

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

Amendment No. 6

to

**Form S-1**  
REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933

**AMERESCO, INC.**

*(Exact name of registrant as specified in its charter)*

**Delaware**  
*(State or other jurisdiction of  
incorporation or organization)*

**4931**  
*(Primary Standard Industrial  
Classification Code Number)*

**04-3512838**  
*(I.R.S. Employer  
Identification No.)*

**111 Speen Street, Suite 410  
Framingham, Massachusetts 01701  
(508) 661-2200**

*(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)*

**George P. Sakellaris  
President and Chief Executive Officer  
111 Speen Street, Suite 410  
Framingham, Massachusetts 01701  
(508) 661-2200**

*(Name, address, including zip code, and telephone number, including area code, of agent for service)*

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**Approximate date of commencement of proposed sale to the public:** As soon as practicable after this Registration Statement is declared effective.

If any of the securities being registered on this form are offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended (the "Securities Act") please check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):  
Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company   
(Do not check if a smaller reporting company)

**The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to Section 8(a), may determine.**

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion  
Preliminary Prospectus dated July 20, 2010

**PROSPECTUS**

**8,696,820 Shares**



**Class A Common Stock**

This is Ameresco's initial public offering. We are selling 6,000,000 shares of our Class A common stock and the selling stockholders are selling 2,696,820 shares of our Class A common stock. We will not receive any proceeds from the sale of shares to be offered by the selling stockholders.

Following this offering, we will have two classes of authorized common stock: Class A common stock and Class B common stock. The rights of the holders of our Class A common stock and our Class B common stock will be identical, except with respect to voting and conversion. Each share of our Class A common stock will be entitled to one vote per share and will not convert into any other shares of our capital stock. Each share of our Class B common stock will be entitled to five votes per share and will convert into one share of our Class A common stock upon the occurrence of specified events. George P. Sakellaris, our founder, principal stockholder, president and chief executive officer, will, following this offering, own shares of Class A and Class B common stock representing 82.9% of the combined voting power of our outstanding Class A and Class B common stock.

We expect the public offering price to be between \$14.00 and \$16.00 per share. Currently, no public market exists for the shares of our Class A common stock. After pricing of the offering, we expect that the shares of our Class A common stock will trade on the New York Stock Exchange under the symbol "AMRC."

**Investing in our Class A common stock involves risks that are described in the "Risk Factors" section beginning on page 11 of this prospectus.**

	<u>Per Share</u>	<u>Total</u>
Public offering price	\$	\$
Underwriting discount	\$	\$
Proceeds, before expenses, to us	\$	\$
Proceeds, before expenses, to the selling stockholders	\$	\$

The underwriters may also purchase up to an additional 1,044,523 shares of our Class A common stock from us, and up to an additional 260,000 shares of our Class A common stock from certain selling stockholders, at the public offering price, less the underwriting discount, within 30 days from the date of this prospectus to cover overallotments, if any.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The shares of our Class A common stock will be ready for delivery on or about \_\_\_\_\_, 2010.

**BofA Merrill Lynch**

**RBC Capital Markets**

**Oppenheimer & Co.  
Cantor Fitzgerald & Co.**

**Madison Williams and Company**

**Canaccord Genuity  
Stephens Inc.**

The date of this prospectus is \_\_\_\_\_, 2010.

## TABLE OF CONTENTS

<a href="#">Prospectus Summary</a>	1
<a href="#">Risk Factors</a>	11
<a href="#">Special Note Regarding Forward-Looking Statements</a>	32
<a href="#">Use of Proceeds</a>	33
<a href="#">Dividend Policy</a>	34
<a href="#">Capitalization</a>	35
<a href="#">Dilution</a>	37
<a href="#">Selected Consolidated Financial Data</a>	40
<a href="#">Management's Discussion and Analysis of Financial Condition and Results of Operations</a>	43
<a href="#">Business</a>	70
<a href="#">Management</a>	90
<a href="#">Related Person Transactions</a>	109
<a href="#">Principal and Selling Stockholders</a>	112
<a href="#">Description of Capital Stock</a>	116
<a href="#">Shares Eligible for Future Sale</a>	120
<a href="#">Material U.S. Federal Tax Considerations for Non-U.S. Holders</a>	124
<a href="#">Underwriting (Conflicts of Interest)</a>	127
<a href="#">Legal Matters</a>	133
<a href="#">Experts</a>	133
<a href="#">Where You Can Find More Information</a>	134
<a href="#">Index to Consolidated Financial Statements</a>	F-1
<a href="#">EX-10.16</a>	
<a href="#">EX-23.1</a>	

You should rely only on the information contained in this prospectus and any free writing prospectus we may specifically authorize to be delivered or made available to you. We have not, and the selling stockholders and the underwriters have not, authorized anyone to provide you with additional or different information. The information contained in this prospectus or any free writing prospectus is accurate only as of its date, regardless of its time of delivery or of any sale of shares of our common stock. Our business, financial condition, results of operations and prospects may have changed since that date.

This prospectus is an offer to sell only the shares offered hereby but only under circumstances and in jurisdictions where it is lawful to do so.

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## PROSPECTUS SUMMARY

*This summary highlights information contained elsewhere in this prospectus. You should read this summary together with the more detailed information appearing in this prospectus, including our consolidated financial statements and related notes, and the risk factors beginning on page 11, before deciding whether to purchase shares of our Class A common stock. Unless the context otherwise requires, we use the terms "Ameresco," "our company," "we," "us" and "our" in this prospectus to refer to Ameresco, Inc. and its subsidiaries.*

### Overview

Ameresco is a leading provider of energy efficiency solutions for facilities throughout North America. Our solutions enable customers to reduce their energy consumption, lower their operating and maintenance costs and realize environmental benefits. Our comprehensive set of services addresses almost all aspects of purchasing and using energy within a facility. Our services include upgrades to a facility's energy infrastructure and the construction and operation of small-scale renewable energy plants. As one of the few large, independent energy efficiency service providers, we are able to objectively select and provide the products and technologies best suited for a customer's needs. Having grown from four offices in three states in 2001 to 54 offices in 29 states and four Canadian provinces in 2010, we now combine a North American footprint with strong local operations. Since our inception in 2000, we have served more than 2,000 customers, which include primarily governmental, educational, utility, healthcare and other institutional, commercial and industrial entities.

Our principal service is the development, design, engineering and installation of projects that reduce the energy and operations and maintenance, or O&M, costs of our customers' facilities. These projects typically include a variety of measures customized for the facility and designed to improve the efficiency of major building systems, such as heating, ventilation, air conditioning and lighting systems. We typically enter into energy savings performance contracts, or ESPCs, under which we commit to our customers that our energy efficiency projects will satisfy agreed-upon performance standards upon installation or achieve specified increases in energy efficiency. In most cases, the forecasted lifetime energy and operating cost savings of the energy efficiency measures we install will defray all or almost all of the cost of such measures. In many cases, we assist customers in obtaining third-party financing for the cost of constructing the facility improvements, resulting in little or no upfront capital expenditure by the customer. After a project is complete, we may operate, maintain and repair the customer's energy systems under a multi-year O&M contract, which provides us with recurring revenue and visibility into the customer's evolving needs.

We also serve certain customers by developing and building small-scale renewable energy plants located at or close to a customer's site. Depending on the customer's preference, we will either retain ownership of the completed plant or build it for the customer. Most of our plants have to date been constructed adjacent to landfills and use landfill gas, or LFG, to generate energy. Our largest renewable energy plant is currently under construction and will use biomass as the source of energy. In the case of the plants that we own, the electricity, thermal energy or processed LFG generated by the plant is sold under a long-term supply contract with the customer, which is typically a utility, municipality, industrial facility or other large purchaser of energy. We also sell and install photovoltaic, or PV, panels and integrated PV systems that convert solar energy to power. By enabling our customers to procure renewable sources of energy, we help them reduce or stabilize their energy costs, as well as realize environmental benefits.

Our revenue has increased from \$20.9 million in 2001, our first full year of operations, to \$428.5 million in 2009. We achieved profitability in 2002 and have been profitable every year since then.

### Industry Overview

The market for energy efficiency services has grown significantly, driven largely by rising and volatile energy prices, advances in energy efficiency and renewable energy technologies, governmental support for energy efficiency and renewable energy programs and growing customer awareness of energy and

environmental issues. End-users, utilities and governmental agencies are increasingly viewing energy efficiency measures as a cost-effective solution for saving energy, renewing aging facility infrastructure and reducing harmful emissions.

According to a 2008 Frost & Sullivan report, activity by energy services companies in the North American market for energy management services, including energy efficiency, demand response and other services, grew at a compound annual growth rate, or CAGR, of 22% from 2004 through 2008, with the estimated size of the market reaching more than \$5 billion in 2008.

Large purchasers of energy and utilities are also increasingly seeking to use renewable sources of energy, such as LFG, wind, biomass, geothermal and solar, to reduce or stabilize their energy costs, meet regulatory mandates for use of renewable energy, diversify their fuel sources and realize environmental benefits, such as the reduction of greenhouse gas emissions.

We believe the following trends and developments are driving the growth of our industry:

- *Rising and Volatile Energy Prices.* Over the past decade, energy-linked commodity prices, including oil, gas, coal and electricity, have all increased and exhibited significant volatility. From 1999 to 2009, average U.S. retail electricity prices have increased by more than 50%.
- *Potential of Energy Efficiency Measures to Significantly Reduce Energy Consumption.* The implementation of energy efficiency measures can significantly reduce the rate at which energy consumption is expected to increase. According to a July 2009 report by McKinsey & Company, economically viable and commercially available energy efficiency measures, if fully implemented, have the potential to save more than one trillion kWh of electricity, or 23% of overall U.S. demand, by 2020.
- *Aging and Inefficient Facility Infrastructure.* Many organizations continue to operate with an energy infrastructure that is significantly less efficient and cost-effective than now available through more advanced technologies applied to lighting, heating, cooling and other building systems. As these organizations explore alternatives for renewing their aging facilities, they often identify multiple areas within their facilities that could benefit from the implementation of energy efficiency measures, including the possible use of renewable sources of energy.
- *Increased Focus on Cost Reduction.* The current economic environment has led many organizations to search for opportunities to reduce their operating costs. There has been a growing awareness that reduced energy consumption presents an opportunity for significant long-term savings in operating costs and that the installation of energy efficiency measures can be a cost-effective way to achieve such reductions.
- *Movement Toward Industry Consolidation.* As energy efficiency solutions continue to increase in technological complexity and customers look for service providers that can offer broad geographic and product coverage, we believe smaller niche energy efficiency companies will continue to look for opportunities to combine with larger companies that can better serve their customers' needs. Increased market presence and size of energy efficiency companies should, in turn, create greater customer awareness of the benefits of energy efficiency measures.
- *Increasing Legislative Support and Initiatives.* In the United States and Canada, federal, state, provincial, and local governments have enacted and are considering legislation and regulations aimed at increasing energy efficiency, reducing greenhouse gas emissions and encouraging the expansion of renewable energy generation.
- *Increased Use of Third-Party Financing.* Many organizations desire to use their existing sources of capital for core investments or do not have the internal capacity to finance improvements to their energy infrastructure. These organizations often require innovative structures to facilitate the financing of energy efficiency and renewable energy projects. Customers seeking to upgrade or renew their energy systems are increasingly seeking to enter into ESPCs or other creative arrangements that facilitate third-party financing for their projects.

### Our Competitive Strengths

We believe our competitive strengths include the following:

- *One-Stop, Comprehensive Service Provider.* We offer our customers expertise in addressing almost all aspects of purchasing and using energy within a facility. Our experienced project development and engineering staff provide us with the capability and flexibility to determine the combination of energy efficiency measures that is best suited to achieve the customer's energy efficiency and environmental goals.
- *Independence.* We are an independent company with no affiliation to any equipment manufacturer, utility or fuel company. Unlike affiliated service companies, we have the freedom and flexibility to be objective in selecting particular products and technologies available from different manufacturers in order to optimize our solutions for customers' particular needs.
- *Strong Customer Relationships.* We have served over 2,000 customers since our inception, including over 1,000 customers in 2009. Our design, engineering and support activities, which typically span multiple years, foster a close relationship with our customers, which positions us to identify their future needs and provide additional services to them.
- *Creative Solutions.* Our engineering staff has expertise in a broad range of technologies and energy savings strategies encompassing different types of electrical, heating, cooling, lighting, water, renewable energy and other facility infrastructure systems. We apply this expertise to design and engineer innovative solutions customized to meet the specific needs of each customer.
- *Strong National and Local Presence.* We have a nationwide presence in both the United States and Canada and serve certain of our customers in European locations. We maintain a centralized staff of engineering, financial and legal personnel at our headquarters in Massachusetts, who provide support to our seven regional offices and 46 other field offices located throughout the United States and Canada. We believe that our organizational structure enables us to be fast, flexible and cost-effective in responding to our customers' needs.
- *Experienced Management and Operations Team.* Our executive officers have an aggregate of over 150 years of experience in the energy efficiency field. As of March 31, 2010, we employed over 200 engineers, whose experience with respect to fuels, rates, technologies and geography-specific regulation and economic benefits enables us to propose and design energy efficiency solutions that take into account the economic, technological, environmental and regulatory considerations that we believe underlie the cost efficiencies and operational success of a project.
- *Federal and State Qualifications.* The federal governmental program under which federal agencies and departments can enter into ESPCs requires that energy service providers have a track record in the industry and meet other specified qualifications. Over 20 states require similar qualifications. In 2008, we renewed our qualification to enter into an indefinite delivery, indefinite quantity, or IDIQ, contract under the U.S. Department of Energy program for ESPCs. This IDIQ contract has an aggregate maximum potential ordering amount of \$5 billion and expires in 2019. We are currently qualified to enter into ESPCs in most states that require qualification. The scope of our qualifications provides us with the opportunity to continue to grow our business with federal, state and other governmental customers and differentiates us from energy efficiency companies that have not been similarly qualified.
- *Integration of Strategic Acquisitions.* We have a track record of completing over ten acquisitions that have enabled us to broaden our offerings, expand our geographical reach and accelerate our growth. We believe that our ability to offer a comprehensive set of energy efficiency services across North America has been, and will continue to be, enhanced by our expertise in identifying and completing acquisitions that expand our service offerings, as well as by our ability to integrate and leverage the skilled engineering, sales and operational personnel that come to us through these acquisitions.

### Strategy

Our goal is to capitalize on our strong customer base and broad range of service offerings to become the leading provider of comprehensive energy efficiency and renewable energy solutions.

Key elements of our strategy include the following:

- *Pursue Organic Growth.* We plan to open additional local offices in the regions we currently serve, as well as hire additional sales personnel. We also plan to expand geographically by opening new local offices in regions we do not currently serve in the United States and Canada, as well as in Europe.
- *Continue to Maintain Customer Focus.* We will continue to maintain an entrepreneurial approach toward our customers and remain flexible in designing projects tailored specifically to meet their needs.
- *Expand Scope of Product and Service Offerings.* We plan to continue to expand our offerings by including new types of energy efficiency services, products and improvements to existing products based on technological advances in energy savings strategies, equipment and materials.
- *Meet Market Demand for Cost-Effective, Environmentally-Friendly Solutions.* Through our energy efficiency measures and small-scale renewable energy plants and products, we enable customers to conserve energy and reduce emissions of carbon dioxide and other pollutants. We plan to continue to focus on providing sustainable energy solutions that will address the growing demand for products and services that create environmental benefits for customers.
- *Increase Recurring Revenue.* For many of our energy efficiency projects, we enter into multi-year O&M contracts, and we plan to continue to grow both the number and scope of such contracts. We also obtain recurring revenue from sales of electricity, thermal energy and gas generated by the small-scale renewable energy and central plants that we construct and own, and we plan to continue to seek opportunities to construct such plants.
- *Grow Through Select Strategic Acquisitions.* We plan to continue to pursue complementary acquisitions that will enable us to both expand geographically in North America and abroad, and broaden our product and service offerings.

### Risks Associated with Our Business

Our business is subject to numerous risks, as more fully described in the section entitled “Risk Factors” immediately following this prospectus summary.

### Our Dual Class Capital Structure

We have two classes of common stock: Class A common stock and Class B common stock. The rights of the holders of our Class A common stock and our Class B common stock are identical, except with respect to voting and conversion. Each share of our Class A common stock is entitled to one vote per share and is not convertible into any other shares of our capital stock. Each share of our Class B common stock is entitled to five votes per share, is convertible at any time into one share of our Class A common stock at the option of the holder of such share and will automatically convert into one share of our Class A common stock upon the occurrence of certain specified events, including a transfer of such shares (other than to such holder’s family members, descendants or certain affiliated persons or entities). All selling stockholders in this offering are selling shares of our Class A common stock. See “Description of Capital Stock — Common Stock.”

**Corporate Information**

We were incorporated in Delaware in April 2000. Our principal executive offices are located at 111 Speen Street, Suite 410, Framingham, Massachusetts 01701 and our telephone number is (508) 661-2200. Our website address is [www.ameresco.com](http://www.ameresco.com). Information contained on our website is not incorporated by reference into this prospectus, and you should not consider information contained on our website to be part of this prospectus or in deciding whether to purchase shares of our Class A common stock.

“Ameresco,” the Ameresco logo, “Green • Clean • Sustainable,” “AXIS” and other trademarks or service marks of Ameresco appearing in this prospectus are the property of Ameresco. This prospectus contains additional trade names, trademarks and service marks of other companies, which are the property of their respective owners.



**The Offering**

Class A Common stock offered by:

Ameresco	<u>6,000,000</u> Shares
Selling stockholders	<u>2,696,820</u> Shares
Total	<u>8,696,820</u> Shares

Common stock to be outstanding after this offering:

Class A	<u>22,403,276</u> Shares
Class B	<u>18,000,000</u> Shares
Total	<u>40,403,276</u> Shares

Use of proceeds

We intend to use our net proceeds from this offering (i) to repay the balance outstanding under our \$50 million revolving senior secured credit facility, under which \$24.9 million in principal was outstanding as of March 31, 2010 and \$31.4 million in principal was outstanding as of June 30, 2010, (ii) to repay in full the \$3.0 million subordinated note held by our president and chief executive officer and (iii) for working capital and other general corporate purposes, which may include opening additional offices in the United States and abroad, expanding sales and marketing activities, and funding the development and construction of our small-scale renewable energy projects and other capital expenditures. We may also use a portion of our net proceeds for acquisitions of complementary companies, assets or technologies. Although we are engaged in discussions with respect to a potential acquisition for consideration of less than \$10 million, we currently have no understandings, commitments or agreements to make any acquisitions. We will not receive any proceeds from the shares sold by the selling stockholders. See "Use of Proceeds" for more information.

Risk Factors

You should read the "Risk Factors" section and other information included in this prospectus for a discussion of factors to consider carefully before deciding to invest in shares of our Class A common stock.

New York Stock Exchange symbol

"AMRC"

All shares being offered hereby by Ameresco and the selling stockholders will be sold to the underwriters as described under "Underwriting."

The number of shares of our Class A common stock and our Class B Common Stock to be outstanding after this offering is based on:

- 15,470,776 shares of our Class A common stock outstanding as of June 30, 2010;
- 18,000,000 shares of our Class B common stock outstanding as of June 30, 2010;

- 932,500 shares of our Class A common stock to be issued upon the exercise of vested stock options by the selling stockholders in connection with this offering at a weighted-average exercise price of \$1.94; and
  - 6,000,000 shares of our Class A common stock offered by us in this offering;
- and excludes:
- 8,641,094 shares of our Class A common stock issuable upon the exercise of stock options outstanding as of June 30, 2010 at a weighted-average exercise price of \$4.06 per share (excluding the 932,500 shares of our Class A common stock that will be issued upon the exercise of vested stock options by the selling stockholders in connection with this offering); and
  - 10,000,000 shares of our Class A common stock that will be available for future issuance under our 2010 stock incentive plan, or our 2010 stock plan, which will become effective upon the closing of this offering.

*Conflicts of Interest*

Bank of America, N.A., an affiliate of Merrill Lynch, Pierce, Fenner & Smith Incorporated, an underwriter in this offering, is acting as the agent and a lender under our revolving line of credit. We intend to use a portion of the net proceeds from this offering to repay the balance outstanding under our \$50 million revolving senior secured credit facility, of which \$24.9 million in principal was outstanding as of March 31, 2010 and \$31.4 million in principal was outstanding as of June 30, 2010. See "Use of Proceeds" and "Underwriting." Because of the manner in which the proceeds will be used, the offering will be conducted in accordance with NASD Rule 2720. These rules require, among other things, that a qualified independent underwriter has participated in the preparation of, and has exercised the usual standards of "due diligence" in respect to, the registration statement and this prospectus. Oppenheimer & Co. Inc. has agreed to act as qualified independent underwriter for the offering and to undertake the legal responsibilities and liabilities of an underwriter under the Securities Act of 1933, specifically including those inherent in Section 11 of the Securities Act.

*Except as otherwise noted, all information in this prospectus:*

- *gives effect to the amendment and restatement of our certificate of incorporation and amendment and restatement of our by-laws to be effected in connection with the closing of this offering;*
- *gives effect to a two-for-one split of our common stock effected on July 20, 2010;*
- *gives effect to the reclassification of all outstanding shares of our common stock as Class A common stock effected on July 20, 2010;*
- *gives effect to the conversion of each outstanding option to purchase shares of our common stock into an option to purchase shares of our Class A common stock;*
- *gives effect to the conversion on July 20, 2010 of all shares of our convertible preferred stock, other than those held by George P. Sakellaris, our founder, principal stockholder, president and chief executive officer, into shares of our Class A common stock;*
- *gives effect to the automatic conversion of all outstanding shares of our convertible preferred stock, which will then be held solely by Mr. Sakellaris, into shares of our Class B common stock upon the closing of this offering; and*
- *assumes no exercise by the underwriters of their over-allotment option.*

### Summary Consolidated Financial Data

The following tables summarize the consolidated financial data for our business for the periods presented. We derived the consolidated statement of income data for the fiscal years ended December 31, 2007, 2008 and 2009 and the consolidated balance sheet data as of December 31, 2009 from our audited financial statements that are included elsewhere in this prospectus. We derived the consolidated statement of income data for the three months ended March 31, 2009 and 2010 and the consolidated balance sheet data as of March 31, 2009 and March 31, 2010 from our unaudited condensed consolidated financial statements that are included elsewhere in this prospectus. Our unaudited condensed consolidated financial statements have been prepared on the same basis as the audited consolidated financial statements and notes thereto and, in the opinion of our management, reflect all adjustments that are necessary for a fair presentation in conformity with U.S. generally accepted accounting principles, or GAAP. Our historical results for prior periods are not necessarily indicative of results to be expected for any future period. You should read this summary consolidated financial data together with our consolidated and condensed and consolidated financial statements and related notes included elsewhere in this prospectus and the information under "Selected Consolidated Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations."

	Year Ended December 31,			Three Months Ended March 31,	
	2007	2008	2009	2009	2010
(In thousands, except share and per share data)					
<b>Consolidated Statement of Income Data:</b>					
Revenue:					
Energy efficiency revenue	\$ 345,936	\$ 325,032	\$ 340,636	\$ 57,228	\$ 74,888
Renewable energy revenue	32,541	70,822	87,881	16,159	30,741
	<u>378,477</u>	<u>395,854</u>	<u>428,517</u>	<u>73,387</u>	<u>105,629</u>
Direct expenses:					
Energy efficiency expenses	285,966	259,019	282,345	46,770	62,524
Renewable energy expenses	26,072	59,551	66,472	12,924	24,705
	<u>312,038</u>	<u>318,570</u>	<u>348,817</u>	<u>59,694</u>	<u>87,230</u>
Gross profit	66,439	77,284	79,700	13,693	18,399
Operating expenses	47,042	52,608	54,406	13,025	15,836
Operating income	19,397	24,676	25,294	667	2,563
Other (expense) income, net	(3,138)	(5,188)	1,563	(24)	(856)
Income before provision for income taxes	16,259	19,488	26,857	643	1,707
Income tax provision	(5,714)	(1,215)	(6,950)	(225)	(429)
Net income	<u>\$ 10,545</u>	<u>\$ 18,273</u>	<u>\$ 19,907</u>	<u>\$ 418</u>	<u>\$ 1,278</u>
Net income per share attributable to common shareholders					
Basic	\$ 0.95	\$ 1.71	\$ 1.99	\$ 0.04	\$ 0.10
Diluted	\$ 0.28	\$ 0.54	\$ 0.61	\$ 0.01	\$ 0.03
Weighted-average number of common shares outstanding					
Basic	11,121,022	10,678,110	9,991,912	9,621,351	13,282,284
Diluted	37,552,953	33,990,547	32,705,617	32,957,183	36,587,847
Pro forma net income per share(1)					
Basic			\$ 0.65	\$ 0.01	\$ 0.04
Pro forma weighted-average number of Class A and Class B common shares used in computing pro forma net income per share(1)					
			30,589,698	30,219,137	33,880,070
<b>Other Operating Data:</b>					
Adjusted EBITDA(2)	\$ 27,974	\$ 29,045	\$ 35,097	\$ 2,391	\$ 5,145

The pro forma consolidated balance sheet data give effect to (i) our issuance of 405,286 shares of Class A common stock upon the June 2010 exercise of a warrant at an exercise price of \$0.005 per share, (ii) a two-for-one split of our common stock, (iii) the reclassification of all outstanding shares of our common stock as Class A common stock, (iv) the conversion of all shares of our convertible preferred stock, other than those held by Mr. Sakellaris, into shares of our Class A common stock, (v) the conversion of all other outstanding shares of our convertible preferred stock into shares of our Class B common stock and (vi) the issuance of 932,500 shares of our Class A common stock upon the exercise of vested stock options by the selling stockholders in connection with this offering at a weighted-average exercise price of \$1.94. The pro forma as adjusted consolidated balance sheet data also give effect to the (i) sale of 6,000,000 shares of our Class A common stock offered by us at an assumed initial public offering price of \$15.00 per share, the midpoint of the estimated price range shown on the cover page of this prospectus and after deducting the estimated underwriting discount and estimated offering expenses payable by us, and (ii) the application of the net proceeds of this offering to us as described under "Use of Proceeds."

	As of March 31, 2010		
	Actual	Pro Forma (Unaudited) (In thousands)	Pro Forma As Adjusted
<b>Consolidated Balance Sheet Data:</b>			
Cash and cash equivalents	\$ 24,361	\$ 26,174	\$ 79,796
Current assets	152,315	154,128	207,749
Total assets	382,198	384,011	437,632
Current liabilities	110,227	110,227	110,227
Long-term debt, less current portion	128,374	128,374	103,441
Subordinated debt	2,999	2,999	—
Total stockholders' equity	105,160	106,974	188,526

- (1) Pro forma net income per share and pro forma weighted-average shares outstanding give effect to (i) our issuance of 405,286 shares of Class A common stock upon the June 2010 exercise of a warrant at an exercise price of \$0.005 per share, (ii) a two-for-one split of our common stock (iii) the reclassification of all outstanding shares of our common stock as Class A common stock, (iv) the conversion of all shares of our convertible preferred stock, other than those held by Mr. Sakellaris, into shares of our Class A common stock, (v) the conversion of all other outstanding shares of our convertible preferred stock into shares of our Class B common stock and (vi) the issuance of 932,500 shares of our Class A common stock upon the exercise of vested stock options by the selling stockholders in connection with this offering at a weighted-average exercise price of \$1.94.
- (2) We define adjusted EBITDA as operating income before depreciation and impairment expense, share-based compensation expense and a non-recurring non-cash recovery of a contingency in 2008. Adjusted EBITDA is a non-GAAP financial measure and should not be considered as an alternative to operating income or any other measure of financial performance calculated and presented in accordance with GAAP.

We believe adjusted EBITDA is useful to investors in evaluating our operating performance for the following reasons:

- adjusted EBITDA and similar non-GAAP measures are widely used by investors to measure a company's operating performance without regard to items that can vary substantially from company to company depending upon financing and accounting methods, book values of assets, capital structures and the methods by which assets were acquired;
- securities analysts often use adjusted EBITDA and similar non-GAAP measures as supplemental measures to evaluate the overall operating performance of companies; and

- by comparing our adjusted EBITDA in different historical periods, our investors can evaluate our operating results without the additional variations of depreciation and amortization expense, share-based compensation expense and the non-recurring non-cash recovery of a contingency in 2008.

Our management uses adjusted EBITDA:

- as a measure of operating performance, because it does not include the impact of items that we do not consider indicative of our core operating performance;
- for planning purposes, including the preparation of our annual operating budget;
- to allocate resources to enhance the financial performance of our business;
- to evaluate the effectiveness of our business strategies; and
- in communications with our board of directors and investors concerning our financial performance.

We understand that, although measures similar to adjusted EBITDA are frequently used by investors and securities analysts in their evaluation of companies, adjusted EBITDA has limitations as an analytical tool, and you should not consider it in isolation or as a substitute for GAAP operating income or an analysis of our results of operations as reported under GAAP. Some of these limitations are:

- adjusted EBITDA does not reflect our cash expenditures or future requirements for capital expenditures or other contractual commitments;
- adjusted EBITDA does not reflect changes in, or cash requirements for, our working capital needs;
- adjusted EBITDA does not reflect stock-based compensation expense;
- adjusted EBITDA does not reflect cash requirements for income taxes;
- adjusted EBITDA does not reflect net interest income (expense);
- although depreciation, amortization and impairment are non-cash charges, the assets being depreciated, amortized or impaired will often have to be replaced in the future, and adjusted EBITDA does not reflect any cash requirements for these replacements; and
- other companies in our industry may calculate adjusted EBITDA differently than we do, limiting its usefulness as a comparative measure.

To properly and prudently evaluate our business, we encourage you to review the GAAP financial statements included elsewhere in this prospectus, and not to rely on any single financial measure to evaluate our business.

The following table presents a reconciliation of adjusted EBITDA to operating income, the most comparable GAAP measure:

	Year Ended December 31,			Three Months Ended March 31,	
	2007	2008	2009	2009	2010
	(In thousands)				
Operating income	\$ 19,397	\$ 24,676	\$ 25,294	\$ 667	\$ 2,563
Depreciation and impairment	5,898	7,278	6,634	1,107	2,143
Stock-based compensation	2,679	2,941	3,169	617	439
Recovery of contingency	—	(5,850)	—	—	—
Adjusted EBITDA	\$ 27,974	\$ 29,045	\$ 35,097	\$ 2,391	\$ 5,145

## RISK FACTORS

*An investment in our Class A common stock involves a high degree of risk. In deciding whether to invest, you should carefully consider the following risk factors. Any of the following risks could have a material adverse effect on our business, financial condition and operating results and cause the value of our Class A common stock to decline, which could cause you to lose all or part of your investment. When determining whether to invest in our Class A common stock, you should also refer to the other information in this prospectus, including the consolidated financial statements and related notes.*

***If demand for our energy efficiency and renewable energy solutions does not develop as we expect, our revenue will suffer and our business will be harmed.***

Our revenue has increased significantly since January 1, 2005. We believe, and our growth expectations assume, that the market for energy efficiency and renewable energy solutions will continue to grow, that we will increase our penetration of this market and that our revenue from selling into this market will continue to increase. If our expectations as to the size of this market and our ability to sell our products and services in this market are not correct, our revenue will suffer and our business will be harmed.

***The projects we undertake for our customers generally require significant capital, which our customers or we may finance through third parties, and such financing may not be available to our customers or to us on favorable terms, if at all.***

Our projects are typically financed by third parties. The cost of these projects to our customers can reach up to \$200 million. For our energy efficiency projects, we often assist our customers in arranging third-party financing. For small-scale renewable energy plants that we own, we typically rely on a combination of our working capital and debt to finance construction costs. The significant disruptions in the credit and capital markets in the last several years have made it more difficult for our customers and us to obtain financing on acceptable terms or, in some cases, at all. If we or our customers are unable to raise funds on acceptable terms when needed, we may be unable to secure customer contracts, the size of contracts we do obtain may be smaller or we could be required to delay the development and construction of projects, reduce the scope of those projects or otherwise restrict our operations.

In 2008, we entered into a \$50 million revolving senior secured credit facility that matures in June 2011. Availability under the facility is based on two times our EBITDA for the preceding four quarters, and we are required to maintain a minimum EBITDA of \$20 million on a rolling four-quarter basis and a minimum level of tangible net worth. This facility may not be sufficient to meet our needs as our business grows, and we may be unable to extend or replace it on acceptable terms, or at all.

Any inability by us or our customers to raise the funds necessary to finance our projects, or any inability by us to extend or replace our revolving credit facility, could materially harm our business, financial condition and operating results.

***Our operating results may fluctuate significantly from quarter to quarter and may fall below expectations in any particular fiscal quarter.***

Our operating results are difficult to predict and have historically fluctuated from quarter to quarter due to a variety of factors, many of which are outside of our control. As a result, comparing our operating results on a period-to-period basis may not be meaningful, and you should not rely on our past results as an indication of our future performance. If our revenue or operating results fall below the expectations of investors or any securities analysts that follow our company in any period, the trading price of our Class A common stock would likely decline.

Factors that may cause our operating results to fluctuate include:

- our ability to arrange financing for projects;
- changes in federal, state and local government policies and programs related to, or a reduction in governmental support for, energy efficiency and renewable energy;
- the timing of work we do on projects where we recognize revenue on a percentage of completion basis;
- seasonality in construction and in demand for our products and services;
- a customer's decision to delay our work on, or other risks involved with, a particular project;
- availability and costs of labor and equipment;
- the addition of new customers or the loss of existing customers;
- the size and scale of new customer projects;
- the availability of bonding for our projects;
- our ability to control costs, including operating expenses;
- changes in the mix of our products and services;
- the rates at which customers renew their O&M contracts with us;
- the length of our sales cycle;
- the productivity and growth of our sales force;
- the timing of opening of new offices or making other significant investments in the growth of our business, as the revenue we hope to generate from those expenses often lags several quarters behind those expenses;
- changes in pricing by us or our competitors, or the need to provide discounts to win business;
- costs related to the acquisition and integration of companies or assets;
- general economic trends, including changes in energy efficiency spending or geopolitical events such as war or incidents of terrorism; and
- future accounting pronouncements and changes in accounting policies.

Our operating expenses do not always vary directly with revenue and may be difficult to adjust in the short term. As a result, if revenue for a particular quarter is below our expectations, we may not be able to proportionately reduce operating expenses for that quarter, and therefore such a revenue shortfall could have a disproportionate effect on our operating results for that quarter.

***We may not be able to maintain or increase our profitability.***

We have been profitable on an annual basis since the year ended December 31, 2002. However, we have incurred net losses in certain quarters since that time. We may not succeed in maintaining our profitability and could incur quarterly or annual losses in future periods. We intend to increase our expenses as we grow our business and expand into new geographic locations, and we expect to incur additional accounting, legal and other expenses associated with being a public company. If our revenue does not increase sufficiently to offset these increases in costs, our operating results will be harmed. Our historical operating results should not be considered as necessarily indicative of future operating results and we can provide no assurance that we will be able to maintain or increase our profitability in the future.

***We may not recognize all revenue from our backlog or receive all payments anticipated under awarded projects and customer contracts.***

As of March 31, 2010, we had backlog of approximately \$635 million in future revenue under signed customer contracts for the installation or construction of projects, which we expect to be recognized over the period from 2010 to 2013, and we had been awarded, but not yet signed customer contracts for, projects with estimated total future revenue of an additional \$618 million over the same period. As of March 31, 2009, we had backlog of approximately \$260 million in future revenue under signed customer contracts for the installation or construction of projects, which we expected to be recognized over the period from 2009 to 2012, and we had been awarded, but not yet signed customer contracts for, projects with estimated total future revenue of an additional \$926 million over the period from 2009 to 2013. We also expect to realize recurring revenue both under long-term O&M contracts and under long-term energy supply contracts for renewable energy plants that we own.

Our customers have the right under some circumstances to terminate contracts or defer the timing of our services and their payments to us. In addition, our government contracts are subject to the risks described below under "Provisions in government contracts may harm our business, financial condition and operating results." The payment estimates for projects that have been awarded to us but for which we have not yet signed contracts have been prepared by management and are based upon a number of assumptions, including that the size and scope of the awarded projects will not change prior to the signing of customer contracts, that we or our customers will be able to obtain any necessary third-party financing for the awarded projects, and that we and our customers will reach agreement on and execute contracts for the awarded projects. We are not always able to enter into a contract for an awarded project on the terms proposed. As a result, we may not receive all of the revenue that we include in our backlog or that we estimate we will receive under awarded projects. If we do not receive all of the revenue we currently expect to receive, our future operating results will be adversely affected. In addition, a delay in the receipt of revenue, even if such revenue is eventually received, may cause our operating results for a particular quarter to fall below our expectations.

***Our business is affected by seasonal trends and construction cycles, and these trends and cycles could have an adverse effect on our operating results.***

We are subject to seasonal fluctuations and construction cycles, particularly in climates that experience colder weather during the winter months, such as the northern United States and Canada, or at educational institutions, where large projects are typically carried out during summer months when their facilities are unoccupied. In addition, government customers, many of which have fiscal years that do not coincide with ours, typically follow annual procurement cycles and appropriate funds on a fiscal-year basis even though contract performance may take more than one year. Further, government contracting cycles can be affected by the timing of, and delays in, the legislative process related to government programs and incentives that help drive demand for energy efficiency and renewable energy projects. As a result, our revenue and operating income in the third quarter are typically higher, and our revenue and operating income in the first quarter are typically lower, than in other quarters of the year. As a result of such fluctuations, we may occasionally experience declines in revenue or earnings as compared to the immediately preceding quarter, and comparisons of our operating results on a period-to-period basis may not be meaningful.

***Our business depends in part on federal, state, provincial and local government support for energy efficiency and renewable energy, and a decline in such support could harm our business.***

We depend in part on government legislation and policies that support energy efficiency and renewable energy projects and that enhance the economic feasibility of our energy efficiency services and small-scale renewable energy projects. The U.S. and Canadian federal governments and several of the states and provinces in which we operate support our existing and potential customers' investments in energy efficiency and renewable energy through legislation and regulations that authorize and regulate the manner in which certain governmental entities do business with us, encourage or subsidize governmental procurement of our services, provide regulatory, tax and other incentives to others to procure our services and provide us with tax and other incentives that reduce our costs or increase our revenue.



For example, U.S. legislation authorizing federal agencies to enter into ESPCs, such as those we enter into with our customers, was enacted in 1992. In 2007, three years after the expiration of the original legislation, new ESPC legislation was enacted without an expiration provision, and in the same year, the President of the United States issued an executive order requiring federal agencies to set goals to reduce energy use and increase renewable energy sources and use. In addition, the American Recovery and Reinvestment Act of 2009 allocated \$67 billion to promote clean energy, energy efficiency and advanced vehicles. Additionally, the Emergency Economic Stabilization Act of 2008 instituted the 1603 cash grant program, which may provide cash in lieu of an investment tax credit for eligible renewable energy generation sources for which construction commences prior to the end of 2010 where the project is placed in service by various dates set out in the act. The Internal Revenue Code, or the Code, currently provides production tax credits for the generation of electricity from wind projects and from LFG-fueled power projects, and an investment tax credit or grant in lieu of such tax credits for investments in LFG, wind, biomass and solar power generation projects. Various state and local governments have also implemented similar programs and incentives, including legislation authorizing the procurement of ESPCs.

We, our customers and prospective customers frequently depend on these programs to help justify the costs associated with, and to finance, energy efficiency and renewable energy projects. If any of these incentives are adversely amended, eliminated or not extended beyond their current expiration dates, or if funding for these incentives is reduced, it could adversely affect our ability to complete projects for existing customers and obtain project commitments from new customers. A delay or failure by government agencies to administer, or make procurements under, these programs in a timely and efficient manner could have a material adverse effect on our existing and potential customers' willingness to enter into project commitments with us.

In addition, some of our customers purchase electricity, thermal energy or processed LFG from our renewable energy plants, or purchase other energy services from us, because tax, energy and environmental laws encourage or in some cases require these customers to procure power from renewable or low-emission sources, or to reduce their electricity use. Changes to these tax, energy and environmental laws could reduce our customers' incentives and mandates to purchase the kinds of services that we supply, and could thereby adversely affect our business, financial condition and operating results.

***Changes in the laws and regulations governing the public procurement of ESPCs could have a material impact on our business.***

We derive a significant amount of our revenue from ESPCs with our government customers. While federal, state and local government rules governing such contracts vary, such rules may, for example, permit the funding of such projects through long-term financing arrangements; permit long-term payback periods from the savings realized through such contracts; allow units of government to exclude debt related to such projects from the calculation of their statutory debt limitation; allow for award of contracts on a "best value" instead of "lowest cost" basis; and allow for the use of sole source providers. To the extent these rules become more restrictive in the future, our business could be harmed.

***A significant decline in the fiscal health of federal, state, provincial and local governments could reduce demand for our energy efficiency and renewable energy projects.***

In 2009, approximately 85% of our revenue was derived from sales to federal, state, provincial or local governmental entities. A significant decline in the fiscal health of these existing and potential customers may make it difficult for them to enter into contracts for our services or to obtain financing necessary to fund such contracts, or may cause them to seek to renegotiate or terminate existing agreements with us.

***Failure of third parties to manufacture quality products or provide reliable services in a timely manner could cause delays in the delivery of our services and completion of our projects, which could damage our reputation, have a negative impact on our relationships with our customers and adversely affect our growth.***

Our success depends on our ability to provide services and complete projects in a timely manner, which in part depends on the ability of third parties to provide us with timely and reliable services and

products, such as boilers, chillers, cogeneration systems, PV panels, lighting and other complex components. In providing our services and completing our projects, we rely on products that meet our design specifications and components manufactured and supplied by third parties, as well as on services performed by subcontractors.

We rely on subcontractors to perform substantially all of the construction and installation work related to our projects. We provide all design and engineering work related to, and act as the general contractor for, our projects. We have established relationships with subcontractors that we believe to be reliable and capable of producing satisfactory results, but we often need to engage subcontractors with whom we have no experience for our projects. If any of our subcontractors are unable to provide services that meet or exceed our customers' expectations or satisfy our contractual commitments, our reputation, business and operating results could be harmed.

The warranties provided by our third-party suppliers and subcontractors typically limit any direct harm we might experience as a result of our relying on their products and services. However, there can be no assurance that a supplier or subcontractor will be willing or able to fulfill its contractual obligations and make necessary repairs or replace equipment. In addition, these warranties generally expire within one to five years or may be of limited scope or provide limited remedies. If we are unable to avail ourselves of warranty protection, we may incur liability to our customers or additional costs related to the affected products and components, including replacement and installation costs, which could have a material adverse effect on our business, financial condition and operating results.

Moreover, any delays, malfunctions, inefficiencies or interruptions in these products or services — even if covered by warranties — could adversely affect the quality and performance of our solutions. This could cause us to experience difficulty retaining current customers and attracting new customers, and could harm our brand, reputation and growth. In addition, any significant interruption or delay by our suppliers in the manufacture or delivery of products or services on which we depend could require us to expend considerable time, effort and expense to establish alternate sources for such products and services.

***We may have liability to our customers under our ESPCs if our projects fail to deliver the energy use reductions to which we are committed under the contract.***

For our energy efficiency projects, we typically enter into ESPCs under which we commit that the projects will satisfy agreed-upon performance standards appropriate to the project. These commitments are typically structured as guarantees of increased energy efficiency that are based on the design, capacity, efficiency or operation of the specific equipment and systems we install. Our commitments generally fall into three categories: pre-agreed, equipment-level and whole building-level. Under a pre-agreed efficiency commitment, our customer reviews the project design in advance and agrees that, upon or shortly after completion of installation of the specified equipment comprising the project, the pre-agreed increase in energy efficiency will have been met. Under an equipment-level commitment, we commit to a level of increased energy efficiency based on the difference in use measured first with the existing equipment and then with the replacement equipment upon completion of installation. A whole building-level commitment requires measurement and verification of increased energy efficiency for a whole building, often based on readings of the utility meter where usage is measured. Depending on the project, the measurement and verification may be required only once, upon installation, based on an analysis of one or more sample installations, or may be required to be repeated at agreed upon intervals generally over periods of up to 20 years.

Under our contracts, we typically do not take responsibility for a wide variety of factors outside our control and exclude or adjust for such factors in commitment calculations. These factors include variations in energy prices and utility rates, weather, facility occupancy schedules, the amount of energy-using equipment in a facility, and failure of the customer to operate or maintain the project properly. We rely in part on warranties from our equipment suppliers and subcontractors to back-stop the warranties we provide to our customers and, where appropriate, pass on the warranties to our customers. However, the warranties we provide to our customers are sometimes broader in scope or longer in duration than the corresponding warranties we receive

from our suppliers and subcontractors, and we bear the risk for any differences, as well as the risk of warranty default by our suppliers and subcontractors.

Typically, our performance commitments apply to the aggregate overall performance of a project rather than to individual energy efficiency measures. Therefore, to the extent an individual measure underperforms, it may be offset by other measures that overperform. In the event that an energy efficiency project does not perform according to the agreed-upon specifications, our agreements typically allow us to satisfy our obligation by adjusting or modifying the installed equipment, installing additional measures to provide substitute energy savings, or paying the customer for lost energy savings based on the assumed conditions specified in the agreement. From our inception to March 31, 2010, our total payments to customers and incurred equipment replacement and maintenance costs under our energy efficiency commitments, after customer acceptance of a project, have been less than \$100,000 in the aggregate. However, we may incur additional or increased liabilities or expenses under our ESPCs in the future. Such liabilities or expenses could be substantial, and they could materially harm our business, financial condition or operating results. In addition, any disputes with a customer over the extent to which we bear responsibility to improve performance or make payments to the customer may diminish our prospects for future business from that customer or damage our reputation in the marketplace.

***We may assume responsibility under customer contracts for factors outside our control, including, in connection with some customer projects, the risk that fuel prices will increase.***

We typically do not take responsibility under our contracts for a wide variety of factors outside our control. We have, however, in a limited number of contracts assumed some level of risk and responsibility for certain factors — sometimes only to the extent that variations exceed specified thresholds — and may also do so under certain contracts in the future, particularly in our contracts for renewable energy projects.

For example, under a contract for the construction and operation of a cogeneration facility at the U.S. Department of Energy Savannah River Site in South Carolina, a subsidiary of ours is exposed to the risk that the price of the biomass that will be used to fuel the cogeneration facility may rise during the 19-year performance period of the contract. Several provisions in that contract mitigate the price risk, including a specified annual increase in the price our subsidiary charges the customer for biomass fuel, incentives for the customer to make on-site biomass available to the cogeneration facility, an escrow fund from which our subsidiary can withdraw funds should the price of biomass in a given year exceed that charged to the customer, the right to reduce the amount of steam generated by the use of biomass to a stipulated minimum level and the ability to use other fuels, such as used tires, to produce up to 30% of the facility's total production. In addition, although we typically structure our contracts so that our obligation to supply a customer with LFG, electricity or steam, for example, does not exceed the quantity produced by the production facility, in some circumstances we may commit to supply a customer with specified minimum quantities based on our projections of the facility's production capacity. In such circumstances, if we are unable to meet such commitments, we may be required to incur additional costs or face penalties.

Despite the steps we have taken to mitigate risks under these and other contracts, such steps may not be sufficient to avoid the need to incur increased costs to satisfy our commitments, and such costs could be material. Increased costs that we are unable to pass through to our customers could have a material adverse effect on our operating results.

***Our business depends on experienced and skilled personnel and substantial specialty subcontractor resources, and if we lose key personnel or if we are unable to attract and integrate additional skilled personnel, it will be more difficult for us to manage our business and complete projects.***

The success of our business depends in large part on the skill of our personnel. Accordingly, it is critical that we maintain, and continue to build, a highly experienced management team and specialized workforce, including engineers, project and construction management, and business development and sales professionals. In addition, our construction projects require a significant amount of trade labor resources, such

as electricians, mechanics, carpenters, masons and other skilled workers, as well as certain specialty subcontractor skills.

Competition for personnel, particularly those with expertise in the energy services and renewable energy industries, is high, and identifying candidates with the appropriate qualifications can be costly and difficult. We may not be able to hire the necessary personnel to implement our business strategy given our anticipated hiring needs, or we may need to provide higher compensation or more training to our personnel than we currently anticipate.

In the event we are unable to attract, hire and retain the requisite personnel and subcontractors, we may experience delays in completing projects in accordance with project schedules and budgets, which may have an adverse effect on our financial results, harm our reputation and cause us to curtail our pursuit of new projects. Further, any increase in demand for personnel and specialty subcontractors may result in higher costs, causing us to exceed the budget on a project, which in turn may have an adverse effect on our business, financial condition and operating results and harm our relationships with our customers.

Our future success is particularly dependent on the vision, skills, experience and effort of our senior management team, including our executive officers and our founder, principal stockholder, president and chief executive officer, George P. Sakellaris. If we were to lose the services of any of our executive officers or key employees, our ability to effectively manage our operations and implement our strategy could be harmed and our business may suffer.

***If we cannot obtain surety bonds and letters of credit, our ability to operate may be restricted.***

Federal and state laws require us to secure the performance of certain long-term obligations through surety bonds and letters of credit. In addition, we are occasionally required to provide bid bonds or performance bonds to secure our performance under energy efficiency contracts. Our sureties have historically required that George P. Sakellaris, who is our founder, principal stockholder, president and chief executive officer, personally indemnify them for up to an aggregate of \$50 million of losses associated with the bonds they have provided on our behalf. We expect this indemnity will terminate following the closing of this offering. In addition, in the event that Mr. Sakellaris no longer controls our company, our sureties may reevaluate our eligibility for surety bonds. Although we expect the net proceeds of this offering to increase our bonding capacity, our ability to obtain required bonds or letters of credit depends in large part upon our capitalization, working capital, past performance, management expertise and reputation, and external factors beyond our control, including the overall capacity of the surety market. Our ability to obtain letters of credit under our existing credit arrangements is limited. We are not permitted to have more than \$10 million in letters of credit outstanding at any time (including letters of credit that have been drawn upon but not repaid on our behalf) under the terms of our revolving senior secured credit facility. Moreover, our use of letters of credit limits our borrowing capability under our revolving senior secured credit facility as the aggregate amount of letters of credit we have outstanding at any time reduces our borrowing capacity under the facility by an equal amount. As of March 31, 2010, we had no letters of credit outstanding.

In the future, we may have difficulty procuring or maintaining surety bonds or letters of credit, and obtaining them may become more expensive, require us to post cash collateral or otherwise involve unfavorable terms. Because we are sometimes required to have performance bonds or letters of credit in place before projects can commence or continue, our failure to obtain or maintain those bonds and letters of credit would adversely affect our ability to begin and complete projects, and thus could have a material adverse effect on our business, financial condition and operating results.

***We operate in a highly competitive industry, and our current or future competitors may be able to compete more effectively than we do, which could have a material adverse effect on our business, revenue, growth rates and market share.***

Our industry is highly competitive, with many companies of varying size and business models, many of which have their own proprietary technologies, competing for the same business as we do. Many of our competitors have longer operating histories and greater resources than us, and could focus their substantial

## [Table of Contents](#)

financial resources to develop a competing business model, develop products or services that are more attractive to potential customers than what we offer or convince our potential customers that they should require financing arrangements that would be impractical for smaller companies to offer. Our competitors may also offer energy solutions at prices below cost, devote significant sales forces to competing with us or attempt to recruit our key personnel by increasing compensation, any of which could improve their competitive positions. Any of these competitive factors could make it more difficult for us to attract and retain customers, cause us to lower our prices in order to compete, and reduce our market share and revenue, any of which could have a material adverse effect on our financial condition and operating results. We can provide no assurance that we will continue to effectively compete against our current competitors or additional companies that may enter our markets.

In addition, we may also face competition based on technological developments that reduce demand for electricity, increase power supplies through existing infrastructure or that otherwise compete with our products and services. We also encounter competition in the form of potential customers electing to develop solutions or perform services internally rather than engaging an outside provider such as us.

### ***We may be unable to complete or operate our projects on a profitable basis or as we have committed to our customers.***

Development, installation and construction of our energy efficiency and renewable energy projects, and operation of our renewable energy projects, entails many risks, including:

- failure to receive critical components and equipment that meet our design specifications and can be delivered on schedule;
- failure to obtain all necessary rights to land access and use;
- failure to receive quality and timely performance of third-party services;
- increases in the cost of labor, equipment and commodities needed to construct or operate projects;
- permitting and other regulatory issues, license revocation and changes in legal requirements;
- shortages of equipment or skilled labor;
- unforeseen engineering problems;
- failure of a customer to accept or pay for renewable energy that we supply;
- weather interferences, catastrophic events including fires, explosions, earthquakes, droughts and acts of terrorism; and accidents involving personal injury or the loss of life;
- labor disputes and work stoppages;
- mishandling of hazardous substances and waste; and
- other events outside of our control.

Any of these factors could give rise to construction delays and construction and other costs in excess of our expectations. This could prevent us from completing construction of our projects, cause defaults under our financing agreements or under contracts that require completion of project construction by a certain time, cause projects to be unprofitable for us, or otherwise impair our business, financial condition and operating results.

### ***Our small-scale renewable energy plants may not generate expected levels of output.***

The small-scale renewable energy plants that we construct and own are subject to various operating risks that may cause them to generate less than expected amounts of processed LFG, electricity or thermal energy. These risks include a failure or degradation of our, our customers' or utilities' equipment; an inability to find suitable replacement equipment or parts; less than expected supply of the plant's source of renewable

energy, such as LFG or biomass; or a faster than expected diminishment of such supply. Any extended interruption in the plant's operation, or failure of the plant for any reason to generate the expected amount of output, could have a material adverse effect on our business and operating results. In addition, we have in the past, and could in the future, incur material asset impairment charges if any of our renewable energy plants incurs operational issues that indicate that our expected future cash flows from the plant are less than its carrying value. Any such impairment charge could have a material adverse effect on our operating results in the period in which the charge is recorded.

***We may be unable to manage our growth effectively.***

Our business and operations have expanded rapidly in the last several years, and we anticipate that further expansion of our organization and operations will be required to achieve our expectations for future growth. In addition, in order to manage our expanding operations, we will also need to continue to improve our management, operational and financial controls and our reporting systems and procedures. All of these measures will require significant expenditures and will demand the attention of management. If we do not continue to enhance our management personnel and our operational and financial systems and controls in response to growth in our business, we could experience operating inefficiencies that could impair our competitive position and could increase our costs more than we had planned. If we are unable to manage growth effectively, our business, financial condition and operating results could be adversely affected.

We expect that some of our growth will be accomplished through the opening of new offices and the hiring of additional personnel to staff those offices. Even if an office is ultimately successful in generating additional revenue and profit for us, there is generally a lag of several years before we are able to recoup the expenses associated with opening that office.

***In order to secure contracts for new projects, we typically face a long and variable selling cycle that requires significant resource commitments and requires a long lead time before we realize revenue.***

The sales, design and construction process for energy efficiency and renewable energy projects typically takes from 12 to 36 months, with sales to federal government and housing authority customers tending to require the longest sales processes. Our existing and potential customers generally have extended budgeting and procurement processes, and sometimes must engage in regulatory approval processes, related to our services. Most of our potential customers issue a request for proposal, or RFP, as part of their consideration of alternatives for their proposed project. In preparation for responding to an RFP, we typically conduct a preliminary audit of the customer's needs and the opportunity to reduce its energy costs. For projects involving a renewable energy plant that is not located on a customer's site or that uses sources of energy not within the customer's control, the sales process also involves the identification of sites with attractive sources of renewable energy, such as a landfill or a site with high winds, and it may involve obtaining necessary rights and governmental permits to develop a project on that site. If we are awarded a project, we then perform a more detailed audit of the customer's facilities, which serves as the basis for the final specifications of the project. We then must negotiate and execute a contract with the customer. In addition, we or the customer typically need to obtain financing for the project.

This extended sales process requires the dedication of significant time by our sales and management personnel and our use of significant financial resources, with no certainty of success or recovery of our related expenses. A potential customer may go through the entire sales process and not accept our proposal. All of these factors can contribute to fluctuations in our quarterly financial performance and increase the likelihood that our operating results in a particular quarter will fall below investor expectations. These factors could also adversely affect our business, financial condition and operating results due to increased spending by us that is not offset by increased revenue.

***Provisions in our government contracts may harm our business, financial condition and operating results.***

A significant majority of our contract backlog and projects that have been awarded to us but have not yet been committed to signed contracts is attributable to customers that are government entities. Our contracts with the federal government and its agencies, and with state, provincial and local governments, customarily

## [Table of Contents](#)

contain provisions that give the government substantial rights and remedies, many of which are not typically found in commercial contracts, including provisions that allow the government to:

- terminate existing contracts, in whole or in part, for any reason or no reason;
- reduce or modify contracts or subcontracts;
- decline to award future contracts if actual or apparent organizational conflicts of interest are discovered, or to impose organizational conflict mitigation measures as a condition of eligibility for an award;
- suspend or debar the contractor from doing business with the government or a specific government agency; and
- pursue criminal or civil remedies under the False Claims Act, False Statements Act and similar remedy provisions unique to government contracting.

Generally, government contracts contain provisions permitting unilateral termination or modification, in whole or in part, at the government's convenience. Under general principles of government contracting law, if the government terminates a contract for convenience, the terminated company may recover only its incurred or committed costs, settlement expenses and profit on work completed prior to the termination. If the government terminates a contract for default, the defaulting company is entitled to recover costs incurred and associated profits on accepted items only and may be liable for excess costs incurred by the government in procuring undelivered items from another source. In most of our contracts with the federal government, the government has agreed to make a payment to us in the event that it terminates the agreement early. The termination payment is designed to compensate us for the cost of construction plus financing costs and profit on the work completed.

In ESPCs for governmental entities, the methodologies for computing energy savings may be less favorable than for non-governmental customers and may be modified during the contract period. We may be liable for price reductions if the projected savings cannot be substantiated.

In addition to the right of the federal government to terminate its contracts with us, federal government contracts are conditioned upon the continuing approval by Congress of the necessary spending to honor such contracts. Congress often appropriates funds for a program on a September 30 fiscal-year basis even though contract performance may take more than one year. Consequently, at the beginning of many major governmental programs, contracts often may not be fully funded, and additional monies are then committed to the contract only if, as and when appropriations are made by Congress for future fiscal years. Similar practices are likely to also affect the availability of funding for our contracts with Canadian, as well as state, provincial and local, government entities. If one or more of our government contracts were terminated or reduced, or if appropriations for the funding of one or more of our contracts is delayed or terminated, our business, financial condition and operating results could be adversely affected.

Government contracts normally contain additional terms and conditions that may increase our costs of doing business, reduce our profits and expose us to liability for failure to comply with these terms and conditions. These include, for example:

- specialized accounting systems unique to government contracting, which may include mandatory compliance with federal Cost Accounting Standards;
- mandatory financial audits and potential liability for adjustments in contract prices;
- public disclosure of contracts, which may include pricing information;
- mandatory socioeconomic compliance requirements, including small business promotion, labor, environmental and U.S. manufacturing requirements; and
- requirements for maintaining current facility and/or personnel security clearances to access certain government facilities or to maintain certain records, and related industrial security compliance requirements.

Our contracts with Canadian governmental entities frequently involve similar risks. Any failure by us to comply with these governmental requirements could adversely affect our business.

***Our renewable energy projects, particularly our LFG projects, depend on locating and acquiring suitable operating sites, of which there are a limited number.***

Our small-scale renewable energy projects must be situated at sites that have access to renewable sources of energy. Specifically, LFG projects must originate on or near landfill sites, of which approximately 500 are currently available in the United States for economically viable LFG projects. Sites for our renewable energy plants must be suitable for construction and efficient operation, which, among other things, requires appropriate road access. Further, many plants must be interconnected to electricity transmission or distribution networks. Once we have identified a suitable operating site, obtaining the requisite LFG and/or land rights (including access rights, setbacks and other easements) requires us to negotiate with landowners and local government officials. These negotiations can take place over a long time, are not always successful and sometimes require economic concessions not in our original plans. The property rights necessary to construct and interconnect our plants must also be insurable and otherwise satisfactory to our financing counterparties. In addition, our ability to obtain adequate LFG and/or property rights is subject to competition. If a competitor or other party obtains LFG and/or land rights critical to our project development efforts and we are unable to reach agreement for their use, we could incur losses as a result of development costs for sites we do not develop, which we would have to write off. If we are unable to obtain adequate LFG and/or property or other rights for a renewable energy plant, including its interconnection, that plant may be smaller in size or potentially unfeasible. Failure to obtain insurable property rights for a project satisfactory to our financing sources would preclude our ability to obtain third-party financing and could prevent ongoing development and construction of that project.

***We plan to expand our business in part through future acquisitions, but we may not be able to identify or complete suitable acquisitions.***

Historically, acquisitions have been a significant part of our growth strategy. We plan to continue to use acquisitions of companies or assets to expand our project skill-sets and capabilities, expand our geographic markets, add experienced management and increase our product and service offerings. However, we may be unable to implement this growth strategy if we cannot identify suitable acquisition candidates, reach agreement with acquisition targets on acceptable terms or arrange required financing for acquisitions on acceptable terms. In addition, the time and effort involved in attempting to identify acquisition candidates and consummate acquisitions may divert members of our management from the operations of our company.

***Any future acquisitions that we may make could disrupt our business, cause dilution to our stockholders and harm our business, financial condition or operating results.***

If we are successful in consummating acquisitions, those acquisitions could subject us to a number of risks, including:

- the purchase price we pay could significantly deplete our cash reserves or result in dilution to our existing stockholders;
- we may find that the acquired company or assets do not improve our customer offerings or market position as planned;
- we may have difficulty integrating the operations and personnel of the acquired company;
- key personnel and customers of the acquired company may terminate their relationships with the acquired company as a result of the acquisition;
- we may experience additional financial and accounting challenges and complexities in areas such as tax planning and financial reporting;



- we may assume or be held liable for risks and liabilities (including for environmental-related costs) as a result of our acquisitions, some of which we may not discover during our due diligence or adequately adjust for in our acquisition arrangements;
- our ongoing business and management's attention may be disrupted or diverted by transition or integration issues and the complexity of managing geographically or culturally diverse enterprises;
- we may incur one-time write-offs or restructuring charges in connection with the acquisition;
- we may acquire goodwill and other intangible assets that are subject to amortization or impairment tests, which could result in future charges to earnings; and
- we may not be able to realize the cost savings or other financial benefits we anticipated.

These factors could have a material adverse effect on our business, financial condition and operating results.

***We need governmental approvals and permits, and we typically must meet specified qualifications, in order to undertake our energy efficiency projects and construct, own and operate our small-scale renewable energy projects, and any failure to do so would harm our business.***

The design, construction and operation of our energy efficiency and small-scale renewable energy projects require various governmental approvals and permits, and may be subject to the imposition of related conditions that vary by jurisdiction. In some cases, these approvals and permits require periodic renewal. We cannot predict whether all permits required for a given project will be granted or whether the conditions associated with the permits will be achievable. The denial of a permit essential to a project or the imposition of impractical conditions would impair our ability to develop the project. In addition, we cannot predict whether the permits will attract significant opposition or whether the permitting process will be lengthened due to complexities and appeals. Delay in the review and permitting process for a project can impair or delay our ability to develop that project or increase the cost so substantially that the project is no longer attractive to us. We have experienced delays in developing our projects due to delays in obtaining permits and may experience delays in the future. If we were to commence construction in anticipation of obtaining the final, non-appealable permits needed for that project, we would be subject to the risk of being unable to complete the project if all the permits were not obtained. If this were to occur, we would likely lose a significant portion of our investment in the project and could incur a loss as a result. Further, the continued operations of our projects require continuous compliance with permit conditions. This compliance may require capital improvements or result in reduced operations. Any failure to procure, maintain and comply with necessary permits would adversely affect ongoing development, construction and continuing operation of our projects.

In addition, the projects we perform for governmental agencies are governed by particular qualification and contracting regimes. Certain states require qualification with an appropriate state agency as a precondition to performing work or appearing as a qualified energy service provider for state, county and local agencies within the state. For example, the Commonwealth of Massachusetts and the states of Colorado and Washington pre-qualify energy service providers and provide contract documents that serve as the starting point for negotiations with potential governmental clients. Most of the work that we perform for the federal government is performed under IDIQ agreements between a government agency and us or a subsidiary. These IDIQ agreements allow us to contract with the relevant agencies to implement energy projects, but no work may be performed unless we and the agency agree on a task order or delivery order governing the provision of a specific project. The government agencies enter into contracts for specific projects on a competitive basis. We and our subsidiaries and affiliates are currently party to an IDIQ agreement with the U.S. Department of Energy that expires in 2019. If we are unable to maintain or renew our IDIQ qualification under the U.S. Department of Energy program for ESPCs, or similar federal or state qualification regimes, our business could be materially harmed.

*Many of our small-scale renewable energy projects are, and other future projects may be, subject to or affected by U.S. federal energy regulation or other regulations that govern the operation, ownership and sale of the facility, or the sale of electricity from the facility.*

The Public Utility Holding Company Act of 2005, or PUHCA, and the Federal Power Act, or FPA, regulate public utility holding companies and their subsidiaries and place constraints on the conduct of their business. The FPA regulates wholesale sales of electricity and the transmission of electricity in interstate commerce by public utilities. Under the Public Utility Regulatory Policies Act of 1978, or PURPA, all of our current small-scale renewable energy projects are small power “qualifying facilities” (facilities meeting statutory size, fuel and ownership requirements) that are exempt from regulations under PUHCA, most provisions of the FPA and state rate regulation. None of our renewable energy projects are currently subject to rate regulation for wholesale power sales by the Federal Energy Regulatory Commission, or FERC, under the FPA, but certain of our projects that are under construction or development could become subject to such regulation in the future. Also, we may acquire interests in or develop generating projects that are not qualifying facilities. Non-qualifying facility projects would be fully subject to FERC corporate and rate regulation, and would be required to obtain FERC acceptance of their rate schedules for wholesale sales of energy, capacity and ancillary services, which requires substantial disclosures to and discretionary approvals from FERC. FERC may revoke or revise an entity’s authorization to make wholesale sales at negotiated, or market-based, rates if FERC determines that we can exercise market power in transmission or generation, create barriers to entry or engage in abusive affiliate transactions or market manipulation. In addition, many public utilities (including any non-qualifying facility generator in which we may invest) are subject to FERC reporting requirements that impose administrative burdens and that, if violated, can expose the company to civil penalties or other risks.

All of our wholesale electric power sales are subject to certain market behavior rules. These rules change from time to time, by virtue of FERC rulemaking proceedings and FERC-ordered amendments to utilities’ FERC tariffs. If we are deemed to have violated these rules, we will be subject to potential disgorgement of profits associated with the violation and/or suspension or revocation of our market-based rate authority, as well as potential criminal and civil penalties. If we were to lose market-based rate authority for any non-qualifying facility project we may acquire or develop in the future, we would be required to obtain FERC’s acceptance of a cost-based rate schedule and could become subject to, among other things, the burdensome accounting, record keeping and reporting requirements that are imposed on public utilities with cost-based rate schedules. This could have an adverse effect on the rates we charge for power from our projects and our cost of regulatory compliance.

Wholesale electric power sales are subject to increasing regulation. The terms and conditions for power sales, and the right to enter and remain in the wholesale electric sector, are subject to FERC oversight. Due to major regulatory restructuring initiatives at the federal and state levels, the U.S. electric industry has undergone substantial changes over the past decade. We cannot predict the future design of wholesale power markets or the ultimate effect ongoing regulatory changes will have on our business. Other proposals to further regulate the sector may be made and legislative or other attention to the electric power market restructuring process may delay or reverse the movement towards competitive markets.

If we become subject to additional regulation under PUHCA, FPA or other regulatory frameworks, if existing regulatory requirements become more onerous, or if other material changes to the regulation of the electric power markets take place, our business, financial condition and operating results could be adversely affected.

***Compliance with environmental laws could adversely affect our operating results.***

Costs of compliance with federal, state, provincial, local and other foreign existing and future environmental regulations could adversely affect our cash flow and profitability. We are required to comply with numerous environmental laws and regulations and to obtain numerous governmental permits in connection with energy efficiency and renewable energy projects, and we may incur significant additional costs to comply with these requirements. If we fail to comply with these requirements, we could be subject to

civil or criminal liability, damages and fines. Existing environmental regulations could be revised or reinterpreted and new laws and regulations could be adopted or become applicable to us or our projects, and future changes in environmental laws and regulations could occur. These factors may materially increase the amount we must invest to bring our projects into compliance and impose additional expense on our operations.

In addition, private lawsuits or enforcement actions by federal, state, provincial and/or foreign regulatory agencies may materially increase our costs. Certain environmental laws make us potentially liable on a joint and several basis for the remediation of contamination at or emanating from properties or facilities we currently or formerly owned or operated or properties to which we arranged for the disposal of hazardous substances. Such liability is not limited to the cleanup of contamination we actually caused. Although we seek to obtain indemnities against liabilities relating to historical contamination at the facilities we own or operate, we cannot provide any assurance that we will not incur liability relating to the remediation of contamination, including contamination we did not cause. For example, in 2009, a customer for which we were performing an energy efficiency project initiated a legal proceeding against us as a result of project delays that we believe were attributable to the discovery of hazardous materials and need for remediation by the customer. An adverse outcome in this proceeding could have an adverse effect on our operating results in the period in which the outcome is determined.

We may not be able to obtain or maintain, from time to time, all required environmental regulatory approvals. A delay in obtaining any required environmental regulatory approvals or failure to obtain and comply with them could adversely affect our business and operating results.

***International expansion is one of our growth strategies, and international operations will expose us to additional risks that we do not face in the United States, which could have an adverse effect on our operating results.***

We generate a significant portion of our revenue from operations in Canada, and although we are engaged in overseas projects for the U.S. Department of Defense, we currently derive a small amount of revenue from outside of North America. However, international expansion is one of our growth strategies, and we expect our revenue and operations outside of North America will expand in the future. These operations will be subject to a variety of risks that we do not face in the United States, and that we may face only to a limited degree in Canada, including:

- building and managing highly experienced foreign workforces and overseeing and ensuring the performance of foreign subcontractors;
- increased travel, infrastructure and legal and compliance costs associated with multiple international locations;
- additional withholding taxes or other taxes on our foreign income, and tariffs or other restrictions on foreign trade or investment;
- imposition of, or unexpected adverse changes in, foreign laws or regulatory requirements, many of which differ from those in the United States;
- increased exposure to foreign currency exchange rate risk;
- longer payment cycles for sales in some foreign countries and potential difficulties in enforcing contracts and collecting accounts receivable;
- difficulties in repatriating overseas earnings;
- general economic conditions in the countries in which we operate; and
- political unrest, war, incidents of terrorism, or responses to such events.

Our overall success in international markets will depend, in part, on our ability to succeed in differing legal, regulatory, economic, social and political conditions. We may not be successful in developing and implementing policies and strategies that will be effective in managing these risks in each country where we

do business. Our failure to manage these risks successfully could harm our international operations, reduce our international sales and increase our costs, thus adversely affecting our business, financial condition and operating results.

***Our insurance and contractual protections may not always cover lost revenue, increased expenses or liquidated damages payments.***

Although we maintain insurance, obtain warranties from suppliers, obligate subcontractors to meet certain performance levels and attempt, where feasible, to pass risks we cannot control to our customers, the proceeds of such insurance, warranties, performance guarantees or risk sharing arrangements may not be adequate to cover lost revenue, increased expenses or liquidated damages payments that may be required in the future.

***If the cost of energy generated by traditional sources does not increase, or if it decreases, demand for our services may decline.***

Decreases in the costs associated with traditional sources of energy, such as prices for commodities like coal, oil and natural gas, may reduce demand for energy efficiency and renewable energy solutions. Technological progress in traditional forms of electricity generation or the discovery of large new deposits of traditional fuels could reduce the cost of electricity generated from those sources and as a consequence reduce the demand for our solutions. Any of these developments could have a material adverse effect on our business, financial condition and operating results.

***We have a material weakness in our internal control over financial reporting. If we fail to establish and maintain proper and effective internal controls, our ability to produce accurate financial statements could be impaired, which could adversely affect our operating results, our ability to operate our business and investors' and customers' views of us.***

As a public company, we will become subject to a set of laws and regulations requiring that we establish and maintain internal control over financial reporting. Internal control over financial reporting is defined under Securities and Exchange Commission, or SEC, rules as a process designed by, or under the supervision of, our principal executive and principal financial officers and effected by our board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP. We have not yet begun the process of documenting, reviewing and, as appropriate, improving our internal controls and procedures in anticipation of being a public company and eventually becoming subject to the SEC rules concerning internal control over financial reporting, which take effect beginning with the filing of our second Annual Report on Form 10-K (which will be due in March 2012). Establishing and maintaining adequate internal financial and accounting controls and procedures so that we can produce accurate financial statements on a timely basis is a costly and time-consuming effort that needs to be re-evaluated frequently, and may distract our officers and employees from the operation of our business.

We do not currently have personnel with an appropriate level of knowledge, experience or training in the selection, application and implementation of GAAP as it relates to certain complex accounting issues, income taxes and SEC financial reporting requirements. This constitutes a material weakness in our internal control over financial reporting that could result in material misstatements in our financial statements not being prevented or detected. Although we plan to remediate this material weakness by hiring additional personnel with the requisite expertise, we may experience difficulties or delays in doing so, and new employees will require time and training to learn our business and operating processes and procedures.

If we fail to enhance and then maintain our internal control over financial reporting, we may be unable to report our financial results timely and accurately, and we may be less likely to prevent fraud. In addition, such failure could increase our operating costs, materially impair our ability to operate our business, result in SEC investigations and penalties and lead to the delisting of our common stock from the . The resulting damage to our reputation in the marketplace and our financial credibility could significantly

impair our sales and marketing efforts with customers. Further, investors' perceptions that our internal controls are inadequate or that we are unable to produce accurate financial statements could adversely affect the market price of our Class A common stock.

***Changes in utility regulation and tariffs could adversely affect our business.***

Our business is affected by regulations and tariffs that govern the activities of utilities. For example, utility companies are commonly allowed by regulatory authorities to charge fees to larger industrial customers for disconnecting from the electric grid or for having the capacity to use power from the electric grid for back-up purposes. These fees could increase the cost to our customers of taking advantage of our services and make them less desirable, thereby harming our business, financial condition and operating results. Our current generating projects are all operated as qualifying facilities. FERC regulations under the FPA confer upon these facilities key rights to interconnection with local utilities, and can entitle qualifying facilities to enter into power purchase agreements with local utilities, from which the qualifying facilities benefit. Changes to these federal laws and regulations could increase our regulatory burdens and costs, and could reduce our revenue. In addition, modifications to the pricing policies of utilities could require renewable energy systems to achieve lower prices in order to compete with the price of electricity from the electric grid and may reduce the economic attractiveness of certain energy efficiency measures.

Some of the demand-reduction services we provide for utilities and institutional clients are subject to regulatory tariffs imposed under federal and state utility laws. In addition, the operation of, and electrical interconnection for, our renewable energy projects are subject to federal, state or provincial interconnection and federal reliability standards that are also set forth in utility tariffs. These tariffs specify rules, business practices and economic terms to which we are subject. The tariffs are drafted by the utilities and approved by the utilities' state and federal regulatory commissions. These tariffs change frequently and it is possible that future changes will increase our administrative burden or adversely affect the terms and conditions under which we render service to our customers.

***Our activities and operations are subject to numerous health and safety laws and regulations, and if we violate such regulations, we could face penalties and fines.***

We are subject to numerous health and safety laws and regulations in each of the jurisdictions in which we operate. These laws and regulations require us to obtain and maintain permits and approvals and implement health and safety programs and procedures to control risks associated with our projects. Compliance with those laws and regulations can require us to incur substantial costs. Moreover, if our compliance programs are not successful, we could be subject to penalties or to revocation of our permits, which may require us to curtail or cease operations of the affected projects. Violations of laws, regulations and permit requirements may also result in criminal sanctions or injunctions.

Health and safety laws, regulations and permit requirements may change or become more stringent. Any such changes could require us to incur materially higher costs than we currently have. Our costs of complying with current and future health and safety laws, regulations and permit requirements, and any liabilities, fines or other sanctions resulting from violations of them, could adversely affect our business, financial condition and operating results.

***Our credit facilities and debt instruments contain financial and operating restrictions that may limit our business activities and our access to credit.***

Provisions in our credit facilities and debt instruments impose restrictions on our and certain of our subsidiaries' ability to, among other things:

- incur additional debt, or debt related to federal projects in excess of specified limits;
- pay cash dividends and make distributions;
- make certain investments and acquisitions;

## [Table of Contents](#)

- guarantee the indebtedness of others or our subsidiaries;
- redeem or repurchase capital stock;
- create liens;
- enter into transactions with affiliates;
- engage in new lines of business;
- sell, lease or transfer certain parts of our business or property;
- enter into sale-leaseback arrangements; and
- merge or consolidate.

These agreements also contain other customary covenants, including covenants that require us to meet specified financial ratios and financial tests. We may not be able to comply with these covenants in the future. Our failure to comply with these covenants may result in the declaration of an event of default and cause us to be unable to borrow under our credit facilities and debt instruments. In addition to preventing additional borrowings under these agreements, an event of default, if not cured or waived, may result in the acceleration of the maturity of indebtedness outstanding under these agreements, which would require us to pay all amounts outstanding. If an event of default occurs, we may not be able to cure it within any applicable cure period, if at all. If the maturity of our indebtedness is accelerated, we may not have sufficient funds available for repayment or we may not have the ability to borrow or obtain sufficient funds to replace the accelerated indebtedness on terms acceptable to us or at all.

***If our subsidiaries default on their obligations under their debt instruments, we may need to make payments to lenders to prevent foreclosure on the collateral securing the debt.***

We typically set up subsidiaries to own and finance our renewable energy projects. These subsidiaries incur various types of debt which can be used to finance one or more projects. This debt is typically structured as non-recourse debt, which means it is repayable solely from the revenue from the projects financed by the debt and is secured by such projects' physical assets, major contracts and cash accounts and a pledge of our equity interests in the subsidiaries involved in the projects. Although our subsidiary debt is typically non-recourse to Ameresco, if a subsidiary of ours defaults on such obligations, or if one project out of several financed by a particular subsidiary's indebtedness encounters difficulties or is terminated, then we may from time to time determine to provide financial support to the subsidiary in order to maintain rights to the project or otherwise avoid the adverse consequences of a default. In the event a subsidiary defaults on its indebtedness, its creditors may foreclose on the collateral securing the indebtedness, which may result in our losing our ownership interest in some or all of the subsidiary's assets. The loss of our ownership interest in a subsidiary or some or all of a subsidiary's assets could have a material adverse effect on our business, financial condition and operating results.

***We are exposed to the credit risk of some of our customers.***

Most of our revenue is derived under multi-year or long-term contracts with our customers, and our revenue is therefore dependent to a large extent on the creditworthiness of our customers. During periods of economic downturn in the global economy, our exposure to credit risks from our customers increases, and our efforts to monitor and mitigate the associated risks may not be effective in reducing our credit risks. In the event of non-payment by one or more of our customers, our business, financial condition and operating results could be adversely affected.

***The use and enjoyment of real property rights for our small-scale renewable energy projects may be adversely affected by the rights of lienholders and leaseholders that are superior to those of the grantors of those real property rights to us.***

Our small-scale renewable energy projects generally are, and are likely to continue to be, located on land we or our customers occupy pursuant to long-term easements and leases. The ownership interests in the land subject to these easements and leases may be subject to mortgages securing loans or other liens (such as tax liens) and other easement and lease rights of third parties (such as leases of oil or mineral rights) that were created prior to our or our customers' easements and leases. As a result, the rights under these easements or leases may be subject, and subordinate, to the rights of those third parties. We typically perform title searches and obtain title insurance to protect ourselves or our customers against these risks. Such measures may, however, be inadequate to protect against all risk of loss of rights to use the land on which these projects are located, which could have a material adverse effect on our business, financial condition and operating results.

***Fluctuations in foreign currency exchange rates can impact our results.***

A significant portion of our total revenue is generated by our Canadian subsidiary, Ameresco Canada. Changes in exchange rates between the Canadian dollar and the U.S. dollar may adversely affect our operating results.

***The trading price of our Class A common stock is likely to be volatile, and you may not be able to sell your shares at or above the initial public offering price.***

Our Class A common stock has no prior trading history. The initial public offering price for our Class A common stock will be determined through negotiations between us and the representatives of the underwriters. This price will not necessarily reflect the price at which investors in the market will be willing to buy and sell shares of our Class A common stock following this offering. In addition, the trading price of our Class A common stock is likely to be highly volatile and could be subject to wide fluctuations in response to various factors. In addition to the risks described in this section, factors that may cause the market price of our Class A common stock to fluctuate include:

- fluctuations in our quarterly financial results or the quarterly financial results of companies perceived to be similar to us;
- changes in estimates of our future financial results or recommendations by securities analysts;
- investors' general perception of us; and
- changes in general economic, industry and market conditions.

In addition, if the stock market in general experiences a significant decline, the trading price of our Class A common stock could decline for reasons unrelated to our business, financial condition or operating results.

Some companies that have had volatile market prices for their securities have had securities class actions filed against them. If a suit were filed against us, regardless of its merits or outcome, it would likely result in substantial costs and divert management's attention and resources. This could have a material adverse effect on our business, operating results and financial condition.

***Our securities have no prior market and an active public trading market for our Class A common stock may not develop.***

Prior to this offering, there has been no public market for shares of our Class A common stock. Although our Class A common stock has been approved for listing on the New York Stock Exchange, or NYSE, an active public trading market for our Class A common stock may not develop or, if it develops, may not be maintained after this offering. For example, applicable NYSE rules impose certain securities trading requirements, including minimum trading price, minimum number of stockholders and minimum market capitalization. If an active public trading market for our Class A common stock does not develop or is not

sustained, it may be difficult for you to sell your shares of our Class A common stock at an attractive price or at all.

***Holders of our Class A common stock, which is the stock we are selling in this offering, are entitled to one vote per share, and holders of our Class B common stock are entitled to five votes per share. The lower voting power of our Class A common stock may negatively affect the attractiveness of our Class A common stock to investors and, as a result, its market value.***

We have two classes of common stock: Class A common stock, which is the stock we are selling in this offering and which is entitled to one vote per share, and Class B common stock, which is entitled to five votes per share. The difference in the voting power of our Class A and Class B common stock could diminish the market value of our Class A common stock because of the superior voting rights of our Class B common stock and the power those rights confer.

***For the foreseeable future, Mr. Sakellaris or his affiliates will be able to control the selection of all members of our board of directors, as well as virtually every other matter that requires stockholder approval, which will severely limit the ability of other stockholders to influence corporate matters.***

Except in certain limited circumstances required by applicable law, holders of Class A and Class B common stock vote together as a single class on all matters to be voted on by our stockholders. Immediately following the closing of this offering, Mr. Sakellaris, our founder, principal stockholder, president and chief executive officer will own all of our Class B common stock, which, together with his Class A common stock, will represent 82.9% of the combined voting power of our outstanding Class A and Class B common stock. Under our restated certificate of incorporation, holders of shares of Class B common stock may generally transfer those shares to family members, including spouses and descendants or the spouses of such descendants, as well as to affiliated entities, without having the shares automatically convert into shares of Class A common stock. Therefore, Mr. Sakellaris, his affiliates, and his family members and descendants will, for the foreseeable future, be able to control the outcome of the voting on virtually all matters requiring stockholder approval, including the election of directors and significant corporate transactions such as an acquisition of our company, even if they come to own, in the aggregate, as little as 20% of the economic interest of the outstanding shares of our Class A and Class B common stock. Moreover, these persons may take actions in their own interests that you or our other stockholders do not view as beneficial. See “Principal and Selling Stockholders” and “Description of Capital Stock.”

***Future sales of shares by existing stockholders could cause our stock price to decline.***

Once a trading market develops for our Class A common stock, many of our stockholders for the first time will have an opportunity to sell their shares, subject to the contractual lock-up agreements and other restrictions on resale discussed in this prospectus. Sales by our existing stockholders of a substantial number of shares in the public market, or the threat that substantial sales might occur, could cause the market price of the Class A common stock to decrease significantly. These factors could also make it difficult for us to raise additional capital by selling our Class A common stock. See “Shares Eligible for Future Sale” for further details regarding the number of shares eligible for sale in the public market after this offering.

***If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, our stock price and trading volume could decline.***

The trading market for our Class A common stock will depend in part on any research reports that securities or industry analysts publish about us or our business. After this offering, if no securities or industry analysts initiate coverage of our company, the trading price for our Class A common stock may be negatively impacted. In the event securities or industry analysts cover our company and one or more of these analysts downgrade our stock or publish unfavorable reports about our business, our stock price would likely decline. In addition, if any securities or industry analysts cease coverage of our company or fail to publish reports on us regularly, demand for our Class A common stock could decrease, which could cause our stock price and trading volume to decline.



***You will experience substantial dilution as a result of this offering and future equity issuances.***

The initial public offering price per share of our Class A common stock is substantially higher than the pro forma net tangible book value per share of our Class A common stock. As a result, investors purchasing Class A common stock in this offering will experience immediate dilution of \$10.77 per share, at an assumed initial public offering price of \$15.00 per share, which is the midpoint of the range listed on the cover page of this prospectus. In addition, we have granted options to acquire Class A common stock at prices significantly below the initial public offering price. To the extent outstanding options are exercised, there will be further dilution to investors in this offering. See "Dilution."

***Our management will have broad discretion over the use of the proceeds we receive in this offering and might not apply the proceeds in ways that increase the value of your investment.***

We expect to use a portion of the net proceeds to us from this offering to repay the balance outstanding under our \$50 million revolving senior secured credit facility, under which \$24.9 million in principal was outstanding as of March 31, 2010 and \$31.4 million in principal was outstanding as of June 30, 2010, and the entire principal balance of and all accrued and unpaid interest on the \$3.0 million subordinated note held by Mr. Sakellaris, our founder, principal stockholder, president and chief executive officer. We intend to use the balance of the net proceeds for working capital and other general corporate purposes, which may include opening additional offices in the United States and abroad, expanding sales and marketing activities, funding the development and construction of our small-scale renewable energy projects and other capital expenditures. Our management will have broad discretion over the use of the net proceeds from this offering, and you will be relying on the judgment of our management regarding the application of those net proceeds. Although it is the intention of our management to use the net proceeds from the offering in the best interests of the company, our management might not apply the net proceeds from this offering in ways that increase the value of your investment or in ways with which you agree. See "Use of Proceeds."

***We do not anticipate paying any cash dividends on our capital stock in the foreseeable future.***

We have never declared or paid any cash dividends on our capital stock and do not currently expect to pay any cash dividends for the foreseeable future. Our revolving senior secured credit facility with Bank of America limits our ability to declare and pay cash dividends during the term of that agreement. See "Dividend Policy." We intend to use our future earnings, if any, in the operation and expansion of our business. Accordingly, you are not likely to receive any dividends on your Class A common stock for the foreseeable future, and your ability to achieve a return on your investment will therefore depend on appreciation in the market price of our Class A common stock.

***Anti-takeover provisions in our charter documents and Delaware law could discourage, delay or prevent a change in control of our company and may affect the trading price of our Class A common stock.***

We are a Delaware corporation and the anti-takeover provisions of the Delaware General Corporation Law may discourage, delay or prevent an acquisition of our company by prohibiting us from engaging in a business combination with an interested stockholder for a period of three years after the person becomes an interested stockholder, even if a change in control would be supported by our existing stockholders. In addition, our restated certificate of incorporation and by-laws may discourage, delay or prevent an acquisition or a change in our management that stockholders may consider favorable. Our restated certificate of incorporation and by-laws, which will be in effect upon the closing of this offering:

- provide for a dual class capital structure that allows our founder, principal stockholder, president and chief executive officer, Mr. Sakellaris, to control the outcome of the voting on virtually all matters requiring stockholder approval, including the election of directors and significant corporate transactions such as an acquisition of our company;
- authorize the issuance of "blank check" preferred stock that could be issued by our board of directors to thwart a takeover attempt;

[Table of Contents](#)

- establish a classified board of directors, as a result of which only approximately one-third of our directors are presented to a stockholder vote for re-election at any annual meeting of stockholders;
- provide that directors may be removed from office only for cause and only upon a supermajority stockholder vote;
- provide that vacancies on our board of directors, including newly created directorships, may be filled only by a majority vote of directors then in office;
- do not permit stockholders to call special meetings of stockholders;
- prohibit stockholder action by written consent, requiring all actions to be taken at a meeting of the stockholders;
- establish advance notice requirements for nominations for election to our board of directors or for proposing matters that can be acted upon by stockholders at stockholder meetings; and
- require a supermajority stockholder vote to effect certain amendments to our restated certificate of incorporation and by-laws.

For additional information regarding these and other anti-takeover provisions, see “Description of Capital Stock — Anti-Takeover Effects of Delaware Law and Our Restated Certificate of Incorporation and By-Laws.”

### SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements. All statements other than statements of historical facts contained in this prospectus, including statements regarding our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans, objectives of management and expected market growth are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

The words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “plan,” “predict,” “project,” “will,” “would” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. These forward-looking statements include, among other things, statements about:

- our expectations as to the future growth of our business;
- the expected future growth of the market for energy efficiency and renewable energy solutions;
- our backlog, awarded projects and recurring revenue;
- the expected energy and cost savings of our projects; and
- the expected energy production capacity of our renewable energy plants.

These forward looking statements are only predictions and we may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, so you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have based these forward-looking statements largely on our current expectations and projections about future events and trends that we believe may affect our business, financial condition and operating results. We have included important factors in the cautionary statements included in this prospectus, particularly in the “Risk Factors” section, that could cause actual future results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make.

The forward-looking statements in this prospectus represent our views as of the date of this prospectus. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we have no current intention of doing so except to the extent required by applicable law. You should, therefore, not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this prospectus.

This prospectus also contains estimates and other statistical data made by independent parties and by us relating to market size and growth and other data about our industry. We obtained the industry and market data in this prospectus from our own research as well as from industry and general publications, surveys and studies conducted by third parties, some of which may not be publicly available. For example, Frost & Sullivan’s 2008 report entitled *North American Energy Management Services — Investment Analysis*, which we refer to in this prospectus, is available to the public for a fee. Such data involves a number of assumptions and limitations and contains projections and estimates of the future performance of the industries in which we operate that are subject to a high degree of uncertainty. We caution you not to give undue weight to such projections, assumptions and estimates. While we believe that these publications, studies and surveys are reliable, we have not independently verified the data contained in them.

## USE OF PROCEEDS

We estimate that we will receive net proceeds from this offering of approximately \$81.6 million, based on an assumed initial public offering price of \$15.00 per share, which is the midpoint of the estimated price range shown on the cover of this prospectus, and after deducting the estimated underwriting discount and estimated offering expenses payable by us. At an assumed initial public offering price of \$15.00 per share, the selling stockholders will receive \$37.6 million from their sale of our Class A common stock in this offering, after deducting the estimated underwriting discount. We will not receive any proceeds from the sale of shares by the selling stockholders; however, we will receive an aggregate of \$1.8 million from the exercise of stock options being exercised by selling stockholders in connection with this offering.

A \$1.00 increase (decrease) in the assumed initial public offering price of \$15.00 would increase (decrease) the net proceeds to us from this offering by \$5.6 million, assuming the number of shares offered by us, as set forth on the cover of this prospectus, remains the same.

We intend to use the net proceeds we receive from this offering as follows:

- to repay the outstanding balance under our \$50 million revolving senior secured credit facility (\$24.9 million outstanding as of March 31, 2010 and \$31.4 million outstanding as of June 30, 2010), which as of March 31, 2010 bears interest at a weighted-average rate of 2.49% per annum and matures on June 30, 2011;
- approximately \$3.0 million to repay in full, the entire principal amount of and accrued but unpaid interest on the subordinated note held by Mr. Sakellaris, which currently bears interest at 10.0% per annum and is payable on demand; and
- the balance for working capital and other general corporate purposes, which may include opening additional offices in the United States and abroad, expanding sales and marketing activities, funding the development and construction of our small-scale renewable energy projects and other capital expenditures.

We may use a portion of the net proceeds that we receive from this offering to expand our current business through acquisitions of complementary companies, assets or technologies. Although we are engaged in discussions with respect to a potential acquisition for consideration of less than \$10 million, we currently have no understandings, commitments or agreements to make any acquisitions.

Pending specific utilization of the net proceeds as described above, we intend to invest the net proceeds of the offering in short-term investment grade and U.S. government securities.

Bank of America, N.A., an affiliate of Merrill, Lynch, Pierce, Fenner & Smith Incorporated, an underwriter of this offering, is acting as the agent and a lender under our revolving senior secured credit facility. See "Underwriting — Conflicts of Interest."

**DIVIDEND POLICY**

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain earnings, if any, to finance the growth and development of our business and do not expect to pay any cash dividends for the foreseeable future. Our revolving senior secured credit facility with Bank of America contains provisions that limit our ability to declare and pay cash dividends during the term of that agreement. Payment of future dividends, if any, will be at the discretion of our board of directors and will depend on our financial condition, results of operations, capital requirements, restrictions contained in current or future financing instruments, provisions of applicable law and other factors our board of directors deems relevant.

**CAPITALIZATION**

The following table sets forth our cash and cash equivalents and capitalization as of March 31, 2010:

- on an actual basis;
- on a pro forma basis to reflect (i) our issuance of 405,286 shares of Class A common stock upon the June 2010 exercise of a warrant at an exercise price of \$0.005 per share, (ii) a two-for-one split of our common stock, (iii) the reclassification of all outstanding shares of our common stock as Class A common stock, (iv) the conversion of all shares of our convertible preferred stock, other than those held by Mr. Sakellaris, into shares of our Class A common stock, (v) the conversion of all other outstanding shares of our convertible preferred stock into shares of our Class B common stock and (vi) the issuance of 932,500 shares of our Class A common stock upon the exercise of vested stock options by the selling stockholders in connection with this offering at a weighted-average exercise price of \$1.94; and
- on a pro forma as adjusted basis to reflect, in addition, (i) the sale of 6,000,000 shares of our Class A common stock offered by us at an assumed initial public offering price of \$15.00 per share, the midpoint of the estimated price range shown on the cover page of this prospectus and after deducting the estimated underwriting discount and estimated offering expenses payable by us, including the sale of shares of our Class A common stock by the selling stockholders, and (ii) the application of the net proceeds of this offering to us as described under “Use of Proceeds.”

You should read this table together with our consolidated financial statements and the related notes appearing at the end of this prospectus and the “Management’s Discussion and Analysis of Financial Condition and Results of Operations” section of this prospectus.

	March 31, 2010		
	Actual	Pro Forma	Pro Forma as Adjusted
	(Unaudited)		
	(In thousands, except share and per share amounts)		
Cash and cash equivalents	\$ 24,361	\$ 26,174	\$ 79,796
Long-term debt, including current portion	140,115	140,115	115,183
Subordinated debt	2,999	2,999	—
Stockholders’ equity:			
Series A convertible preferred stock, par value \$0.0001 per share; 3,500,000 shares authorized, 3,210,000 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	0	—	—
Common stock, par value \$0.0001 per share; 60,000,000 shares authorized, 17,998,168 shares issued and 13,282,284 outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	1	—	—
Class A common stock, par value \$0.0001 per share; no shares authorized, issued or outstanding, actual; 500,000,000 shares authorized, 15,880,070 shares issued and outstanding, pro forma; 500,000,000 shares authorized, 21,880,070 shares issued and outstanding, pro forma as adjusted	—	2	2
Class B common stock, par value \$0.0001 per share; no shares authorized, issued or outstanding, actual; 144,000,000 shares authorized, 18,000,000 shares issued and outstanding, pro forma; 144,000,000 shares authorized, 18,000,000 shares issued and outstanding, pro forma as adjusted	—	2	2
Preferred stock, par value \$0.0001 per share; no shares authorized, issued or outstanding, actual; 5,000,000 shares authorized, no shares issued or outstanding, pro forma and pro forma as adjusted	—	—	—
Additional paid-in capital	10,905	12,716	94,270

	March 31, 2010		
	Actual	Pro Forma	Pro Forma
		(Unaudited)	as Adjusted
	(In thousands, except share and per share amounts)		
Retained earnings	99,161	99,161	99,161
Accumulated other comprehensive income (loss)	3,506	3,506	3,506
Treasury stock, 4,715,884 shares, at cost	(8,414)	(8,414)	(8,414)
Total stockholders' equity	105,160	106,971	188,524
Total capitalization	\$ 248,274	\$ 250,085	\$ 303,707

A \$1.00 increase (decrease) in the assumed initial public offering price of \$15.00 would increase (decrease) each of additional paid-in capital and total stockholders' equity in the pro forma as adjusted column by \$5.6 million, assuming the number of shares of our Class A common stock offered by us, as set forth on the cover of this prospectus, remains the same.

The table above excludes:

- 8,470,700 shares of our Class A common stock issuable upon the exercise of stock options outstanding as of March 31, 2010 at a weighted-average exercise price of \$2.90 per share (excluding the 932,500 shares of our Class A common stock that will be issued upon the exercise of vested stock options by the selling stockholders in connection with this offering); and
- 10,000,000 shares of our Class A common stock that will be available for future issuance under our 2010 stock plan, which will become effective upon the closing of this offering.

## DILUTION

If you invest in our Class A common stock in this offering, your interest in our company will be diluted immediately to the extent of the difference between the initial public offering price per share of our Class A common stock and the pro forma as adjusted net tangible book value per share of our Class A and Class B common stock after this offering. Our pro forma net tangible book value as of March 31, 2010 was \$87.1 million, or \$2.57 per share of our Class A and Class B common stock. Our pro forma net tangible book value per share set forth below represents our total tangible assets less total liabilities and convertible preferred stock, divided by the number of shares of our Class A and Class B common stock outstanding on March 31, 2010, after giving effect to (i) our issuance of 405,286 shares of Class A common stock upon the June 2010 exercise of a warrant at an exercise price of \$0.005 per share; (ii) a two-for-one split of our common stock, (iii) the reclassification of all outstanding shares of our common stock as Class A common stock, (iv) the conversion of all shares of our convertible preferred stock, other than those held by Mr. Sakellaris, into shares of our Class A common stock, (v) the conversion of all other outstanding shares of our convertible preferred stock into shares of our Class B common stock and (vi) the issuance of 932,500 shares of our Class A common stock upon the exercise of vested stock options by the selling stockholders in connection with this offering at a weighted-average exercise price of \$1.94.

After giving effect to our issuance and sale of 6,000,000 shares of Class A common stock in this offering at an assumed initial public offering price of \$15.00 per share, the midpoint of the estimated price range shown on the cover of this prospectus, and after deducting the estimated underwriting discount and estimated offering expenses payable by us, and the application of the net proceeds to us as described under "Use of Proceeds," the pro forma as adjusted net tangible book value as of March 31, 2010 would have been \$168.7 million, or \$4.23 per share of Class A and Class B common stock. This represents an immediate increase in net tangible book value to existing stockholders of \$1.66 per share of Class A and Class B common stock. New investors who purchase shares of Class A common stock in this offering will suffer an immediate dilution of their investment of \$10.77 per share. Dilution per share to new investors is determined by subtracting the pro forma as adjusted net tangible book value per share of our Class A and Class B common stock after this offering from the initial public offering price per share of our Class A common stock paid by a new investor. The following table illustrates this per share dilution to new investors purchasing shares of Class A common stock in this offering:

Assumed initial public offering price per share		\$ 15.00
Pro forma net tangible book value per share of Class A and Class B common stock as of March 31, 2010	\$ 2.57	
Increase in pro forma net tangible book value per share attributable to new investors	1.66	
Pro forma as adjusted net tangible book value per share after the offering		4.23
Dilution per share to new investors in Class A common stock		\$ 10.77

A \$1.00 increase (decrease) in the assumed initial public offering price of \$15.00 per share of Class A common stock would increase (decrease) our net tangible book value by \$0.14 per share of Class A and Class B common stock and increase (decrease) the dilution in net tangible book value per share to investors in this offering by \$0.86 per share, assuming that the number of shares of Class A common stock offered by us, as set forth on the cover page of this prospectus, remains the same.

If the underwriters exercise their over-allotment option in full, the pro forma as adjusted net tangible book value will increase to \$4.48 per share of Class A and Class B common stock, representing an immediate increase in net tangible book value to existing stockholders of \$1.91 per share of Class A and Class B common stock and an immediate dilution of \$10.52 per share of Class A common stock to new investors. If any shares of our Class A common stock are issued upon exercise of outstanding options, new investors will experience further dilution (see below in this section for additional information).



[Table of Contents](#)

The following table summarizes, on a pro forma basis as of March 31, 2010 (giving effect to (i) our issuance of 405,286 shares of Class A common stock upon the June 2010 exercise of a warrant at an exercise price of \$0.005 per share; (ii) a two-for-one split of our common stock, (iii) the reclassification of all outstanding shares of our common stock as Class A common stock, (iv) the conversion of all shares of our convertible preferred stock, other than those held by Mr. Sakellaris, into shares of our Class A common stock, (v) the conversion of all other outstanding shares of our convertible preferred stock into shares of our Class B common stock and (vi) the issuance of 932,500 shares of our Class A common stock upon the exercise of vested stock options by the selling stockholders in connection with this offering at a weighted-average exercise price of \$1.94) the differences between the number of shares of common stock purchased from us, the total consideration paid to us, and the average price per share paid by existing stockholders and by new investors purchasing shares of our Class A common stock from us in this offering. The calculation below is based on an assumed initial public offering price of \$15.00 per share, the midpoint of the estimated price range shown on the cover of this prospectus, before the deduction of the estimated underwriting discount and estimated offering expenses payable by us.

	Shares Purchased		Total Consideration		Average Price Per Share
	Number	%	Amount	%	
Existing stockholders	33,880,070	85%	\$ 4,307,207	5%	\$ 0.13
New investors	6,000,000	15	90,000,000	95	\$ 15.00
Total	39,880,070	100%	\$ 94,307,207	100%	

The number of shares of common stock purchased from us prior to this offering by existing stockholders is based on 15,880,070 shares of our Class A common stock and 18,000,000 shares of our Class B common stock outstanding as of March 31, 2010 after giving effect to (i) our issuance of 405,286 shares of Class A common stock upon the June 2010 exercise of a warrant at an exercise price of \$0.005 per share, (ii) a two-for-one split of our common stock, (iii) the reclassification of all outstanding shares of our common stock as Class A common stock, (iv) the conversion of all shares of our convertible preferred stock, other than those held by Mr. Sakellaris, into shares of our Class A common stock, (v) the conversion of all other outstanding shares of our convertible preferred stock into shares of Class B common stock and (vi) the issuance of 932,500 shares of our Class A common stock upon the exercise of vested stock options by the selling stockholders in connection with this offering at a weighted-average exercise price of \$1.94, and excludes:

- 8,470,700 shares of Class A common stock issuable upon the exercise of stock options outstanding as of March 31, 2010 at a weighted-average exercise price of \$2.90 per share (excluding the 932,500 shares of our Class A common stock that will be issued upon the exercise of vested stock options by the selling stockholders in connection with this offering); and
- 10,000,000 shares of our Class A common stock that will be available for future issuance under our 2010 stock plan, which will become effective upon the closing of this offering.

To the extent that any of the outstanding options are exercised, there will be further dilution to new investors. To the extent that all of such outstanding options had been exercised as of March 31, 2010, the pro forma net tangible book value of our Class A and Class B common stock would be \$2.64 per share, the pro forma as adjusted net tangible book value of our Class A and Class B common stock after this offering would be \$4.00 per share, and total dilution to new investors in shares of Class A common stock would be \$10.80 per share. If all options outstanding as of March 31, 2010 had been exercised in full, new investors would have contributed 76% of the total consideration paid for our Class A and Class B common stock outstanding but would own only 12% of our Class A and Class B common stock outstanding after the offering.

The sale of 2,696,820 shares of Class A common stock by the selling stockholders in this offering will reduce the number of shares held by existing stockholders to 31,183,250, or 78% of the total shares of our Class A and Class B common stock outstanding, and will increase the number of shares held by new investors to 8,696,820, or 22% of the total shares of our Class A and Class B common stock outstanding. If the

[Table of Contents](#)

underwriters exercise their over-allotment option in full, the number of shares held by existing stockholders will further decrease to 30,923,250, or 76% of the total shares of our Class A and Class B common stock outstanding, and the number of shares held by new investors will further increase to 10,001,343, or 24% of the total shares of our Class A and Class B common stock outstanding.

**SELECTED CONSOLIDATED FINANCIAL DATA**

The following tables summarize our consolidated financial data for the periods presented. You should read the following selected consolidated financial data in conjunction with our consolidated and condensed consolidated financial statements and the related notes appearing at the end of this prospectus and the “Management’s Discussion and Analysis of Financial Condition and Results of Operations” section of this prospectus.

We derived the consolidated statement of income data for the fiscal years ended December 31, 2007, 2008 and 2009, and the consolidated balance sheet data as of December 31, 2008 and 2009, from our audited consolidated financial statements that are included in this prospectus. We derived the consolidated statement of income data for the fiscal years ended December 31, 2005 and 2006, and the consolidated balance sheet data as of December 31, 2005, 2006 and 2007, from our audited consolidated financial statements that are not included in this prospectus. We derived the consolidated statement of income data for the three months ended March 31, 2009 and 2010 and the consolidated balance sheet data as of March 31, 2009 and March 31, 2010 from our unaudited condensed consolidated financial statements that are included in this prospectus. Our unaudited condensed consolidated financial statements have been prepared on the same basis as the audited consolidated financial statements and notes thereto and, in the opinion of our management, reflect all adjustments that are necessary for a fair presentation in conformity with GAAP. Our historical results for any prior period are not necessarily indicative of results to be expected for any future period.

	Year Ended December 31,					Three Months Ended March 31,	
	2005	2006	2007	2008	2009	2009	2010
	(In thousands, except share and per share data)						
<b>Consolidated Statement of Income Data:</b>							
Revenue:							
Energy efficiency revenue	\$ 248,759	\$ 264,477	\$ 345,936	\$ 325,032	\$ 340,635	\$ 57,228	\$ 74,888
Renewable energy revenue	10,970	13,445	32,541	70,822	87,881	16,159	30,741
	<u>259,729</u>	<u>277,922</u>	<u>378,477</u>	<u>395,854</u>	<u>428,517</u>	<u>73,387</u>	<u>105,629</u>
Direct expenses:							
Energy efficiency expenses	202,573	215,320	285,966	259,019	282,345	46,770	62,524
Renewable energy expenses	9,503	9,500	26,072	59,551	66,472	12,924	24,705
	<u>212,076</u>	<u>224,820</u>	<u>312,038</u>	<u>318,570</u>	<u>348,817</u>	<u>59,694</u>	<u>87,230</u>
Gross profit	47,653	53,102	66,439	77,284	79,700	13,693	18,399
Operating expenses	32,637	37,307	47,042	52,608	54,406	13,025	15,836
Operating income	15,016	15,795	19,397	24,676	25,294	667	2,563
Other (expense) income, net	(1,577)	(1,842)	(3,138)	(5,188)	1,563	(24)	(856)
Income before provision for income taxes	13,439	13,953	16,259	19,488	26,857	643	1,707
Income tax provision	(1,223)	(4,337)	(5,714)	(1,215)	(6,950)	(225)	(429)
Net income	<u>\$ 12,216</u>	<u>\$ 9,615</u>	<u>\$ 10,545</u>	<u>\$ 18,273</u>	<u>\$ 19,907</u>	<u>418</u>	<u>1,278</u>
Net income per share attributable to common shareholders							
Basic	\$ 1.07	\$ 0.83	\$ 0.95	\$ 1.71	\$ 1.99	\$ 0.04	\$ 0.10
Diluted	\$ 0.33	\$ 0.26	\$ 0.28	\$ 0.54	\$ 0.61	\$ 0.01	\$ 0.03
Weighted-average number of common shares outstanding							
Basic	11,388,793	11,575,789	11,121,022	10,678,110	9,991,912	9,621,351	13,282,284
Diluted	36,786,666	37,667,359	37,552,953	33,990,547	32,705,617	32,957,183	36,587,847
Pro forma net income per share(1)							
Basic					\$ 0.65	\$ 0.01	\$ 0.04
Weighted average number of Class A and Class B common shares used in computing pro forma net income per share(1)							
					30,589,698	30,219,137	33,880,070
<b>Other Operating Data:</b>							
Adjusted EBITDA(2)	\$ 18,254	\$ 19,928	\$ 27,974	\$ 29,045	\$ 35,097	\$ 2,391	\$ 5,145

	As of December 31,					As of March 31,
	2005	2006	2007	2008	2009	2010 (Unaudited)
(In thousands)						
<b>Consolidated Balance Sheet Data:</b>						
Cash and cash equivalents	\$ 11,790	\$ 45,454	\$ 40,892	\$ 18,149	\$ 47,928	\$ 24,361
Current assets	89,425	140,335	154,036	131,432	171,772	152,315
Total assets	170,050	256,870	262,224	292,027	375,545	382,198
Current liabilities	53,730	91,304	108,011	90,967	132,330	110,227
Long-term debt, less current portion	47,771	74,529	39,316	90,980	102,807	128,374
Subordinated debt	2,999	2,999	2,999	2,999	2,999	2,999
Total stockholders' equity	46,888	56,963	70,776	74,086	102,770	105,160

- (1) Pro forma net income per share and pro forma weighted-average shares outstanding give effect to (i) our issuance of 405,286 shares of Class A common stock upon the June 2010 exercise of a warrant at an exercise price of \$0.005 per share, (ii) a two-for-one split of our common stock, (iii) the reclassification of all outstanding shares of our common stock as Class A common stock, (iv) the conversion of all shares of our convertible preferred stock, other than those held by Mr. Sakellaris, into shares of our Class A common stock, (v) the conversion of all other outstanding shares of our convertible preferred stock into shares of our Class B common stock and (vi) the issuance of 932,500 shares of our Class A common stock upon the exercise of vested stock options by the selling stockholders in connection with this offering at a weighted-average exercise price of \$1.94.
- (2) We define adjusted EBITDA as operating income before depreciation and impairment expense, share-based compensation expense and a non-recurring non-cash recovery of a contingency in 2008. Adjusted EBITDA is a non-GAAP financial measure and should not be considered as an alternative to operating income or any other measure of financial performance calculated and presented in accordance with GAAP.

We believe adjusted EBITDA is useful to investors in evaluating our operating performance for the following reasons:

- adjusted EBITDA and similar non-GAAP measures are widely used by investors to measure a company's operating performance without regard to items that can vary substantially from company to company depending upon financing and accounting methods, book values of assets, capital structures and the methods by which assets were acquired;
- securities analysts often use adjusted EBITDA and similar non-GAAP measures as supplemental measures to evaluate the overall operating performance of companies; and
- by comparing our adjusted EBITDA in different historical periods, our investors can evaluate our operating results without the additional variations of depreciation and amortization expense, stock-based compensation expense and the non-recurring non-cash recovery of a contingency in 2008.

Our management uses adjusted EBITDA:

- as a measure of operating performance, because it does not include the impact of items that we do not consider indicative of our core operating performance;
- for planning purposes, including the preparation of our annual operating budget;
- to allocate resources to enhance the financial performance of our business;
- to evaluate the effectiveness of our business strategies; and
- in communications with our board of directors and investors concerning our financial performance.

[Table of Contents](#)

We understand that, although measures similar to adjusted EBITDA are frequently used by investors and securities analysts in their evaluation of companies, adjusted EBITDA has limitations as an analytical tool, and you should not consider it in isolation or as a substitute for GAAP operating income or an analysis of our results of operations as reported under GAAP. Some of these limitations are:

- adjusted EBITDA does not reflect our cash expenditures or future requirements for capital expenditures or other contractual commitments;
- adjusted EBITDA does not reflect changes in, or cash requirements for, our working capital needs;
- adjusted EBITDA does not reflect stock-based compensation expense;
- adjusted EBITDA does not reflect cash requirements for income taxes;
- adjusted EBITDA does not reflect net interest income (expense);
- although depreciation, amortization and impairment are non-cash charges, the assets being depreciated, amortized or impaired will often have to be replaced in the future, and adjusted EBITDA does not reflect any cash requirements for these replacements; and
- other companies in our industry may calculate adjusted EBITDA differently than we do, limiting its usefulness as a comparative measure.

To properly and prudently evaluate our business, we encourage you to review the GAAP financial statements included elsewhere in this prospectus, and not to rely on any single financial measure to evaluate our business.

The following table presents a reconciliation of adjusted EBITDA to operating income, the most comparable GAAP measure:

	Year Ended December 31,					Three Months Ended March 31,	
	2005	2006	2007	2008	2009	2009	2010
	(In thousands)						
Operating income	\$ 15,016	\$ 15,795	\$ 19,397	\$ 24,676	\$ 25,294	\$ 667	\$ 2,563
Depreciation and impairment	3,238	3,538	5,898	7,278	6,634	1,107	2,143
Stock-based compensation	—	594	2,679	2,941	3,169	617	439
Recovery of contingency	—	—	—	(5,850)	—	—	—
<b>Adjusted EBITDA</b>	<b>\$ 18,254</b>	<b>\$ 19,927</b>	<b>\$ 27,974</b>	<b>\$ 29,045</b>	<b>\$ 35,097</b>	<b>\$ 2,391</b>	<b>\$ 5,145</b>

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

*You should read the following discussion and analysis of our financial condition and results of operations together with our consolidated financial statements and the related notes and other financial information included elsewhere in this prospectus. Some of the information contained in this discussion and analysis or set forth elsewhere in this prospectus, including information with respect to our plans and strategy for our business and related financing, includes forward-looking statements that involve risks and uncertainties. You should review the "Risk Factors" section of this prospectus for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.*

### Overview

Ameresco is a leading provider of energy efficiency solutions for facilities throughout North America. We provide solutions that enable customers to reduce their energy consumption, lower their operating and maintenance costs and realize environmental benefits. Our comprehensive set of services includes upgrades to a facility's energy infrastructure and the construction and operation of small-scale renewable energy plants.

We report results under ASC 280 for four segments: U.S. federal, central U.S. region, other U.S. regions and Canada. Each segment provides customers with energy efficiency and renewable energy solutions. These segments do not include results of other activities, such as O&M and sales of renewable energy and certain other renewable energy products, that are managed centrally at our corporate headquarters, or corporate operating expenses not specifically allocated to the segments. See Note 19 to our consolidated financial statements appearing at the end of this prospectus.

Our revenue has increased from \$20.9 million in 2001, our first full year of operations, to \$428.5 million in 2009. We achieved profitability in 2002, and we have been profitable every year since then.

In addition to organic growth, strategic acquisitions of complementary businesses and assets have been an important part of our development. Since inception, we have completed more than ten acquisitions, which have enabled us to broaden our service offerings and expand our geographical reach. Our acquisition of the energy services business of Duke Energy in 2002 expanded our geographical reach into Canada and the southeastern United States and enabled us to penetrate the federal government market for energy efficiency projects. The acquisition of the energy services business of Exelon in 2004 expanded our geographical reach into the Midwest. Our acquisition of the energy services business of Northeast Utilities in 2006 substantially grew our capability to provide services for the federal market and in Europe. Our acquisition of Southwestern Photovoltaics, Inc. in 2007 significantly expanded our offering of solar energy products and services.

### *Energy Savings Performance and Energy Supply Contracts*

For our energy efficiency projects, we typically enter into ESPCs under which we agree to develop, design, engineer and construct a project and also commit that the project will satisfy agreed-upon performance standards that vary from project to project. These performance commitments are typically based on the design, capacity, efficiency or operation of the specific equipment and systems we install. Our commitments generally fall into three categories: pre-agreed, equipment-level and whole building-level. Under a pre-agreed energy reduction commitment, our customer reviews the project design in advance and agrees that, upon or shortly after completion of installation of the specified equipment comprising the project, the commitment will have been met. Under an equipment-level commitment, we commit to a level of energy use reduction based on the difference in use measured first with the existing equipment and then with the replacement equipment. A whole building-level commitment requires demonstration of energy usage reduction for a whole building, often based on readings of the utility meter where usage is measured. Depending on the project, the measurement and demonstration may be required only once, upon installation, based on an analysis of one or more sample installations, or may be required to be repeated at agreed upon intervals generally over up to 20 years.

Under our contracts, we typically do not take responsibility for a wide variety of factors outside our control and exclude or adjust for such factors in commitment calculations. These factors include variations in energy prices and utility rates, weather, facility occupancy schedules, the amount of energy-using equipment in a facility, and failure of the customer to operate or maintain the project properly. Typically, our performance commitments apply to the aggregate overall performance of a project rather than to individual energy efficiency measures. Therefore, to the extent an individual measure underperforms, it may be offset by other measures that overperform. In the event that an energy efficiency project does not perform according to the agreed-upon specifications, our agreements typically allow us to satisfy our obligation by adjusting or modifying the installed equipment, installing additional measures to provide substitute energy savings, or paying the customer for lost energy savings based on the assumed conditions specified in the agreement. Many of our equipment supply, local design, and installation subcontracts contain provisions that enable us to seek recourse against our vendors or subcontractors if there is a deficiency in our energy reduction commitment. From our inception to March 31, 2010, our total payments to customers and incurred equipment replacement and maintenance costs under our energy reduction commitments, after customer acceptance of a project, have been less than \$100,000 in the aggregate. See "Risk Factors — We may have liability to our customers under our ESPCs if our projects fail to deliver the energy use reductions to which we are committed under the contract."

Payments by the federal government for energy efficiency measures are based on the services provided and the products installed, but are limited to the savings derived from such measures, calculated in accordance with federal regulatory guidelines and the specific contract's terms. The savings are typically determined by comparing energy use and other costs before and after the installation of the energy efficiency measures, adjusted for changes that affect energy use and other costs but are not caused by the energy efficiency measures.

For projects involving the construction of a small-scale renewable energy plant that we own and operate, we enter into long-term contracts to supply the electricity, processed LFG, heat or cooling generated by the plant to the customer, which is typically a utility, municipality, industrial facility or other large purchaser of energy. The rights to use the site for the plant and purchase of renewable fuel for the plant are also obtained by us under long-term agreements with terms at least as long as the associated output supply agreement. Our supply agreements typically provide for fixed prices or prices that escalate at a fixed rate or vary based on a market benchmark. See "Risk Factors — We may assume responsibility under customer contracts for factors outside our control, including, in connection with some customer projects, the risk that fuel prices will increase."

#### ***Project Financing***

To finance projects with federal governmental agencies, we typically sell to the lenders our right to receive a portion of the long-term payments from the customer arising out of the project for a purchase price reflecting a discount to the aggregate amount due from the customer. The purchase price is generally advanced to us over the implementation period based on completed work or a schedule predetermined to coincide with the construction of the project. Under the terms of these financing arrangements, we are required to complete the construction or installation of the project in accordance with the contract with our customer, and the debt remains on our consolidated balance sheet until the completed project is accepted by the customer. Once the completed project is accepted by the customer, the financing is treated as a true sale and the related receivable and financing liability are removed from our consolidated balance sheet.

Institutional customers, such as state, provincial and local governments, schools and public housing authorities, typically finance their energy efficiency and renewable energy projects through either tax-exempt leases or issuances of municipal bonds. We assist in the structuring of such third-party financing.

In some instances, customers prefer that we retain ownership of the renewable energy plants and related project assets that we construct for them. In these projects, we typically enter into a long-term supply agreement to furnish electricity, gas, heat or cooling to the customer's facility. To finance the significant upfront capital costs required to develop and construct the plant, we rely either on our internal cash flow or, in some cases, third-party debt. For project financing by third-party lenders, we typically establish a separate

subsidiary, usually a limited liability company, to own the project assets and related contracts. The subsidiary contracts with us for construction and operation of the project and enters into a financing agreement directly with the lenders. Additionally, we will provide assurance to the lender that the project will achieve commercial operation. Although the financing is secured by the assets of the subsidiary and a pledge of our equity interests in the subsidiary, and is non-recourse to Ameresco, we may from time to time determine to provide financial support to the subsidiary in order to maintain rights to the project or otherwise avoid the adverse consequences of a default. The amount of such financing is included on our consolidated balance sheet.

In addition to project-related debt, we currently maintain a \$50 million revolving senior secured credit facility with a commercial bank to finance our working capital needs.

***Effects of Seasonality***

We are subject to seasonal fluctuations and construction cycles, particularly in climates that experience colder weather during the winter months, such as the northern United States and Canada, or at educational institutions, where large projects are typically carried out during summer months when their facilities are unoccupied. In addition, government customers, many of which have fiscal years that do not coincide with ours, typically follow annual procurement cycles and appropriate funds on a fiscal-year basis even though contract performance may take more than one year. Further, government contracting cycles can be affected by the timing of, and delays in, the legislative process related to government programs and incentives that help drive demand for energy efficiency and renewable energy projects. As a result, our revenue and operating income in the third quarter are typically higher, and our revenue and operating income in the first quarter are typically lower, than in other quarters of the year. As a result of such fluctuations, we may occasionally experience declines in revenue or earnings as compared to the immediately preceding quarter, and comparisons of our operating results on a period-to-period basis may not be meaningful.

Our annual and quarterly financial results are also subject to significant fluctuations as a result of other factors, many of which are outside our control. See “Risk Factors — Our operating results may fluctuate significantly from quarter to quarter and may fall below expectations in any particular fiscal quarter.”

***Backlog and Awarded Projects***

As of March 31, 2010, we had backlog of approximately \$635 million in future revenue under signed customer contracts for the installation or construction of projects, which we expect to be recognized over the period from 2010 to 2013, and we had been awarded, but not yet signed customer contracts for, projects with estimated total future revenue of an additional \$618 million over the same period. As of March 31, 2009, we had backlog of approximately \$260 million in future revenue under signed customer contracts for the installation or construction of projects, which we expected to be recognized over the period from 2009 to 2012, and we had been awarded, but not yet signed customer contracts for, projects with estimated total future revenue of an additional \$926 million over the period from 2009 to 2013. As of December 31, 2009, we had backlog of approximately \$590 million in future revenue under signed customer contracts for the installation or construction of projects, which we expect to be recognized over the period from 2010 to 2013, and we had been awarded, but not yet signed customer contracts for, projects with estimated total future revenue of an additional \$700 million over the same period. As of December 31, 2008, we had backlog of approximately \$263 million in future revenue under signed customer contracts for the installation or construction of projects, which we expected to be recognized over the period from 2009 to 2011, and we had been awarded, but not yet signed customer contracts for, projects with estimated total future revenue of an additional \$939 million over the period from 2009 to 2013. We also expect to realize recurring revenue both under long-term O&M contracts and under energy supply contracts for renewable energy plants that we own. See “Risk Factors — We may not recognize all revenue from our backlog or receive all payments anticipated under awarded projects and customer contracts.”



## Financial Operations Overview

### *Revenue*

We derive revenue from energy efficiency and renewable energy products and services. Our energy efficiency products and services include the design, engineering and installation of equipment and other measures to improve the efficiency and control the operation of a facility's energy infrastructure. Our renewable energy products and services include the construction of small-scale plants that produce electricity, gas, heat or cooling from renewable sources of energy, the sale of such electricity, processed LFG, heat or cooling from plants that we own, and the sale and installation of solar energy products and systems.

While in any particular quarter a single customer may account for more than ten percent of revenue, in 2007, 2008 and 2009, no customer accounted for more than ten percent of our revenue. During the quarter ended March 31, 2010, one customer, the U.S. Department of Energy, Savannah River Site, accounted for 14.1% of our total revenue for the quarter.

### *Direct Expenses and Gross Margin*

Direct expenses include the cost of labor, materials, equipment, subcontracting and outside engineering that are required for the development and installation of our projects, as well as preconstruction costs, sales incentives, associated travel, inventory obsolescence charges, and, if applicable, costs of procuring financing. A majority of our contracts have fixed price terms; however, in some cases we negotiate protections, such as a cost-plus structure, to mitigate the risk of rising prices for materials, services and equipment.

Direct expenses also include O&M costs for the small-scale renewable energy plants that we own, including the cost of fuel (if any) and depreciation charges.

Gross margin, which is gross profit as a percent of revenue, is affected by a number of factors, including the type of services performed and the geographic region in which the sale is made. Renewable energy projects that we own and operate typically have higher margins than energy efficiency projects, and sales in the United States typically have higher margins than in Canada due to the typical mix of products and services that we sell there.

### *Operating Expenses*

Operating expenses consist of salaries and benefits, project development costs, and general, administrative and other expenses.

*Salaries and benefits.* Salaries and benefits consist primarily of expenses for personnel not directly engaged in specific project or revenue generating activity. These expenses include the time of executive management, legal, finance, accounting, human resources, information technology and other staff not utilized in a particular project. We employ a comprehensive time card system which creates a contemporaneous record of the actual time by employees on project activity. We expect salaries and benefits to increase as we incur additional costs related to operating as a publicly-traded company, including accounting, compliance and legal.

*Project development costs.* Project development costs consist primarily of sales, engineering, legal, finance and third-party expenses directly related to the development of a specific customer opportunity. This also includes associated travel and marketing expenses. We intend to hire additional sales personnel and initiate additional marketing programs as we expand into new regions or complement existing development resources. Accordingly, we expect that our project development costs will continue to increase, but will moderate as a percentage of revenue over time.

*General, administrative and other expenses.* These expenses consist primarily of rents and occupancy, professional services, insurance, unallocated travel expenses, telecommunications and office expenses. Professional services consist principally of recruiting costs, external legal, audit, tax and other consulting services. We expect general and administrative expenses to increase as we incur additional costs related to operating as a publicly-traded company, including increased audit and legal fees, costs of compliance with

securities, corporate governance and other regulations, investor relations expenses and higher insurance premiums, particularly those related to director and officer insurance.

***Other Income (Expense), net***

Other income (expense), net consists primarily of interest income on cash balances, interest expense on borrowings and amortization of deferred financing costs, unrealized gains and losses on derivatives not accounted for as hedges, and realized gains on derivatives not accounted for as hedges. Interest expense will vary periodically depending on the amounts drawn on our revolving senior secured credit facility and the prevailing short-term interest rates.

***Provision for Income Taxes.***

The provision for income taxes is based on various rates set by federal and local authorities and is affected by permanent and temporary differences between financial accounting and tax reporting requirements.

**Critical Accounting Policies and Estimates**

This discussion and analysis of our financial condition and results of operations is based upon our consolidated financial statements, which have been prepared in accordance with GAAP. The preparation of these consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, expense and related disclosures. The most significant estimates with regard to these consolidated financial statements relate to estimates of final contract profit in accordance with long-term contracts, project development costs, project assets, impairment of goodwill, impairment of long-lived assets, fair value of derivative financial instruments, income taxes and stock-based compensation expense. Such estimates and assumptions are based on historical experience and on various other factors that management believes to be reasonable under the circumstances. Estimates and assumptions are made on an ongoing basis, and accordingly, the actual results may differ from these estimates under different assumptions or conditions.

The following critical accounting policies, among others, affect our more significant judgments and estimates used in the preparation of our consolidated financial statements.

***Revenue Recognition***

For each arrangement we have with a customer, we typically provide a combination of one or more of the following services or products:

- installation or construction of energy efficiency measures, facility upgrades and/or a renewable energy plant to be owned by the customer;
- sale and delivery, under long-term agreements, of electricity, gas, heat, chilled water or other output of a renewable energy or central plant that we own and operate;
- sale and delivery of PV equipment and other renewable energy products for which we are a distributor; and
- O&M services provided under long-term O&M agreements, as well as consulting services.

Often, we will sell a combination of these services and products in a bundled arrangement. We divide bundled arrangements into separate deliverables and revenue is allocated to each deliverable based on the relative fair market value of all the elements. The fair market value is determined based on the price of the deliverable sold on a stand-alone basis.

We recognize revenue from the installation or construction of a project on a percentage-of-completion basis. The percentage-of-completion for each project is determined on an actual cost-to-estimated final cost basis. In accordance with industry practice, we include in current assets and liabilities the amounts of receivables related to construction projects that are payable over a period in excess of one year. We recognize

revenue associated with contract change orders only when the authorization for the change order has been properly executed and the work has been performed and accepted by the customer.

When the estimate on a contract indicates a loss, or claims against costs incurred reduce the likelihood of recoverability of such costs, our policy is to record the entire expected loss immediately, regardless of the percentage of completion.

Deferred revenue represents circumstances where (i) there has been a receipt of cash from the customer for work or services that have yet to be performed, (ii) receipt of cash where the product or service may not have been accepted by the customer or (iii) when all other revenue recognition criteria have been met, but an estimate of the final total cost cannot be determined. Deferred revenue will vary depending on the timing and amount of cash receipts from customers and can vary significantly depending on specific contractual terms. As a result, deferred revenue is likely to fluctuate from period to period. Unbilled receivables represent amounts earned and billable that were not invoiced at the end of the fiscal period.

We recognize revenue from the sale and delivery of products, including the output of our renewable energy plants, when produced and delivered to the customer, in accordance with the specific contract terms, provided that persuasive evidence of an arrangement exists, our price to the customer is fixed or determinable and collectibility is reasonably assured.

We recognize revenue from O&M contracts and consulting services as the related services are performed.

For a limited number of contracts under which we receive additional revenue based on a share of energy savings, we recognize such additional revenue as energy savings are generated.

***Project Development Costs***

We capitalize as project development costs only those costs incurred in connection with the development of energy efficiency and renewable energy projects, primarily direct labor, interest costs, outside contractor services, consulting fees, legal fees and associated travel, if incurred after a point in time when the realization of related revenue becomes probable. Project development costs incurred prior to the probable realization of revenue are expensed as incurred.

***Project Assets***

We capitalize interest costs relating to construction financing during the period of construction. The interest capitalized is included in the total cost of the project at completion. The amount of interest capitalized for the years ended December 31, 2007, 2008 and 2009 were \$0, \$0.2 million and \$1.4 million, respectively, and for the first quarters of 2009 and 2010 were \$0.3 million and \$0.3 million respectively.

Routine maintenance costs are expensed in the current year's consolidated statements of income and comprehensive income to the extent that they do not extend the life of the asset. Major maintenance, upgrades and overhauls are required for certain components of our assets. In these instances, the costs associated with these upgrades are capitalized and are depreciated over the shorter of the life of the asset or until the next required major maintenance or overhaul period. Gains or losses on disposal of property and equipment are reflected in general and administrative expenses in the consolidated statements of income and comprehensive income.

We evaluate our long-lived assets for impairment as events or changes in circumstances indicate the carrying value of these assets may not be fully recoverable. We evaluate recoverability of long-lived assets to be held and used by estimating the undiscounted future cash flows before interest associated with the expected uses and eventual disposition of those assets. When these comparisons indicate that the carrying value of those assets is greater than the undiscounted cash flows, we recognize an impairment loss for the amount that the carrying value exceeds the fair value.

During 2008, we determined that impairment had occurred on two of our LFG energy facilities. One facility's landfill owner was experiencing permanent operational issues with its existing well field equipment.

The volume of LFG supplied to our facility was impaired by this factor, resulting in a write-down of the asset value. The second facility's industrial customer filed for bankruptcy in 2008. We assessed the likelihood of the industrial customer emerging from bankruptcy and the resulting impact on future cash flows to the project in determining the amount of the impairment. A total of \$3.5 million was written down for these two facilities, and is included in direct expenses in the accompanying consolidated statement of income and comprehensive income for 2008.

During 2007, we decommissioned one of our LFG facilities as the supply agreement with the local utility company expired in December 2006. During 2007, the plant was temporarily shut down. The plant equipment had been in service for 20 years and the cost of maintaining the aged equipment was economically unfeasible. The remaining book value of \$2.0 million was written off, and is included in direct expenses in the accompanying consolidated statement of income and comprehensive income for 2007.

#### ***Impairment of Goodwill***

We apply ASC Topic 350 in accounting for the valuation of goodwill and identifiable intangible assets. During our annual goodwill impairment tests at December 31, 2009, 2008 and 2007, we determined that the fair value of equity exceeded the carrying value of equity, and therefore that goodwill was not impaired.

Goodwill represents the excess of cost over the fair value of net tangible and identifiable intangible assets of businesses acquired. We assess the impairment of goodwill and intangible assets with indefinite lives on an annual basis and whenever events or changes in circumstances indicate that the carrying value of the asset may not be recoverable. We would record an impairment charge if such an assessment were to indicate that, more likely than not, the fair value of such assets was less than their carrying values. Judgment is required in determining whether an event has occurred that may impair the value of goodwill or identifiable intangible assets. Factors that could indicate that an impairment may exist include significant underperformance relative to plan or long-term projections, significant changes in business strategy, significant negative industry or economic trends or a significant decline in the base stock price of our public competitors for a sustained period of time.

The first step, or Step 1, of the goodwill impairment test, used to identify potential impairment, compares the fair value of the equity with its carrying amount, including goodwill. If the fair value of the equity exceeds its carrying amount, goodwill of the reporting unit is considered not impaired, thus the second step of the impairment test is unnecessary. If the carrying amount of a reporting unit exceeds its fair value, the second step of the goodwill impairment test shall be performed to measure the amount of impairment loss, if any. We performed a Step 1 test at our December 31, 2009, 2008 and 2007 annual testing dates and determined that the fair value of equity exceeded the carrying value of equity, and therefore that goodwill was not impaired.

We completed the Step 1 test using both an income approach and a market approach. The discounted cash flow method was used to measure the fair value of our equity under the income approach. A terminal value utilizing a constant growth rate of cash flows was used to calculate a terminal value after the explicit projection period. Determining the fair value using a discounted cash flow method requires that we make significant estimates and assumptions, including long-term projections of cash flows, market conditions and appropriate discount rates. Our judgments are based upon historical experience, current market trends, pipeline for future sales and other information. While we believe that the estimates and assumptions underlying the valuation methodology are reasonable, different estimates and assumptions could result in a different outcome. In estimating future cash flows, we rely on internally-generated projections for a defined time period for sales and operating profits, including capital expenditures, changes in net working capital and adjustments for non-cash items to arrive at the free cash flow available to invested capital.

Under the market approach, we estimate the fair value based on market multiples of revenue and earnings of comparable publicly-traded companies and comparable transactions of similar companies. The estimates and assumptions used in our calculations include revenue growth rates, expense growth rates, expected capital expenditures to determine projected cash flows, expected tax rates and an estimated discount

rate to determine present value of expected cash flows. These estimates are based on historical experiences, our projections of future operating activity and our weighted-average cost of capital.

In addition, we periodically review the estimated useful lives of our identifiable intangible assets, taking into consideration any events or circumstances that might result in either a diminished fair value or revised useful life. If the Step 1 test concludes an impairment is indicated, we will employ a second step to measure the impairment. If we determine that an impairment has occurred, we will record a write-down of the carrying value and charge the impairment as an operating expense in the period the determination is made. Although we believe goodwill and intangible assets are appropriately stated in our consolidated financial statements, changes in strategy or market conditions could significantly impact these judgments and require an adjustment to the recorded balance.

***Impairment of Long-Lived Assets***

We periodically evaluate long-lived assets for events and circumstances that indicate a potential impairment. A review of long-lived assets for impairment is performed whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable or that the useful lives of these assets are no longer appropriate. Each impairment test is based on a comparison of the estimated undiscounted cash flows of the asset as compared to the recorded value of the asset. If these estimates or their related assumptions change in the future, an impairment charge may be required against these assets in the reporting period in which the impairment is determined.

***Derivative Financial Instruments***

We account for our interest rate swaps as derivative financial instruments in accordance with the related guidance. Under this guidance, derivatives are carried on our consolidated balance sheet at fair value. The fair value of our interest rate swaps is determined based on observable market data in combination with expected cash flows for each instrument.

Effective January 1, 2009, we adopted new guidance which expands the disclosure requirements for derivative instruments and hedging activities.

In the normal course of business, we utilize derivative contracts as part of our risk management strategy to manage exposure to market fluctuations in interest rates. These instruments are subject to various credit and market risks. Controls and monitoring procedures for these instruments have been established and are routinely reevaluated. Credit risk represents the potential loss that may occur because a party to a transaction fails to perform according to the terms of the contract. The measure of credit exposure is the replacement cost of contracts with a positive fair value. We seek to manage credit risk by entering into financial instrument transactions only through counterparties that we believe to be creditworthy. Market risk represents the potential loss due to the decrease in the value of a financial instrument caused primarily by changes in interest rates. We seek to manage market risk by establishing and monitoring limits on the types and degree of risk that may be undertaken. As a matter of policy, we do not use derivatives for speculative purposes.

We are exposed to interest rate risk through our borrowing activities. A portion of our project financing includes three projects that utilize a variable rate swap instrument. Prior to December 31, 2009, we entered into two 15-year interest rate swap contracts under which we agreed to pay an amount equal to a specified fixed rate of interest times a notional principal amount, and to, in turn, receive an amount equal to a specified variable rate of interest times the same notional principal amount. During the three months ended March 31, 2010, we entered into a 14-year interest rate swap contract under which we agreed to pay an amount equal to a specified fixed rate of interest times a notional principal amount, and to in turn receive an amount equal to a specified variable rate of interest times the same notional principal amount. We entered into the interest rate swap contracts as an economic hedge.

We recognize all derivatives in our consolidated financial statements at fair value.

The interest rate swaps that we entered into prior to December 31, 2009, qualify, but have not been designated, as fair value hedges. As such, any changes in fair value are reported in other income (expense) in our consolidated statements of income and comprehensive income. Cash flows from these derivative instruments are reported as operating activities on the consolidated statements of cash flows.

The interest rate swap that we have entered into during 2010 does qualify, and has been designated, as a fair value hedge. We recognize the fair value of this derivative instrument in our consolidated balance sheets and any changes in the fair value are recorded as adjustments to other comprehensive income (loss).

With respect to our interest rate swaps, we recorded the unrealized gain (loss) in earnings in 2007, 2008, 2009 and the first quarter of 2010 of approximately \$(1.4 million), \$(2.8 million), \$2.3 million and \$(0.1 million), respectively, as other (expense) income in our consolidated statements of income and comprehensive income.

#### ***Income Taxes***

We provide for income taxes based on the liability method. We provide for deferred income taxes based on the expected future tax consequences of differences between the financial statement basis and the tax basis of assets and liabilities calculated using the enacted tax rates in effect for the year in which the differences are expected to be reflected in the tax return.

We account for uncertain tax positions using a "more-likely-than-not" threshold for recognizing and resolving uncertain tax positions. The evaluation of uncertain tax positions is based on factors that include, but are not limited to, changes in tax law, the measurement of tax positions taken or expected to be taken in tax returns, the effective settlement of matters subject to audit, new audit activity and changes in facts or circumstances related to a tax position. We evaluate uncertain tax positions on a quarterly basis and adjust the level of the liability to reflect any subsequent changes in the relevant facts surrounding the uncertain positions. Our liabilities for an uncertain tax position can be relieved only if the contingency becomes legally extinguished through either payment to the taxing authority or the expiration of the statute of limitations, the recognition of the benefits associated with the position meet the "more-likely-than-not" threshold or the liability becomes effectively settled through the examination process. We consider matters to be effectively settled once: the taxing authority has completed all of its required or expected examination procedures, including all appeals and administrative reviews; we have no plans to appeal or litigate any aspect of the tax position; and we believe that it is highly unlikely that the taxing authority would examine or re-examine the related tax position. We also accrue for potential interest and penalties, related to unrecognized tax benefits in income tax expense.

#### ***Business Segments***

We report four segments: U.S. federal, central U.S. region, other U.S. regions and Canada. Each segment provides customers with energy efficiency and renewable energy solutions. The other U.S. regions segment is an aggregation of three regions: northeast U.S., southeast U.S. and southwest U.S. These regions have similar economic characteristics — in particular, expected and actual gross profit margins. In addition, they sell products and services of a similar nature, serve similar types of customers and use similar methods to distribute their products and services. Accordingly, these three regions meet the aggregation criteria set forth in ASC 280. The "all other" category includes activities, such as O&M and sales of renewable energy and certain other renewable energy products, that are managed centrally at our corporate headquarters. It also includes all corporate operating expenses not specifically allocated to the segments. We do not allocate any indirect expenses to the segments.

#### **Stock-Based Compensation Expense**

Our stock-based compensation expense results from the issuances of shares of restricted common stock and grants of stock options and warrants to employees, directors, outside consultants and others. We recognize the costs associated with option and warrant grants using the fair value recognition provisions of ASC 718, Compensation — Stock Compensation (formerly SFAS No. 123(R), Share-Based Payment).

Generally, ASC 718 requires the value of all stock-based payments to be recognized in the statement of operations based on their estimated fair value at date of grant amortized over the grants' vesting period.

#### ***Grants of Restricted Shares***

On October 25, 2006, we issued 2,000,000 shares of restricted stock to George P. Sakellaris, our founder, principal shareholder, president and chief executive officer under the 2000 stock plan in consideration for his personal indemnity of surety arrangements required for certain projects. The shares vested in full upon the date three years from the date of grant. At the time the shares were issued, the fair value was determined to be \$3.41 per share. We recorded an expense of \$2.3 million, \$2.3 million and \$1.9 million in 2007, 2008 and 2009, respectively, related to this award. This expense is included in salaries and benefits in our consolidated statements of income and comprehensive income.

#### ***Issuance of Warrants***

As part of a financing agreement, we issued warrants to acquire 2,000,000 and 1,600,000 shares of common stock in 2001 and 2002, respectively. The warrants initially had a per share exercise price of \$0.005 and \$0.30, respectively; however, the \$0.30 per share exercise price was subsequently reduced to \$0.005. During 2008, we repurchased 3,194,714 of these warrants at an average price of \$2.505 per share, for a total price of \$8.0 million. We recorded this transaction in additional paid-in capital and it is reflected in our consolidated balance sheets for 2008 and 2009. In June 2010, we issued 405,286 shares of Class A common stock upon the exercise of a warrant at an exercise price of \$0.005 per share, and no warrants to purchase shares of our common stock remain outstanding.

#### ***Stock Option Grants***

We have granted stock options to certain employees and directors under the 2000 stock plan. At March 31, 2010, 8,492,600 shares were available for grant under the 2000 stock plan.

Under the terms of the 2000 stock plan, all options expire if not exercised within ten years after the grant date. The options vest over five years, with 20% vesting at the end of the first year and five percent vesting every three months beginning one year after the grant date. If the employee ceases to be employed for any reason before vested options have been exercised, the employee generally has three months to exercise vested options or they are forfeited.

Effective January 1, 2006, we adopted the fair value recognition provisions of ASC 718 requiring that all stock-based payments to employees, including grants of employee stock options and modifications to existing stock options, be recognized in the consolidated statements of income and comprehensive income based on their fair values, using the prospective-transition method.

Effective with the adoption of ASC 718, we elected to use the Black-Scholes option pricing model to determine the weighted-average fair value of options granted.

The determination of the fair value of stock-based payment awards utilizing the Black-Scholes model is affected by the stock price and a number of assumptions, including expected volatility, expected life, risk-free interest rate and expected dividends. The following table sets forth the significant assumptions used in the model during 2007, 2008 and 2009:

	Year Ended December 31,		
	2007	2008	2009
Future dividends	\$ —	\$ —	\$ —
Risk-free interest rate	4.26-4.84%	2.90-5.07%	2.00-2.94%
Expected volatility	32-43%	48-54%	57-59%
Expected life	6.5 years	6.5 years	6.5 years

We will continue to use our judgment in evaluating the expected term, volatility and forfeiture rate related to our own stock-based compensation on a prospective basis, and incorporating these factors into the

Black-Scholes pricing model. Higher volatility and longer expected lives result in an increase to stock-based compensation expense determined at the date of grant. In addition, any changes in the estimated forfeiture rate can have a significant effect on reported stock-based compensation expense, as the cumulative effect of adjusting the rate for all expense amortization is recognized in the period that the forfeiture estimate is changed. If a revised forfeiture rate is higher than the previously estimated forfeiture rate, an adjustment is made that will result in a decrease to the stock-based compensation expense recognized in our consolidated financial statements. If a revised forfeiture rate is lower than the previously estimated rate, an adjustment is made that will result in an increase to the stock-based compensation expense recognized in our consolidated financial statements. These expenses will affect our direct expenses, project development and marketing expenses, and salaries and benefits expense.

As of March 31, 2010 we had \$6.3 million of total unrecognized stock-based compensation cost related to employee stock options. We expect to recognize this cost over a weighted-average period of 3.8 years after March 31, 2010. The allocation of this expense between direct expenses, project development and marketing expenses, and salaries and benefits expense will depend on the salaries and work assignments of the personnel holding these options.

#### *Determination of Fair Value*

We believe we have used reasonable methodologies and assumptions in determining the fair value of our common stock for financial reporting purposes. Our board of directors has historically estimated the fair value of our common stock. Because there has been no public market for our shares, our board of directors historically determined the fair value of our common stock based primarily on the market approach, together with a number of objective and subjective factors, including:

- our results of operations and financial condition during the most recently completed period;
- forecasts of our financial results and market conditions affecting our business; and
- developments in our business

The market approach estimates the fair value of a company by applying market multiples of publicly-traded, or recently-acquired, firms in the same or similar lines of business to the results and projected results of the company being valued. In establishing exercise prices for our options, we followed a methodology designed to result in exercise prices that were not lower than, but could be higher than, the then fair value of our common stock. When choosing companies for use in the market approach, we focused on companies that provide energy efficiency services and have high rates of growth. To determine our enterprise value, we reviewed the multiple of market valuations of the comparable companies to their adjusted EBITDA for the prior fiscal year (based on publicly-available data), as well as the multiples of adjusted EBITDA for the prior fiscal year paid by us for our acquisitions. Based on this review, we established a market multiple which was generally higher than that of our comparable companies, and which we then applied to our own adjusted EBITDA for the prior fiscal year. To determine equity value, we added cash on hand at the end of the period and the cash from the pro forma exercise of stock options, and then subtracted senior corporate debt. The resulting value was divided by the number of common shares outstanding on a fully diluted basis to obtain the fair value per share of common stock. Typically, we performed a new valuation annually after completing our audited consolidated financial statements.

We used adjusted EBITDA in determining our enterprise value under the market approach because we believe that metric provides greater comparability than other metrics for the companies included in the analysis. We considered using net income, book value and cash flow; however, we found those metrics less meaningful than adjusted EBITDA due to varying levels of non-cash and non-operating income and expenses, and the effects of leverage, in the other companies' financial statements. We believe adjusted EBITDA was the most meaningful financial metric for purposes of estimating the fair value of our common stock for financial statement reporting purposes because it is an unlevered measure of operating earnings potential before financing and certain other accounting decisions are considered. In addition to the use of the market approach to determine the enterprise value, we considered the discounted cash flow methodology to estimate the equity



value in the goodwill impairment analysis discussed on page F-11. The resulting equity values obtained from the discounted cash flow methodology corroborated the results of the market approach used in our contemporaneous common stock valuations.

Since the beginning of 2007, we granted stock options with exercise prices as follows:

<u>Grant Date or Period</u>	<u>Number of Shares of Common Stock Subject to Option Grants</u>	<u>Exercise Price per Share</u>
January 24, 2007	500,000	\$ 3.41
July 25, 2007 to January 30, 2008	982,000	4.22
April 30, 2008 to January 28, 2009	248,000	6.055
July 22, 2009 to September 30, 2009	842,000	6.055
April 26, 2010 to May 28, 2010	856,000	13.045

The analyses undertaken in determining the exercise prices for all option grants between January 24, 2007 and December 31, 2009 are summarized below.

*Grants on January 24, 2007.* On October 25, 2006, our board of directors established the exercise price per share of common stock at \$3.41 per share. The market approach resulted in an enterprise value of \$144.6 million, determined by applying the market multiple to our adjusted EBITDA for the year ended December 31, 2005. That value was increased by cash on hand totaling \$11.8 million and reduced by debt of \$10.5 million, for an equity value of \$145.9 million. The equity value was divided by 42.8 million fully diluted shares outstanding to arrive at the estimated fair value per share.

*Grants from July 25, 2007 to January 30, 2008.* On July 25, 2007, our board of directors established the exercise price per share of common stock at \$4.22 per share. The market approach resulted in an enterprise value of \$157.9 million, determined by applying the market multiple to our adjusted EBITDA for the year ended December 31, 2006. That value was increased by cash on hand totaling \$45.5 million and reduced by debt of \$8.0 million, for an equity value of \$195.3 million. The equity value was divided by 46.2 million fully diluted shares outstanding to arrive at the estimated fair value per share.

*Grants from April 30, 2008 to January 28, 2009.* On April 30, 2008, our board of directors established the exercise price per share of common stock at \$6.055 per share. The market approach resulted in an enterprise value of \$223.6 million, determined by applying the market multiple to our adjusted EBITDA for the year ended December 31, 2007. That value was increased by cash on hand totaling \$45.5 million and reduced by debt of \$8.0 million. In view of the increase in the number of options outstanding, we added the pro forma exercise cash value of the options, at a weighted-average exercise price of \$1.995 per share, totaling \$21.7 million. This resulted in an equity value of \$280.7 million, which was divided by 46.4 million fully diluted shares outstanding to arrive at the estimated fair value per share.

*Grants from July 22, 2009 to September 30, 2009.* On July 22, 2009, our board of directors established the exercise price per share of common stock at \$6.055 per share. Based on the methodology described above, our board would have decreased the value of a share of our common stock (from \$6.055 to \$5.66). However, the decrease was due primarily to higher corporate debt levels and a lower cash balance, which in our board's view were the result primarily of the unprecedented economic conditions prevailing at that time. Our board, therefore, determined not to reduce its estimate of the fair value of the common stock and to maintain the value at \$6.055 per share.

In March 2010, in connection with the preparation of our consolidated financial statements for the year ended December 31, 2009 and in preparing for our initial public offering, our board of directors decided to undertake a reassessment of the fair value of our common stock in 2007, 2008 and 2009. As a part of that reassessment, our board of directors took into account not only the factors it originally considered in determining fair value, but it also considered as of such dates:

- the liquidation preferences of our preferred stock, including any financing and repurchase activities that may have occurred in the relevant period;

## [Table of Contents](#)

- the illiquid nature of our common stock, including the opportunity and timing for any expected liquidity events;
- our size and historical operating and financial performance, including our recent operating and financial projections as of each grant date;
- our existing backlog;
- important events in the development of our business; and
- the market performance of a peer group comprised of selected publicly-traded companies we identified as being guidelines for us.

In performing this retrospective analysis, we reexamined and reapplied the market approach and also applied the current value method to allocate the equity to the various share classes as outlined in the American Institute of Certified Public Accountants Technical Practice Aid, Valuation of Privately-Held Company Equity Securities Issued as Compensation, which we refer to as the practice aid. We believe that the valuation methodologies used in the retrospective analysis are reasonable and consistent with the practice aid.

In applying the current value method, we considered the rights of our Series A convertible preferred stock, which we refer to as our Series A preferred stock, and which will be converted into shares of Class B common stock upon the closing of this offering. The calculated enterprise value as of each of the valuation dates was significantly higher than the cumulative liquidation preference of our Series A preferred stock of \$3.2 million. We also determined that in each valuation date, the Series A preferred stock would receive a substantially higher per share value on an “as if” converted to common stock basis than by retaining its liquidation preference. Thus for the purposes of these valuations the total equity value was divided by the fully diluted shares outstanding in order to calculate the per share value of our common stock.

In connection with this retrospective analysis, in determining our enterprise value, our analysis also considered the calculated multiple of market valuations of the comparable companies to their next 12 months adjusted EBITDA, and applied this multiple to our own next 12 months projected adjusted EBITDA, in addition to considering the enterprise value to trailing 12 months adjusted EBITDA, with more weight placed on our projected EBITDA analysis than the historical adjusted EBITDA analysis. To determine equity value, we added cash on hand at the end of the period and the cash from the assumed pro forma exercise of in-the-money stock options, and then subtracted senior corporate debt. To allocate the equity, we considered the option pricing method from the practice aid. In connection with applying the option pricing method to value our common stock for these valuation dates, we determined that allocating the equity based on applying the option pricing method instead of the current value method in the contemporaneous valuations resulted in immaterial differences from the per share value calculated using the current value method.

Following this retrospective analysis, our board of directors determined that the fair value of our common stock remained as previously determined in 2007, 2008 and on January 28, 2009, and that the fair value was \$9.00 per share on July 22, 2009 and \$11.00 per share on September 25, 2009, as described below.

*January 28, 2009 Fair Value Calculation.* The fair value of our common stock as of January 28, 2009 was retrospectively determined to be \$6.055 per share. In applying the market approach, our next 12 months projected adjusted EBITDA was primarily affected by the following factors:

- continued challenges during 2008 in the U.S. economy and decreased valuations of comparable companies; and
- concerns about liquidity during the upcoming fiscal quarters.

*July 22, 2009 Fair Value Calculation.* The fair value of our common stock as of July 22, 2009 was retrospectively determined to be \$9.00 per share. The primary reason for the significant increase in the valuation of our common stock between January 28, 2009 and July 22, 2009 was the 11% increase in our next

## [Table of Contents](#)

12 months projected adjusted EBITDA between those two dates. Our projected adjusted EBITDA in July 2009 had increased significantly for the following reasons:

- we were notified in March 2009 that the U.S. Department of Energy had lifted restrictions on its ability to enter into ESPCs, which permitted us to proceed with the execution of larger federal contracts;
- in May 2009, we executed a contract for our large U.S. Department of Energy Savannah River Site renewable energy project; however, we had not yet secured the financing necessary to complete this project; and
- improvement in general economic and market conditions in the first half of 2009.

The valuation of our common stock in July 2009 was also significantly affected by an increase, between January 2009 and July 2009, in the multiple of market valuations of comparable companies that we applied to our next 12 months projected adjusted EBITDA. The multiple we applied in this analysis in January 2009, derived from publicly available data on the comparable companies we used in the market approach, was eight. We increased the multiple we applied to ten in July 2009, due primarily to the improvement in the public equity markets during this period.

In addition, this determination took into account our expectation that we would undertake an initial public offering within one year.

*September 25, 2009 Fair Value Calculation.* The fair value of our common stock as of September 25, 2009 was retrospectively determined to be \$11.00 per share. The primary reason for the increase in the valuation of our common stock between July 22, 2009 and September 25, 2009 was the 17% increase in our next 12 months projected adjusted EBITDA between those two dates. Our next 12 months projected adjusted EBITDA in September 2009 had increased from our next 12 months projected adjusted EBITDA in July 2009, for the following reasons:

- our backlog under signed customer contracts increased from July 2009 to September 2009;
- in August 2009, we secured the financing necessary to complete our large U.S. Department of Energy Savannah River Site renewable energy project, the contract for which had been executed in May 2009 but was subject to our securing that financing. Securing this financing represented a significant milestone for us, particularly in light of its size and the significant disruptions in the credit and capital markets in the preceding several years; and
- improvement in general economic and market conditions in the third quarter of 2009.

The valuation of our common stock in September 2009 was also affected by an increase, between July 2009 and September 2009, in the multiple of market valuations of comparable companies that we applied to our next 12 months projected adjusted EBITDA. The multiple we applied in this analysis in July 2009, derived from publicly available data on the comparable companies we used in the market approach, was 10. We increased the multiple we applied to 11 in September 2009, due primarily to the improvement in the public equity markets during this period.

Our determination of fair market value in September 2009 also took into account our expectation that we would undertake an initial public offering within nine months.

We have incorporated the fair values calculated in the retrospective valuations into the Black-Scholes option pricing model when calculating the stock-based compensation expense to be recognized for the stock options granted during the period from July through September 2009. The retrospective valuations generated per share fair values of common stock of \$9.00 and \$11.00, respectively, at July 22, 2009 and September 25, 2009. This resulted in intrinsic values of \$2.945 and \$4.945 per share, respectively, at each grant date.

*April 26, 2010 Fair Value Calculation.* The fair value of our common stock as of April 26, 2010 and May 28, 2010 was determined contemporaneously to be \$13.045 per share. In determining this value, we employed the same methods and approaches used in the retrospective analyses described above. The primary

reasons for the increase in the valuation of our common stock from September 25, 2009 to April 26, 2010 and May 28, 2010 were:

- a 30% increase in our next 12 months projected adjusted EBITDA between September 25, 2009 and the two relevant dates in 2010, due to growth in our backlog and several, previously-contracted, large efficiency and renewable energy projects entering major construction phases;
- our expectation that we would conduct an initial public offering within the next three months; and
- our preliminary estimates of our valuation for purposes of this offering.

Valuation models require the input of highly subjective assumptions. There are significant judgments and estimates inherent in the determination of these valuations. These judgments and estimates include assumptions regarding our future performance, the time to undertaking and completing an initial public offering or other liquidity event, as well as determinations of the appropriate valuation methods. If we had made different assumptions, our stock-based compensation expense, net income and net income per share could have been significantly different. Additionally, because our capital stock prior to this offering had characteristics significantly different from that which will apply upon the closing of this offering, and because changes in the subjective input assumptions can materially affect the fair value estimate, in management's opinion, the existing models do not necessarily provide a reliable, single measure of fair value. The foregoing valuation methodologies are not the only valuation methodologies available and will not be used to value our Class A or Class B common stock once this offering is complete. We cannot make assurances regarding any particular valuation of our shares.

#### **Internal Control Over Financial Reporting**

We had a material weakness in our internal control over financial reporting in each of 2007, 2008 and 2009. A material weakness is defined as a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis by the company's internal controls. We do not currently have personnel with an appropriate level of knowledge, experience and training in the selection, application and implementation of GAAP as it relates to certain complex accounting issues, income taxes and SEC financial reporting requirements. This constitutes a material weakness, which we plan to remediate by hiring additional personnel with the requisite expertise. See "Risk Factors — We have a material weakness in our internal control over financial reporting. If we fail to establish and maintain proper and effective internal controls, our ability to produce accurate financial statements could be impaired, which could adversely affect our operating results, our ability to operate our business and investors' and customers' views of us."

#### **Results of Operations**

##### **Three Months Ended March 31, 2010 and 2009**

##### **Revenue**

*Total revenue.* Total revenue increased by \$32.2 million, or 43.9%, in the first quarter of 2010 compared to the first quarter of 2009 due to higher revenue from both energy efficiency and renewable energy.

*Energy efficiency revenue.* Energy efficiency revenue increased by \$17.6 million, or 30.9%, in the first quarter of 2010 compared to the first quarter of 2009 due to an increase in the number of projects being installed for our municipal and other institutional customers.

*Renewable energy revenue.* Renewable energy revenue increased by \$14.6 million, or 90.2%, in the first quarter of 2010 compared to the first quarter of 2009. The increase was primarily due to the greater number of renewable energy facilities being built by us for our customers. Construction volume of such plants increased by \$12.5 million in the first quarter of 2010. Additionally, during the first quarter of 2010, we placed in service nine new facilities owned by us that sell to our customers electricity generated from LFG or

solar energy or provide for delivery of LFG. Partially offsetting this increase in revenue was a decline in sales of PV systems and components as declining market prices and shifting demand continue to impact the market for these products.

Revenue from customers outside the United States, principally Canada, was \$18.7 million in the first quarter of 2010 compared to \$13.9 million in the first quarter of 2009.

*Business segment revenue.* Total revenue for the U.S. federal segment increased \$12.9 million, or 107.2%, to \$24.9 million in the first quarter of 2010, compared to the first quarter of 2009, primarily due to increased installation of renewable energy facilities and other projects. Revenue recognized on the installation of a renewable energy project for the U.S. Department of Energy accounted for a significant portion of our revenue for this segment in the first quarter of 2010. Total revenue for the central U.S. region segment increased \$7.5 million, or 67.5%, to \$18.6 million in the first quarter of 2010, compared to the first quarter of 2009, primarily due to the increased installation of energy efficiency projects. Total revenue for the Canada segment increased \$5.4 million, or 41.5%, in the first quarter of 2010, to \$18.4 million, compared to the first quarter of 2009, primarily due to a larger volume of construction activity related to the installation of energy efficiency measures, particularly two large projects for housing authorities. Total revenue from the other U.S. regions segment increased \$4.3 million, or 24.5%, to \$21.7 million in the first quarter of 2010, compared to the first quarter of 2009, primarily due to an increase in the size and, to a lesser extent, the number of projects under construction. Total revenue not allocated to segments and presented as all other increased \$2.2 million, or 11.1%, to \$22.1 million in the first quarter of 2010, compared to the first quarter of 2009, primarily due to increased renewable energy sales, partially offset by slower sales of renewable energy products.

#### **Direct Expenses and Gross Profit**

*Total direct expenses.* Direct expenses increased by \$27.5 million, or 46.1%, in the first quarter of 2010 compared to the first quarter of 2009. Lower gross profit margins in the first quarter of 2010 caused direct expenses to increase at a greater rate than revenue.

*Energy efficiency.* Energy efficiency gross margin decreased to 16.5% in the first quarter of 2010 from 18.3% in the same period in 2009. The decrease was primarily due to our recognition of additional profit in the first quarter of 2009 on certain of our construction projects that we were able to complete at total costs below their construction budget.

*Renewable energy.* Renewable energy gross margin declined to 19.6% in the first quarter of 2010 from 20.0% in the first quarter of 2009 due to additional costs required to bring certain facilities for federal customers into operation.

#### **Operating Expenses**

*Salaries and benefits.* Salaries and benefits increased by \$2.1 million, or 34.5%, in the first quarter of 2010 as compared with the first quarter of 2009. This was primarily due to the increased headcount necessary to manage our expectation of an increase in our business activity in fiscal 2010 and beyond.

*Project development.* Project development expenses increased by \$0.4 million, or 14.3%, in the first quarter of 2010 compared to the first quarter of 2009. The higher expenses reflected our efforts to increase proposal activity and to finalize the contracts related to awarded projects.

*General, administrative and other.* General, administrative and other expenses increased by \$0.3 million, or 7.8%, in first quarter of 2010 compared to the first quarter of 2009, as we incurred higher costs for office-related expenses, corporate franchise fees, and expenses related to the hiring of temporary employees.

**Other Income (Expense)**

Other income (expense) decreased by \$0.8 million to a net expense of \$0.9 million in the first quarter of 2010 from a net expense of \$24,000 in the first quarter of 2009. The decrease was due primarily to changes in the unrealized loss on derivatives. The following table presents the changes in other income (expense) from the first quarter of 2009 to the first quarter of 2010:

	<u>2009</u>	<u>2010</u>
	(In thousands)	
Unrealized gain (loss) from derivatives	\$ 682	\$ (134)
Interest expense, net of interest income	(641)	(652)
Amortization of deferred financing costs	(65)	(70)
	<u>\$ (24)</u>	<u>\$ (856)</u>

**Income Before Taxes**

Income before taxes for the first quarter of 2010 increased to \$1.7 million from \$0.6 million for the first quarter of 2009. The increase was primarily due to higher gross profit, which was partially offset by increases in operating expenses and other net expenses.

*Business Segment Income Before Taxes.* Income before taxes for the U.S. federal segment increased \$0.5 million, or 37.4%, in the first quarter of 2010 compared to the first quarter of 2009, primarily due to increased revenue, partially offset by our recognition of additional profit in the first quarter of 2009 on certain of our construction projects that we were able to complete at total costs below their respective construction budgets. Income before taxes for the central U.S. region segment increased \$0.8 million to \$1.0 million in the first quarter of 2010 compared to the first quarter of 2009, primarily due to a combination of higher revenue and improved margins arising from better utilization of resources. Income before taxes for the Canada segment increased \$0.3 million to \$0.4 million in the first quarter of 2010 compared to the first quarter of 2009, primarily due to higher revenue and improved margins earned on projects. Income before taxes for the other U.S. regions segment increased by \$0.9 million, or 77.2%, to \$2.2 million in the first quarter of 2010 compared to the first quarter of 2009. The increase in this segment was primarily due to increased revenue and an increase in the profit margin during the first quarter of 2010 from the same period in 2009, as the segment avoided certain cost overruns that impacted results in 2009. The loss before taxes not allocated to segments and presented as all other, increased by \$1.6 million, or 68.8%, to \$3.9 million in the first quarter of 2010, compared to the first quarter of 2009, primarily due to the lower margins on renewable energy sales, and an increase in both operating expenses and other expenses. The amounts of unallocated corporate expenses for the first quarters of 2009 and 2010 were \$6.5 million, and \$7.3 million, respectively. The changes in the expenses allocated to all other from the first quarter of 2009 to the first quarter of 2010 were consistent with the overall change in consolidated expenses discussed above. Income before taxes and unallocated corporate expenses for all other was \$3.4 million in the first quarter of 2010, a \$0.7 million, or 17.1%, decrease compared to the first quarter of 2009.

**Provision for Income Taxes**

The provision for income taxes increased by \$0.2 million to \$0.4 million in the first quarter of 2010 from \$0.2 million for the first quarter of 2009. The effective tax rate decreased to 25.2% for the first quarter of 2010 from 35.0% in the first quarter of 2009. The rate variance between the periods is due mainly to a change in permanent items from 2009 to 2010. The principal difference between the statutory rate and the effective rate was due to deductions permitted under Section 179(d) of the Code, which relate to the installation of certain energy efficiency equipment in federal, state, provincial and local government-owned buildings, as well as production tax credits to which we are entitled from the electricity generated by certain plants that we own.

**Net Income**

Net income increased by \$0.9 million, or 206%, in the first quarter of 2010 to \$1.3 million, compared to \$0.4 million in the first quarter of 2009, due to higher pre-tax income, which was partially offset by an increase in the tax provision. Earnings per share in the first quarter of 2010 were \$0.10 per basic share and \$0.03 per diluted share, representing an increase of \$0.06 and \$0.02, respectively, from the first quarter of 2009. The weighted-average number of basic and diluted shares outstanding increased by 38.1% and 11.0%, respectively, as a result of the vesting of restricted shares, exercise of stock options, and the grant of new stock options.

**Years Ended December 31, 2009, 2008 and 2007**

**Revenue**

*Total revenue.* Total revenue increased by \$32.6 million, or 8.3%, from 2008 to 2009, due primarily to an increase in energy efficiency revenue and, to a lesser extent, an increase in renewable energy revenue. Total revenue increased by \$17.4 million, or 4.6%, from 2007 to 2008 due to an increase in renewable energy revenue, offset in part by a decrease in energy efficiency revenue.

*Energy efficiency revenue.* Energy efficiency revenue increased by \$15.6 million, or 4.8%, from 2008 to 2009, due to an increase in the number of new projects for municipal and other institutional customers that commenced in late 2008 and continued through 2009. Revenue decreased by \$20.9 million, or 6.0%, from 2007 to 2008, primarily because the size of our energy efficiency projects in the Canadian market decreased significantly from an unusually high level in 2007.

*Renewable energy revenue.* Renewable energy revenue increased by \$17.1 million, or 24.1%, from 2008 to 2009, due mainly to an increase in the number of LFG and biomass facilities being built by us for federal agencies. Construction volume of such plants increased by \$15.7 million from 2008 to 2009. Additionally, in 2009, we placed in service eight new plants owned by us that sell and deliver LFG, or electricity generated by LFG, to customers. Partially offsetting this increase in revenue was a decline in the sales of PV systems and components, primarily due to a decline in market prices of solar panels. In 2008, renewable energy revenue increased by \$38.3 million, or 117.6% from 2007. The increase in 2008 was due primarily to increased sales of solar energy products and services, reflecting the first full year of sales from Southwestern Photovoltaic, Inc., or SWPV, which we acquired in May 2007. Also contributing to the increase in 2008, to a lesser extent, was an increase in revenue from the construction of biomass and LFG plants for federal agencies.

Revenue from customers outside the United States, principally Canada, was \$86.9 million in 2009, compared with \$87.3 million in 2008 and \$100.4 million in 2007.

*Business segment revenue.* Total revenue for the U.S. federal segment increased from 2008 to 2009 by \$18.3 million, or 26.3%, to \$87.6 million, primarily due to an increase in the number of projects being installed primarily for the U.S. federal government. During 2009, work commenced, and revenue was recognized, on the installation of a large renewable energy project for the U.S. Department of Energy. Total revenue for the U.S. federal segment increased from 2007 to 2008 by \$7.1 million, or 11.4%, to \$69.3 million, primarily as a result of increased construction of energy efficiency measures. Total revenue for the central U.S. region segment increased from 2008 to 2009 by \$13.1 million, or 17.4%, to \$88.1 million, primarily due to an increase in the number of energy efficiency projects in construction. Total revenue for the central U.S. region segment increased from 2007 to 2008 by \$9.2 million, or 14.1%, to \$75.0 million, also primarily due to an increase in the number of energy efficiency projects in construction. Total revenue in 2009 for the Canada segment was virtually flat, decreasing by \$0.4 million, or 0.4%, compared to 2008, to \$83.6 million. Total revenue for the Canada segment decreased from 2007 to 2008 by \$16.2 million, or 16.2%, to \$84.0 million, primarily due to a slowdown in the installation of energy efficiency measures. Total revenue for the other U.S. regions segment decreased from 2008 to 2009 by \$0.8 million, or 1.1% to \$77.8 million. Total revenue for the other U.S. regions segment decreased from 2007 to 2008 by \$2.3 million, or 2.9%, to \$78.7 million. The decreases in both years were primarily due to a generally flat level of business throughout

the period in the other U.S. regions segment. Total revenue not allocated to segments and presented as all other, increased from 2008 to 2009 by \$2.6 million, or 2.9%, to \$91.4 million, due to increases in O&M revenues and the sales of renewable energy products. Total revenue not allocated to segments and presented as all other increased from 2007 to 2008 by \$19.5 million, or 28.2%, to \$88.8 million, primarily due to an increase in sales of renewable energy products.

#### **Direct Expenses and Gross Profit**

*Total direct expenses.* Direct expenses increased by \$30.2 million, or 9.5%, from 2008 to 2009, due to higher revenue. Lower profit margins caused direct expenses to increase at a greater rate than revenue. Direct expenses increased by \$6.5 million, or 2.1%, from 2007 to 2008, due to the increase in revenue, but at a slower rate as profit margins improved during the year. Direct expenses generally increase or decrease as related revenue increases or decreases.

*Energy efficiency.* Energy efficiency gross margin decreased from 20.3% in 2008 to 17.2% in 2009, due primarily to cost overruns on several projects, as well as lower budgeted margins on certain Canadian projects. Energy efficiency gross margin increased from 17.4% in 2007 to 20.3% in 2008 due primarily to the recovery of a cost contingency for a project that was completed without requiring the use of such contingency and the recovery of a cost contingency relating to an O&M contract that was terminated as part of a settlement with a customer.

*Renewable energy.* Renewable energy gross margin increased from 15.9% in 2008 to 24.4% in 2009 as a result of the completion of seven new renewable energy plants, which typically have higher margins than PV products. Renewable energy gross margins decreased from 19.9% in 2007 to 15.9% in 2008 due primarily to a higher proportion of sales in 2008 represented by PV products.

#### **Operating Expenses**

*Salaries and benefits.* Salaries and benefits declined \$2.0 million, or 6.7%, from 2008 to 2009, as a higher proportion of salaries and benefits was allocated to direct expense due to the increased utilization rates of our staff resulting from the higher volume of development and construction activity in 2009. Lower employee incentive payments also contributed to the decrease. Salaries and benefits increased from 2007 to 2008 by \$4.4 million, or 17.0%, due primarily to the addition of personnel from the acquisition of SWPV and other staff additions.

*Project development.* Project development expenses declined \$3.5 million, or 26.8%, from 2008 to 2009, and increased \$5.0 million, or 62.6%, from 2007 to 2008. Our project development expenses were unusually high in 2008 as a result of a major marketing and rebranding initiative that we undertook and delays in projects due to the limited availability of financing for our customers. Expenses that we incurred during such delays are recorded as project development expenses rather than direct expenses.

*General, administrative and other.* General, administrative and other expenses increased \$7.3 million, or 79.5%, from 2008 to 2009, and declined by \$3.9 million, or 29.6%, from 2007 to 2008. In 2008, we recorded as a reduction to general, administrative and other expenses the sum of \$5.8 million reflecting the recovery of a contingency that we had established in connection with our acquisition of Select Energy in 2006. Also in 2008, we incurred an additional \$2.0 million of general, administrative and other expenses due to the first full year of operations of SWPV. In 2009, general, administrative and other expense included \$2.2 million paid by us to settle a dispute with a competitor related to our PV business.

#### **Other Income (Expense)**

Other income (expense) increased from 2008 to 2009 by \$6.7 million, from a net expense of \$5.2 million to a net income of \$1.6 million, due primarily to realized and unrealized gains from derivatives. In 2008, net expense increased by \$2.0 million, or 65.3%, due to an increase in unrealized losses on derivatives and an increase in net interest expense. The following table shows the changes in other income (expense) from 2007 to 2008 and from 2008 to 2009:



	<u>2007</u>	<u>2008</u> (In thousands)	<u>2009</u>
Gain realized from derivative	\$ —	\$ —	\$ 2,494
Unrealized (loss) gain from derivatives	(1,366)	(2,832)	2,264
Interest expense, net of interest income	(1,449)	(2,118)	(2,993)
Amortization of deferred financing costs	(323)	(238)	(202)
	<u>\$ (3,138)</u>	<u>\$ (5,188)</u>	<u>\$ 1,563</u>

#### Income Before Taxes

Income before taxes increased from 2008 to 2009 by \$7.4 million, or 37.8%, due to realized and unrealized gains on derivatives. In 2008, we recorded a \$5.8 million contingency recovery. Adjusting for the effect of the 2009 gains on derivatives and the 2008 contingency recovery, income before taxes in 2009 would have increased by \$8.5 million, or 62.5%, compared to 2008. Higher revenue and improving margins were the principal reasons for the improvement in the adjusted results.

Income before taxes increased from 2007 to 2008 by \$3.2 million, or 19.9%, due to the contingency recovery described above, partially offset by unrealized losses on derivatives and higher depreciation charges.

*Business Segment Income Before Taxes.* Income before taxes for the U.S. federal segment increased from 2008 to 2009 by \$6.3 million, or 124.8%, to \$11.3 million. The increase was primarily due to increased revenue and higher margins recognized on project installations. In 2009, we recognized additional operating profit on certain of our construction projects that we were able to complete at a total cost below the respective construction budgets. In 2008, income before taxes for the U.S. federal segment increased from 2007 to 2008 by \$0.8 million, or 18.6%, to \$5.0 million. Higher revenue, along with better operating margins, were the primary contributors to this increase.

Income before taxes for the central U.S. region segment increased from 2008 to 2009 by \$2.0 million, or 24.1%, to \$10.1 million. The increase was primarily due to higher revenue and improved margins arising from more effective utilization of resources. Income before taxes for the central U.S. region segment decreased from 2007 to 2008 by \$0.6 million, or 7.1%, to \$8.2 million. The decrease was primarily due to lower realized margins on installed projects and a significant increase in the development of new projects resulting in increased costs that are incurred prior to the commencement of construction and the associated recognition of revenue.

Income before taxes for the Canada segment was unchanged at \$4.2 million in both 2009 and 2008, which was consistent with the slight change in revenue for this segment. Income before taxes for the Canada segment decreased from 2007 to 2008 by \$1.9 million, or 31.5%, to \$4.2 million. This decrease was primarily due to the decrease in total revenue and a decrease in margins related to lower utilization rate for staff and other resources.

Income before taxes for the other U.S. regions segment decreased from 2008 to 2009 by \$7.8 million, or 60.4%, to \$5.1 million, primarily due to a decrease in gross profit margins. The lower gross profit margins were the result of a higher number of low margin projects accepted during a period of slower business activity in order to maintain utilization levels. Income before taxes for the other U.S. regions segment increased from 2007 to 2008 by \$5.2 million, or 67.8%, primarily due to an improvement in gross profit margins, due largely to a reduction in construction cost overruns.

The loss before taxes not allocated to segments and presented as all other, decreased from 2008 to 2009 by \$6.9 million, or 64.7%, to \$3.8 million, primarily due to an increase in other income. The loss before taxes not allocated to segments and presented as all other increased from 2007 to 2008 by \$0.2 million, or 2.0%, to \$10.7 million, primarily due to increases in operating expenses and other expenses, partially offset by the recovery of a contingency that we had established in connection with our acquisition of Select Energy in 2006. The amounts of unallocated corporate expenses for 2007, 2008 and 2009 were \$28.8 million, \$31.9 million and \$25.1 million, respectively. The changes in the expenses allocated to all other from 2008 to

2009 and 2007 to 2008 were consistent with the overall change in consolidated expenses discussed above. Income before taxes and unallocated corporate expenses for all other was \$21.3 million in 2009, a \$0.1 million, or 0.2%, increase compared to 2008. Income before taxes and unallocated corporate expenses for all other was \$21.3 million in 2008, a \$3.0 million, or 16.2%, increase compared to 2007.

#### **Provision for Income Taxes**

The provision for income taxes is based on various rates set by federal, state, provincial and local authorities and are affected by permanent and temporary differences between financial accounting and tax reporting requirements. Our statutory rate, which is a combined federal and state rate, has ranged between 38.1% and 39.7%. During 2009, we recognized income taxes of \$6.9 million, or 25.8% of pretax income. The principal difference between the statutory rate and the effective rate was due to deductions permitted under Section 179(d) of the Code, which relate to the installation of certain energy efficiency equipment in federal, state, provincial and local government-owned buildings, as well as production tax credits to which we are entitled from the electricity generated by certain plants that we own. These energy efficiency tax benefits accounted for a \$3.0 million reduction in the 2009 provision, or a reduction of 11.1 percentage points in the effective rate.

In 2008, the tax provision was \$1.2 million, or 6.2% of pre-tax income, as we recognized benefits of the Section 179(d) deduction. These cumulative benefits, plus production tax credits for electricity generation, resulted in an \$8.0 million reduction in the tax provision, and decreased our effective rate by 40.9 percentage points.

In 2007, the tax provision was \$5.7 million, or 35.1% of pre-tax income. The difference between the statutory rate and our effective rate was due primarily to the energy efficiency preferences from the Section 179(d) deduction and production tax credits for electricity generation, resulting in an \$1.2 million reduction in the tax provision, and a decrease in the effective rate by 7.5 percentage points.

#### **Net Income**

Net income increased in 2009 by \$1.6 million, or 8.9%, due to higher pre-tax income, partially offset by an increase in the tax provision. Earnings per share in 2009 were \$1.99 per basic share, and \$0.61 per diluted share, representing an increase of \$0.28, or 16.4%, and \$0.07, or 13.2%, respectively. The weighted-average number of basic and diluted shares decreased by 6.4% and 3.8%, respectively, as a result of share repurchases.

Net income in 2008 was \$18.3 million, compared with \$10.5 million in 2007, an increase of \$7.7 million, or 73.3%. The increase was a result of higher income before taxes, and a significantly lower tax provision. Earnings per share were \$1.71 per basic share and \$0.54 per diluted share in 2008, representing an increase of 80.0% and 91.4%, respectively, from 2007. The weighted-average number of basic and diluted shares outstanding decreased in 2008 by 4.0% and 9.5%, respectively, as a result of share, option and warrant repurchases.

#### **Liquidity and Capital Resources**

*Sources of liquidity.* Since inception, we have funded operations primarily through cash flow from operations and various forms of debt. We believe that available cash and cash equivalents and availability under our revolving senior secured credit facility, combined with our access to credit markets and the net proceeds from this offering, will be sufficient to fund our operations through 2011 and thereafter.

*Capital expenditures.* Our total capital expenditures were \$22.8 million in 2007, \$43.0 million in 2008, and \$21.6 million in 2009, which is net of \$12.9 million in Section 1603 rebates. Section 1603 of the American Recovery and Reinvestment Tax Act of 2009 authorized the U.S. Department of the Treasury to make payments to eligible persons who place in service specified energy property. This property would have been eligible for production tax credits under the Code, but we elected to forego such tax in exchange for the payment made under Section 1603. Additionally, we invested \$10.8 million for an acquisition in 2007 and

\$0.7 million for an acquisition in 2009. We currently plan to make capital expenditures of approximately \$29.4 million in 2010, principally for new renewable energy plants.

*Cash flows from operating activities.* Operating activities used \$17.9 million of net cash during the three months ended March 31, 2010. During that period, we had net income of \$1.3 million, which is net of non-cash compensation, depreciation, amortization, deferred income taxes, unrealized losses and other non-cash items totaling \$4.1 million. Net decreases in accounts receivable and other assets provided another \$4.3 million in cash. However, reductions in accounts payable and billings in excess of costs and estimated earnings used \$27.6 million of cash. Changes in other liabilities provided the balance of net cash during the period.

Operating activities used \$19.7 million of net cash during the three months ended March 31, 2009. During that period, we had net income of \$0.4 million, which is net of non-cash compensation, depreciation, amortization, deferred income taxes, unrealized losses and other non-cash items totaling \$5.1 million. Net decreases in accounts receivable and other assets provided another \$2.4 million in cash. However, net reductions in accounts payable, billings in excess of costs and estimated earnings, and other liabilities used \$27.6 million of cash.

Operating activities provided \$45.3 million of net cash during 2009. In 2009, we had net income of \$19.9 million, which is net of non-cash compensation, depreciation and amortization totaling \$10.1 million, partially offset by a \$2.3 million unrealized gain on derivatives. Increases in accounts payable and other liabilities contributed \$36.7 million, and investment in federal projects used \$52.9 million, in 2009. We also drew a total of \$33.0 million in cash from restricted cash accounts maintained in connection with our federal ESPC and our renewable energy projects. We reflect restricted cash as an operating asset on our consolidated balance sheet and withdrawals from existing restricted cash accounts as cash flow from operations on our consolidated statements of cash flows. The creation of new restricted cash accounts is reflected as a decrease to cash flows from financing activities on our consolidated statements of cash flows. Certain of the cash generated from our federal ESPC receivable financing is held in restricted cash accounts to be used to pay for the cost of construction under our federal ESPCs. We withdrew \$31.5 million in cash from these accounts during 2009. In addition, under the terms of our term loan agreements used to finance certain of our renewable energy projects, we are required to maintain restricted cash accounts to provide for operation and maintenance expenses incurred. We withdrew \$1.5 million in cash from these accounts during 2009. Other changes in net assets and liabilities provided the balance of net cash during the year.

Operating activities provided \$1.3 million of net cash during 2008. We had net income of \$18.3 million which included non-cash compensation, depreciation and amortization totaling \$6.7 million, impairments and write-downs totaling \$4.8 million and a \$2.8 million unrealized loss on derivatives. Net income also included a non-cash gain related to an acquisition of \$5.9 million. Payments pursuant to contracts decreased by \$7.6 million due primarily to late customer remittances. Inventory and project development costs used \$3.8 million and \$3.6 million, respectively. We also drew a total of \$25.5 million in cash from restricted cash accounts maintained in connection with our federal ESPC and our renewable energy projects. We reflect restricted cash as an operating asset on our consolidated balance sheet and withdrawals from existing restricted cash accounts as cash flow from operations on our consolidated statements of cash flows. The creation of new restricted cash accounts is reflected as a decrease to cash flows from financing activities on our consolidated statements of cash flows. Certain of the cash generated from our federal ESPC receivable financing is held in restricted cash accounts to be used to pay for the cost of construction under our federal ESPCs. We withdrew \$23.5 million in cash from these accounts during 2008. In addition, under the terms of our term loan agreements used to finance certain of our renewable energy projects, we are required to maintain restricted cash accounts to provide for operation and maintenance expenses incurred. We withdrew \$2.0 million in cash from these accounts during 2008. Other changes in net assets and liabilities provided the balance of net cash during the year.

Operating activities provided \$30.3 million of net cash during 2007. We had net income of \$10.5 million which included non-cash compensation, depreciation and amortization totaling \$6.6 million, a \$2.0 million asset write-down and a \$1.4 million unrealized loss from a derivative. Net income also included a

[Table of Contents](#)

non-cash gain related to a securitization of \$2.3 million. Activity related to federal projects contributed \$11.4 million of cash and changes in net assets and liabilities used \$3.9 million of net cash during the year.

*Cash flows from investing activities.* Cash used for investing activities during the three months ended March 31, 2010 totaled \$6.3 million and consisted of capital investments of \$5.9 million related to the development of renewable energy plants. Other investments related to leasehold improvements and office equipment.

Cash used for investing activities during the three months ended March 31, 2009 totaled \$9.9 million and consisted of capital investments of \$9.5 million related to the development of renewable energy plants. Other investments were related to leasehold improvements and office equipment.

Cash flows from investing activities primarily relate to capital expenditures to support our growth.

Cash used in investing activities totaled \$22.3 million during 2009 and consisted of capital expenditures of \$21.6 million, primarily related to the development of renewable energy plants. This amount was net of \$12.9 million of Section 1603 rebates. Also, \$0.7 million of cash was used for an acquisition.

Cash used in investing activities totaled \$43.0 million during 2008 and consisted solely of capital expenditures primarily for development of renewable energy plants.

Cash used in investing activities totaled \$33.6 million during 2007 and consisted of capital expenditures of \$22.8 million, primarily related to the development of renewable energy plants. Also, \$10.8 million of cash was used for an acquisition.

*Cash flows from financing activities.* Net cash used in financing activities during the three months ended March 31, 2010 totaled \$0.01 million. We increased certain restricted cash accounts by \$4.3 million to meet terms of our loan agreements, and repaid \$1.3 million of long-term project debt. Additionally, we paid \$0.2 million in financing related fees. Partially offsetting those payments were net draws on our revolving credit facility totaling \$5.0 million and proceeds from long-term debt financing arrangements of \$0.8 million.

Cash flows provided by financing activities during the three months ended March 31, 2009 totaled \$18.6 million. Proceeds from a long-term debt financing arrangement and net draws on our credit facility were \$15.1 million and \$5.9 million, respectively. Partially offsetting those proceeds were \$1.2 million used to pay down long-term debt, \$0.9 million to repurchase outstanding shares from an employee, \$0.2 million to meet a restricted cash requirement, and \$0.1 million for financing-related fees.

Cash flows provided by financing activities totaled \$4.1 million during 2009 and included proceeds, net of financing costs, of \$25.4 million from a construction and term loan facility provided by a bank. These proceeds were offset by repayments of \$14.6 million on our revolving senior secured credit facility, repayments of \$3.6 million on other long-term debt and payments of \$3.1 million into restricted cash accounts which we are required to maintain under the terms of our term loan agreements used to finance certain of our renewable energy projects to provide for operation and maintenance expenses incurred in connection with such projects.

Cash flows provided by financing activities totaled \$22.2 million during 2008 and included proceeds of \$34.5 million from our revolving senior secured credit facility and proceeds from project finance debt of \$9.3 million. These proceeds were partially offset by repayments of \$2.5 million on long-term debt, \$2.9 million of project debt, \$0.9 million in financing fees, \$12.9 million for the repurchase of stock and warrants and payments of \$2.4 million into restricted cash accounts which we are required to maintain under the terms of our term loan agreements used to finance certain of our renewable energy projects to provide for operation and maintenance expenses incurred in connection with such projects.

Cash flows used in financing activities totaled \$3.2 million during 2007, primarily related to the repayment of long-term debt of \$4.4 million, repayment of senior debt of \$2.5 million and the repurchase of employee stock and options of \$2.5 million, partially offset by \$6.2 million of proceeds from project financing.

#### **Subordinated Note**

In connection with the organization of Ameresco, on May 17, 2000, we issued a subordinated note to our principal stockholder in the amount of \$3.0 million. The subordinated note bears interest at the rate of 10.00% per annum, payable monthly in arrears, and is subordinate to our revolving senior secured credit facility. The subordinated note is payable upon demand. We incurred \$0.3 million of interest related to the subordinated note during each of 2007, 2008 and 2009. We will repay in full the outstanding principal balance of, and all accrued but unpaid interest on, the note out of the proceeds of this offering.

#### **Revolving Senior Secured Credit Facility**

On June 10, 2008, we entered into a credit and security agreement with Bank of America, consisting of a \$50 million revolving facility. The agreement requires us to pay monthly interest at various rates in arrears, based on the amount outstanding. This facility has a maturity date of June 30, 2011. The facility is secured by a lien on all of our assets other than renewable energy projects that we own that were financed by others, and limits our ability to enter into other financing arrangements. Availability under the facility is based on two times our EBITDA for the preceding four quarters, and we are required to maintain a minimum EBITDA of \$20 million on a rolling four-quarter basis and a minimum level of tangible net worth. The full line of credit, less outstanding amounts, was available to us as of March 31, 2010. As of March 31, 2010, there was \$24.9 million in principal outstanding under the facility. There was \$34.5 million and \$19.9 million in principal outstanding under the facility as of December 31, 2008 and 2009, respectively.

#### **Project Financing**

*Construction and Term Loans.* We have entered into a number of construction and term loan agreements for the purpose of constructing and owning certain renewable energy plants. The physical assets and the operating agreements related to the renewable energy plants are owned by wholly-owned, single member special purpose subsidiaries. These construction and term loans are structured as project financings made directly to a subsidiary, and upon acceptance of a project, the related construction loan converts into a term loan. While we are required under GAAP to reflect these loans as liabilities on our consolidated balance sheet, they are nonrecourse and not direct obligations of Ameresco, Inc. As of March 31, 2010, we had outstanding \$58.0 million in aggregate principal amount under these loans, bearing interest at rates ranging from 6.9% to 8.7% and maturing at various dates from 2014 to 2025. As of December 31, 2009, we had outstanding \$58.4 million in aggregate principal amount under these loans, bearing interest at rates ranging from 6.9% to 8.7% and maturing at various dates from 2014 to 2021. As of March 31, 2010 and December 31, 2009, a term loan in the amount of \$5.0 million and \$5.4 million, respectively, was in default as a result of the bankruptcy of the customer for the energy output of the plant financed by the loan. The bankruptcy filing by the customer constitutes an event of default under the credit agreement, which could subject us to an assessment of default interest charges. To date, no such interest charges have been assessed. This customer has emerged from bankruptcy, confirmed its obligations to our subsidiary and made all back payments together with interest. We are currently seeking to refinance this loan to cure the default.

*Federal ESPC Receivable Financing.* We have arrangements with certain lenders to provide advances to us during the construction or installation of projects for certain customers, typically federal governmental entities, in exchange for our assignment to the lenders of our rights to the long-term receivables arising from the ESPCs related to such projects. These financings totaled \$57.3 million and \$32.6 million in principal amount at March 31, 2010 and December 31, 2009, respectively. Under the terms of these financing arrangements, we are required to complete the construction or installation of the project in accordance with the contract with our customer, and the debt remains on our consolidated balance sheet until the completed project is accepted by the customer.

Our revolving senior secured credit facility and construction and term loan agreements require us to comply with a variety of financial and operational covenants. As of March 31, 2010, except as noted above in “— Construction and Term Loans” with respect to the \$5.0 million term loan that was in default due to the bankruptcy of the customer that purchases the energy output of the plant financed by the loan, we were in

compliance with all of our financial and operational covenants. In addition, we do not consider it likely that we will fail to comply with these covenants during the term of these agreements.

**Contractual Obligations**

The following table summarizes our significant contractual obligations and commitments as of March 31, 2010:

	Payments due by Period				
	Total	Less than One Year	One to Three Years (In thousands)	Three to Five Years	More than Five Years
Revolving senior secured credit facility(1)	\$ 24,932	\$ —	\$ 24,932	\$ —	\$ —
Term loans	57,925	11,800	9,711	6,894	29,520
Federal ESPC receivable financing(2)	57,258	3,419	53,839	—	—
Interest obligations(3)	23,101	3,851	6,405	4,405	8,440
Operating leases	7,404	1,482	2,643	1,611	1,668
Total	<u>\$ 170,620</u>	<u>\$ 20,552</u>	<u>\$ 97,530</u>	<u>\$ 12,910</u>	<u>\$ 39,628</u>

- (1) For our revolving senior secured credit facility, the table above assumes that the variable interest rate in effect as of March 31, 2010 remains constant for the term of the facility.
- (2) Federal ESPC receivable financing arrangements relate to the installation and construction of projects for certain customers, typically federal governmental entities, where we assign to the lenders our right to customer receivables. We are relieved of the financing liability when the project is completed and accepted by the customer.
- (3) The table does not include, for our federal ESPC receivable financing arrangements, the difference between the aggregate amount of the long-term customer receivables sold by us to the lender and the amount received by us from the lender for such sale.

**Off-Balance Sheet Arrangements**

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined under SEC rules, such as relationships with unconsolidated entities or financial partnerships, which are often referred to as structured finance or special purpose entities, established for the purpose of facilitating financing transactions that are not required to be reflected on our balance sheet.

**Quantitative and Qualitative Disclosures About Market Risk**

We are exposed to changes in interest rates and foreign currency exchange rates because we finance certain operations through fixed and variable rate debt instruments and denominate our transactions in U.S. and Canadian dollars. Changes in these rates may have an impact on future cash flows and earnings. We manage these risks through normal operating and financing activities and, when deemed appropriate, through the use of derivative financial instruments.

**Interest Rate Risk**

We had cash and cash equivalents totaling \$24.4 million as of March 31, 2010, \$47.9 million as of December 31, 2009, \$18.1 million as of December 31, 2008, and \$40.9 million as of December 31, 2007. Our exposure to interest rate risk primarily relates to the interest expense paid on our senior secured credit facility.

**Derivative Instruments**

We do not enter into financial instruments for trading or speculative purposes. However, through our subsidiaries we do enter into derivative instruments for purposes other than trading purposes. Certain of the term loans that we use to finance our renewable energy projects bear variable interest rates that are indexed to

short-term market rates. We have entered into interest rate swaps in connection with these term loans in order to seek to hedge our exposure to adverse changes in the applicable short-term market rate. In some instances, the conditions of our renewable energy project term loans require us to enter into interest rate swap agreements in order to mitigate our exposure to adverse movements in market interest rates. The interest rate swaps that we entered into prior to December 31, 2009, qualify, but have not been designated, as fair value hedges. The interest rate swap that we have entered into during 2010 does qualify, and has been designated, as a fair value hedge.

By using derivative instruments, we are subject to credit and market risk. The fair market value of the derivative instruments is determined by using valuation models whose inputs are derived using market observable inputs, including interest rate yield curves, and reflects the asset or liability position as of the end of each reporting period. When the fair value of a derivative contract is positive, the counterparty owes us, thus creating a receivable risk for us. We are exposed to counterparty credit risk in the event of non-performance by counterparties to our derivative agreements. We minimize counterparty credit (or repayment) risk by entering into transactions with major financial institutions of investment grade credit rating.

Our exposure to market interest rate risk is not hedged in a manner that completely eliminates the effects of changing market conditions on earnings or cash flow.

#### ***Foreign Currency Risk***

As a result of our operations in Canada, we have significant expenses, assets and liabilities that are denominated in a foreign currency. Also, a significant number of employees are located in Canada and we transact a significant amount of business in Canadian currency. Consequently, we have determined that Canadian currency is the functional currency for our Canadian operations. When we consolidate the operations of our Canadian subsidiary into our financial results, because we report our results in U.S. dollars, we are required to translate the financial results and position of our Canadian subsidiary from Canadian currency into U.S. dollars. We translate the revenues, expenses, gains, and losses from our Canadian subsidiary into U.S. dollars using a weighted average exchange rate for the applicable fiscal period. We translate the assets and liabilities of our Canadian subsidiary into U.S. dollars at the exchange rate in effect at the applicable balance sheet date. Translation adjustments are not included in determining net income for the period but are disclosed and accumulated in a separate component of consolidated equity until sale or until a complete or substantially complete liquidation of the net investment in our Canadian subsidiary takes place. Changes in the values of these items from one period to the next which result from exchange rate fluctuations are recorded in our consolidated statements of changes in stockholders' equity as accumulated other comprehensive income (loss). During the three months ended March 31, 2010 and December 31, 2009, due to changes in the U.S.-Canadian exchange rate that were favorable to the value of the Canadian dollar versus the U.S. dollar, our foreign currency translation resulted in a gain of \$1.0 million and \$3.5 million, respectively, which we recorded as an increase in accumulated other comprehensive income.

As a consequence, gross profit, operating results, profitability and cash flows are impacted by relative changes in the value of the Canadian dollar. We have not repatriated earnings from our Canadian subsidiary, but have elected to invest in new business opportunities there. We do not hedge our exposure to foreign currency exchange risk.

#### **Recent Accounting Pronouncements**

*Codification.* In 2009, the Financial Accounting Standards Board, or FASB, issued an accounting pronouncement establishing the FASB Accounting Standards Codification, or ASC, as the source of authoritative accounting principles recognized by the FASB to be applied by nongovernmental entities. This pronouncement was effective for financial statements issued for interim and annual periods ending after September 15, 2009 for most entities. On the effective date, all non-SEC accounting and reporting standards were superseded. We adopted this new accounting pronouncement during 2009, and it did not have a material impact on our consolidated financial statements.

## [Table of Contents](#)

*Subsequent Events.* In May 2009, the FASB issued guidance on subsequent events, which sets forth general standards of accounting for and disclosure of events that occur after the balance sheet date but before financial statements are issued or are available to be issued. We adopted the guidance during 2009, and it did not have a material impact on our consolidated financial statements.

*Fair Value Measurement.* In January 2010, the FASB issued guidance on improving disclosures about fair value measurements. This guidance has new requirements for disclosures related to recurring or nonrecurring fair-value measurements including significant transfers into and out of Level 1 and Level 2 fair-value measurements and information on purchases, sales, issuances and settlements in a rollforward reconciliation of Level 3 fair-value measurements. This guidance is effective for the first reporting period beginning after December 15, 2009, and, as a result, it was effective for us beginning on January 1, 2010. The Level 3 reconciliation disclosures are effective for fiscal years beginning after December 15, 2010, which will be effective for us for the year ending December 31, 2011. We do not expect our adoption of this guidance to have a material impact on our consolidated financial statements.

On January 1, 2007, we adopted the related guidance for fair value measurements. The guidance defines fair value, establishes a framework for measuring fair value in accordance with GAAP and expands disclosures about fair value measurements. In addition, in 2009, we adopted fair value measurements for all of our non-financial assets and non-financial liabilities, except for those recognized at fair value in our consolidated financial statements at least annually. These assets include goodwill and long-lived assets measured at fair value for impairment assessments, and non-financial assets and liabilities initially measured at fair value in a business combination. Our adoption of this guidance did not have a material impact on our consolidated financial statements.

In September 2009, the FASB issued guidance related to revenue arrangements with multiple deliverables as codified in ASC 605, Revenue Recognition, or ASC 605. ASC 605 provides greater ability to separate and allocate arrangement consideration in a multiple element revenue arrangement. In addition, ASC 605 requires the use of estimated selling price to allocate arrangement considerations, therefore eliminating the use of the residual method of accounting. ASC 605 will be effective for fiscal years beginning after June 15, 2010 and may be applied retrospectively or prospectively for new or materially modified arrangements. Earlier application is permitted. We do not expect our adoption of this guidance will have a material effect on our consolidated financial statements.



## BUSINESS

### Company Overview

Ameresco is a leading provider of energy efficiency solutions for facilities throughout North America. Our solutions enable customers to reduce their energy consumption, lower their operating and maintenance costs and realize environmental benefits. Our comprehensive set of services addresses almost all aspects of purchasing and using energy within a facility. Our services include upgrades to a facility's energy infrastructure and the construction and operation of small-scale renewable energy plants. As one of the few large, independent energy efficiency service providers, we are able to objectively select and provide the products and technologies best suited for a customer's needs. Having grown from four offices in three states in 2001 to 54 offices in 29 states and four Canadian provinces in 2010, we now combine a North American footprint with strong local operations, which enable us to remain close to our customers and serve them effectively. We believe that we are a leading provider of energy efficiency solutions for facilities throughout North America based on having secured more than 30% of the projects awarded from October 1, 2008 through February 2010 under U.S. Department of Energy programs related to energy savings performance contracts, as well as our belief based on our own internal analyses and on third-party analyst reports that, by revenue, we are among the top ten North American energy services companies/energy consultants.

The market for energy efficiency services has grown significantly, driven largely by rising and volatile energy prices, advances in energy efficiency and renewable energy technologies, governmental support for energy efficiency and renewable energy programs and growing customer awareness of energy costs and environmental issues. End-users and governmental agencies are increasingly viewing energy efficiency measures as a cost-effective solution for saving energy, renewing aging facility infrastructure and reducing harmful emissions.

Our principal service is the development, design, engineering and installation of projects that reduce the energy and O&M costs of our customers' facilities. These projects typically include a variety of measures customized for the facility and designed to improve the efficiency of major building systems, such as heating, ventilation, air conditioning and lighting systems. We typically commit to customers that our energy efficiency projects will satisfy agreed-upon performance standards upon installation or achieve specified increases in energy efficiency. In most cases, the forecasted lifetime energy and operating cost savings of the energy efficiency measures we install will defray all or almost all of the cost of such measures. In many cases, we assist customers in obtaining third-party financing for the cost of constructing the facility improvements, resulting in little or no upfront capital expenditure by the customer. After a project is complete, we may operate, maintain and repair the customer's energy systems under a multi-year O&M contract, which provides us with recurring revenue and visibility into the customer's evolving needs.

We also serve certain customers by developing and building small-scale renewable energy plants located at or close to a customer's site. Depending on the customer's preference, we will either retain ownership of the completed plant or build it for the customer. Most of our plants have to date been constructed adjacent to landfills and use LFG to generate energy. Our largest renewable energy plant is currently under construction and will use biomass as the source of energy. In the case of the plants that we own, the electricity, thermal energy or processed LFG generated by the plant is sold under a long-term supply contract with the customer, which is typically a utility, municipality, industrial facility or other large purchaser of energy. We also sell and install PV panels and integrated PV systems that convert solar energy to power. By enabling our customers to procure renewable sources of energy, we help them reduce or stabilize their energy costs, as well as realize environmental benefits.

We provide our services primarily to governmental, educational, utility, healthcare and other institutional, commercial and industrial entities. Since our inception in 2000, we have served more than 2,000 customers.

Our revenue has increased from \$20.9 million in 2001, our first full year of operations, to \$428.5 million in 2009. We achieved profitability in 2002 and have been profitable every year since then.

As of March 31, 2010, we had backlog of approximately \$635 million in future revenue under signed customer contracts for the installation or construction of projects, which we expect to be recognized over the period from 2010 to 2013, and we had been awarded, but not yet signed customer contracts for, projects with estimated total future revenue of an additional \$618 million over the same period. As of March 31, 2009, we had backlog of approximately \$260 million in future revenue under signed customer contracts for the installation or construction of projects, which we expected to be recognized over the period from 2009 to 2012, and we had been awarded, but not yet signed customer contracts for, projects with estimated total future revenue of an additional \$926 million over the period from 2009 to 2013. We also expect to realize recurring revenue both under long-term O&M contracts and under energy supply contracts for renewable energy plants that we own. See “Risk Factors — We may not recognize all revenue from our backlog or receive all payments anticipated under awarded projects and customer contracts.”

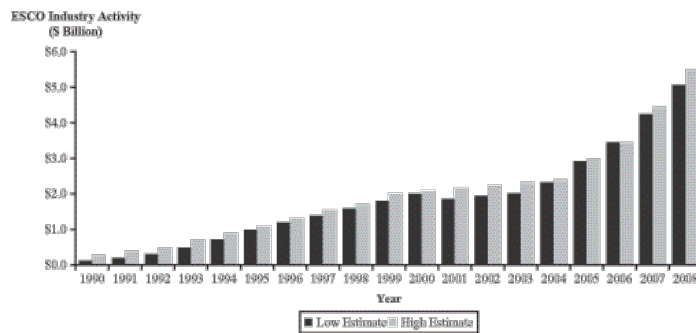
### Industry Overview

Energy efficiency companies, sometimes referred to as energy services companies, or ESCOs, develop, install and arrange financing for projects designed to improve the energy efficiency of buildings and other facilities. Typical products and services offered by energy efficiency companies include boiler and chiller replacement, HVAC upgrades, lighting retrofits, equipment installations, on-site cogeneration, renewable energy plants, load management, energy procurement, rate analysis, risk management and billing administration. Energy efficiency companies often offer their products and services through ESPCs. Under these contracts, energy efficiency companies assume certain responsibilities for the performance of the installed measures, under assumed conditions, for a portion of the project’s economic lifetime.

#### Energy Efficiency

The market for energy efficiency services has grown significantly, driven largely by rising and volatile energy prices, advances in energy efficiency and renewable energy technologies, governmental support for energy efficiency and renewable energy programs and growing customer awareness of energy and environmental issues. End-users, utilities and governmental agencies are increasingly viewing energy efficiency measures as a cost-effective solution for saving energy, renewing aging facility infrastructure and reducing harmful emissions.

According to a 2008 Frost & Sullivan report, as shown in the table below, activity by ESCOs in the North American market for energy management services, including energy efficiency, demand response and other services, grew at a compound annual growth rate, or CAGR, of 22% from 2004 through 2008, with the estimated size of the market reaching more than \$5 billion in 2008:



In a 2009 report, McKinsey & Company estimated that energy savings worth \$1.2 trillion are available if the full amount of economically viable and commercially available energy efficiency potential is implemented in the United States through 2020, which would require upfront investment of \$520 billion.

In 2008, Frost & Sullivan estimated that government and institutional facilities accounted for approximately 60% of energy management services revenue, with commercial and industrial customers accounting for 32% of the market and residential customers accounting for the balance. While we expect these existing U.S. markets will continue to grow, we also believe that the international markets provide opportunities for significant additional growth. For example, Frost & Sullivan in its 2008 report estimated that the spending for energy efficiency measures outside North America will reach approximately \$216 billion over the ensuing four to five years.

The U.S. federal government has over the past decade significantly increased its interest in and spending on energy efficiency measures. Legislation authorizing federal agencies to enter into ESPCs was originally passed in 1992, and in 2007, three years after the sunset of the original legislation, Congress passed new ESPC legislation without a sunset provision. As of the end of 2009, ESPCs have been awarded by 19 different federal agencies and departments in 48 states, resulting in more than 485 federal energy efficiency projects cumulatively worth \$2.7 billion. In December 2008, the U.S. Department of Energy awarded new IDIQ contracts that permit 16 companies to propose and procure ESPCs with federal agencies. Of these 16 companies, only three are independent companies not affiliated with an equipment manufacturer, utility or fuel company.

There are three principal types of energy efficiency companies:

- *Independent Energy Services Companies* — Energy efficiency companies not associated with an equipment manufacturer, utility or fuel company. Most of these companies are small and focus either on a specific geography or specific customer base.
- *Utility-Affiliated Energy Services Companies* — Companies owned by regulated North American utilities, many of which were traditionally focused on the service territories of their affiliated utilities. Many of these companies have since expanded their geographical markets. Examples include Constellation Energy Projects and Services and ConEdison Solutions.
- *Equipment Manufacturers* — Companies owned by building equipment or controls manufacturers. Many of these companies have a national presence through an extensive network of branch offices. Examples include Honeywell, Johnson Controls and Siemens.

#### **Renewable Energy**

Utilities and large purchasers of energy are increasingly seeking to use renewable sources of energy, such as LFG, wind, biomass, geothermal and solar, to reduce or stabilize their energy costs, meet regulatory mandates for use of renewable energy, diversify their fuel sources and realize environmental benefits, such as the reduction of greenhouse gas emissions.

According to the International Energy Agency, utilities worldwide are expected to increase their overall renewable generation capacity (excluding hydro) as a percentage of their overall capacity from less than four percent in 2007 to 13% in 2030.

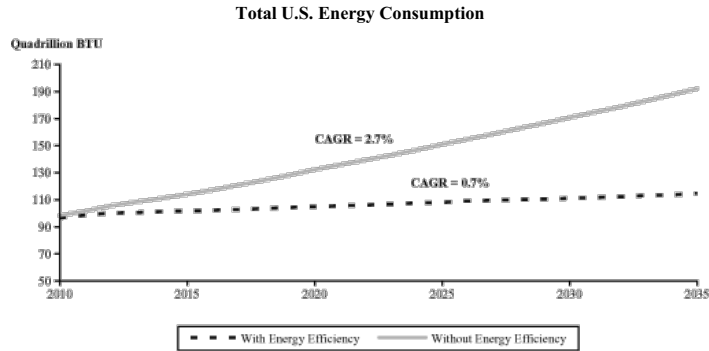
#### **Industry Trends**

We believe the following trends and developments are driving the growth of our industry.

- *Rising and Volatile Energy Prices.* Over the past decade, energy-linked commodity prices, including oil, gas, coal and electricity, have all increased and exhibited significant volatility. From 1999 to 2009, average U.S. retail electricity prices have increased by more than 50%. Over an 18-month period from January 2007 to July 2008, oil prices increased by almost 200%. According to the U.S. Energy Information Administration, or EIA, oil prices are expected to increase by approximately 115% from 2009 to 2035 and electricity prices are expected to

increase by approximately six percent annually over the same time period. We believe that rising energy prices combined with significant volatility have resulted in growing demand for energy efficiency measures that reduce energy usage and for sources of renewable energy that can stabilize energy costs.

- *Potential of Energy Efficiency Measures to Significantly Reduce Energy Consumption.* According to the EIA, U.S. energy demand is expected to increase nearly twofold from 2010 to 2035 in the absence of any improvements in energy efficiency, but the implementation of energy efficiency measures can significantly reduce energy consumption, as shown below:



According to a July 2009 report by McKinsey & Company, economically viable and commercially available energy efficiency measures, if fully implemented, have the potential to save more than one trillion kWh of electricity, or 23% of overall U.S. demand, by 2020.

- *Aging and Inefficient Facility Infrastructure.* Many organizations continue to operate with an energy infrastructure that is significantly less efficient and cost-effective than that now available through more advanced technologies applied to lighting, heating, cooling and other building systems. As these organizations explore alternatives for renewing their aging facilities, they often identify multiple areas within their facilities that could benefit from the implementation of energy efficiency measures, including the possible use of renewable sources of energy. According to a July 2009 report by McKinsey & Company, increased energy efficiency through facility renewal of government buildings, community infrastructure and existing homes in the United States represents a \$76 billion market opportunity through 2020, and could result in energy savings of \$174 billion over the same period.
- *Increased Focus on Cost Reduction.* The current economic environment has led many organizations to search for opportunities to reduce their operating costs. There has been a growing awareness that reduced energy consumption presents an opportunity for significant long-term savings in operating costs and that the installation of energy efficiency measures can be a cost-effective way to achieve such reductions.
- *Movement Toward Industry Consolidation.* As energy efficiency solutions continue to increase in technological complexity and customers look for service providers that can offer broad geographic and product coverage, we believe smaller niche energy efficiency companies will continue to look for opportunities to combine with larger companies that can better serve their customers' needs. In addition, we believe utilities will continue to consider divesting their energy management services divisions, in part because of the potential conflicts between the

interests of an energy provider and the interests of a provider of energy efficiency services. Increased market presence and size of energy efficiency companies should, in turn, create greater customer awareness of the benefits of energy efficiency measures.

- *Increased Use of Third-Party Financing.* Many organizations desire to use their existing sources of capital for core investments or do not have the internal capacity to finance improvements to their energy infrastructure. These organizations often require innovative structures to facilitate the financing of energy efficiency and renewable energy projects. Customers seeking to upgrade or renew their energy systems are increasingly seeking to enter into ESPCs or other creative arrangements that facilitate third-party financing for their projects.
- *Increasing Legislative Support and Initiatives.* In the United States and Canada, federal, state, provincial and local governments have enacted and are considering legislation and regulations aimed at increasing energy efficiency, reducing greenhouse gas emissions and encouraging the expansion of renewable energy generation. Examples of such legislation and regulation are:
  - *Federal.* In 2007, the United States enacted the Energy Independence and Security Act which mandates that federal buildings reduce energy consumption by 30% by 2015 compared to their 2003 baseline and contains multiple provisions promoting long-term ESPCs. The U.S. Department of Energy also has a number of research, development, grant and financing programs — most notably the DOE Loan Guarantee Program — to encourage energy efficiency and renewable energy. Additionally, the United States has adopted federal incentives for renewable energy, including the production tax credit, investment tax credit and accelerated depreciation.
  - *States.* At the U.S. state level, significant measures to support energy efficiency and renewable energy have been implemented, including as of December 31, 2009, the following:
    - 20 states have adopted energy efficiency resource standards, or EERS, and long-term energy savings targets for utilities.
    - 29 U.S. states and the District of Columbia have renewable portfolio standards, or RPS, in place, and six states have renewable portfolio goals.
    - 14 states have passed legislation enabling a new financing mechanism known as Property Assessed Clean Energy (PACE) Bonds. The bonds provide funds that can be used by commercial and residential property owners to finance efficiency measures and small-scale renewable energy systems.



- The U.S. Senate and House of Representatives have passed various forms of EERS and RPS legislation and, if enacted, all 50 states would have additional incentives to support energy efficiency and renewable energy.
- *Canada.* The federal, provincial and local governments have also provided incentives for the development of energy efficiency and renewable energy projects, and facility renewal. In 2010, the federal government announced its 2020 greenhouse gas emissions reduction target

under the Copenhagen Accord, a 17% reduction from 2005 levels, subject to adjustment to remain consistent with the U.S. target. In 2009, Ontario and Quebec both passed enabling legislation to establish cap-and-trade programs, which aim at reducing emissions by 15% below 1990 levels by 2020 and 20% by 2020, respectively. Ontario also passed the Green Energy and Green Economy Act in May 2009 to expand renewable energy production, encourage energy conservation and create green jobs. The act established a feed-in tariff program with pricing incentives to encourage the development of renewable energy. Similarly, British Columbia has also passed enabling legislation to establish a cap-and-trade program and a greenhouse gas reduction target of at least 33% below 2007 levels by 2020. Under the federal Economic Action Plan, the federal government has committed to multi-year expenditures of \$4 billion for new infrastructure funding, and has established program funds of \$1 billion for sustainable energy and other green projects and \$2 billion to repair, retrofit and expand facilities at post-secondary institutions.

- *Economic Stimuli.* Governments worldwide have allocated significant portions of economic stimuli to clean energy. The American Recovery and Reinvestment Act of 2009 allocated \$67 billion to promote clean energy, energy efficiency and advanced vehicles. Additionally, the Emergency Economic Stabilization Act instituted a grant program that provides cash in lieu of the investment tax credit for eligible renewable energy generation sources which commence construction in 2010.

These trends and developments are contributing to the growth of the market for energy efficiency and renewable energy solutions and create opportunities for energy efficiency companies that can provide the comprehensive range of services and deep level of expertise necessary to cost-effectively meet customers' energy and facility renewal needs.

#### **The Ameresco Solution**

Ameresco's solutions enable customers to increase energy efficiency, reduce costs and realize environmental benefits. Our comprehensive set of services addresses almost all aspects of purchasing and using energy within a facility. We have significant in-house expertise in identifying, designing and installing the improvements necessary to enhance the energy efficiency of a facility. As an independent company unaffiliated with any specific equipment manufacturer or utility, we have the freedom and flexibility to be objective in selecting, purchasing and integrating the particular systems best suited for a facility's infrastructure.

We can reduce our customers' energy costs in several ways. The energy efficiency measures that we design, install and manage, such as boilers, chillers, lighting systems and control systems, can reduce the usage of energy and water, thereby significantly reducing operating costs. By upgrading aging facilities, we can also significantly reduce ongoing O&M costs. In addition, customers buying energy from our renewable energy plants can reduce or stabilize their energy prices under 10- to 20-year supply contracts with us. We also sell and install equipment, such as solar energy products, that enable customers to benefit from federal and state tax credits and other governmental incentives.

Most customers undertaking an energy efficiency project desire to minimize their upfront costs and overall cost of system ownership. We assist customers in achieving their economic objectives by helping to arrange third-party financing, which often results in little or no upfront capital expenditure by the customer. By committing that our energy efficiency measures will achieve specified performance standards upon installation or specified increases in energy efficiency over a multi-year period, we enable our customers to reduce the risk that the systems we install will not achieve forecasted energy usage savings. In most cases, the forecasted lifetime savings of the energy efficiency measures we install will defray all or almost all of the cost of such measures. For customers desiring to procure renewable energy sources, we provide financing flexibility by offering either to build a small-scale renewable energy plant that will be owned and financed by the customer itself or to build and finance a plant that we will own and that will supply energy or gas to the customer under a long-term contract.

Our solutions also assist our customers in achieving their environmental goals and, in the case of governmental customers, complying with federal and state energy efficiency and emission reduction mandates. Our energy efficiency improvements enable customers to achieve environmental benefits both by reducing their energy and water usage and by reducing their reliance on conventional energy sources. Customers procuring electricity, thermal energy or processed gas from the renewable energy plants that we construct can further reduce their emissions of greenhouse gases and other pollutants.

#### **Our Competitive Strengths**

We believe our competitive strengths include the following:

- *One-Stop, Comprehensive Service Provider.* We offer our customers expertise in addressing almost all aspects of purchasing and using energy within a facility. Our experienced project development and engineering staff provide us with the capability and flexibility to determine the combination of energy efficiency measures that is best suited to achieve the customer's energy efficiency and environmental goals. Our solutions range from smaller projects, such as a lighting system retrofit, to larger and more complex projects comprising new heating, cooling and electrical infrastructure, solar panels and a small-scale renewable energy plant serving multiple buildings.
- *Independence.* We are an independent company with no affiliation to any equipment manufacturer, utility or fuel company. Unlike affiliated service companies, we have the freedom and flexibility to be objective in selecting particular products and technologies available from different manufacturers. By bundling components from multiple sources, we can optimize our solution for customers' particular needs. In addition, we can leverage the high volume of equipment purchases that originate across our North American operations to obtain attractive pricing terms that enable us to provide cost-effective solutions to our customers.
- *Strong Customer Relationships.* We have served over 2,000 customers since our inception, including over 1,000 customers in 2009. The sales, design and construction process for energy efficiency and renewable energy projects typically takes from 12 to 36 months, during which time our engineers work closely with the customer to ensure a successful installation. For certain projects, we enter into a multi-year O&M contract under which we have personnel on-site monitoring and controlling the customer's energy systems. Our services include helping customers procure energy and managing their utility bill payment processes. All of these design, engineering and support activities foster a close relationship with our customers, which positions us to identify their future needs and provide additional services to them. For example, for a single federal facility, we have completed three separate projects over the period from 2005 to 2009.
- *Creative Solutions.* We seek to provide innovative solutions to meet our customers' energy efficiency, facility renewal and environmental goals. Our engineering staff has expertise in a broad range of technologies and energy savings strategies encompassing different types of electrical, heating, cooling, lighting, water, renewable energy, and other facility infrastructure systems. We are constantly seeking to identify new services, products and technologies that can be incorporated into our energy efficiency and renewable energy solutions to enhance their performance. We apply this expertise to design and engineer innovative solutions customized to meet the specific needs of each client. We also have an internal structured finance team that is skilled and experienced in arranging third-party financing for our customers' projects.
- *Strong National and Local Presence.* We have a nationwide presence in both the United States and Canada and serve certain of our customers in European locations. We maintain a centralized staff of engineering, financial and legal personnel at our headquarters in Massachusetts, who provide support to our seven regional offices and 46 other field offices located throughout the United States and Canada. We leverage our centralized resources and local offices by sharing experiences and best practices across the offices. We are able to

maintain an entrepreneurial approach toward our customers by delegating significant responsibility to our regional offices and making them accountable for their own operational and financial performance. We believe that our organizational structure enables us to be fast, flexible and cost-effective in responding to our customers' needs.

- *Experienced Management and Operations Team.* Our executive officers have an aggregate of over 150 years of experience in the energy efficiency field. Some have worked together for over 15 years and most have worked together at Ameresco for over five years. In addition, we have accumulated significant in-house expertise in our sales, engineering, financing, legal, construction and operations functions. As of March 31, 2010, we employed over 200 engineers, whose experience with respect to fuels, rates, technologies and geography-specific regulation and economic benefits enables us to propose and design energy efficiency solutions that take into account the economic, technological, environmental and regulatory considerations that we believe underlie the cost efficiencies and operational success of a project. Many of our employees were previously employed by utilities, construction companies, financial institutions, engineering firms, consultancies and government agencies, which provides them with specialized experience in solving problems and creating value for our customers.
- *Federal and State Qualifications.* The federal governmental program under which federal agencies and departments can enter into ESPCs requires that energy service providers have a track record in the industry and meet other specified qualifications. Over 20 states require similar qualifications to do business with state agencies and, in certain cases, with other governmental agencies in the state. In 2008, we renewed our IDIQ qualification under the U.S. Department of Energy program for ESPCs, and we are currently qualified to enter into ESPCs in most states that require qualification. Our projects accounted for almost half of the total dollar amount of published task orders issued under the Department of Energy's IDIQ program for ESPCs in fiscal 2009. The scope of our qualifications provides us with the opportunity to continue to grow our business with federal, state and other governmental customers and differentiates us from energy efficiency companies that have not been similarly qualified.
- *Integration of Strategic Acquisitions.* We have a track record of completing over ten acquisitions that have enabled us to broaden our offerings, expand our geographical reach and accelerate our growth. We follow a disciplined approach in evaluating and valuing potential acquisition candidates and frequently improve their operating performance significantly following our acquisition. Our acquisition of the energy services business of Duke Energy in 2002 expanded our geographical reach into Canada and the southeastern United States, and enabled us to penetrate the federal government market for energy efficiency projects. Our acquisition of the energy services business of Northeast Utilities in 2006 further grew our capability to provide services for the federal market and in Europe. Our acquisition of Southwestern Photovoltaics in 2007 significantly expanded our offering of solar energy products and services. We believe that our ability to offer a comprehensive set of energy efficiency services across North America has been, and will continue to be, enhanced by our expertise in identifying and completing acquisitions that expand our service offerings, as well as by our ability to integrate and leverage the skilled engineering, sales and operational personnel that come to us through these acquisitions.

### Strategy

Our goal is to capitalize on our strong customer base and broad range of service offerings to become the leading provider of comprehensive energy efficiency and renewable energy solutions.

Key elements of our strategy include the following:

- *Pursue Organic Growth.* We plan to grow primarily by leveraging our core expertise in designing, engineering and installing energy efficiency solutions to reach additional customers



in our target markets. To achieve this goal, we plan to open additional local offices in the regions we currently serve, as well as hire additional sales personnel. We also plan to expand geographically by opening new offices in regions we do not currently serve in the United States and Canada, as well as in Europe.

- *Continue to Maintain Customer Focus.* Our success will continue to depend in large part on our ability to understand and meet our customers' energy infrastructure requirements. We will maintain an entrepreneurial approach toward our customers and remain flexible in designing projects tailored specifically to meet their needs. We will also continue to monitor and explore alternative services, products and technologies that might offer improved system performance and will seek to design and engineer innovative solutions for our customers.
- *Expand Scope of Product and Service Offerings.* We believe the breadth of our services differentiates us from our competitors. We plan to continue to expand our offerings by including new types of energy efficiency services, products and improvements to existing products based on technological advances in energy savings strategies, equipment and materials. Examples of services that we have added to complement our energy efficiency services include asset planning, new construction, waste reduction, water conservation, demand response, management of utility and non-utility invoices and web-based software for tracking of a customer's carbon footprint, electrical distribution upgrades, meters with communication capabilities, transformer replacements and power factor correction. Through our acquisition of Southwestern Photovoltaics in 2007, we significantly expanded our offering of solar energy products, which enabled us both to integrate solar solutions into broad energy efficiency projects and to target projects based specifically on solar energy. We plan to seek similar opportunities to broaden our offerings of complementary products and services.
- *Meet Market Demand for Cost-Effective, Environmentally-Friendly Solutions.* We believe that addressing climate change will remain a global theme for governmental, institutional and commercial organizations. Through our energy efficiency measures and small-scale renewable energy plants and products, we enable customers to conserve energy and reduce emissions of carbon dioxide and other pollutants. We plan to continue to focus on providing sustainable energy solutions that will address the growing demand for products and services that create environmental benefits for customers.
- *Increase Recurring Revenue.* We intend to continue to seek opportunities to increase our sources of recurring revenue. For many of our energy efficiency projects, we enter into multi-year O&M contracts, and we plan to continue to grow both the number and scope of such contracts. We also obtain recurring revenue from sales of electricity, thermal energy and gas generated by the small-scale renewable energy and central plants that we construct and own, and we plan to continue to seek opportunities to construct such plants based on LFG, biomass, biogas, solar, wind, geothermal and other sources of energy.
- *Grow through Select Strategic Acquisitions.* We have been able to accelerate the expansion of our service offerings, customer base and geographic reach through targeted acquisitions. We will continue to follow a disciplined approach in evaluating and valuing potential acquisition candidates. We plan to pursue complementary acquisitions that will enable us to both expand geographically in North America and abroad, and broaden our product and service offerings.

#### **Ameresco's Products and Services**

We offer a comprehensive set of services that includes the design and installation of upgrades to a facility's energy infrastructure, the design and construction of renewable energy plants, the sale of other renewable energy products and the arranging of financing for customer projects.

### *Energy Efficiency Services*

Our services typically includes the design, engineering and installation of, and the arranging of financing for, equipment to improve the efficiency, and control the operation, of a building's heating, ventilation, cooling and lighting systems. In certain projects, we also design and construct a central plant or cogeneration system providing power, heat and/or cooling to a building. Our projects generally range in size and scope from a one-month project to design and retrofit a lighting system to a more complex 30-month project to design and install a central plant or cogeneration system.

At the commencement of a project, we typically evaluate the customer's energy needs and opportunities to reduce costs. We start by reviewing and analyzing the customer's utility and other energy bills, using in complex cases our proprietary AXIS software for bill scanning and analyses. Our in-house personnel can, for example, analyze whether a customer is eligible for lower rates in a different utility rate class. Our experienced engineers then review and assess the customer's current energy systems and determine how to optimize federal, state or local energy, utility and environmental-based payments or credits available for usage reductions or renewable power generation. Upon customer approval of a project, our engineers, with the assistance in some cases of local or specialized engineers, design and engineer the project.

### *Energy Efficiency Measures*

In designing a project for a customer, we typically include a combination of the following energy efficiency measures:

- *Boilers and Furnaces.* We replace low efficiency boilers and furnaces with higher efficiency equipment. In addition, to reduce emissions, we can install emissions controls or either modify existing equipment or install new equipment to use cleaner fuels. We can also install biomass boilers for customers that have access to organic materials, such as waste from agricultural or food processing activities.
- *Chillers.* Small buildings are cooled by air conditioners and large buildings are cooled by chillers. We replace older low efficiency chillers with new higher efficiency chillers capable of delivering the same cooling with less energy input, often eliminating the use of atmospheric ozone depleting chlorofluorocarbon-based refrigerants in the process. We retrofit existing chillers with new, more sophisticated, automated controls, high efficiency motors and variable speed drives to improve efficiency in cases where complete equipment replacement is not necessary. If the customer has an on-site source of recoverable waste heat, we may replace an electric chiller with an absorption chiller that can utilize the waste heat to directly produce cooling with reduced need to purchase energy for chiller operation.
- *Central Plants.* Customers that have multiple buildings in close proximity on a site may benefit from installation of a single central plant to provide power, heat or cooling to these buildings. The central plant typically contains multiple large boilers, chillers or combined heat and power, or CHP, systems to handle the combined requirements of all site buildings. Pipes are installed to distribute steam, hot water or chilled water from the central plant to the individual buildings. Any centrally generated power is delivered via interconnection with the existing site-wide electrical distribution system. A central plant allows the multiple smaller and less energy efficient individual building heating and cooling plants to be decommissioned. In addition to improved energy efficiency, centralization can create other scale benefits in operating labor, equipment maintenance and operating reliability. Where a customer already has a central plant, we can improve the efficiency of the plant by implementing improved equipment controls and by retrofit or replacement of existing equipment for enhanced energy efficiency.
- *Cogeneration or Combined Heat and Power.* CHP systems produce both heat and power simultaneously at a customer site, displacing power purchases from the utility grid and conventional sources of heat generation at the customer facility. When utilities produce power at large central station plants, the heat produced as a byproduct of the power generation process is

typically wasted via disposal to the atmosphere or a nearby waterway. This wasted heat is generally a majority of the energy value of the input fuel to the power generation process. With on site power generation, the waste heat can be recovered from the power generation process and used as a substitute for heat that would otherwise be generated using site purchased fuels. Through use of heat driven chillers, also known as absorption chillers, this recovered heat can also be employed to provide building cooling. For facilities with large and relatively constant needs for power and heat or cooling, the cost of fuel for the cogeneration system operation can often be less than the cost of the purchased utility power and conventional heating fuel that is displaced. Installing a CHP that uses a lower-cost fossil fuel or a renewable fuel source can create further economic benefits.

- *Energy Management Systems.* Automating building system adjustments for optimum performance under changing building operating conditions is one of the most cost effective energy saving strategies. We install energy management system, or EMS, projects consisting of small computers, wiring or wireless communication systems, and sensors and controllers located at energy-using equipment and at locations that need monitoring for such conditions as temperature and flow. Equipment that may be controlled through an energy management system includes lights, boilers, chillers, and fans and pumps that move energy throughout a building. We program the computers to automatically turn the equipment on and off or to adjust equipment operating setpoints for lower energy use in response to monitored conditions. For example, when the outdoor air is cool and the building requires cooling, instead of turning on the chillers to cool the building, the EMS may turn on building fans to draw the cool outside air into the building and significantly reduce the energy use under that condition. Both we and the customer can access the EMS information through a personal computer and reprogram the energy-saving strategies through secure, hard-wired or web-based communications systems.
- *Lighting.* We replace lighting system components with more efficient components in both indoor and outdoor lighting systems. We may alternatively redesign and install a new lighting system. Typical measures include replacing incandescent lighting with compact fluorescent lighting, metal halide lighting with fluorescent lighting and low efficiency fluorescent lighting with higher efficiency fluorescent lighting. Also, lighting controls may be installed to turn off lights when the lit space is unoccupied or if natural light through windows or skylights is adequate.
- *Retro-commissioning.* Over time, the performance of building systems can degrade due to a variety of factors, such as a failure of dampers, actuators and switches to operate in accordance with the building control system or modifications to equipment without taking into account their interaction with other building systems. Cumulatively, these factors can lead to significant increased energy consumption and reduce the quality of the indoor environment. Through a retro-commissioning process, we systematically repair and restore building equipment and systems so that they function together in an optimal manner to enhance overall building performance.
- *Motors.* The energy cost over the life of a motor is often many times the original cost of the motor. We replace older low efficiency motors with new higher efficiency motors. Often, motors are over-sized for the application and additional savings can be attained by replacing an existing motor with an appropriately sized motor. We may also replace the sheave and belt drives associated with motors so that the motor output is transmitted to the driven device with reduced energy loss.
- *Variable Speed Drives or Variable Frequency Drives.* Motors driving building equipment such as fans, pumps, chillers and elevators are typically selected and operated at the size and speed necessary to deliver services under worst case or peak load conditions. This causes inefficiencies when operating at less than peak load conditions. We install electronic devices called variable speed drives, or VSDs, that automatically adjust the characteristics of the power supplied to a motor so that the motor is operated at only the speed necessary to meet the load conditions at any time.

- *Electric Load Shaping.* Many customers pay an energy charge per kWh of electricity used and a demand charge based on their highest or peak use of electricity in a 15 minute period during the month. By installing an EMS or an on-site generator and controlling the system using our monitoring and analysis of the customer's electricity use, we can reduce the customer's peak electricity use and thus its demand charge. We may also shift energy use from expensive on-peak (weekday) periods to less expensive off-peak periods (nights and weekends). For example, by adding chilled water storage tanks to a facility, cooling systems can be operated at night to generate stored chilled water and the chilled water can then be withdrawn to cool the building during the next day without operating the cooling equipment during daytime peak periods.
- *Utility Rate Reductions.* A customer's cost of gas and electricity is a function of how much energy is used and what rate the customer is charged for the energy. We analyze a customer's energy use and the various utility rates that the customer is eligible to select. By switching a customer to the optimal rate, the customer can typically save energy costs. We may be able to switch a customer into a better rate by installing an EMS or an on-site generator.
- *Geothermal Heat Pumps.* Heat pumps are designed to efficiently provide both heat and cooling to a facility. The geothermal heat pump system works to store and recapture energy from the ground on a seasonally advantageous basis. Beneath the surface, the earth is warmer than the air in winter and cooler than the air in summer. Using the heat pump, heat removed from a building to cool it during the summer can be stored in the ground. This stored heat can then be withdrawn by the heat pump in the winter to provide necessary building heating. We install piping loops in the ground and heat pumps in buildings. Water piped underground captures the stored geothermal energy and heat pumps deliver the energy efficiently to the building interior.
- *Window Replacement.* Existing windows are often the most inefficient component of a building envelope. We may replace existing inefficient windows with new windows with features that more effectively control the sources of window heat transfer.
- *Roofs.* An existing roof with inadequate insulation levels or with water damage compromising the effectiveness of insulation is a source of unnecessary energy waste. We replace existing roofs with new roofs with higher insulation levels to reduce heat losses in winter and heat gains in summer. We may employ membrane roof technology for better protection of the insulation against degradation.
- *Insulation.* Insulating materials reduce unwanted transfer of heat that can increase energy usage. We apply additional insulation to building shell components, such as walls, ceilings, floors and foundations, to reduce heat loss in winter and heat gain in summer. We may add to or fully replace existing insulation on equipment such as piping, storage tanks and heat exchangers to reduce energy losses and the equipment inefficiency that results from these losses.
- *Asset Planning.* Asset planning tools enable organizations to identify and prioritize current and future facility renewal requirements and associated capital-investment needs. We have developed software that helps organizations measure the condition of their facilities, the costs necessary to improve the facilities and make them more energy efficient and the funding alternatives for any such improvements. Our asset planning tools enable customers to develop facility renewal plans that will effectively leverage their available sources of capital and meet their future needs.
- *Demand Response and Demand-Side Management.* Electric utilities and regional or independent system operators, or ISOs, are responsible for ensuring that power is available at all times throughout a region's electrical transmission and distribution system. It is expensive to provide power during peak times such as a hot summer afternoon when customers are turning on their air conditioners and chillers. Utilities and ISOs seek to reduce the peak load demand and are willing to pay customers to reduce their power usage at these times, either during pre-arranged hours or in response to a call to reduce power. We help utilities and ISOs to attract customers to their programs and coordinate the customers' participation in the programs. Typically we enter

into a contract with a utility or ISO, market the program to customers, and share contract payments with the customers.

- *Utility Data Management.* We have developed proprietary software and systems that allow us to efficiently collect, optically scan, enter into a data base and perform analysis on information from customer utility bills. Using these systems, we can deliver a variety of services, including centralized and automated collection, processing and preparation for payment of utility billing information; identification of errors in utility metering or billings; aggregation of multiple location billings from a single utility to facilitate payment; modeling of available utility tariff rates against a database of historical energy use to identify the most economical rate; and analysis of utility use data in multiple ways to identify and report usage and cost trends, variances and performance relative to benchmarks.
- *Carbon Emissions Tracking.* Our carbon management program provides greenhouse gas, or GHG, emissions accounting and reporting services to our customers. With an international, multi-tiered approach, we can support a wide variety of GHG accounting and reporting standards, including utility-based GHG and full ISO 14064 compliance reporting. This service helps customers, for example, to develop corporate social responsibility reports and prepare for an audit of their GHG emissions.

We typically purchase the equipment for our projects either from local vendors or, in certain cases, from vendors with which we have a company-wide relationship. Our large volume of equipment purchases enables us to achieve cost-efficiencies with our significant vendors. In most cases, we use local subcontractors to install the purchased equipment in accordance with our design and under the supervision of our project manager.

#### *Customer Arrangements*

For our energy efficiency projects, we typically enter into ESPCs under which we agree to develop, design, engineer and construct a project and also commit that the project will satisfy agreed-upon performance standards that vary from project to project. These performance commitments are typically based on the design, capacity, efficiency or operation of the specific equipment and systems we install. Our commitments generally fall into three categories: pre-agreed, equipment-level and whole building-level. Under a pre-agreed energy reduction commitment, our customer reviews the project design in advance and agrees that, upon or shortly after completion of installation of the specified equipment comprising the project, the commitment will have been met. Under an equipment-level commitment, we commit to a level of energy use reduction based on the difference in use measured first with the existing equipment and then with the replacement equipment. A whole building-level commitment requires demonstration of energy usage reduction for a whole building, often based on readings of the utility meter where usage is measured. Depending on the project, the measurement and demonstration may be required only once, upon installation, based on an analysis of one or more sample installations, or may be required to be repeated at agreed upon intervals generally over periods of up to 20 years.

Under our contracts, we typically do not take responsibility for a wide variety of factors outside our control and exclude or adjust for such factors in commitment calculations. These factors include variations in energy prices and utility rates, weather, facility occupancy schedules, the amount of energy-using equipment in a facility, and failure of the customer to operate or maintain the project properly. Typically, our performance commitments apply to the aggregate overall performance of a project and not to individual energy efficiency measures. Therefore, to the extent an individual measure underperforms, it may be offset by other measures that overperform during the same period. In the event that an energy efficiency project does not perform according to the agreed-upon specifications, our agreements typically allow us to satisfy our obligation by adjusting or modifying the installed equipment, installing additional measures to provide substitute energy savings, or paying the customer for lost energy savings based on the assumed conditions specified in the agreement. Many of our equipment supply, local design, and installation subcontracts contain provisions that enable us to seek recourse against our vendors or subcontractors if there is a deficiency in our energy

reduction commitment. From our inception to March 31, 2010, our total payments to customers and incurred costs under our energy reduction commitments, after customer acceptance of a project, have been less than \$100,000 in the aggregate. See “Risk Factors — We may have liability to our customers under our ESPCs if our projects fail to deliver the energy use reductions to which we are committed under the contract.”

The projects that we perform for governmental agencies are governed by particular qualification and contracting regimes. Certain states require qualification with an appropriate state agency as a precondition to performing work or appearing as a qualified energy service provider for state, county and local agencies within the state. Most of the work that we perform for the federal government is performed under IDIQ agreements between government agencies and us or our subsidiaries. These IDIQ agreements allow us to contract with the relevant agencies to implement energy projects, but no work may be performed unless we and the agency agree on a task order or delivery order governing the provision of a specific project. The government agencies enter into contracts for specific projects on a competitive basis. We and our subsidiaries and affiliates are currently party to an IDIQ agreement with the U.S. Department of Energy, expiring in 2019, with an aggregate maximum potential ordering amount of \$5 billion. Payments by the federal government for energy efficiency measures are based on the services provided and products installed, but are limited to the savings derived from such measures, calculated in accordance with federal regulatory guidelines and the specific contract terms. The savings are typically determined by comparing energy use and O&M costs before and after the installation of the energy efficiency measures, adjusted for changes that affect energy use and O&M costs but are not caused by the energy efficiency measures.

#### *Engineering and Installation Controls*

Our engineering and construction quality, schedule and budget goals are managed through several control processes. We follow formal processes for the review and approval of the technical and economic content of all proposals by senior managers. Our engineers employ standardized, and in some cases proprietary, software tools for technical and economic analysis to establish a baseline for quality and accuracy during the development stage of our projects. We fully review final design, engineering and construction document preparation efforts at selected milestones, using internal or subcontracted specialized engineering resources. During the construction phase, a construction project management team utilizes a number of tools to manage quality, cost and schedule. We use agreement templates, customized to meet the specific technical requirements of each project, to ensure well defined procedures and responsibilities to be followed by our equipment suppliers and labor subcontractors. We use scheduling software to prepare, regularly update and communicate project schedules at a task specific level. Inspections of work progress and quality are conducted throughout the construction process at frequent intervals. Both project managers and senior management use a computerized project control system throughout the project delivery process to track actual project costs against project budgets on a real-time basis. In addition, we employ a full-time, dedicated safety director who is responsible for developing and promulgating best practices and training throughout the organization and working with our regional safety coordinators to ensure appropriate procedures are in place at all job sites.

#### *Operations and Maintenance Services*

After a project is completed, we often provide ongoing O&M services under a multi-year contract. These services include operating, maintaining and repairing facility energy systems such as boilers, chillers and building controls, as well as central power plants. For larger projects, we often maintain staff on-site to perform these services.

#### *Renewable Energy Projects and Products*

Our services offering includes the development, construction and operation of, and the arrangement of financing for, small-scale renewable energy plants, as well as the sale and integration of solar energy products and systems.

We have constructed and are currently designing and constructing a wide range of renewable energy plants using LFG, wastewater treatment biogas, solar, wind, biomass, food waste, animal waste and hydro

sources of energy. Most of our renewable energy projects to date have involved the generation of electricity from LFG or the sale of processed LFG. LFG is created by the action of micro-organisms within a landfill that generate methane gas as a byproduct of solid waste decay. Generally, landfills avoid the unsafe build up of methane-containing LFG by venting it into the atmosphere, or in most cases, by collecting and flaring it. As methane is suspected of contributing to global climate change and is regulated as a pollutant, landfill owners are generally required by environmental laws to collect and combust LFG, usually in a flare. We purchase the LFG that otherwise would be combusted or vented, process it, and either sell it or use it in our energy plants. Electricity that we sell is generally delivered to the customer at the interconnection of our plant with the electrical grid. The thermal energy that we sell is generally delivered to the customer at the inlet flange of the thermal piping located at the customer's facilities. The processed LFG we sell to industrial customers is generally delivered by us to the customer's facility through a pipeline transmission system that we design, construct and operate. Under our energy supply agreements, we typically provide all environmental attributes associated with the project, including those represented by renewable energy certificates, to the customer.

Depending on the customer's preference, we will either build, own and operate the completed plant or build it for the customer to own. We generally sell the electricity, gas, heat or cooling generated by small-scale plants that we own under long-term contracts, typically to utilities, industrial facilities or other large users of energy. For an LFG-based plant, the output will typically be sold under a sales agreement with a term covering ten to 20 years of plant operation. The right to use the site for the energy plant, and the purchase of the renewable energy needed to fuel the plant, are also obtained under long-term agreements with terms at least as long as that of the associated output sales agreement. Our projects are generally designed and permitted by our own engineers, although we often obtain additional engineering assistance from consulting engineers. We generally subcontract installation of project equipment, under the supervision of our construction manager.

As part of our renewable energy offering, we also distribute and integrate solar energy products manufactured by several vendors. We are a distributor of PV panels, solar regulators, solar charge controllers, inverters, solar-powered lighting systems, solar-powered water pumps, solar panel mounting hardware and other system components. We also integrate our PV products and system components into solar solutions designed specifically for customers. We provide solar energy solutions for both on-grid applications where the solar power is used in a building connected to a utility distribution system, and for off-grid applications where the power is used directly in the device using the electricity, such as traffic signs.

We also design and construct renewable energy plants based on wind power. In many parts of the country, available wind resources, utility net metering and local incentives can make on-site wind generation a viable solution for meeting a significant portion of customers' energy needs. As of March 31, 2010, we had completed two projects that included a wind turbine.

In addition, we have constructed, and are constructing, small-scale renewable energy plants based on biomass. Biomass is organic material such as wood, agricultural waste, animal waste and waste from food processors. Biomass is typically converted to energy by burning or gasifying it in a boiler to produce steam or gas. Our largest renewable energy plant is currently under construction and will use biomass as the primary source of energy.

As of March 31, 2010, we had constructed more than 25 renewable energy plants, and owned and operated 19 renewable energy plants. Of the owned plants, 18 are renewable LFG plants. These 18 plants have the capacity to generate electricity or deliver LFG producing an aggregate of 83 MW (megawatts) or MWE (megawatt-equivalents). As of March 31, 2010, we had signed contracts for the construction, operation and ownership of an additional four LFG plants, two wastewater treatment biogas plants, two biomass power and cogeneration plants and five biomass boiler projects. If and when completed, we expect that the LFG plants will be capable of producing an aggregate of approximately 24 MW or MWE, the biogas plants will be capable of producing an aggregate of approximately eight MW or MWE, the biomass power and cogeneration plants will be capable of producing approximately 21 MW, and the biomass boiler projects will be capable of producing approximately 41 million BTU per hour of steam or hot water.

### Examples of Energy Efficiency and Renewable Energy Projects

The following are examples of energy efficiency and renewable energy projects we have designed and either have installed or are installing for customers. While most of our projects are less complex and smaller in scope than those shown below, these examples are intended to demonstrate how various different types of energy efficiency measures and renewable energy plants can be combined to create a customized solution addressing the multiple needs of a customer.

*Elmendorf Air Force Base (Alaska).* Elmendorf Air Force Base had an inefficient, costly-to-operate central heating and power plant and approximately 50 miles of aging steam and condensate distribution piping. We modernized the heating system by demolishing the central plant and installing over 200 boilers and 20 alternate heating systems in over 120 commercial facilities. We worked with the local gas utility to install approximately seven miles of gas pipeline to serve the new, decentralized boilers and negotiated a new gas and electric service for the Base with the local utilities. We also installed over 800 energy efficient steam traps and abated over 125 steam pits throughout the base. The \$49 million project is designed to save approximately \$4 million of energy and energy-related O&M costs per year. This work was completed in 2008. We provide a full-time staff of four people at the base and have contracted to perform approximately \$22 million of fixed price O&M services throughout the 22-year performance period term of our agreement.

*Hill Air Force Base (Utah).* Hill Air Force Base was seeking to upgrade its inefficient energy systems and maximize the use of renewable energy sources including using gas from an off-base landfill to lower its energy costs. In response, during the period from 2005 to 2009, we designed and installed \$17.7 million of energy efficiency and renewable energy projects which are designed to save approximately \$2.1 million of energy costs per year. The energy efficiency projects include the installation of a wide range of high efficiency lighting, heating and cooling systems and associated controls for these and other energy-consuming equipment. The Base also provides compressed air, steam, water cooling and wastewater treatment services to a nearby industrial area. We upgraded and control these systems to reduce the disposal of hazardous materials and the loss of steam, water and electricity. The renewable energy projects include a 210 kW ground-mounted solar PV array and an LFG project involving the purchase of gas from the Davis County landfill, piping the gas over one mile to the base, processing the gas and producing approximately 2.25 MW of power. We operate and maintain the LFG project, the PV project, and the steam traps in the heating distribution system with an on-site operator and the remote support of two engineers for a fixed price of \$0.9 million per year under a 20 year contract. We believe the PV system was the largest in Utah at the time it was installed.

*State of Missouri Correctional Facilities.* The State of Missouri and Columbia Water & Light were seeking to lower and stabilize their energy costs by purchasing thermal energy and electricity, respectively, from a cogeneration facility fueled by LFG from the Jefferson City Landfill owned by a subsidiary of Republic Services, Inc. The State of Missouri also wanted to upgrade its inefficient energy systems at two state-owned correctional facilities, Algoa and Jefferson City. In 2009 we completed the design and installation of \$7.6 million of energy efficiency improvements and the design, financing and installation of a 3.2 MW \$10.4 million cogeneration facility, which together are designed to save approximately \$0.7 million of energy costs per year. The energy efficiency measures include the installation of high efficiency lighting systems, electrical system improvements, steam traps to reduce steam losses and controls for various energy-using equipment within the correctional facilities. The LFG project, which we own, purchases LFG from Republic, processes the gas and then pipes it approximately three miles to the Jefferson City Correctional Facility to use as a fuel source in our cogeneration facility that produces electricity and thermal energy. Columbia Water & Light purchases the power at a fixed rate per kWh for all electricity that is delivered. The State of Missouri has a take or pay obligation for a minimum amount of thermal energy at a fixed price.

*Porta Community Unit School District (Illinois).* Porta Community Unit School District #202 was seeking to lower and stabilize its operating costs and improve its educational environment. To achieve this goal, we designed, installed and completed in 2009 a \$7.6 million energy efficiency and renewable energy project, which is designed to save over \$0.4 million of energy and operating costs per year. The project includes energy efficient lighting retrofits, re-commissioning and upgrade of the existing heating, ventilation and air conditioning control system, domestic hot water system upgrades and swimming pool heating system



upgrades. The project also includes the design and construction of a geothermal heating and cooling system to heat and cool the building. In addition, we installed a one kW PV energy system and a 600 kW wind energy generating system. When the wind turbine generates more electricity than the district can use, the excess electricity is sold to the local utility under a net metering arrangement. We believe the district is the first school district in Illinois to employ a combination of geothermal, solar and wind renewable technologies.

*BMW (South Carolina).* BMW was seeking to lower and stabilize its energy costs, and Waste Management was seeking to monetize the value of the LFG produced at its Palmetto Landfill. To achieve these goals, in 2003, we completed the development, design, construction and financing for the \$9.6 million project to process and deliver LFG to BMW's factory and refurbish BMW's boilers and turbines to be able to utilize the LFG fuel. BMW also uses the LFG to provide energy for its paint shop, incinerator and pollution control devices. This project involves buying LFG from Waste Management at its Palmetto Landfill, processing and compressing the LFG adjacent to the landfill and piping the LFG approximately 9.5 miles for delivery to BMW. Over the period from 2005 to 2009, the project has delivered from 0.88 to 1.17 million BTU annually. BMW pays for the LFG under a multi-year supply contract. Our delivery obligations are limited to those volumes of LFG supplied to us by Waste Management. In 2009, BMW announced that the project produces over 60% of the plant's total energy requirements, saving BMW an average of \$5 million in energy costs annually while reducing carbon dioxide emissions by approximately 92,000 tons per year.

*U.S. Department of Energy Savannah River Site (South Carolina).* The Savannah River Site, or SRS, utilizes steam and power for process and heating loads currently generated from an aging and inefficient coal power plant. We are currently constructing a 20.7 MW cogeneration plant to replace this coal power plant. The cogeneration plant will use fuel from forest residue, scrap tires, pallets and other clean wood and is scheduled to come on-line in December 2011. We will install two ten million BTU per hour wood-fired heating plants at other SRS locations to replace an old and inefficient fuel oil heating plant. These smaller plants are scheduled to come on-line in November 2010. This \$183.4 million project is designed to save approximately \$35 million of energy and energy-related O&M costs per year. We will provide a full-time staff of 20 to 25 people at the new plant and have contracted to perform approximately \$17 million of O&M services annually, at escalating fixed rates, throughout the 19-year performance period of the agreement.

*City of Vancouver (British Columbia, Canada).* The City of Vancouver was seeking to implement a comprehensive greenhouse gas reduction project in its larger facilities. From 2006 to 2010, we designed and installed two-phases of work, with an additional third-phase expected to be completed by October 2010. This comprehensive \$14.7 million energy efficiency and facility renewal project includes boiler plant replacements in 18 facilities, comprehensive lighting upgrades, HVAC upgrades, solar hot water, desiccant dehumidification and low-emissivity ceilings and heat recovery in ice rinks. The project is designed to save \$0.9 million per year in energy costs.

### **Sales and Marketing**

Our sales and marketing approach is to offer customers customized and comprehensive energy efficiency solutions tailored to meet their economic, operational and technical needs. The sales, design and construction process for energy efficiency and renewable energy projects typically takes from 12 to 36 months, with sales to federal governmental and housing authority customers tending to require the longest sales processes. We identify project opportunities through referrals, requests for proposals, or RFPs, conferences, web searches, telemarketing and repeat business from existing customers. Our direct sales force develops and follows up on customer leads and, in some cases, works with customers to develop their RFPs. By working with customers prior to the issuance of an RFP, we can gain a deeper understanding of the customers' needs and the scope of the potential project. As of March 31, 2010, we had 108 sales people.

In preparation for a proposal, we typically conduct a preliminary audit of the customer's needs and the opportunity to reduce its energy costs. We start by reading and analyzing the customer's utility and other energy bills. If the bills are complex or numerous, we employ our proprietary AXIS software for bill scanning and analysis. Our experienced engineers visit and assess the customer's current energy systems. Through our knowledge of the federal, state, local governmental and utility environment, we assess the availability of

energy, utility or environmental-based payments for usage reductions or renewable power generation, which helps us optimize the economic benefits of a proposed project for a customer. If we are awarded a project, we perform a more detailed audit of the customer's facilities, which serves as the basis for the final specifications of the project and final contract terms.

For renewable energy plants that are not located on a customer's site or use sources of energy not within the customer's control, the sales process also involves the identification of sites with attractive sources of renewable energy, such as a landfill or a site with high wind, and obtaining necessary rights and governmental permits to develop a plant on that site. For example, for LFG projects, we start with gaining control of a LFG resource located close to the prospective customer. For solar and wind projects, we look for sites where utilities are interested in purchasing renewable energy power at rates that are sufficient to make a project feasible. Where governmental agencies control the site and resource, such as a landfill owned by a municipality, the customer may be required to issue an RFP to use the site or resource. Once we believe we are likely to obtain the rights to the site and the resource, we seek customers for the energy output of the potential project.

#### **Customers**

In 2009, we served more than 1,000 customers in 49 states in the United States and seven Canadian provinces. Our customers include government, education, utility, healthcare and other institutional, industrial and commercial customers. Outside North America, we have constructed projects for U.S. naval bases in Europe, and also sell our off-grid PV systems. In 2007, 2008 and 2009, no single customer accounted for more than ten percent of our total revenue. In 2009, the largest 20 customers accounted for approximately 40% of our revenue. During the first quarter of 2010, one customer, the U.S. Department of Energy, Savannah River Site, accounted for 14.1% of our total revenue. In 2009, approximately 85% of our revenue was derived from sales to federal, state, provincial or local governmental entities. Our 20 largest customers in 2009, by revenue, in alphabetical order, were:

- Belleville Township High School District 201 (Belleville, Illinois)
- Bethlehem Pennsylvania Housing Authority (Bethlehem, Pennsylvania)
- Chicago Housing Authority (Chicago, Illinois)
- City of Henderson, Nevada
- Franklin County, Ohio
- Freeport Unified School District (Freeport, New York)
- Hamilton-Wentworth District School Board (Hamilton, Ontario)
- Hastings Prince Edward District School Board (Belleville, Ontario)
- Los Angeles Community College District
- Medical University of South Carolina (Charleston, South Carolina)
- Portsmouth Naval Shipyard (Portsmouth, New Hampshire)
- Prairie Valley School District (Regina, Saskatchewan)
- Providence Housing Authority (Providence, Rhode Island)
- Rainbow District School Board (Sudbury, Ontario)
- U.S. Department of Energy, Savannah River Site (South Carolina)
- Toronto Community Housing (Toronto, Ontario)
- U.S. Army — Adelphi Laboratory Center (Maryland)
- University City School District (University City, Missouri)
- Wolf Branch School District (Swansea, Illinois)
- Worcester Housing Authority (Worcester, Massachusetts)

## **Competition**

While we face significant competition from a large number of companies, we believe few offer the full range of services that we provide.

Our principal competitors include Chevron Energy Solutions, Constellation Energy, Honeywell, Johnson Controls, Siemens Building Technologies and TAC Energy Solutions. We compete primarily on the basis of our comprehensive, independent offering of energy efficiency and renewable energy services and the breadth and depth of our expertise.

For renewable energy plants, we compete primarily with many large independent power producers and utilities, as well as a large number of developers of renewable energy projects. In the LFG market, our principal competitors include national project developers and owners of landfills which self-develop projects using LFG from their landfills. For the sale of solar energy products and systems, we face numerous competitors ranging from small web-based companies that sell components to PV module manufacturers and other multi-national corporations that sell both products and systems. We compete for renewable energy projects primarily on the basis of our experience, reputation and ability to identify and complete high quality and cost-effective projects.

In addition, we may also face competition based on technological developments that reduce demand for electricity, increase power supplies through existing infrastructure or that otherwise compete with our energy efficiency and renewable energy projects and services. We also encounter competition in the form of potential customers electing to develop solutions or perform services internally rather than engaging an outside provider such as us.

Many of our competitors have longer operating histories and greater resources than we do, and we may be unable to continue to compete effectively against our current competitors or additional companies that may enter our markets.

## **Regulatory**

Various regulations affect the conduct of our business. Federal and state legislation and regulations enable us to enter into ESPCs with government agencies in the United States. The applicable regulatory requirements for ESPCs differ in each state and between agencies of the federal government.

Our projects must conform to all applicable electric reliability, building and safety, and environmental regulations and codes, which vary from place to place and time to time. Various federal, state, provincial and local permits are required to construct an energy efficiency project or renewable energy plant.

Renewable energy projects are also subject to specific governmental safety and economic regulation. States and the federal government typically do not regulate the transportation or sale of LFG unless it is combined with and distributed with natural gas, but this is not uniform among states and may change from time to time. The sale and distribution of electricity at the retail level is subject to state and provincial regulation, and the sale and transmission of electricity at the wholesale level is subject to federal regulation. While we do not own or operate retail-level electric distribution systems or wholesale-level transmission systems, the prices for the products we offer can be affected by the tariffs, rules and regulations applicable to such systems, as well as the prices that the owners of such systems are able to charge. The construction of power generation projects typically is regulated at the state and provincial levels, and the operation of these projects also may be subject to state and provincial regulation as “utilities.” At the federal level, the ownership, operation, and sale of power generation facilities may be subject to regulation under PURPA, the FPA and PHUCA. However, because all of the plants that we have constructed and operated to date are small power “qualifying facilities” under PURPA, they are subject to less regulation by the FPA, PHUCA and related state utility laws than traditional utilities.

If we pursue projects employing different technologies or with electrical capacities greater than 20 MW, we could become subject to some of the regulatory schemes which do not apply to our current

## [Table of Contents](#)

projects. In addition, the state, provincial and federal regulations that govern qualifying facilities and other power sellers frequently change, and the effect of these changes on our business cannot be predicted.

LFG-based power generation facilities require an air emissions permit, which may be difficult to obtain in certain jurisdictions. Renewable energy projects may also be eligible for certain governmental or government-related incentives from time to time, including tax credits, cash payments in lieu of tax credits, and the ability to sell associated environmental attributes, including carbon credits. Government incentives and mandates typically vary by jurisdiction.

Some of the demand-reduction services we provide for utilities and institutional clients are subject to regulatory tariffs imposed under federal and state utility laws. In addition, the operation of, and electrical interconnection for, our renewable energy projects are subject to federal, state or provincial interconnection and federal reliability standards also set forth in utility tariffs. These tariffs specify rules, business practices and economic terms to which we are subject. The tariffs are drafted by the utilities and approved by the utilities' state, provincial or federal regulatory commissions.

### **Employees**

As of March 31, 2010, we had a total of 649 employees in offices located in 29 states and four Canadian provinces.

### **Legal Proceedings**

In the ordinary conduct of our business we are subject to periodic lawsuits, investigations and claims. Although we cannot predict with certainty the ultimate resolution of such lawsuits, investigations and claims against us, we do not believe that any currently pending or threatened legal proceedings to which we are a party will have a material adverse effect on our business, results of operations or financial condition.

### **Facilities**

Our corporate headquarters is located in Framingham, Massachusetts, where we occupy approximately 20,000 square feet under a lease expiring on June 30, 2016. We occupy seven regional offices in Oak Brook, Illinois; Columbia, Maryland; Charlotte, North Carolina; Knoxville, Tennessee; Tomball, Texas; Spokane, Washington; and North York, Ontario, each less than 25,000 square feet, under lease or sublease agreements. In addition, we lease space, typically less than 5,000 square feet, for 46 field offices throughout North America. We also own 21 small-scale renewable energy and central plants throughout North America, which are located on leased sites or sites provided by customers. We expect to add new facilities and expand existing facilities as we continue to add employees and expand our business into new geographic areas.

## MANAGEMENT

### Executive Officers and Directors

Our executive officers and directors, their current positions and their ages as of June 30, 2010 are set forth below:

Name	Age	Position (s)
George P. Sakellaris	64	Chairman of the Board of Directors, President and Chief Executive Officer
David J. Anderson	50	Executive Vice President, Business Development and Director
Michael T. Bakas	41	Senior Vice President, Renewable Energy
David J. Corrsin	51	Executive Vice President, General Counsel and Secretary and Director
William J. Cunningham	51	Senior Vice President, Corporate Government Relations
Joseph P. DeManche	53	Executive Vice President, Engineering and Operations
Keith A. Derrington	50	Executive Vice President and General Manager, Federal Operations
Mario Iusi	51	President, Ameresco Canada
Louis P. Maltezos	43	Executive Vice President and General Manager, Central Region
Andrew B. Spence	54	Vice President and Chief Financial Officer
William M. Bulger	76	Director(3)
Douglas I. Foy	63	Director(2)(3)
Michael E. Jesanis	53	Director(1)(2)
Guy W. Nichols	84	Director(1)(3)
Joseph W. Sutton	62	Director(1)(2)

- (1) Member of audit committee.
- (2) Member of compensation committee.
- (3) Member of nominating and corporate governance committee.

*George P. Sakellaris:* Mr. Sakellaris has served as chairman of our board of directors and our president and chief executive officer since founding Ameresco in 2000. Mr. Sakellaris previously founded Noresco, an energy services company, in 1989 and served as its president and chief executive officer until 2000. Noresco was acquired by Equitable Resources, Inc. in 1997. Mr. Sakellaris was a founding member and previously served as the president, and is currently a director, of the National Association of Energy Service Companies, a national trade organization representing the energy efficiency industry. We believe that Mr. Sakellaris is qualified to serve as a director because of his 31 years of experience in the energy services and renewable energy industries, his leadership experience, skill and familiarity with our business gained from serving as our chief executive officer for over a decade, as well as his experience developed through founding and serving as chief executive officer of two previous energy services companies.

*David J. Anderson:* Mr. Anderson has served as our executive vice president, business development, as well as a director, since 2000. From 1992 to 2000, Mr. Anderson was a senior vice president at Noresco. We believe that Mr. Anderson is qualified to serve as a director because of his extensive knowledge of our business, gained through more than a decade as an executive officer, and his more than 20 years of experience in the energy services and renewable energy industries. We also believe that Mr. Anderson brings a deep understanding of operations and strategy to our board of directors.

*Michael T. Bakas:* Mr. Bakas has served as our senior vice president, renewable energy, since March 2010. From 2000 to February 2010, he was our vice president, renewable energy. From 1997 to 2000, Mr. Bakas was director of energy services at Noresco.

*David J. Corrsin:* Mr. Corrsin has served as our executive vice president, general counsel and secretary, as well as a director, since 2000. From 1996 to 2000, Mr. Corrsin was executive vice president of Public Power International, Inc., an independent developer of power projects in south Asia and Europe. We believe that Mr. Corrsin is qualified to serve as a director because of his extensive experience with energy regulations, federal, state and local regulatory authorities and complex energy construction and financing projects, gained through more than 23 years of energy-related legal practice, and his more than a decade as an executive officer of our company.

*William J. Cunningham:* Mr. Cunningham has served as our senior vice president, corporate government relations since January 2008. From April 2007 to January 2008, he was a vice president at Dutko Worldwide, a public affairs and lobbying firm. From 2004 to 2006, Mr. Cunningham was senior vice president, corporate government relations, at Conseco Services, which is a subsidiary of Conseco, Inc., an insurance company.

*Joseph P. DeManche:* Mr. DeManche has served as our executive vice president, engineering and operations since 2002. Mr. DeManche joined the company as a result of our acquisition of DukeSolutions Inc., where he most recently served as executive vice president in charge of all commercial operations.

*Keith A. Derrington:* Mr. Derrington has served as our executive vice president and general manager, federal operations since April 2009. From 2004 to April 2009, Mr. Derrington was our vice president and general manager, federal operations. From 2000 to 2004, Mr. Derrington was vice president and general manager of the federal group of the ESPC business of Exelon, an electric utility.

*Mario Iusi:* Mr. Iusi has served as president of Ameresco Canada since 2002. From 1998 to 2002, he was president of DukeSolutions Canada, a subsidiary of Duke Energy, which we acquired in 2002.

*Louis P. Maltezos:* Mr. Maltezos has served as our executive vice president and general manager, central region, since April 2009. From 2004 until April 2009, Mr. Maltezos was our vice president and general manager, midwest region. From 1988 until 2004, Mr. Maltezos was with Exelon, where he most recently served as vice president and general manager of Exelon's ESPC business.

*Andrew B. Spence:* Mr. Spence has served as our vice president and chief financial officer since 2002. From 1997 to 2000, Mr. Spence was chief financial officer of ABB Energy Capital L.L.C. an energy-related financial services company.

*William M. Bulger:* Mr. Bulger has served as a director since 2001. From 2004 to 2009, Mr. Bulger served as an adjunct professor at Suffolk University and a part-time faculty member of the political science department at Boston College. From 1996 to 2003, Mr. Bulger was president of the University of Massachusetts. From 1970 to 1996, Mr. Bulger was a member of the Massachusetts State Senate, where he served as president from 1978 to 1996. Mr. Bulger was a director of New England Electric System until it was acquired by National Grid in 2000. We believe that Mr. Bulger is qualified to serve as a director because of his prior experience as a director of a large public utility. He has valuable experience serving as the leader of large, complex organizations gained through his legislative experience, and as president of the University of Massachusetts.

*Douglas I. Foy:* Mr. Foy has served as a director since May 2010. Since 2006, Mr. Foy has served as president of Serrafix Corporation, a provider of strategic consulting, financing and logistical support to energy efficiency projects, which he founded. From January 2003 to February 2006, Mr. Foy served as the first secretary of the Massachusetts Office for Commonwealth Development, where he oversaw the Executive Office of Transportation, the Executive Office of Environmental Affairs, the Department of Housing and Community Development and the Department of Energy Resources. Prior to his service with the Massachusetts Office for Commonwealth Development, Mr. Foy served for 25 years as president of the Conservation Law Foundation, an environmental advocacy organization. We believe that Mr. Foy is qualified to serve as a director because of his extensive leadership experience in environmental policy and the energy and sustainable development industries, including as president of Serrafix and the Conservation Law Foundation.

*Michael E. Jesanis:* Mr. Jesanis has served as a director since April 2010. Since October 2007, Mr. Jesanis has served as a principal of Serrafix Corporation. From July 2004 to December 2006, Mr. Jesanis was president and chief executive officer of National Grid USA, a utility, where he had previously been chief

financial officer. Mr. Jesanis currently serves on the board of directors of NiSource Inc., a utility holding company, and is a former director of National Grid plc, a utility company. We believe that Mr. Jesanis is qualified to serve as a director because of his extensive leadership experience in the energy, energy services and renewable energy industries, including as chief executive officer of National Grid USA.

*Guy W. Nichols:* Mr. Nichols has served as a director since 2001. Prior to retiring in 1984, he was chairman, president and chief executive officer of New England Electric System. We believe that Mr. Nichols is qualified to serve as a director because of his extensive leadership experience in the energy, energy services and renewable energy industries, including as chief executive officer of New England Electric Systems. Mr. Nichols provides our board of directors with critical advice on strategy within the energy services industry.

*Joseph W. Sutton:* Mr. Sutton has served as a director since 2002. Since 2000, Mr. Sutton has been the manager of Sutton Ventures Group, LLC, an energy investment firm that he founded. In 2007, he founded and has since led Consolidated Asset Management Services, or CAMS, which provides asset management, O&M, information technology, budgeting, contract management and development services to power plant ventures, oil and gas companies, renewable energy companies and other energy businesses. From 1992 to November 2000, Mr. Sutton worked for Enron Corporation, an energy company, where he most recently served as vice chairman and as chief executive officer of Enron International. Enron Corporation filed a voluntary bankruptcy petition under Chapter 11 of the U.S. Bankruptcy Code in December 2001, 13 months after Mr. Sutton left Enron. We believe that Mr. Sutton is qualified to serve as a director because of his prior experience in the energy industry. For example, at both Sutton Ventures and CAMS, he has had significant experience in energy industry capital raising transactions, as well as in the ownership and management of, and the provision of advisory and other services to, a wide range of energy-related businesses. At Enron, Mr. Sutton was responsible for budgeting, financial reporting and planning for Enron's international business unit and oversaw the development, construction, financing, operation and management of numerous energy projects.

#### **Composition of our Board of Directors**

Our board of directors currently consists of eight members. Our directors hold office until their successors have been elected and qualified or until the earlier of their death, resignation or removal. There are no family relationships among any of our directors or executive officers.

In accordance with the terms of our restated certificate of incorporation and by-laws, our board of directors is divided into three classes, each of which consists, as nearly as possible, of one-third of the total number of directors constituting our entire board of directors and each of whose members serve for staggered three-year terms. As a result, only one class of our board of directors will be elected each year. Upon the expiration of the term of a class of directors, directors in that class will be eligible to be elected for a new three-year term at the annual meeting of stockholders in the year in which their term expires. The members of the classes are as follows:

- the class I directors are Messrs. Anderson, Bulger and Nichols, and their term expires at the annual meeting of stockholders to be held in 2011;
- the class II directors are Messrs. Corrsin, Sakellaris and Sutton, and their term expires at the annual meeting of stockholders to be held in 2012; and
- the class III directors are Messrs. Jesanis and Foy, and their term expires at the annual meeting of stockholders to be held in 2013.

Our restated certificate of incorporation and restated by-laws provide that the authorized number of directors comprising our board of directors may be changed only by resolution of our board of directors. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors. Our restated certificate of incorporation and restated by-laws also provide that our directors may be removed only for cause and only by the affirmative vote of the holders of at least two-thirds of the votes that all our stockholders would be entitled to cast in an annual election of directors, and that any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, may be filled only by vote of a

majority of our directors then in office. Our classified board could have the effect of delaying or discouraging an acquisition of Ameresco or a change in our management.

#### **Director Independence**

Under applicable NYSE rules, a director will qualify as “independent” if our board of directors affirmatively determines that he or she has no material relationship with Ameresco (either directly or as a partner, stockholder or officer of an organization that has a relationship with us). Our board of directors has established guidelines to assist it in determining whether a director has such a material relationship. Under these guidelines, a director is not considered to have a material relationship with Ameresco if he or she is independent under Section 303A.02(b) of the NYSE Listed Company Manual and he or she:

- is an executive officer of another company which is indebted to us, or to which we are indebted, unless the total amount of either company’s indebtedness to the other is more than one percent of the total consolidated assets of the company he or she serves as an executive officer; or
- serves as an officer, director or trustee of a tax exempt organization, unless our discretionary contributions to such organization are more than the greater of \$1 million or two percent of that organization’s consolidated gross revenue.

In addition, ownership of a significant amount of our stock, by itself, does not constitute a material relationship.

Pursuant to applicable NYSE rules, a director employed by us cannot be deemed to be an “independent director,” and consequently none of Messrs. Sakellaris, Corrsin or Anderson qualifies as an independent director.

Our board has determined that each of Messrs. Bulger, Foy, Jesanis, Nichols, and Sutton meet the categorical standards described above, that none of these directors has a material relationship with us and that each of these directors is “independent” as determined under Section 303A.02(b) of the NYSE Listed Company Manual.

#### **Committees of our Board of Directors**

Our board of directors has established an audit committee, a compensation committee and a nominating and corporate governance committee. Each committee operates under a charter approved by our board of directors. Following the closing of this offering, copies of each committee’s charter will be posted on the Investor Relations section of our website, which is located at [www.ameresco.com](http://www.ameresco.com).

All of the members of our board’s three standing committees described below have been determined to be independent as defined under applicable NYSE rules and in the case of all members of the audit committee, the independence requirements contemplated by Rule 10A-3 under the Securities Exchange Act of 1934, as amended, which we refer to as the Exchange Act.

##### ***Audit Committee***

The members of our audit committee are Messrs. Jesanis, Nichols and Sutton. Our board of directors has determined that each of the members of our audit committee satisfy the requirements for financial literacy under applicable stock market and SEC rules and regulations. Mr. Jesanis is the chair of the audit committee and is also an “audit committee financial expert,” as defined by SEC rules and satisfies the financial sophistication requirements of applicable NYSE rules. Our audit committee assists our board of directors in its oversight of our accounting and financial reporting process and the audits of our financial statements.

The audit committee’s responsibilities include:

- appointing, approving the compensation of, and assessing the independence of our registered public accounting firm;



## Table of Contents

- overseeing the work of our registered public accounting firm, including through the receipt and consideration of reports from such firm;
- reviewing and discussing with management and our registered public accounting firm our annual and quarterly financial statements and related disclosures;
- monitoring our internal control over financial reporting, disclosure controls and procedures and code of business conduct and ethics;
- overseeing our internal audit function;
- overseeing our risk assessment and risk management policies;
- establishing policies regarding hiring employees from our registered public accounting firm and procedures for the receipt and retention of accounting related complaints and concerns;
- meeting independently with our internal auditing staff, registered public accounting firm and management;
- reviewing and approving or ratifying any related person transactions; and
- preparing the audit committee report required by SEC rules to be included in our proxy statement for our annual meeting of stockholders.

All audit services and all non-audit services, other than de minimis non-audit services, to be provided to us by our registered public accounting firm must be approved in advance by our audit committee.

### *Compensation Committee*

The members of our compensation committee are Messrs. Foy, Jesanis and Sutton. Mr. Sutton is the chair of the compensation committee. Our compensation committee assists our board of directors in the discharge of its responsibilities relating to the compensation of our executive officers. The compensation committee's responsibilities include:

- annually reviewing and approving corporate goals and objectives relevant to CEO compensation;
- determining our CEO's compensation;
- reviewing and approving, or making recommendations to our board of directors with respect to, the compensation of our other executive officers;
- overseeing an evaluation of our senior executives;
- overseeing and administering our cash and equity incentive plans;
- reviewing and making recommendations to our board of directors with respect to director compensation;
- reviewing and discussing annually with management our "Compensation Discussion and Analysis," which is included beginning on page 97 of this prospectus; and
- preparing the compensation committee report required by SEC rules to be included in our proxy statement for our annual meeting of stockholders.

### *Nominating and Corporate Governance Committee*

The members of our nominating and corporate governance committee are Messrs. Bulger, Foy and Nichols. Mr. Nichols is the chair of the nominating and corporate governance committee. The nominating and corporate governance committee's responsibilities include:

- identifying individuals qualified to become members of our board of directors;
- recommending to our board of directors the persons to be nominated for election as directors and to each of the committees of our board of directors;

- reviewing and making recommendations to our board of directors with respect to our board of directors' leadership structure;
- reviewing and making recommendations to our board of directors with respect to management succession planning;
- developing and recommending to our board of directors corporate governance principles; and
- overseeing an annual evaluation of our board of directors.

**Compensation Committee Interlocks and Insider Participation**

None of our executive officers serves as a member of the board of directors or compensation committee, or other committee serving an equivalent function, of any entity that has one or more executive officers who serve as members of our board of directors or our compensation committee. None of the members of our compensation committee is an officer or employee of our company, nor have they ever been an officer or employee of our company.

**Corporate Governance Guidelines**

Our board of directors has adopted corporate governance guidelines to assist the board in the exercise of its duties and responsibilities and to serve the best interests of our company and our stockholders. Following the closing of this offering, a copy of these guidelines will be posted on the Investor Relations section of our website, which is located at [www.ameresco.com](http://www.ameresco.com). These guidelines, which provide a framework for the conduct of our board's business, provide that:

- our board's principal responsibility is to oversee the management of Ameresco;
- a majority of the members of our board of directors shall be independent directors;
- the non-management directors meet regularly in executive session;
- directors have full and free access to management and employees of our company, and the right to hire and consult with independent advisors at our expense;
- new directors participate in an orientation program and all directors are expected to participate in continuing director education on an ongoing basis; and
- at least annually, our board of directors and its committees will conduct self-evaluations to determine whether they are functioning effectively.

Our board of directors, upon the recommendation of our nominating and corporate governance committee, has appointed Mr. Nichols as lead director. Mr. Nichols is an independent director within the meaning of applicable NYSE rules. His duties as lead director include the following:

- chairing any meeting of our non-management or independent directors in executive session;
- meeting with any director who is not adequately performing his or her duties as a member of our board of directors or any committee;
- facilitating communications between other members of our board of directors and the chairman of our board of directors and/or the chief executive officer; however, each director is free to communicate directly with the chairman of our board of directors and with the chief executive officer;
- monitoring, with the assistance of our general counsel, communications from stockholders and other interested parties and providing copies or summaries to the other directors as he considers appropriate;

- working with the chairman of our board in the preparation of the agenda for each board of directors meeting and in determining the need for special meetings of the board of directors; and
- otherwise consulting with the chairman of our board of directors and/or the chief executive officer on matters relating to corporate governance and the performance of our board of directors.

#### **Code of Business Conduct and Ethics**

We have adopted a written code of business conduct and ethics that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, and persons performing similar functions. Following the closing of this offering, a copy of the code of business conduct and ethics will be posted on the Investor Relations section of our website, which is located at [www.ameresco.com](http://www.ameresco.com). In addition, we intend to post on our website all disclosures that are required by law or applicable NYSE listing standards concerning any amendments to, or waivers from, any provision of the code.

#### **Director Compensation**

Since our company was formed, we have not paid cash compensation to any director for his or her service as a director. However, non-employee directors are reimbursed for reasonable travel and other expenses incurred in connection with attending our board and committee meetings. Messrs. Bulger, Jesanis, Nichols and Sutton are our non-employee directors.

In the past, we have granted options to purchase shares of our Class A common stock to our non-employee directors. We did not grant any options or shares of restricted stock to our non-employee directors during 2009.

None of Messrs. Sakellaris, Anderson or Corrsin has ever received any compensation in any form in connection with his service as a director, and none of Messrs. Bulger, Nichols or Sutton received any compensation in any form in connection with his service as a director in 2009. Messrs. Jesanis and Foy were appointed to our board of directors in April 2010 and May 2010, respectively, and have received and will receive the compensation set forth below in connection with their service as directors.

In anticipation of becoming a public company, our board of directors adopted the following director compensation plan for non-employee directors in April 2010. As indicated below, some of these compensation arrangements apply to all non-employee directors, while others apply only to non-employee directors elected to our board of directors from and after April 2010, except as noted below. Employee directors will continue to not be compensated for their service on our board of directors.

*Cash Compensation.* Each non-employee director initially elected to the board of directors from and after April 2010 will receive a \$10,000 annual retainer. The chair of the audit committee will receive an additional annual retainer of \$12,000, the chair of the compensation committee will receive an additional annual retainer of \$8,000, and the chair of the nominating and corporate governance committee will receive an additional annual retainer of \$6,000. Each non-employee director, other than the chair, who serves on the audit committee will receive an additional \$2,500 annual retainer, each non-employee director, other than the chair, who serves on the compensation committee will receive an additional \$2,000 annual retainer, and each non-employee director, other than the chair, who serves on the nominating and corporate governance committee will receive an additional annual retainer of \$1,000. Each non-employee director will receive \$1,000 for each in person board meeting or committee meeting (if not on the same day as a board meeting) he or she attends and \$500 for each telephonic board meeting or committee meeting (if not on the same day as a board meeting) in which he or she participates.

*Equity Compensation.* The following equity compensation arrangements apply only to non-employee directors initially elected to the board of directors from and after April 2010. Upon his or her initial election to the board of directors, each such non-employee director will be granted an option to purchase 40,000 shares

of our Class A common stock. On the date of each annual meeting of stockholders, beginning with the year following his or her initial election as a director, each such non-employee director will receive an additional option to purchase 10,000 shares of our Class A common stock. Both the initial and annual options will become exercisable as to 20% of the shares subject to the option on each of the first five anniversaries of the option grant date, subject to the director's continued service on our board of directors. All such options will have an exercise price equal to the fair market value of the Class A common stock on the date of grant and will become exercisable in full upon a change in control of Ameresco.

#### **Director Stock Ownership Guidelines**

Our board of directors has adopted the following stock ownership guidelines for our non-employee directors. Each non-employee director is expected to own 1,000 shares of Class A common stock by the first anniversary of his or her initial election as a director, 2,000 shares of by the second anniversary, 3,000 shares by the third anniversary, 4,000 shares by the fourth anniversary, and 5,000 shares by the fifth anniversary and thereafter.

#### **Compensation Discussion and Analysis**

This section discusses the material elements of our executive compensation policies and decisions and the most important factors relevant to an analysis of these policies and decisions. It provides qualitative information regarding the manner and context in which compensation is awarded to and earned by our executive officers and is intended to place in perspective the data presented in the tables and narrative that follow.

In preparing to become a public company, we have begun a thorough review of all elements of our executive compensation program, including the function and design of our annual incentive bonus and equity incentive programs. We have begun, and we expect to continue in the coming months, to evaluate the need for revisions to our executive compensation program to ensure our program is competitive with the companies with which we compete for executive talent and is appropriate for a public company.

##### *Overview of Executive Compensation Process*

*Roles of Our Board, Chief Executive Officer and Compensation Committee in Compensation Decisions.* As a private company, our chief executive historically has overseen our executive compensation program. In this role, our chief executive officer has reviewed all compensation decisions relating to our executive officers other than himself. He has annually reviewed the performance of each of our other executive officers, and, based on these reviews, has made recommendations to our board of directors regarding salary adjustments, annual incentive bonus payments and equity incentive awards for our executive officers. Our chief executive officer has annually met in executive session with our board of directors to discuss these recommendations. Our chief executive officer has not historically been present for board discussions regarding his compensation.

In anticipation of becoming a public company, we have established a compensation committee, which will oversee our executive compensation program. Our chief executive officer will make recommendations to the compensation committee regarding the compensation of our executive officers, but the compensation committee will either make all compensation decisions regarding our executive officers or will make recommendations concerning executive compensation to our board of directors, with the independent directors making such decisions.

*Competitive Market Data and Use of Compensation Consultants.* Historically, we have not formally benchmarked our executive compensation against compensation data of a peer group of companies, but rather have relied on the business judgment and experience in the energy services and engineering consulting industries of our chief executive officer and our executive management team. We have developed substantial information about compensation practices and levels at comparable companies through extensive recruiting, networking and industry research. Once we are a public company, our compensation committee may elect to engage an independent compensation consulting firm to provide advice regarding our executive compensation

## [Table of Contents](#)

program and general information regarding executive compensation practices in our industry. Although the compensation committee would consider such a compensation firm's advice in establishing and approving the various elements of our executive compensation program, the compensation committee would ultimately make its own decisions, or make recommendations to our board of directors, about these matters.

*Objectives and Philosophy of Our Executive Compensation Program.* Our primary objective with respect to executive compensation is to attract, retain and motivate highly talented individuals who have the skills and experience to successfully execute our business strategy. Our executive compensation program is designed to:

- reward the achievement of our annual and long-term operating and strategic goals;
- recognize individual contributions;
- align the interests of our executives with those of our stockholders by rewarding performance that meets or exceeds established goals, with the ultimate objective of increasing stockholder value; and
- retain and build our executive management team.

To achieve these objectives, our executive compensation program ties a portion of each executive's overall compensation — annual incentive bonuses — to key corporate financial goals and to individual goals. We have also provided a portion of our executive compensation in the form of restricted stock and option awards that vest over time, which we believe helps to retain our executive officers and aligns their interests with those of our stockholders by allowing them to participate in our long-term performance as reflected in the trading price of shares of our common stock.

*Elements of Our Executive Compensation Program.* The primary elements of our executive compensation program are:

- base salaries;
- annual incentive bonuses;
- equity incentive awards; and
- other employee benefits.

We have not adopted any formal or informal policies or guidelines for allocating compensation among these elements.

*Base Salaries.* We use competitive base salaries to attract and retain qualified candidates to help us achieve our growth and performance goals. Base salaries are intended to recognize an executive officer's immediate contribution to our organization, as well as his or her experience, knowledge and responsibilities.

Historically, our chief executive officer (with respect to executive officers other than himself) has annually evaluated and adjusted executive officer base salary levels based on factors determined to be relevant, including:

- the executive officer's skills and experience;
- the particular importance of the executive officer's position to us;
- the executive officer's individual performance;
- the executive officer's growth in his or her position; and
- base salaries for comparable positions within our company and at other companies.

Our chief executive officer's base salary has been determined by the non-management members of our board of directors, taking into account these same factors.

We have historically made annual base salary adjustments during the year, often around the anniversary of the executive's hire, with the adjustments taking effect as of the anniversary of hire (rather than as of the beginning of the year). In 2009, we increased the base salaries for Messrs. Spence, Maltezos, Derrington and Cunningham by 4.8%, 9.3%, 9.8% and 17.9%, respectively, and made no adjustment for Mr. Sakellaris. The increase for Mr. Spence was in recognition of his increasing seniority in our company and his role in helping us during 2009 to secure financings that we deemed important to our business. The increases for Messrs. Maltezos and Derrington, each of whom joined our company at the same time and has a similar level of experience in our industry, were in recognition of their increased levels of responsibility within our organization and the strategic expansion of the areas of our business they each oversee. The increase for Mr. Cunningham was designed to achieve base salary parity with Messrs. Maltezos and Derrington, and to recognize his performance and increasing importance to our organization since joining our company in 2008.

Once we are a public company, our compensation committee will perform such annual evaluations, and we expect that it will consider similar factors, as well as perhaps the input of a compensation firm and peer group benchmarking data, in making any adjustments to executive officer base salary levels.

*Annual Incentive Bonus Program.* Each year we establish an incentive bonus program in which all of our executive officers, as well as most other full-time employees, participate. These annual incentive bonuses are intended to compensate our executive officers for our achievement of corporate financial goals, as well as individual performance goals.

Under our incentive bonus program for 2009, the total bonus pool payable is determined based on our performance with respect to corporate financial goals and qualitative operational measures. The corporate financial goals consist of revenue, adjusted EBITDA from ongoing operations (for both the company and for one particular organizational unit), value of customer contracts signed and proposal volume. The qualitative operational measures relate to the U.S. Department of Energy's lifting of restrictions on its ability to enter into ESPCs, our completion of financings necessary to complete particular projects, our hiring of personnel in particular functional areas and customer satisfaction. The specific targets for each of these financial and qualitative goals were established near the beginning of 2009 by our board of directors, with input from our chief executive officer and other executive officers. The goals were based on our historical operating results and growth rates, as well as our expected future results, and were designed to require significant effort and operational success on the part of our company. In particular, the revenue and adjusted EBITDA from ongoing operations goals for the organizational unit that comprise an element of the incentive bonus program (which are not shown in the table below for confidentiality reasons) were viewed as difficult to achieve, because they represented significant increases over the comparable results for 2008, less than two-thirds of the revenue target was covered by contracts that had been executed at the time the goal was established (which was an unusually low proportion based on our operating history), and attaining those goals further required us to complete and commission several plants on tight schedules. The amount of the total bonus pool can be up to ten percent of our adjusted EBITDA from continuing operations for 2009, with the actual percentage based on our performance against the corporate financial goals and qualitative operational measures.

The table below shows, for each of the company-wide financial metrics used in calculating the total bonus pool available under our 2009 incentive bonus program, both the goal established by our board and our actual performance against that goal:

Goal	Target		Result	
Revenue	\$470.0	million	\$428.5	million
Adjusted EBITDA from ongoing operations*	\$ 37.0	million	\$ 35.4	million
Value of customer contracts signed	\$800.0	million	\$836.1	million
Proposal volume	\$ 1.70	billion	\$ 1.73	billion

\* This differs from adjusted EBITDA as reported in the Summary Consolidated Financial Data table on page 8 and in "Selected Consolidated Financial Data" because this measure excludes certain items that we consider to be non-recurring in nature. Adjusted EBITDA from ongoing operations is a non-GAAP financial

[Table of Contents](#)

measure and should not be considered as an alternative to operating income or any other measure of financial performance calculated and presented in accordance with GAAP.

With respect to the qualitative operational measures, the U.S. Department of Energy lifted its ESPC restrictions, we completed the specified financings, we hired nearly all of the key functional area personnel that we intended and we nearly achieved the customer satisfaction level we had set for our company.

The below table shows for each of the financial and qualitative goals, the relative weighting of each goal assigned by our board near the beginning of 2009, the achievement percentage assigned to each goal based on the actual performance described above, and the actual weighting of each goal based on the performance described above:

Goal	Weight Assigned at Beginning of 2009	Achievement Percentage Assigned Based on Actual Performance	Weight Based on Actual Performance
Revenue	25%	93%	23.3%
Adjusted EBITDA from ongoing operations	15%	93%	14.3%
Value of customer contracts signed	15%	105%	15.0%
Proposal volume	10%	102%	10.0%
Department of Energy ESPC restriction lifting	10%	100%	10.0%
Completion of financings	10%	100%	10.0%
Hiring of personnel	10%	80%	8.0%
Customer satisfaction	5%	80%	4.0%
<b>Total</b>	<b>100%</b>		<b>94.6%</b>

The total bonus pool payable under this program is determined based on our actual performance against the goals described above, provided that the aggregate weight based on actual performance exceeds 80%. The pool is determined using a formula designed to yield the following results:

Aggregate Weight Based on Actual Performance	Bonus Pool (as a Percentage of Adjusted EBITDA from Ongoing Operations)
Less than 80%	0
80%	2%
85%	4%
90%	6%
95%	8%
100%	10%

Based on our 94.6% aggregate weight based on actual performance for 2009, the total bonus pool payable under this program was calculated at \$2.7 million, which represents 7.7% of our 2009 adjusted EBITDA from ongoing operations.

Once the total bonus pool is calculated, it is allocated among our executive officers and organizational units based on their performance with respect to financial and operational goals for 2009. These goals, and the specific targets with respect to each goal, were established near the beginning of 2009 by our board of directors, based on recommendations from our executive management team, including our chief executive officer.

In addition to the corporate and organizational unit goals described above, members of management — including each of our executive officers — were assigned written individual performance goals near the beginning of fiscal 2009. For our executive officers other than our chief executive officer, these individual goals were set by our chief executive officer in collaboration with our executive management team; the individual goals for our chief executive officer were set by our board of directors, taking into account discussions with our chief executive officer.

[Table of Contents](#)

The individual goals established for our named executive officers (as listed in the Summary Compensation Table appearing on page 103) related to the following areas:

Mr. Sakellaris — his individual goals were identical to the corporate goals used in calculating the total bonus pool.

Mr. Spence — revenue and adjusted EBITDA from ongoing operations for the company and a particular function; corporate expense containment; completion of financing and lending arrangements; development of strategic plans; and financial reporting efficiencies.

Mr. Maltezos — revenue, adjusted EBITDA from ongoing operations and cash flow for a particular organizational unit; development of growth opportunities; operational efficiencies; safety record; and customer satisfaction.

Mr. Derrington — total sales, revenue and adjusted EBITDA for a particular organizational unit; develop management team for particular organizational unit; operational efficiencies; business development activities; and customer satisfaction.

Mr. Cunningham — marketing and business development initiatives.

Each participant in the 2009 incentive bonus program was assigned a maximum bonus, expressed as a percentage of his or her annual base salary. The maximum bonus payment for our chief executive officer is 50% of his base salary. For each of our other executive officers, the maximum bonus payment is 40% of his base salary.

Once the total bonus pool for the 2009 program is determined and allocated among our executive officers and organizational units, the bonus pool for each organizational unit is allocated among its members based on their performance with respect to their individual performance goals, subject to the maximum payments described above. For our executive officers other than our chief executive officer, the assessment of performance against individual goals and the determination of individual bonus payments are done by our chief executive officer, subject to approval by our board of directors.

Mr. Sakellaris elected to forego his annual incentive bonus for 2009.

Once we are a public company, our compensation committee, or our board of directors based on recommendations from our compensation committee, will establish and administer our annual incentive bonus program for executive officers.

*Equity Incentive Awards.* Our equity incentive award program is the primary vehicle for offering long-term incentives to our executive officers. To date, equity incentive awards to our executive officers have been made in the form of restricted stock awards and stock options, with options being the primary form of equity grants in recent years. We believe that equity incentive awards:

- provide our executive officers with a strong link to our long-term performance by enhancing their accountability for long-term decision making;
- help balance the short-term orientation of our annual incentive bonus program;
- create an ownership culture by aligning the interests of our executive officers with the creation of value for our stockholders; and
- further our goal of executive retention.

Employees who are considered important to our long-term success are eligible to receive equity incentive awards, which generally vest over five years. Equity incentive awards have been granted to over 25% of our current employees.

Historically, all equity awards to our executive officers have been approved by our board of directors, with input from our chief executive officer and our executive management team. In determining the size of equity awards to executive officers, our board and chief executive officer have generally considered the executive's experience, skills, level and scope of responsibilities, existing equity holdings, and comparisons to comparable positions in our company.



[Table of Contents](#)

Once we are a public company, our compensation committee will have the authority to make equity awards to our executive officers and to administer our equity compensation plans.

We do not have any equity ownership guidelines or requirements for our executive officers.

*Other Employee Benefits.* We maintain broad-based benefits that are provided to all employees, including our 401(k) retirement plan, flexible spending accounts, medical and dental care plans, life insurance, short- and long-term disability policies, vacation and company holidays. Our executive officers are eligible to participate in each of these programs on the same terms as non-executive employees; however, employees at the director level and above are eligible for life insurance coverage equal to three times (rather than twice) their annual base salary.

*Severance and Change of Control Arrangements.* We have entered into employment agreements with several of our executive officers. Each of these agreements provides the executive officer with certain severance benefits in connection with certain terminations of the executive's employment both before and after a change of control of us. See "Executive Compensation — Potential Payments upon Termination or Change of Control" and "Executive Compensation — Employment Agreements" below.

*Risk Considerations in our Compensation Program.* We do not believe that any risks arising from our employee compensation policies and practices are reasonably likely to have a material adverse effect on our company. In addition, we do not believe that the mix and design of the components of our executive compensation program encourage management to assume excessive risks.

*Tax Considerations.* Section 162(m) of the Code generally disallows a tax deduction for compensation in excess of \$1.0 million paid by a public company to its chief executive officer and to each other officer (other than its chief executive officer and chief financial officer) whose compensation is required to be reported to stockholders by reason of being among the three other most highly paid executive officers. Qualifying performance-based compensation is not subject to the deduction limitation if specified requirements are met. We will periodically review the potential consequences of Section 162(m) on the various elements of our executive compensation program, and we generally intend to structure the equity incentives component of our executive compensation program, where feasible, to comply with exemptions in Section 162(m) so that the compensation remains tax deductible to us. However, our board of directors or compensation committee may, in its judgment, authorize compensation payments that do not comply with the exemptions in Section 162(m) when it believes that such payments are appropriate to attract and retain executive talent.

Section 409A of the Code applies to plans, agreements and arrangements that provide for the deferral of compensation, and imposes penalty taxes on employees if those plans, agreements and arrangements do not comply with Section 409A. We have sought to structure our executive compensation arrangements to be exempt from, or comply with, Section 409A.

**Executive Compensation**

**Summary Compensation Table**

The following table sets forth information regarding compensation earned by our chief executive officer, our chief financial officer and our three next most highly compensated executive officers during our fiscal year ended December 31, 2009. We refer to these individuals as our named executive officers.

Name and Principal Position	Salary (\$)	Bonus (\$)	Option Awards (\$)(1)	All Other Compensation (\$)(2)	Total (\$)
George P. Sakellaris(3) <i>President and Chief Executive Officer</i>	500,000	—	2,049,424	26,785	2,576,209
Andrew B. Spence <i>Vice President and Chief Financial Officer</i>	220,000	55,000	16,816	14,504	306,320
Louis P. Maltezos <i>Executive Vice President and General Manager</i>	250,000	76,000	119,658	15,870	461,528
Keith A. Derrington <i>Executive Vice President and General Manager, Federal Operations</i>	250,000	100,000	—	15,314	365,314
William J. Cunningham <i>Senior Vice President, Corporate Government Relations</i>	250,000	50,000	20,834	15,175	336,009

- (1) Value is equal to the aggregate grant date fair value of stock options computed in accordance with ASC Topic 718. These amounts do not represent the actual amounts paid to or realized by the named executive officer with respect to these option grants. The assumptions used by us with respect to the valuation of option awards are the same as those set forth in Note 11 to our consolidated financial statements included elsewhere in this prospectus.
- (2) Amounts represent the value of perquisites and other personal benefits, which are further detailed below.

	Matched 401(k) Contribution (\$)	Group Life Insurance (\$)	Auto Insurance (\$)	Total (\$)
George P. Sakellaris	14,700	10,585	1,500	26,785
Andrew B. Spence	13,521	983	—	14,504
Louis P. Maltezos	14,700	1,170	—	15,870
Keith A. Derrington	14,205	1,109	—	15,314
William J. Cunningham	14,005	1,170	—	15,175

- (3) Mr. Sakellaris is also a member of our board of directors, but does not receive any additional compensation in his capacity as a director.

**Grants of Plan-Based Awards in 2009**

The following table sets forth information regarding grants of compensation in the form of plan-based awards during the fiscal year ended December 31, 2009 to our named executive officers.

Name	Grant Date	Approval Date	All Other Option Awards: Number of Securities Underlying Options (#) (1)	Exercise or Base Price of Option Awards (\$/Sh)	Market Price on Grant Date (\$/Sh)	Grant Date Fair Value of Stock and Option Awards (\$)
George P. Sakellaris	9/30/2009	9/30/2009	600,000	6.055	11.00	6,600,000
Andrew B. Spence	—	—	—	—	—	—
Louis P. Maltezos	7/22/2009	7/22/2009	100,000	6.055	9.00	900,000
Keith A. Derrington	—	—	—	—	—	—
William J. Cunningham	7/22/2009	7/22/2009	50,000	6.055	9.00	450,000

**Outstanding Equity Awards at Fiscal Year End**

The following table sets forth information regarding outstanding stock options held by our named executive officers as of December 31, 2009. No unvested restricted stock was held by our named executive officers as of December 31, 2009.

Name	Option Awards (1)			
	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date
George P. Sakellaris	—	600,000	6.055	9/30/2019
Andrew B. Spence	300,000	—	0.875	4/25/2012
	100,000	—	1.875	10/16/2013
	65,000	35,000	3.25	7/26/2016
Louis P. Maltezos	200,000	—	2.75	6/25/2014
	75,000	25,000	3.25	1/27/2016
	90,000	110,000	4.22	7/25/2017
	—	100,000	6.055	7/22/2019
Keith A. Derrington	200,000	—	2.75	7/20/2014
	55,000	45,000	3.41	1/24/2017
William J. Cunningham	—	50,000	6.055	7/22/2019

(1) All option awards and stock awards listed in this table were granted under the 2000 stock plan. Each option listed above vests or has vested as to 20% of the shares on the first anniversary of the grant date, and as to an additional five percent of the shares at the end of each successive three-month period of employment with us until the fifth anniversary of the grant date. Under the terms of the individual stock option agreements we have entered into with our named executive officers, if, an "Acquisition Event" (as defined in the 2000 stock plan) involving us occurs, and prior to the one-year anniversary of such Acquisition Event the executive's employment is terminated without Cause (as defined in the 2000 stock plan) or the executive voluntarily terminates his or her employment for Good Reason (as defined in the 2000 stock plan) prior to such anniversary, then the number of shares subject to the option which would have vested and become exercisable had the last 24 months (or if less than 24 months remained, such lesser period) of scheduled vesting been accelerated shall vest and become exercisable immediately prior to such named executive officer's termination date.

**Option Exercises and Stock Vested**

No named executive officer exercised any options during the fiscal year ended December 31, 2009. The following table sets forth information regarding the exercise of options by and the vesting of restricted stock awards held by our named executive officers during the fiscal year ended December 31, 2009.

Name	Option Awards		Stock Awards	
	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise (\$)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting (\$)(1)
George P. Sakellaris	—	—	2,000,000	12,110,000
Andrew B. Spence	—	—	—	—
Louis P. Maltezos	—	—	—	—
Keith A. Derrington	—	—	—	—
William J. Cunningham	—	—	—	—

- (1) There was no public market for our Class A common stock on the date that these shares of restricted stock vested. The value realized has been calculated by multiplying the fair value of our Class A common stock as of the date that such shares vested, based on the fair value that had been most recently determined by our board of directors, by the number of vested shares.

**Potential Payments Upon Termination or Change of Control**

The table below summarizes the potential payments to each of our named executive officers if he were to be terminated without cause or resign for good reason, prior to the one-year anniversary of a sale of our company, on December 31, 2009.

Name	Severance Payments	Value of Additional Vested Option Awards(\$)(1)	Total Benefits
George P. Sakellaris	—	2,415,150(2)	2,415,150
Andrew B. Spence	—	411,250(3)	411,250
Louis P. Maltezos	250,000	1,531,150(4)	1,781,150
Keith A. Derrington	250,000	1,159,000(5)	1,409,000
William J. Cunningham	—	201,263(6)	201,263

- (1) Valuation of acceleration of these options is determined by subtracting the exercise price of such option from a price per share of our Class A common stock of \$15.00, which is the midpoint of the estimated price range shown on the cover of this prospectus, and multiplying the resulting difference by the number of shares subject to acceleration by the option.
- (2) Upon termination without cause or resignation for good reason prior to the one-year anniversary of a sale of our company, options to purchase 270,000 shares of Class A common stock would vest and become immediately exercisable.
- (3) Upon termination without cause or resignation for good reason prior to the one-year anniversary of a sale of our company, options to purchase 35,000 shares of Class A common stock would vest and become immediately exercisable.
- (4) Upon termination without cause or resignation for good reason prior to the one-year anniversary of a sale of our company, options to purchase 150,000 shares of Class A common stock would vest and become immediately exercisable.
- (5) Upon termination without cause or resignation for good reason prior to the one-year anniversary of a sale of our company, options to purchase 100,000 shares of Class A common stock would vest and become immediately exercisable.

- (6) Upon termination without cause or resignation for good reason prior to the one-year anniversary of a sale of our company, options to purchase 22,500 shares of Class A common stock would vest and become immediately exercisable.

#### **Employment Agreements**

We have entered into employment agreements with Messrs. Derrington and Maltezos providing for an employment period of three years, unless terminated earlier in a manner permitted by the employment agreement.

In the event that either Mr. Derrington's or Mr. Maltezos' employment is terminated either (i) prior to an acquisition of our company, by us without cause or (ii) following an acquisition of our company, by us without cause or by him for good reason, then we will provide him with one year of salary continuation, provided that he enters into a release of claims in a form reasonably acceptable to us within 60 days following the date of termination.

Each of Messrs. Derrington and Maltezos has also agreed not to compete with us and not to solicit our employees for alternative employment during the term of his employment and if he voluntarily ends his employment without good reason or is terminated by us for cause, for an additional period that will end on the later of (i) six months after the end of his employment or (ii) three years after the closing of this offering.

#### **Stock Option and Other Compensation Plans**

##### *2010 Stock Incentive Plan*

The 2010 stock plan, which will become effective upon the closing of this offering, was adopted by our board of directors in May 2010 and approved by our stockholders in June 2010. The 2010 stock plan provides for the grant of incentive stock options, non-statutory stock options, restricted stock awards and other stock-based awards. Upon its effectiveness, 10,000,000 shares of our Class A common stock will be reserved for issuance under the 2010 stock plan.

Our employees, officers, directors, consultants and advisors are eligible to receive awards under the 2010 stock plan; however, incentive stock options may only be granted to our employees. The maximum number of shares of our Class A common stock with respect to which awards may be granted to any participant under the 2010 stock plan is 2,000,000 per year.

In accordance with the terms of the 2010 stock plan, our board of directors has authorized our compensation committee to administer the 2010 stock plan. Pursuant to the terms of the 2010 stock plan, our compensation committee will select the recipients of awards and determine:

- the number of shares of our Class A common stock covered by the award and the dates upon which the award will vest;
- with respect to options, the exercise price and period of exercise; and
- with respect to restricted stock and other stock-based awards, the terms and conditions of such awards, including conditions for repurchase, issue price and repurchase price.

Upon a merger or other reorganization event, our board of directors may, in its sole discretion, take any one or more of the following actions pursuant to the 2010 stock plan as to some or all outstanding awards:

- provide that all outstanding awards shall be assumed or substituted by the successor corporation;
- upon written notice to a participant, provide that the participant's unexercised options or awards will terminate immediately prior to the consummation of such transaction unless exercised by the participant;
- provide that outstanding awards will become exercisable, realizable or deliverable, or restrictions applicable to an award will lapse, in whole or in part, prior to or upon the reorganization event;

- in the event of a reorganization event pursuant to which holders of our Class A common stock will receive a cash payment for each share surrendered in the reorganization event, make or provide for a cash payment to the participants equal to the excess, if any, of the acquisition price times the number of shares of our Class A common stock subject to such outstanding awards (to the extent then exercisable at prices not in excess of the acquisition price), over the aggregate exercise price of all such outstanding awards and any applicable tax withholdings, in exchange for the termination of such awards; and
- provide that, in connection with a liquidation or dissolution, awards convert into the right to receive liquidation proceeds.

Upon the occurrence of a reorganization event other than a liquidation or dissolution, the repurchase and other rights under each outstanding restricted stock award will continue for the benefit of the successor company and will, unless the board of directors may otherwise determine, apply to the cash, securities or other property into which our Class A common stock is converted pursuant to the reorganization event. Upon the occurrence of a reorganization event involving a liquidation or dissolution, all conditions on each outstanding restricted stock award will automatically be deemed terminated or satisfied, unless otherwise provided in the agreement evidencing the restricted stock award.

No award may be granted under the 2010 stock plan after 2020. Our board of directors may amend, suspend or terminate the 2010 stock plan at any time, except that stockholder approval will be required to comply with applicable law or NYSE requirements.

#### ***2000 Stock Incentive Plan***

The 2000 stock plan was adopted in October 2000. As of March 31, 2010, a maximum of 28,500,000 shares of our Class A common stock was authorized for issuance under the 2000 stock plan. The 2000 stock plan allows us to grant options, restricted stock awards and other stock-based awards to our employees, officers and directors as well as outside consultants and advisors we retain from time to time. As of March 31, 2010, under the 2000 stock plan, options to purchase 9,403,200 shares of our Class A common stock were outstanding, 2,176,700 shares of our Class A common stock had been issued and were outstanding pursuant to the exercise of options, 8,422,250 shares of our Class A common stock had been issued pursuant to restricted stock awards and remain outstanding, and 8,492,600 shares of our Class A common stock were available for future awards. After the effective date of the 2010 stock plan, we will grant no further stock options or restricted stock awards under the 2000 stock plan.

#### ***401(k) Retirement Plan***

We maintain a 401(k) retirement plan that is intended to be a tax-qualified defined contribution plan under Section 401(k) of the Code. In general, all of our employees are eligible to participate upon commencement of their employment. The 401(k) plan includes a salary deferral arrangement pursuant to which participants may elect to reduce their current compensation by up to the statutorily prescribed limit, equal to \$16,500 in 2009, plus \$5,500 for those age 50 and over, and have the amount of the reduction contributed to the 401(k) plan. We currently match on a per payroll basis up to 100% of the first six percent of base compensation and commissions that a participant contributes to his or her in 401(k) plan, up to \$14,700 in 2009, subject to certain time of service and other eligibility conditions.

#### **Limitation of Liability and Indemnification**

As permitted by Delaware law, we have included provisions in our restated certificate of incorporation, which will become effective upon the closing of this offering, that limit or eliminate the personal liability of our directors to the maximum extent permitted by Delaware law. Our directors will not be personally liable for monetary damages for breaches of their fiduciary duties as directors, except liability for:

- any breach of the director's duty of loyalty to us or our stockholders;

- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- any unlawful payments related to dividends or unlawful stock repurchases, redemptions or other distributions; or
- any transaction from which the director derived an improper personal benefit.

These limitations do not affect the availability of equitable remedies, including injunctive relief or rescission. Any amendment to or repeal of these provisions will not eliminate or reduce the effect of these provisions in respect of any act, omission or claim that occurred or arose prior to such amendment or repeal. If Delaware law is amended to authorize the further elimination or limiting of a director, then the liability of our directors will be eliminated or limited to the fullest extent permitted by Delaware law as so amended.

As permitted by Delaware law, our restated certificate of incorporation that will become effective upon the closing of this offering also provides that:

- we will indemnify our directors and officers to the fullest extent permitted by law;
- we may indemnify our other employees and other agents to the same extent that we indemnify our officers and directors, unless otherwise determined by our board of directors; and
- we will advance expenses to our directors and officers in connection with legal proceedings in connection with a legal proceeding to the fullest extent permitted by law.

The indemnification provisions contained in our restated certificate of incorporation that will become effective upon the closing of this offering are not exclusive.

In addition, we have entered into indemnification agreements with each of our directors. Each indemnification agreement will provide that we will indemnify the director to the fullest extent permitted by law for claims arising in his capacity as our director, officer, employee or agent, provided that he acted in good faith and in a manner that he reasonably believed to be in, or not opposed to, our best interests and, with respect to any criminal proceeding, had no reasonable cause to believe that his conduct was unlawful. In the event that we do not assume the defense of a claim against a director we are required to advance his expenses in connection with his defense, subject to certain conditions, provided that he undertakes to repay all amounts advanced if it is ultimately determined that he is not entitled to be indemnified by us.

We believe that these provisions and agreements are necessary to attract and retain qualified persons as directors and officers. Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, which we refer to as the Securities Act, may be permitted to directors, officers or persons controlling our company pursuant to the foregoing provisions, we understand that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

In addition, we maintain standard policies of insurance under which coverage is provided to our directors and officers against losses arising from claims made by reason of breach of duty or other wrongful act, and to us with respect to payments which may be made by us to such directors and officers pursuant to the above indemnification provisions or otherwise as a matter of law.

#### **Rule 10b5-1 Sales Plans**

Our directors and executive officers may adopt written plans, known as Rule 10b5-1 plans, in which they will contract with a broker to buy or sell shares of our common stock on a periodic basis. Under a Rule 10b5-1 plan, a broker executes trades pursuant to parameters established by the director or officer when entering into the plan, without further direction from the director or officer. The director or officer may amend or terminate the plan in some circumstances. Our directors and executive officers may also buy or sell additional shares outside of a Rule 10b5-1 plan when they are not in possession of material, nonpublic information concerning our company.

## RELATED PERSON TRANSACTIONS

Since January 1, 2007, we have engaged in the following transactions with our directors, executive officers and holders of more than five percent of our voting securities, and affiliates of our directors, executive officers and holders of more than five percent of our voting securities. We believe that all of the transactions described below were made on terms no less favorable to us than could have been obtained from unaffiliated third parties.

### **Conversion of Common Stock into Class A Common Stock and Convertible Preferred Stock into Class B Common Stock**

On July 20, 2010, we amended and restated our certificate of incorporation to (i) reclassify all outstanding shares of our common stock as Class A common stock and (ii) provide that each share of our convertible preferred stock will be convertible into shares of our Class B common stock. Each share of our Class B common stock is entitled to five votes per share, is convertible at any time into one share of our Class A common stock at the option of the holder of such shares and will automatically convert into one share of our Class A common stock upon the occurrence of certain specified events. See "Description of Capital Stock — Common Stock."

As of June 30, 2010, three of our executive officers, Mr. Sakellaris, Mr. Anderson and Mr. Corsin, one of our non-employee directors, Mr. Sutton, and one of our five percent stockholders, Mr. Arthur Sakellaris, beneficially owned 3,350,000, 1,020,000, 1,500,000, 1,000,000 and 1,600,000 shares of our common stock, respectively, which, prior to the amendment and restatement of our certificate of incorporation, collectively represented approximately 54.75% of our outstanding common stock. Upon the amendment and restatement of our certificate of incorporation effected on July 20, 2010, these shares were reclassified as 3,350,000, 1,020,000, 1,500,000, 1,000,000 and 1,600,000 shares of our Class A common stock, respectively. Our founder, principal stockholder, chief executive officer and president, Mr. Sakellaris, owns 3,000,000 shares of our convertible preferred stock, which represents all of our outstanding convertible preferred stock. Upon the closing of this offering, these shares will automatically convert into 18,000,000 shares of our Class B common stock and will represent all of the shares of our Class B common stock outstanding.

### **Subordinated Note and Indemnity**

On May 17, 2000, our board of directors authorized us to borrow \$2,998,750 from Mr. Sakellaris, and this loan is evidenced by a subordinated note in favor of Mr. Sakellaris. The subordinated note bears interest at the rate of ten percent per annum, which is payable monthly in arrears, and all amounts outstanding under the subordinated note are payable on demand. During each of 2007, 2008 and 2009, we made interest payments of \$300,000 to Mr. Sakellaris under the subordinated note. As of June 30, 2010, the entire \$2,998,750 principal amount under the subordinated note remains outstanding. Our obligations under this note are subordinated to our obligations under our senior credit facilities. See "Management's Discussion and Analysis — Liquidity and Capital Resources." We will repay in full the outstanding principal balance of and all accrued but unpaid interest on this subordinated note using net proceeds from this offering. See "Use of Proceeds."

Our sureties have historically required that Mr. Sakellaris personally indemnify them for up to an aggregate of \$50 million of losses associated with the bonds they have provided on our behalf. As consideration for this personal indemnity, in October 2006, we issued to Mr. Sakellaris 2,000,000 shares of restricted Class A common stock, which vested in full on the third anniversary of the issuance, and in September 2009, we granted Mr. Sakellaris an option to purchase 600,000 shares of Class A common stock, which vests as to 20% of the shares on the first anniversary of the grant date and as to an additional five percent at each successive three-month period.

### **Other Transactions**

Samuel T. Byrne purchased 1,333,334 shares of our Class A common stock directly from us in December 2000 for an aggregate purchase price of \$600,000, or \$0.45 per share. Mr. Byrne, who is a holder of more than five percent of our outstanding common stock, is offering to sell 40,000 of such shares in this offering. If the underwriters exercise their over-allotment option in full, Mr. Byrne will sell up to an additional



[Table of Contents](#)

60,000 of such shares in this offering. In addition, on June 21, 2010, Mr. Byrne purchased 405,286 shares of Class A common stock from us upon the exercise of a warrant at an exercise price of \$0.005 per share. Mr. Byrne is not offering to sell any such shares in this offering.

In 2002, we entered into a letter agreement, which we refer to as the Terra agreement, with TERRA Nova Holdings LLC, or Terra, which was under the common control of William H. Kremer and Mr. Byrne, each of whom then held more than five percent of our outstanding common stock. Under the Terra agreement, Terra provided us with consulting services related to a 2002 acquisition in exchange for a \$344,000 cash fee to be payable by us in specified circumstances. Terra subsequently assigned its rights under the Terra agreement to CrossHarbor Capital Partners LLC, or CrossHarbor, which was also under the common control of Messrs. Kremer and Byrne. On September 25, 2008, we entered into a warrant termination agreement with Messrs. Kremer and Byrne, each of whom still held more than five percent of our outstanding common stock, and CrossHarbor and Terra, each of which remained under the common control of Messrs. Kremer and Byrne. Pursuant to the warrant termination agreement, we and the other parties agreed to terminate a warrant pursuant to which CrossHarbor had the right to purchase up to 1,480,000 shares of our common stock at a purchase price of \$0.22 per share in exchange for a \$1,959,400 cash payment by us to CrossHarbor. In addition, under the warrant termination agreement, in consideration of the termination of the Terra agreement, we agreed to reduce the exercise price per share under two separate warrants held by CrossHarbor, each for the purchase of up to 60,000 shares of our common stock, from \$0.22 to \$0.005. Immediately following the consummation of the transactions under the warrant termination agreement, CrossHarbor transferred one of its warrants for the purchase of up to 60,000 shares of our common stock to Mr. Kremer, and the other to Mr. Byrne.

On September 25, 2008, we also entered into a stock repurchase agreement with Mr. Kremer, pursuant to which we purchased 1,333,334 shares of our common stock from Mr. Kremer, for an aggregate purchase price of \$4,546,669, or \$3.41 per share, as a result of which Mr. Kremer ceased to be a stockholder of our company.

On September 25, 2008, we entered into a warrant termination agreement with AMCAP Holdings, Ltd. or AMCAP, which was wholly-owned by Mr. Byrne. Pursuant to the agreement, we and AMCAP agreed to terminate a warrant pursuant to which AMCAP had the right to purchase up to 1,587,372 shares of our common stock at a purchase price of \$0.005 per share in exchange for a \$5,605,002 cash payment from us.

On October 14, 2008, Mr. Byrne transferred the warrant to purchase up to 60,000 shares of our common stock transferred to him by CrossHarbor to a charitable institution. On December 2, 2008, we and the charitable institution entered into a warrant termination agreement pursuant to which the charitable institution agreed to terminate the warrant in exchange for a \$204,300 cash payment from us.

On November 11, 2008, AMCAP transferred a warrant to purchase up to 7,342 shares of our common stock to a charitable institution. On December 2, 2008, we and the charitable institution entered into a warrant termination agreement pursuant to which the charitable institution agreed to terminate the warrant in exchange for a \$25,000 cash payment from us.

In April 2007, we repurchased from David J. Anderson, our executive vice president, business development and a member of our board of directors, 180,000 shares of our common stock at a purchase price per share of \$3.41.

On April 26, 2010, in connection with the resolution of a dispute related to a prior stock option grant, we issued an option to purchase 140,000 shares of our common stock, at an exercise price of \$13.045 per share, to Michael E. Castonguay, an employee and holder of more than five percent of our outstanding common stock. The option will vest as to 40% of the shares on the first anniversary of the grant date and as to an additional 7.5% of the shares at the end of each successive three-month period thereafter.

We have entered into non-competition and non-solicitation agreements with certain of the selling stockholders which prohibit them from engaging in specified activities that are competitive with us and from soliciting our employees until the later of six months after employment termination and the three-year anniversary of the closing of this offering.

**Director Indemnification Agreements**

We have entered into indemnification agreements with each of our directors. The indemnification agreements and our restated certificate of incorporation and restated by-laws require us to indemnify our directors and officers to the fullest extent permitted by Delaware law. See “Management — Limitation of Liability and Indemnification.”

**Registration Rights**

We entered into a stockholder agreement on September 25, 2008 with three of our stockholders, Mr. Sakellaris, Mr. Byrne and AMCAP. After the closing of this offering and the sale by the selling stockholders of the shares of our Class A common stock offered by them hereby, Mr. Byrne will beneficially own 1,738,620 shares of our Class A common stock. AMCAP is no longer a stockholder. Pursuant to the stockholder agreement, if during the two-year period following the closing of this offering, we propose to register shares of our Class A common stock under the Securities Act, other than under a registration statement on Form S-4 or Form S-8 (or any other successor forms used to register shares issued by us under an employee benefit plan or dividend reinvestment plan or pursuant to an acquisition or merger, or any other form for a similar limited purpose), then we are required to give Mr. Byrne notice of our intent to make the registration and, subject to certain exceptions, Mr. Byrne will have the right to request that some or all of his shares be included in such registration. If Mr. Byrne makes such a request, then we will be required to use our commercially reasonable efforts to cause such shares to be included in that registration statement. Mr. Byrne’s registration rights under the stockholder agreement expire upon the earliest of the second anniversary of the closing of this offering, the time when he no longer holds any of the shares he currently holds, and the time when he holds less than two percent of our Class A and Class B common stock (assuming the issuance of all shares of Class A common stock reserved for issuance under our 2000 and 2010 stock plans).

The foregoing description of these registration rights is intended as a summary only and is qualified in its entirety by reference to the stockholder agreement, which is filed as an exhibit to the registration statement of which this prospectus forms a part.

**Policies and Procedures for Related Person Transactions**

Our board of directors has adopted a written related person transaction policy for the review of any transaction, arrangement or relationship in which we are a participant, the amount involved exceeds \$120,000, and one of our executive officers, directors, director nominees or five percent stockholders (or their immediate family members), each of whom we refer to as a “related person,” has a direct or indirect material interest.

If a related person proposes to enter into such a transaction, arrangement or relationship, which we refer to as a “related person transaction,” the related person must report the proposed related person transaction to our general counsel. The policy calls for the proposed related person transaction to be reviewed and, if deemed appropriate, approved by our audit committee. Whenever practicable, the reporting, review and approval will occur prior to entry into the transaction. If the general counsel determines that advance review and approval is not practicable, then the audit committee will review, and, in its discretion, may ratify the related person transaction. The policy also permits the chairman of the audit committee to review and, if deemed appropriate, approve proposed related person transactions that arise between audit committee meetings, subject to ratification by the audit committee at its next meeting. Any related person transactions previously approved by the audit committee or otherwise already existing that are ongoing in nature in nature will be reviewed annually, or more frequently if the audit committee determines such review to be necessary.

The audit committee will review all relevant information available to it about the related person transaction and may approve or ratify it only if the audit committee determines that, under all of the circumstances, the transaction is in, or is not inconsistent with, Ameresco’s best interests. The audit committee may impose any conditions on the related person transaction that it deems appropriate.

The policy provides that transactions involving compensation of executive officers shall be reviewed and approved by our compensation committee in the manner specified in its charter.

**PRINCIPAL AND SELLING STOCKHOLDERS**

This section sets forth certain information regarding the beneficial ownership of our Class A and Class B common stock as of June 30, 2010 (adjusted as set forth below) and immediately after the closing of this offering by:

- each of our directors;
- each of our named executive officers;
- each person, or group of affiliated persons, who is known by us to beneficially own more than five percent of our Class A and Class B common stock;
- all of our directors and executive officers as a group; and
- each selling stockholder.

For purposes of the table below, the percentage ownership calculations for beneficial ownership prior to this offering are based on 15,470,776 shares of our Class A common stock and 18,000,000 shares of our Class B common stock outstanding as of June 30, 2010. These assumed total outstanding share numbers reflect (i) a two-for-one split of our common stock, (ii) the reclassification of all outstanding shares of our common stock as Class A common stock, (iii) the conversion of all shares of our convertible preferred stock, other than those held by Mr. Sakellaris into shares of our Class A common stock and (iv) the conversion of all other outstanding shares of our convertible preferred stock into shares of our Class B common stock. The table below assumes that there are 22,403,276 shares of our Class A common stock and 18,000,000 shares of our Class B common stock outstanding immediately following the closing of this offering.

Beneficial ownership is determined in accordance with the rules of the SEC. These rules generally attribute beneficial ownership of shares to persons who possess sole or shared voting power or investment power with respect to our shares. In computing the number of shares beneficially owned by an individual or entity and the percentage ownership of that person, shares subject to options, warrants or other rights held by such person that are currently exercisable or will become exercisable within 60 days of June 30, 2010 are considered outstanding, although these shares are not considered outstanding for purposes of computing the percentage ownership of any other person.

Except as otherwise indicated in the footnotes to the table below, all persons listed below have sole voting and investment power with respect to the shares beneficially owned by them, subject to applicable community property laws. The information presented in the table below is not necessarily indicative of beneficial ownership for any other purpose. Beneficial ownership representing less than one percent is denoted with an asterisk (\*).

Percentage total voting power represents voting power of beneficially owned shares with respect to all shares of our Class A and Class B common stock, as a single class. Each holder of Class A common stock is entitled to one vote per share of Class A common stock and each holder of Class B common stock is entitled to five votes per share of Class B common stock. See “Description of Capital Stock — Common Stock.” Voting power of less than one percent is denoted with an asterisk (\*).

Name of Beneficial Owner	Shares Beneficially Owned Prior to Offering					Shares of Class A Common Stock Being Offered(12)	Shares Beneficially Owned After Offering					
	Class A Common Stock		Class B Common Stock		% Total Voting Power		Class A Common Stock		Class B Common Stock		% Total Voting Power	
	Shares	%	Shares	%			Shares	%	Shares	%		
	Shares	%	Shares	%	Power		Shares	%	Shares	%	Power	
<b>Five Percent Stockholders:</b>												
George P. Sakellaris(1)	3,350,000	21.65	18,000,000	100.00	88.51	200,000	3,150,000	14.06	18,000,000	100.00	82.87	
Samuel T. Byrnes(2)	1,738,620	11.24	—	—	1.65	40,000	1,698,620	7.58	—	—	1.51	
Arthur P. Sakellaris(3)	1,600,000	10.34	—	—	1.52	—	1,600,000	7.14	—	—	1.42	
David J. Anderson(4)	1,020,000	6.59	—	—	*	255,000	765,000	3.41	—	—	*	
Michael R. Castonguay(5)	910,000	5.75	—	—	*	—	910,000	4.00	—	—	*	

[Table of Contents](#)

Name of Beneficial Owner	Shares Beneficially Owned Prior to Offering					Shares of Class A Common Stock Being Offered(12)	Shares Beneficially Owned After Offering				
	Class A Common Stock		Class B Common Stock		% Total Voting Power		Class A Common Stock		Class B Common Stock		% Total Voting Power
	Shares	%	Shares	%			Shares	%	Shares	%	
<b>Directors and Named Executive Officers:</b>											
Andrew B. Spence(6)	480,000	3.01	—	—	*	—	480,000	2.10	—	*	
Louis P. Maltezos(7)	430,000	2.70	—	—	*	150,000	280,000	1.23	—	*	
William J. Cunningham(6)	10,000	*	—	—	*	—	10,000	*	—	*	
Keith A. Derrington(8)	270,000	1.72	—	—	*	125,000	145,000	*	—	*	
David J. Corsin(9)	1,500,000	9.70	—	—	1.42	375,000	1,125,000	5.02	—	1.00	
William M. Bulger(6)	150,000	*	—	—	*	—	150,000	*	—	*	
Douglas I. Foy	—	—	—	—	—	—	—	—	—	*	
Michael E. Jesanis	—	—	—	—	—	—	—	—	—	*	
Guy W. Nichols(6)	150,000	*	—	—	*	—	150,000	*	—	*	
Joseph W. Sutton(10)	1,000,000	6.46	—	—	*	—	1,000,000	4.46	—	*	
All executive officers and directors as a group (15 persons)(11)	9,807,500	54.73	18,000,000	100.00	92.48	1,529,374	8,278,126	33.99	18,000,000	100.00	
<b>Other Selling Stockholders(13):</b>											
Michael Bakas(14)	637,500	4.08	—	—	*	159,374	478,126	2.12	—	*	
John L. Bosch(14)	55,000	*	—	—	*	15,000	40,000	*	—	*	
Mark Bruce	204,000	1.32	—	—	*	40,800	163,200	*	—	*	
Peter Christakis(14)	344,500	2.21	—	—	*	86,126	258,374	1.15	—	*	
John Clune(15)	66,100	*	—	—	*	13,220	52,880	*	—	*	
Enzo Colangelo(14)	61,000	*	—	—	*	16,000	45,000	*	—	*	
Jeanette Coleman-Hall	76,500	*	—	—	*	15,300	61,200	*	—	*	
Anthony DaSilva(14)	329,000	2.08	—	—	*	87,500	241,500	1.07	—	*	
Janice DeBarros(14)	128,000	*	—	—	*	32,000	96,000	*	—	*	
Paul Dello Iacono(14)	100,000	*	—	—	*	25,000	75,000	*	—	*	
Joseph DeManche(14)	420,000	2.64	—	—	*	125,000	295,000	1.30	—	*	
Timothy Dellafla(14)	80,000	*	—	—	*	50,000	30,000	*	—	*	
Kathleen DevlinRuggiero(14)	367,250	2.36	—	—	*	99,750	267,500	1.19	—	*	
Mark Feichtner(14)	165,000	1.06	—	—	*	30,000	135,000	*	—	*	
Edward Golfetto(14)	37,000	*	—	—	*	10,000	27,000	*	—	*	
Alex J. Harkness(14)	60,000	*	—	—	*	15,000	45,000	*	—	*	
Vivekanand Hegde	120,000	*	—	—	*	30,000	90,000	*	—	*	
Ben Heuser(14)	40,000	*	—	—	*	4,000	36,000	*	—	*	
Mohsin Huq(14)	40,000	*	—	—	*	10,000	30,000	*	—	*	
Mario Lusi(14)	390,000	2.46	—	—	*	100,000	290,000	1.28	—	*	
Lillian Kamalay(14)	87,000	*	—	—	*	21,750	65,250	*	—	*	
Richard Kohrs(14)	153,000	*	—	—	*	38,250	114,750	*	—	*	
Peter W. Kurpiewski(14)	68,300	*	—	—	*	18,250	50,050	*	—	*	
Dean Lebron	204,000	1.32	—	—	*	44,000	160,000	*	—	*	
David Maksymiuk(14)	60,000	*	—	—	*	15,000	45,000	*	—	*	
Jeffrey Metcalf(14)	43,000	*	—	—	*	14,250	28,750	*	—	*	
Stephen Morgan(16)	180,000	1.16	—	—	*	45,000	135,000	*	—	*	
Craig Piercey(14)	37,000	*	—	—	*	10,000	27,000	*	—	*	
Patricia Puopolo(14)	30,000	*	—	—	*	12,500	17,500	*	—	*	
David Seymour(14)	50,000	*	—	—	*	12,500	37,500	*	—	*	
William Skosky(14)	115,000	*	—	—	*	30,000	85,000	*	—	*	

[Table of Contents](#)

Name of Beneficial Owner	Shares Beneficially Owned Prior to Offering					Shares of Class A Common Stock Being Offered(12)	Shares Beneficially Owned After Offering				
	Class A Common Stock		Class B Common Stock		% Total Voting Power		Class A Common Stock		Class B Common Stock		% Total Voting Power
	Shares	%	Shares	%			Shares	%	Shares	%	
Jeffrey Stander(14)	40,000	*	—	—	*	10,000	30,000	*	—	—	*
Christopher Sternadore(14)	75,000	*	—	—	*	18,750	56,250	*	—	—	*
Kevin A. Sullivan	255,000	1.65	—	—	*	55,000	200,000	*	—	—	*
Bhoopendra N. Tripathi(14)	150,000	*	—	—	*	37,500	112,500	*	—	—	*
Thomas Tsaros	204,000	1.32	—	—	*	51,000	153,000	*	—	—	*
Carl Van Salza	440,000	2.84	—	—	*	44,000	396,000	1.77	—	—	*
Douglas Walk(14)	40,000	*	—	—	*	10,000	30,000	*	—	—	*
Alan Winkler(14)	383,332	2.46	—	—	*	100,000	283,332	1.26	—	—	*

- (1) Mr. Sakellaris is our founder, principal stockholder, president and chief executive officer. His address is c/o Ameresco, Inc., 111 Speen Street, Framingham, Massachusetts 01701. Includes 12,000,000 shares of our Class B common stock held by the Ameresco 2010 Annuity Trust, of which Mr. Sakellaris is trustee and the sole beneficiary. The shares of Class A common stock being offered by Mr. Sakellaris represent shares of restricted Class A common stock granted by us to Mr. Sakellaris as consideration for the personal indemnity provided by Mr. Sakellaris to our sureties.
- (2) Mr. Byrne's address is c/o CrossHarbor Capital Partners LLC, One Boston Place, Suite 2300, Boston, Massachusetts 02108. The shares of our Class A common stock being offered by Mr. Byrne were purchased directly from us by Mr. Byrne. See "Related Person Transactions — Other Transactions."
- (3) Arthur P. Sakellaris' address is c/o Ameresco, Inc., 111 Speen Street, Framingham, Massachusetts 01701.
- (4) Mr. Anderson is our executive vice president, business development and a director. His address is c/o Ameresco, Inc., 111 Speen Street, Framingham, Massachusetts 01701. The shares of our Class A common stock being offered by Mr. Anderson consist of shares of restricted stock granted to him under our 2000 stock plan.
- (5) Includes 350,000 shares of our Class A common stock issuable upon the exercise of options that are exercisable within 60 days of June 30, 2010. Mr. Castonguay's address is c/o Ameresco, Inc., 111 Speen Street, Framingham, Massachusetts 01701.
- (6) Consists of shares of our Class A common stock issuable upon the exercise of options that are exercisable within 60 days of June 30, 2010.
- (7) Mr. Maltezos is our executive vice president and general manager, central region. Consists of shares of our Class A common stock issuable upon the exercise of options that are exercisable within 60 days of June 30, 2010. The shares of our Class A common stock being offered by Mr. Maltezos are issuable to him upon the exercise of an option granted to him pursuant to our 2000 stock plan that will be exercised in connection with this offering.
- (8) Mr. Derrington is our executive vice president and general manager, federal operations. Consists of shares of our Class A common stock issuable upon the exercise of options that are exercisable within 60 days of June 30, 2010. The shares being offered by Mr. Derrington are issuable to him upon the exercise an option granted to him pursuant to our 2000 stock plan that will be exercised in connection with this offering.
- (9) Mr. Corrsin is our executive vice president, general counsel and secretary and a director. The shares of our Class A common stock being offered by Mr. Corrsin consist of shares of restricted stock granted to him under our 2000 stock plan.
- (10) Consists of shares of our Class A common stock held by Sutton Ventures LP. Mr. Sutton is managing member of Sutton Ventures Group LLC, which is the general partner of Sutton Ventures LP.
- (11) Includes 2,450,000 shares of our Class A common stock issuable upon the exercise of options that are exercisable within 60 days of June 30, 2010.

[Table of Contents](#)

(12) If the underwriters' overallocation option is exercised in full, the additional shares to be sold by selling stockholders would be allocated as follows:

<u>Selling Stockholder</u>	<u>Shares Subject to Overallocation Option</u>
George P. Sakellaris	200,000
Samuel T. Byrne	60,000

If the underwriter's overallocation is exercised in part, the additional shares would first be sold by us, and then be allocated pro rata between Messrs. Sakellaris and Byrne based upon the share amounts set forth in the preceding table.

- (13) Unless otherwise indicated in the footnotes below, (i) each other selling stockholder is our employee and (ii) the shares of our Class A common stock being offered by each of the other selling stockholders represent either shares of restricted stock granted to him or her under our 2000 stock plan, shares issued to him or her upon the exercise of options granted to him or her pursuant to our 2000 stock plan, or shares that are issuable to him or her upon the exercise of an option granted to him or her under our 2000 stock plan that will be exercised in connection with this offering.
- (14) Includes shares of our Class A common stock issuable upon the exercise of options that are exercisable within 60 days of June 30, 2010.
- (15) Mr. Clune is a former employee. The shares being offered by Mr. Clune were issued to him upon the exercise of options granted to him pursuant to our 2000 stock plan in his capacity as our employee.
- (16) Mr. Morgan is a consultant to us. The shares being offered by Mr. Morgan are issuable to him upon the exercise an option granted to him pursuant to our 2000 stock plan in his capacity as our consultant that will be exercised in connection with this offering.

## DESCRIPTION OF CAPITAL STOCK

### General

The following description of our capital stock and provisions of our restated certificate of incorporation and by-laws are summaries and are qualified by reference to our restated certificate of incorporation and by-laws that will be in effect upon the closing of this offering. Copies of these documents have been filed with the SEC as exhibits to our registration statement, of which this prospectus forms a part. The descriptions of our common stock and preferred stock reflect changes to our capital structure that will have occurred upon the closing of this offering.

Upon the closing of this offering, our authorized capital stock will consist of 500,000,000 shares of our Class A common stock, par value \$0.0001 per share, 144,000,000 shares of our Class B common stock, par value \$0.0001 per share, and 5,000,000 shares of preferred stock, par value \$0.0001 per share.

### Common Stock

We have two classes of common stock: Class A common stock and Class B common stock. The rights of the holders of our Class A common stock and our Class B common stock are identical, except that

(i) each share of our Class A common stock is entitled to one vote per share while each share of our Class B common stock is entitled to five votes per share, and

(ii) each share of our Class B common stock is convertible into one share of our Class A common stock at the option of the holder at any time and will automatically convert into one share of our Class A common stock in specified circumstances (described below).

Assuming (i) a two-for-one split of our common stock, (ii) the reclassification of all outstanding shares of our common stock as Class A common stock, (iii) the conversion of all shares of our convertible preferred stock other than those held by Mr. Sakellaris into shares of our Class A common stock, (iv) the conversion of all other outstanding shares of our convertible preferred stock into shares of our Class B common stock and (v) the issuance of 932,500 shares of our Class A common stock upon the exercise of vested stock options by the selling stockholders in connection with this offering at a weighted-average exercise price of \$1.94, as of June 30, 2010, there were:

- 15,470,776 shares of our Class A common stock outstanding, held of record by 67 stockholders;
- 18,000,000 shares of our Class B common stock outstanding, held of record by one stockholder, Mr. Sakellaris, our president and chief executive officer; and
- 8,641,094 shares of our Class A common stock issuable upon the exercise of stock options outstanding at a weighted-average exercise price of \$4.06 per share.

In connection with the reclassification of our common stock as Class A common stock effected on July 20, 2010, each outstanding option to purchase shares of our common stock became an option to purchase an equal number of shares of our Class A common stock at the same exercise price per share.

### Voting

The holders of our Class A and Class B common stock vote together on all matters properly submitted to our stockholders for their vote (including the election of directors). The holders of our Class A common stock are entitled to one vote for each share held on all matters properly submitted to a vote of our stockholders and do not have any cumulative voting rights with respect to the election of directors. The holders of our Class B common stock are entitled to five votes for each share held on all matters properly submitted to a vote of our stockholders and do not have any cumulative voting rights with respect to the election of directors. Delaware law generally requires holders of our Class A common stock or our Class B common stock, as applicable, to vote separately as a single class if we amend our restated certificate of incorporation in a manner that alters or changes the powers, preferences or special rights of such class of stock

[Table of Contents](#)

in a manner that affects them adversely or increases or decreases the number of shares of that class. However, we have provided in our restated certificate of incorporation that the holders of neither our Class A common stock nor our Class B common stock are entitled to a vote as a separate class in the event that the number of shares of their respective class is increased or decreased.

***Dividends***

Holders of our Class A and Class B common stock are entitled to share equally, on a per-share basis, in any dividends declared by our board of directors out of funds legally available therefor, subject to any preferential dividend or other rights of any then outstanding preferred stock. In the event a dividend is paid in the form of shares of common stock or rights to acquire shares of common stock, the holders of our Class A common stock shall receive shares of our Class A common stock or rights to acquire shares of our Class A common stock, as the case may be, and the holders of shares of our Class B common stock shall receive shares of our Class B common stock or rights to acquire shares of our Class B common stock, as the case may be.

***Conversion***

Our Class A common stock is not convertible into any other shares of our capital stock.

Our Class B common stock is convertible as follows:

*Voluntary Conversion.* Each share of our Class B common stock is convertible into one share of our Class A common stock at any time, at the option of the holder.

*Mandatory Conversion.* All shares of our Class B common stock will convert into shares of our Class A common stock on a one-for-one basis in the following instances:

(i) at such time when we receive a written consent executed by the holders of a majority of the shares of our Class B common stock then outstanding electing to convert all outstanding shares of our Class B common stock into our Class A common stock, or

(ii) at such time when the total number of outstanding shares of our Class B common stock is less than 20% of the aggregate number of shares of our Class A and Class B common stock then outstanding.

In addition, each share of our Class B common stock will automatically convert into one share of our Class A common stock upon any transfer of such share of our Class B common stock, whether or not for value, except for transfers to (a) the original holder of our Class B common stock, Mr. Sakellaris, certain of such Class B common stockholder's family members or descendants, entities controlled by such Class B common stockholder, certain trusts for the benefit of such Class B common stockholder or such holder's family or charitable organizations established by such Class B common stockholder or certain members of such holder's family or (b) a pledgee (subject to certain limitations) or nominee of such Class B common stockholder.

Following the closing of this offering, we may not issue or sell any shares of our Class B common stock, or any securities convertible or exercisable into shares of our Class B common stock, except for any stock splits, stock dividends, subdivisions, combinations or recapitalizations with respect to our Class B common stock and there will not be any securities outstanding that are convertible into or may be exercised to acquire shares of our Class B common stock.

No class of common stock may be subdivided or combined unless the other class of common stock concurrently is subdivided or combined in the same proportion and in the same manner.

***Liquidation Rights***

In the event of our liquidation or dissolution, holders of our Class A and Class B common stock are entitled to share equally, on a per-share basis, in all assets remaining after payment of all debts and other liabilities, subject to the prior rights of any then outstanding preferred stock.



***Other Rights***

Holders of our Class A and Class B common stock have no preemptive, subscription or redemption rights.

The rights, preferences and privileges of holders of our common stock are subject to, and may be adversely affected by, the rights of holders of shares of any series of preferred stock that we may designate and issue in the future.

**Preferred Stock**

Under the terms of our restated certificate of incorporation, our board of directors is authorized to issue up to 5,000,000 shares of preferred stock in one or more series without stockholder approval. Our board of directors has the discretion to determine the rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock, any or all of which may be greater than or senior to the rights of the either or both of our Class A and Class B common stock. The issuance of preferred stock could adversely affect the voting power of holders of either or both of our Class A and Class B common stock and reduce the likelihood that such holders will receive dividend payments or payments on liquidation.

The purpose of authorizing our board of directors to issue preferred stock and determine its rights and preferences is to eliminate the delay and uncertainty associated with a stockholder vote on specific issuances. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions, future financings and other corporate purposes, could have the effect of making it more difficult for a third party to acquire, or could discourage a third party from seeking to acquire, a majority of our outstanding stock. In certain circumstances, an issuance of preferred stock could have the effect of decreasing the market price of our Class A common stock. Upon the closing of this offering, there will be no shares of preferred stock outstanding, and we have no present plans to issue any shares of preferred stock.

**Anti-Takeover Effects of Delaware Law and Our Restated Certificate of Incorporation and By-Laws**

Delaware law, our restated certificate of incorporation and our by-laws contain provisions that could have the effect of delaying or discouraging another party from acquiring control of us. These provisions, which are summarized below, are intended to discourage coercive takeover practices and inadequate takeover bids. These provisions are also intended to encourage persons seeking to acquire control of us to first negotiate with our board of directors. In addition, see “Description of Capital Stock—Common Stock” for a description of our dual class capital structure.

***Staggered Board of Directors; Removal of Directors***

Our restated certificate of incorporation and by-laws divide our board of directors into three classes with staggered three-year terms. In addition, a director may be removed only for cause and only by the affirmative vote of the holders of at least two-thirds of the votes that all stockholders would be entitled to cast in any annual election of directors. Any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, may be filled only by vote of a majority of our directors then in office.

***Stockholder Action by Written Consent; Special Meetings***

Our restated certificate of incorporation provides that any action required or permitted to be taken by our stockholders must be effected at a duly called annual or special meeting of such holders and may not be effected by any consent in writing by such holders. Our restated certificate of incorporation and by-laws also provide that special meetings of our stockholders can only be called by the chairman of our board of directors, our chief executive officer or our board of directors.

***Advance Notice Requirements for Stockholder Proposals***

Our by-laws establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of stockholders, including proposed nominations of persons for election to our board of directors. Stockholders at an annual meeting may only consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of our board of directors or by a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has delivered timely written notice in proper form to our secretary of the stockholder's intention to bring such business before the meeting.

***Delaware Business Combination Statute***

We are subject to Section 203 of the Delaware General Corporation Law. Subject to certain exceptions, Section 203 prevents a publicly-held Delaware corporation from engaging in a "business combination" with any "interested stockholder" for three years following the date that the person became an interested stockholder, unless (1) the interested stockholder attained such status with the approval of our board of directors, (2) the business combination is approved by our board of directors and stockholders in a prescribed manner or (3) the interested stockholder acquired at least 85% of our outstanding voting stock in the transaction in which it became an interested stockholder. A "business combination" includes, among other things, a merger or consolidation involving us and the "interested stockholder" and the sale of more than ten percent of our assets, and other transactions resulting in a financial benefit to the interested stockholder. In general, an "interested stockholder" is any entity or person beneficially owning 15% or more of our outstanding voting stock and any entity or person affiliated with or controlling or controlled by such entity or person. Section 203 would not prevent us from engaging in a business combination with Mr. Sakellaris even though he owns greater than five percent of our outstanding voting stock because he acquired such voting stock before we were subject to Section 203.

***Amendment of Restated Certificate of Incorporation and By-Laws***

The Delaware General Corporation Law provides generally that the affirmative vote of a majority of the shares entitled to vote on any matter is required to amend a corporation's certificate of incorporation or by-laws, unless a corporation's certificate of incorporation or by-laws, as the case may be, requires a greater percentage. Our by-laws may be amended or repealed by a majority vote of our board of directors or by the affirmative vote of the holders of at least two-thirds of the votes that all our stockholders would be entitled to cast in any annual election of directors. In addition, the affirmative vote of the holders of at least two-thirds of the votes that all our stockholders would be entitled to cast in any annual election of directors is required to amend or repeal or to adopt any provisions inconsistent with the bylaw amendment provision or any of the provisions of our restated certificate of incorporation described above under "— Staggered Board of Directors; Removal of Directors" and "— Stockholder Action by Written Consent; Special Meetings."

**Transfer Agent and Registrar**

The transfer agent and registrar for our Class A and Class B common stock is American Stock Transfer and Trust Company, LLC.

**Stock Market Listing**

Our Class A common stock has been approved for listing on the NYSE under the symbol "AMRC."

## SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our common stock, and a liquid public trading market for our common stock may not develop or be sustained after this offering. If a public market does develop, future sales of significant amounts of our common stock, including shares issued upon exercise of outstanding options, or the anticipation of those sales, could adversely affect the public market prices prevailing from time to time and could impair our ability to raise capital through sales of our equity securities. Our Class A common stock has been approved for listing on the NYSE under the symbol "AMRC." Our Class B common stock will not be listed on any stock market or exchange. Due, in part, to the mandatory conversion features of our Class B common stock, we do not anticipate that there will ever be a trading market for our Class B common stock.

Upon the closing of this offering, we will have outstanding an aggregate of 22,403,276 shares of Class A common stock and 18,000,000 shares of Class B common stock, based on 15,470,776 shares of Class A common stock and 18,000,000 shares of our Class B common stock outstanding as of June 30, 2010, assuming no exercise by the underwriters of their over-allotment option and no exercise of outstanding options. Of these shares, all of the shares of our Class A common stock sold in this offering will be freely tradable without restriction or further registration under the Securities Act, except for any shares of our Class A common stock purchased by our "affiliates," as that term is defined in Rule 144 under the Securities Act, whose sales would be subject to the Rule 144 resale restrictions described below.

The remaining shares of Class A common stock and all of the shares of our Class B common stock (and the shares of Class A common stock that they can be converted into) will be "restricted securities," as that term is defined in Rule 144 under the Securities Act. As set forth in our restated certificate of incorporation, upon the consummation of the sale of any shares of our Class B common stock (except for sales to family members and certain affiliated persons and entities), such shares of our Class B common stock will be automatically converted into shares of our Class A common stock. These restricted securities are eligible for public sale only if they are registered under the Securities Act or if they qualify for an exemption from registration under the Securities Act. One such safe-harbor exemption is Rule 144, which is summarized below.

Subject to the lock-up agreements described below and the provisions of Rule 144 under the Securities Act, these restricted securities will be available for sale in the public market as follows:

<u>Date Available for Sale</u>	<u>Shares Eligible for Sale</u>	<u>Comment</u>
Date of prospectus	—	Shares that can be sold under Rule 144 that are not subject to a lock-up
90 days after date of prospectus	—	Shares that are not subject to a lock-up and can be sold under Rule 144
180 days after date of prospectus	31,706,456	Lock-up released; shares can be sold under Rule 144

In addition, of the 8,641,094 shares of our Class A common stock that were issuable upon the exercise of stock options outstanding as of June 30, 2010, options to purchase 6,693,142 shares were exercisable as of June 30, 2010 (in each case excluding the 932,500 shares of our Class A common stock that will be issued upon the exercise of vested stock options by the selling stockholders in connection with this offering) and, upon exercise, these shares will be eligible for sale in the public markets, subject to the lock-up agreements and securities laws described below.

### Rule 144

#### *Affiliate Resales of Shares*

Affiliates of ours must generally comply with Rule 144 if they wish to sell in the public market any shares of our Class A common stock or our Class B common stock, whether or not those shares are "restricted securities." "Restricted securities" are any securities acquired from us or one of our affiliates in a transaction not involving a public offering. All shares of our Class A and Class B common stock issued prior to the

## [Table of Contents](#)

closing of this offering, and the shares of Class A common stock that our Class B common stock can be converted into, are considered to be restricted securities. The shares of our Class A common stock sold in this offering are not considered to be restricted securities.

In general, subject to the lock-up agreements described below, beginning 90 days after the effective date of the registration statement of which this prospectus is a part, a person who is an affiliate of ours, or who was an affiliate of ours at any time during the 90 days immediately before a sale can sell restricted shares of our Class A common stock or our Class B common stock in compliance with the following requirements of Rule 144.

*Holding period:* If the shares are restricted securities, an affiliate must have beneficially owned the shares of our Class A or Class B common stock for at least six months.

*Manner of sale:* An affiliate must sell its shares in “broker’s transactions” or certain “riskless principal transactions” or to market makers, each within the meaning of Rule 144.

*Limitation on number of shares sold:* An affiliate is only allowed to sell within any three-month period an aggregate number of shares of our Class A and Class B common stock that does not exceed:

- for our Class B common stock: one percent of the number of the total number of shares of our Class A and Class B common stock then outstanding, which will equal approximately 404,033 shares immediately after this offering; and
- for our Class B common stock converted to Class A common stock and our Class A common stock: the greater of (a) one percent of the number of the aggregate number of shares of our Class A and Class B common stock then outstanding, which will equal approximately 404,033 shares immediately after this offering or (b) the average weekly trading volume in our Class A common stock on the NYSE during the four calendar weeks preceding either (i) to the extent that the seller is required to file a notice on Form 144 with respect to such sale, the date of filing such notice, (ii) date of receipt of the order to execute the transaction by the broker or (iii) the date of execution of the transaction with the market maker.

*Current public information:* An affiliate may only resell its restricted securities to the extent that adequate current public information, as defined in Rule 144, is available about us, which, in our case, means that we have been subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act for a period of at least 90 days prior to the date of the sale and we have filed all reports with the SEC required by those sections during the preceding twelve months (or such shorter period that we have been subject to these filing requirements).

*Notice on Form 144:* If the number of shares of either our Class A or Class B common stock being sold by an affiliate under Rule 144 during any three-month period exceeds 5,000 shares or has an aggregate sale price in excess of \$50,000, then the seller must file a notice on Form 144 with the SEC and the NYSE concurrently with either the placing of a sale order with the broker or the execution directly with a market maker.

### ***Non-Affiliate Resales of Restricted Shares***

Any person or entity who is not an affiliate of ours and who has not been an affiliate of ours at any time during the three months preceding a sale is only required to comply with Rule 144 in connection with sales of restricted shares of our Class A or Class B common stock. Subject to the lock-up agreements described below, those persons may sell shares of our Class A or Class B common stock that they have beneficially owned for at least one year without any restrictions under Rule 144 immediately following the effective date of the registration statement of which this prospectus is a part.

Further, beginning 90 days after the effective date of the registration statement of which this prospectus is a part, a person who is not an affiliate of ours at the time such person sells shares of either our Class A or Class B common stock, and has not been an affiliate of ours at any time during the three months preceding such sale, and who has beneficially owned such shares of our Class A or Class B common stock, as

## Table of Contents

applicable, for at least six months but less than a year, is entitled to sell such shares so long as there is adequate current public information, as defined in Rule 144, available about us.

Resales of restricted shares of our Class A and Class B common stock by non-affiliates are not subject to the manner of sale, volume limitation or notice filing provisions of Rule 144, described above.

### *Rule 701*

Rule 701 under the Securities Act applies to shares purchased from us by our employees, directors or consultants, in connection with a qualified compensatory stock plan or other written agreement, either prior to the date of this prospectus or pursuant to the exercise of options granted prior to the date of this prospectus. Shares issued in reliance on Rule 701 are “restricted securities,” but may be sold in the public market beginning 90 days after the date of this prospectus (i) by our affiliates, subject to compliance with the provisions of Rule 144 other than its one-year holding period requirement, and (ii) by persons other than our affiliates, subject only to the manner of sale provisions of Rule 144.

### **Lock-up Agreements**

Holders of 15,238,776 outstanding shares of our Class A common stock and all of our outstanding shares of Class B common stock, including each of our officers and directors, have agreed with the underwriters, subject to certain exceptions, not to dispose of or hedge any of our Class A or Class B common stock or securities convertible into or exchangeable for shares of our Class A common stock for a period through the date 180 days after the date of this prospectus, as modified as described below, except with the prior written consent of Merrill Lynch, Pierce, Fenner & Smith Incorporated on behalf of the underwriters.

The 180-day restricted period will be automatically extended under the following circumstances:

- if, during the last 17 days of the 180-day restricted period, we issue an earnings release or announce material news or a material event, the restrictions described in the preceding paragraph will continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the announcement of the material news or material event; or
- if, prior to the expiration of the 180-day restricted period, we announce that we will release earnings results or become aware that other material news or a material event will occur during the 16-day period beginning on the last day of the 180-day period, the restrictions described in the preceding paragraph will continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event, as applicable.

Merrill Lynch, Pierce, Fenner & Smith Incorporated currently does not anticipate shortening or waiving any of the lock-up agreements and do not have any pre-established conditions for such modifications or waivers. Merrill Lynch, Pierce, Fenner & Smith Incorporated may, however, release for sale in the public market all or any portion of the shares subject to the lock-up agreement.

In addition, stockholders who purchased shares from us upon exercise of stock options have agreed with us that they will not sell any of their shares for a period through the date 180 days after the date of this prospectus.

### **Stock Options**

As of June 30, 2010, we had outstanding options to purchase 8,641,094 shares of our Class A common stock at a weighted-average exercise price of \$4.06 per share, of which options to purchase 6,693,142 shares were exercisable as of June 30, 2010 (in each case excluding the 932,500 shares of our Class A common stock that will be issued upon the exercise of vested stock options by the selling stockholders in connection with this offering). Following this offering, we intend to file a registration statement on Form S-8 under the Securities Act to register all of the shares subject to outstanding options and options and other awards issuable under the 2000 stock plan and the 2010 stock plan. See “Management—Executive Compensation—Stock Option and Other Compensation Plans” for additional information regarding these plans.

**Registration Rights**

Mr. Sakellaris and Mr. Byrne have registration rights with respect to certain shares of Class A common stock held by, or issuable to, them. See “Related Person Transactions—Registration Rights.” In addition, we have agreed with another stockholder (who beneficially owns less than 1% of our outstanding Class A common stock) that he may include shares of his Class A common stock in a registration statement filed by us that covers shares of stock to be sold by our officers or employees; the terms on which he includes shares in such a registration statement must be no less favorable than those applicable to those officers or employees.

## MATERIAL U.S. FEDERAL TAX CONSIDERATIONS FOR NON-U.S. HOLDERS

The following is a general discussion of material U.S. federal income and estate tax considerations relating to ownership and disposition of our Class A common stock by a non-U.S. holder. For purposes of this discussion, the term "non-U.S. holder" means a beneficial owner of our Class A common stock that is not, for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation, or other entity treated as a corporation for U.S. federal income tax purposes, created or organized in or under the laws of the United States or of any political subdivision of the United States;
- an estate the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust, if a U.S. court is able to exercise primary supervision over the administration of the trust and one or more U.S. persons have authority to control all substantial decisions of the trust or if the trust has a valid election to be treated as a U.S. person under applicable U.S. Treasury Regulations.

An individual may be treated as a resident instead of a nonresident of the United States in any calendar year for U.S. federal income tax purposes if the individual was present in the United States for at least 31 days in that calendar year and for an aggregate of at least 183 days during the three-year period ending with the current calendar year. For purposes of this calculation, all of the days present in the current year, one-third of the days present in the immediately preceding year and one-sixth of the days present in the second preceding year are counted. Residents are taxed for U.S. federal income tax purposes as if they were U.S. citizens.

This discussion is based on current provisions of the Code, existing and proposed U.S. Treasury Regulations promulgated thereunder, current administrative rulings and judicial decisions, all as in effect as of the date of this prospectus and all of which are subject to change or to differing interpretation, possibly with retroactive effect. Any change could alter the tax consequences to non-U.S. holders described in this prospectus. In addition, the Internal Revenue Service, or the IRS, could challenge one or more of the tax consequences described in this prospectus.

We assume in this discussion that each non-U.S. holder holds shares of our Class A common stock as a capital asset (generally, property held for investment). This discussion does not address all aspects of U.S. federal income and estate taxation that may be relevant to a particular non-U.S. holder in light of that non-U.S. holder's individual circumstances nor does it address any aspects of U.S. state, local or non-U.S. taxes. This discussion also does not consider any specific facts or circumstances that may apply to a non-U.S. holder and does not address the special tax rules applicable to particular non-U.S. holders, such as:

- insurance companies;
- tax-exempt organizations;
- financial institutions;
- brokers or dealers in securities;
- regulated investment companies;
- pension plans;
- controlled foreign corporations;
- passive foreign investment companies;
- owners that hold our Class A common stock as part of a straddle, hedge, conversion transaction, synthetic security or other integrated investment; and
- certain U.S. expatriates.

In addition, this discussion does not address the tax treatment of partnerships or persons who hold their Class A common stock through partnerships or other entities which are transparent for U.S. federal income tax purposes. A partner in a partnership or other transparent entity that will hold our Class A common stock should consult his, her or its own tax advisor regarding the tax consequences of the ownership and disposition of our Class A common stock through a partnership or other transparent entity, as applicable.

Prospective investors should consult their own tax advisors regarding the U.S. federal, state, local and non-U.S. income and other tax considerations of acquiring, holding and disposing of our Class A common stock.

#### **Dividends**

If we pay distributions on our Class A common stock, those distributions generally will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. If a distribution exceeds our current and accumulated earnings and profits, the excess will be treated as a tax-free return of the non-U.S. holder's investment, up to such holder's tax basis in the Class A common stock. Any remaining excess will be treated as capital gain, subject to the tax treatment described below under the heading "Gain on Disposition of Class A Common Stock."

Dividends paid to a non-U.S. holder generally will be subject to withholding of U.S. federal income tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence. If we determine, at a time reasonably close to the date of payment of a distribution on our Class A common stock, that the distribution will not constitute a dividend because we do not anticipate having current or accumulated earnings and profits, we intend not to withhold any U.S. federal income tax on the distribution as permitted by U.S. Treasury Regulations.

Dividends that are treated as effectively connected with a trade or business conducted by a non-U.S. holder within the United States, and, if an applicable income tax treaty so provides, that are attributable to a permanent establishment or a fixed base maintained by the non-U.S. holder within the United States, are generally exempt from the 30% withholding tax if the non-U.S. holder satisfies applicable certification and disclosure requirements. However, such U.S. effectively connected income, net of specified deductions and credits, is taxed at the same graduated U.S. federal income tax rates applicable to U.S. persons (as defined in the Code). Any U.S. effectively connected income received by a non-U.S. holder that is a corporation may also, under certain circumstances, be subject to an additional "branch profits tax" at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence.

A non-U.S. holder of our Class A common stock who claims the benefit of an applicable income tax treaty between the United States and such holder's country of residence generally will be required to provide a properly executed IRS Form W-8BEN (or successor form) and satisfy applicable certification and other requirements. Non-U.S. holders are urged to consult their own tax advisors regarding their entitlement to benefits under a relevant income tax treaty.

A non-U.S. holder that is eligible for a reduced rate of U.S. withholding tax under an income tax treaty may obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim with the IRS.

#### **Gain on Disposition of Class A Common Stock**

A non-U.S. holder generally will not be subject to U.S. federal income tax on gain recognized on a disposition of our Class A common stock unless:

- the gain is effectively connected with the non-U.S. holder's conduct of a trade or business in the United States, and, if an applicable income tax treaty so provides, the gain is attributable to a permanent establishment maintained by the non-U.S. holder in the United States; in these cases, the non-U.S. holder will be taxed on a net income basis at the regular graduated rates and in the manner applicable to U.S. persons, and, if the non-U.S. holder is a foreign corporation, an additional branch profits tax at a rate of 30%, or a lower rate as may be specified by an applicable income tax treaty, may also apply;



- the non-U.S. holder is an individual present in the United States for 183 days or more in the taxable year of the disposition and certain other conditions are met, in which case the non-U.S. holder will be subject to a 30% tax (or such lower rate as may be specified by an applicable income tax treaty) on the net gain derived from the disposition; or
- we are or have been, at any time during the five-year period preceding such disposition (or the non-U.S. holder's holding period, if shorter) a "U.S. real property holding corporation" unless our Class A common stock is regularly traded on an established securities market and the non-U.S. holder held no more than five percent of our outstanding Class A common stock, directly or indirectly, during the shorter of the five-year period ending on the date of the disposition or the period that the non-U.S. holder held our Class A common stock. Generally, a corporation is a "U.S. real property holding corporation" if the fair market value of its "U.S. real property interests" equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus its other assets used or held for use in a trade or business. We believe that we are not currently, and we do not anticipate becoming, a "U.S. real property holding corporation" for U.S. federal income tax purposes.

#### **Information Reporting and Backup Withholding Tax**

We must report annually to the IRS and to each non-U.S. holder the gross amount of the distributions on our Class A common stock paid to such holder and the tax withheld, if any, with respect to such distributions. Non-U.S. holders may have to comply with specific certification procedures to establish that the holder is not a U.S. person (as defined in the Code) in order to avoid backup withholding at the applicable rate, currently 28%, with respect to dividends on our Class A common stock. Generally, a holder will comply with such procedures if it provides a properly executed IRS Form W-8BEN or otherwise meets documentary evidence requirements for establishing that it is a non-U.S. holder, or otherwise establishes an exemption.

Information reporting and backup withholding generally will apply to the proceeds of a disposition of our Class A common stock by a non-U.S. holder effected by or through the U.S. office of any broker, U.S. or foreign, unless the holder certifies its status as a non-U.S. holder and satisfies certain other requirements, or otherwise establishes an exemption. Generally, information reporting and backup withholding will not apply to a payment of disposition proceeds to a non-U.S. holder where the transaction is effected outside the United States through a non-U.S. office of a broker. However, for information reporting purposes, dispositions effected through a non-U.S. office of a broker with substantial U.S. ownership or operations generally will be treated in a manner similar to dispositions effected through a U.S. office of a broker. Non-U.S. holders should consult their own tax advisors regarding the application of the information reporting and backup withholding rules to them.

Copies of information returns may be made available to the tax authorities of the country in which the non-U.S. holder resides or is incorporated under the provisions of a specific treaty or agreement.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules from a payment to a non-U.S. holder can be refunded or credited against the non-U.S. holder's U.S. federal income tax liability, if any, provided that an appropriate claim is timely filed with the IRS.

#### **Federal Estate Tax**

Class A common stock owned or treated as owned by an individual who is a non-U.S. holder (as specially defined for U.S. federal estate tax purposes) at the time of death will be included in the individual's gross estate for U.S. federal estate tax purposes and, therefore, may be subject to U.S. federal estate tax, unless an applicable estate tax or other treaty provides otherwise.

The preceding discussion of material U.S. federal tax considerations is for general information only. It is not tax advice. Prospective investors should consult their own tax advisors regarding the particular U.S. federal, state, local and non-U.S. tax consequences of purchasing, holding and disposing of our Class A common stock, including the consequences of any proposed changes in applicable laws.

**UNDERWRITING**

Merrill Lynch, Pierce, Fenner & Smith Incorporated is acting as representative of each of the underwriters named below. Subject to the terms and conditions set forth in a purchase agreement among us, the selling stockholders and the underwriters, we and the selling stockholders have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us and the selling stockholders, the number of shares of Class A common stock set forth opposite its name below.

<u>Underwriter</u>	<u>Number of Shares</u>
Merrill Lynch, Pierce, Fenner & Smith Incorporated	
RBC Capital Markets Corporation	
Oppenheimer & Co. Inc.	
Canaccord Genuity Inc.	
Cantor Fitzgerald & Co.	
Madison Williams and Company LLC	
Stephens Inc.	
Total	<u>8,696,820</u>

Subject to the terms and conditions set forth in the purchase agreement, the underwriters have agreed, severally and not jointly, to purchase all of the shares sold under the purchase agreement if any of these shares are purchased. If an underwriter defaults, the purchase agreement provides that the purchase commitments of the nondefaulting underwriters may be increased or the purchase agreement may be terminated.

We and the selling stockholders have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the underwriters may be required to make in respect of those liabilities.

The underwriters are offering the shares, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the shares, and other conditions contained in the purchase agreement, such as the receipt by the underwriters of officer's certificates and legal opinions. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

**Commissions and Discounts**

The representative has advised us and the selling stockholders that the underwriters propose initially to offer the shares to the public at the public offering price set forth on the cover page of this prospectus and to dealers at that price less a concession not in excess of \$ per share. The underwriters may allow, and the dealers may reallow, a discount not in excess of \$ per share to other dealers. After the initial offering, the public offering price, concession or any other term of the offering may be changed.

The following table shows the public offering price, underwriting discount and proceeds before expenses to us and the selling stockholders. The information assumes either no exercise or full exercise by the underwriters of their overallotment option.

	<u>Per Share</u>	<u>Without Option</u>	<u>With Option</u>
Public offering price	\$	\$	\$
Underwriting discount	\$	\$	\$
Proceeds, before expenses, to us	\$	\$	\$
Proceeds, before expenses, to the selling stockholders	\$	\$	\$

The expenses of the offering, not including the underwriting discount, are estimated at \$2.8 million and are payable by us and the selling stockholders. The underwriters have agreed to reimburse us for certain documented expenses incurred in connection with this offering.

#### **Overallotment Option**

We and the selling stockholders have granted an option to the underwriters to purchase up to 1,304,523 additional shares at the public offering price, less the underwriting discount. The underwriters may exercise this option for 30 days from the date of this prospectus solely to cover any overallotments. If the underwriters exercise this option, each will be obligated, subject to conditions contained in the purchase agreement, to purchase a number of additional shares proportionate to that underwriter's initial amount reflected in the above table.

#### **Reserved Shares**

At our request, the underwriters have reserved for sale, at the initial public offering price, up to 5% of the shares offered by this prospectus for sale to some of our directors, officers, employees, distributors, dealers, business associates and related persons. If these persons purchase reserved shares, this will reduce the number of shares available for sale to the general public. Any reserved shares that are not so purchased will be offered by the underwriters to the general public on the same terms as the other shares offered by this prospectus.

#### **No Sales of Similar Securities**

We and the selling stockholders, our executive officers and directors and our other existing security holders have agreed not to sell or transfer any common stock or securities convertible into, exchangeable for, exercisable for, or repayable with common stock, for 180 days after the date of this prospectus without first obtaining the written consent of Merrill Lynch, Pierce, Fenner & Smith Incorporated. Specifically, we and these other persons have agreed, with certain limited exceptions, not to directly or indirectly

- offer, pledge, sell or contract to sell any common stock;
- sell any option or contract to purchase any common stock;
- purchase any option or contract to sell any common stock;
- grant any option, right or warrant for the sale of any common stock;
- lend or otherwise dispose of or transfer any common stock;
- request or demand that we file a registration statement related to the common stock; or
- enter into any swap or other agreement that transfers, in whole or in part, the economic consequence of ownership of any common stock whether any such swap or transaction is to be settled by delivery of shares or other securities, in cash or otherwise.

We may also issue shares of common stock or securities convertible into, exchangeable for, exercisable for, or repayable with in connection with business combinations or acquisitions of assets or businesses so long as the number of shares issued does not exceed five percent of our common stock outstanding immediately following the closing of this offering.

This lock-up provision applies to common stock and to securities convertible into or exchangeable or exercisable for or repayable with common stock. It also applies to common stock owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition. In the event that either (x) during the last 17 days of the lock-up period referred to above, we issue an earnings release or material news or a material event relating to us occurs or (y) prior to the expiration of the lock-up period, we announce that we will release earnings results or become aware that material news or a material event will occur during the 16-day period beginning on the last day of the lock-up

period, the restrictions described above shall continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event.

**Listing**

Our Class A common stock has been approved for listing on the NYSE under the symbol “AMRC.” In order to meet the requirements for listing on the NYSE exchange, the underwriters have undertaken to sell a minimum number of shares to a minimum number of beneficial owners as required by the NYSE.

Before this offering, there has been no public market for our common stock. The initial public offering price will be determined through negotiations among us, the selling stockholders and the representative. In addition to prevailing market conditions, the factors to be considered in determining the initial public offering price are

- the valuation multiples of publicly-traded companies that the representative believes to be comparable to us;
- our financial information;
- the history of, and the prospects for, our company and the industry in which we compete;
- an assessment of our management, its past and present operations, and the prospects for, and timing of, our future revenue; and
- the above factors in relation to market values and various valuation measures of other companies engaged in activities similar to ours.

An active trading market for the shares may not develop. It is also possible that after the offering the shares will not trade in the public market at or above the initial public offering price.

The underwriters do not expect to sell more than five percent of the shares in the aggregate to accounts over which they exercise discretionary authority.

**Price Stabilization, Short Positions and Penalty Bids**

Until the distribution of the shares is completed, SEC rules may limit underwriters and selling group members from bidding for and purchasing our common stock. However, the representative may engage in transactions that stabilize the price of the common stock, such as bids or purchases to peg, fix or maintain that price.

In connection with the offering, the underwriters may purchase and sell our common stock in the open market. These transactions may include short sales, purchases on the open market to cover positions created by short sales and stabilizing transactions. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering. “Covered” short sales are sales made in an amount not greater than the underwriters’ overallocation option described above. The underwriters may close out any covered short position by either exercising their overallocation option or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the overallocation option. “Naked” short sales are sales in excess of the overallocation option. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of our common stock in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of shares of common stock made by the underwriters in the open market prior to the closing of the offering.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representative has repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

Similar to other purchase transactions, the underwriters' purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. The underwriters may conduct these transactions on the NYSE, in the over-the-counter market or otherwise.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. In addition, neither we nor any of the underwriters make any representation that the representative will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

**Electronic Offer, Sale and Distribution of Shares**

In connection with the offering, certain of the underwriters or securities dealers may distribute prospectuses by electronic means, such as e-mail. In those cases, prospective investors may view offering terms online. Depending upon the particular underwriter, prospective investors may be allowed to place orders online. The underwriters may agree with us to allocate a specific number of shares for sale to online brokerage account holders. Any such allocation for online distributions will be made on the same basis as other allocations.

Other than this prospectus in electronic format, the information concerning any underwriter's web site and any information contained in any other web site maintained by an underwriter is not intended to be part of this prospectus or the registration statement, has not been approved and/or endorsed by us or any underwriter in its capacity as underwriter. Investors should not rely on such information.

In addition, Merrill Lynch, Pierce, Fenner & Smith Incorporated may facilitate Internet distribution for this offering to certain of its Internet subscription customers. Merrill Lynch, Pierce, Fenner & Smith Incorporated may allocate a limited number of shares for sale to its online brokerage customers. An electronic prospectus is available on the Internet web site maintained by Merrill Lynch, Pierce, Fenner & Smith Incorporated. Other than the prospectus in electronic format, the information on the Merrill Lynch, Pierce, Fenner & Smith Incorporated web site is not part of this prospectus.

**Conflicts of Interest**

An affiliate of Merrill Lynch, Pierce, Fenner & Smith Incorporated, one of the underwriters, will receive more than five percent of the net proceeds from this offering when we repay the outstanding balance under our revolving senior secured credit facility, which was \$24.9 million as of March 31, 2010 and \$31.4 million as of June 30, 2010. See "Use of Proceeds." Because of the manner in which the proceeds will be used, the offering will be conducted in accordance with NASD Rule 2720. These rules require, among other things, that a qualified independent underwriter has participated in the preparation of, and has exercised the usual standards of "due diligence" in respect to, the registration statement and this prospectus. Oppenheimer & Co. Inc. has agreed to act as qualified independent underwriter for the offering and to undertake the legal responsibilities and liabilities of an underwriter under the Securities Act of 1933, specifically including those inherent in Section 11 of the Securities Act. Oppenheimer & Co. Inc. will not receive any additional compensation for acting in this capacity in connection with the offering. We and the selling stockholders have agreed to indemnify Oppenheimer & Co. Inc. against liabilities incurred in connection with acting as a qualified independent underwriter, including liabilities under the Securities Act.

**Other Relationships**

Bank of America, N.A., an affiliate of Merrill Lynch, Pierce, Fenner & Smith Incorporated, is the agent and a lender under our revolving senior secured credit facility. Some of the underwriters and their affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with us or our affiliates. They have received, or may in the future receive, customary fees and commissions for these transactions.

**Notice to Prospective Investors in the EEA**

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a “Relevant Member State”) an offer to the public of any shares which are the subject of the offering contemplated by this prospectus may not be made in that Relevant Member State, except that an offer to the public in that Relevant Member State of any shares may be made at any time under the following exemptions under the Prospectus Directive, if they have been implemented in that Relevant Member State:

- (a) to legal entities which are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities;
- (b) to any legal entity which has two or more of (1) an average of at least 250 employees during the last financial year; (2) a total balance sheet of more than €43,000,000 and (3) an annual net turnover of more than €50,000,000, as shown in its last annual or consolidated accounts;
- (c) by the underwriters to fewer than 100 natural or legal persons (other than “qualified investors” as defined in the Prospectus Directive) subject to obtaining the prior consent of the representative for any such offer; or
- (d) in any other circumstances falling within Article 3(2) of the Prospectus Directive;

provided that no such offer of shares shall result in a requirement for the publication by us or any representative of a prospectus pursuant to Article 3 of the Prospectus Directive.

Any person making or intending to make any offer of shares within the EEA should only do so in circumstances in which no obligation arises for us or any of the underwriters to produce a prospectus for such offer. Neither we nor the underwriters have authorized, nor do they authorize, the making of any offer of shares through any financial intermediary, other than offers made by the underwriters which constitute the final offering of shares contemplated in this prospectus.

For the purposes of this provision, and your representation below, the expression an “offer to the public” in relation to any shares in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase any shares, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Relevant Member State and the expression “Prospectus Directive” means Directive 2003/71/EC and includes any relevant implementing measure in each Relevant Member State.

Each person in a Relevant Member State who receives any communication in respect of, or who acquires any shares under, the offer of shares contemplated by this prospectus will be deemed to have represented, warranted and agreed to and with us and each underwriter that:

(A) it is a “qualified investor” within the meaning of the law in that Relevant Member State implementing Article 2(1)(e) of the Prospectus Directive; and

(B) in the case of any shares acquired by it as a financial intermediary, as that term is used in Article 3(2) of the Prospectus Directive, (i) the shares acquired by it in the offering have not been acquired on behalf of, nor have they been acquired with a view to their offer or resale to, persons in any Relevant Member State other than “qualified investors” (as defined in the Prospectus Directive), or in circumstances in which the prior consent of the representative has been given to the offer or resale; or (ii) where shares have been acquired by it on behalf of persons in any Relevant Member State other than qualified investors, the offer of those shares to it is not treated under the Prospectus Directive as having been made to such persons.

In addition, in the United Kingdom, this document is being distributed only to, and is directed only at, and any offer subsequently made may only be directed at persons who are “qualified investors” (as defined in the Prospectus Directive) (i) who have professional experience in matters relating to investments falling within Article 19 (5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as

amended (the “Order”) and/or (ii) who are high net worth companies (or persons to whom it may otherwise be lawfully communicated) falling within Article 49(2) (a) to (d) of the Order (all such persons together being referred to as “relevant persons”). This document must not be acted on or relied on in the United Kingdom by persons who are not relevant persons. In the United Kingdom, any investment or investment activity to which this document relates is only available to, and will be engaged in with, relevant persons.

**Notice to Prospective Investors in Switzerland**

This document, as well as any other material relating to the shares which are the subject of the offering contemplated by this prospectus, do not constitute an issue prospectus pursuant to Article 652a and/or 1156 of the Swiss Code of Obligations. The shares will not be listed on the SIX Swiss Exchange and, therefore, the documents relating to the shares, including, but not limited to, this document, do not claim to comply with the disclosure standards of the listing rules of SIX Swiss Exchange and corresponding prospectus schemes annexed to the listing rules of the SIX Swiss Exchange. The shares are being offered in Switzerland by way of a private placement, *i.e.*, to a small number of selected investors only, without any public offer and only to investors who do not purchase the shares with the intention to distribute them to the public. The investors will be individually approached by the issuer from time to time. This document, as well as any other material relating to the shares, is personal and confidential and do not constitute an offer to any other person. This document may only be used by those investors to whom it has been handed out in connection with the offering described herein and may neither directly nor indirectly be distributed or made available to other persons without express consent of the issuer. It may not be used in connection with any other offer and shall in particular not be copied and/or distributed to the public in (or from) Switzerland.

**Notice to Prospective Investors in the Dubai International Financial Centre**

This document relates to an exempt offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority. This document is intended for distribution only to persons of a type specified in those rules. It must not be delivered to, or relied on by, any other person. The Dubai Financial Services Authority has no responsibility for reviewing or verifying any documents in connection with exempt offers. The Dubai Financial Services Authority has not approved this document nor taken steps to verify the information set out in it, and has no responsibility for it. The shares which are the subject of the offering contemplated by this prospectus may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the shares offered should conduct their own due diligence on the shares. If you do not understand the contents of this document you should consult an authorised financial adviser.

**LEGAL MATTERS**

The validity of the Class A common stock being offered will be passed upon for us by Wilmer Cutler Pickering Hale and Dorr LLP, Boston, Massachusetts. The underwriters are represented by Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., Boston, Massachusetts, in connection with certain legal matters related to this offering.

**EXPERTS**

The consolidated financial statements as of December 31, 2008 and December 31, 2009 and for each of the three years in the period ended December 31, 2009 included in this prospectus have been so included in reliance on the report of Caturano and Company, Inc., an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.



#### WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act of 1933 with respect to the shares of our Class A common stock to be sold in this offering. This prospectus, which constitutes part of the registration statement, does not include all of the information contained in the registration statement and the exhibits, schedules and amendments to the registration statement. Some items are omitted in accordance with the rules and regulations of the SEC. For further information with respect to us and our Class A common stock, we refer you to the registration statement and to the exhibits and schedules to the registration statement filed as part of the registration statement. Statements contained in this prospectus about the contents of any contract or any other document filed as an exhibit are not necessarily complete and in each instance we refer you to the copy of the contract or other documents filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference.

You may read and copy the registration statement of which this prospectus is a part at the SEC's public reference room, which is located at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You can request copies of the registration statement by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the SEC's public reference room. In addition, the SEC maintains an Internet website, located at [www.sec.gov](http://www.sec.gov), which contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. You may access the registration statement of which this prospectus is a part at the SEC's Internet website.

Upon the closing of the offering, we will become subject to the full informational and periodic reporting requirements of the Exchange Act. We will fulfill our obligations with respect to such requirements by filing periodic reports and other information with the SEC. These documents will also be publicly available, free of charge, on our website, [www.ameresco.com](http://www.ameresco.com). We intend to furnish our stockholders with annual reports containing consolidated financial statements certified by an independent registered public accounting firm.

[Table of Contents](#)

AMERESCO, INC.

Index to Consolidated Financial Statements

<a href="#">Report of Independent Registered Public Accounting Firm</a>	F-2
<a href="#">Consolidated Balance Sheets as of December 31, 2008 and December 31, 2009</a>	F-3
<a href="#">Consolidated Statements of Income and Comprehensive Income for the years ended December 31, 2007, December 31, 2008 and December 31, 2009</a>	F-4
<a href="#">Consolidated Statements of Changes in Stockholders' Equity for the years ended December 31, 2007, December 31, 2008 and December 31, 2009</a>	F-5
<a href="#">Consolidated Statements of Cash Flows for the years ended December 31, 2007, December 31, 2008 and December 31, 2009</a>	F-6
<a href="#">Notes to Consolidated Financial Statements</a>	F-8
<a href="#">Condensed Consolidated Balance Sheets as of December 31, 2009 and March 31, 2010 (unaudited)</a>	F-36
<a href="#">Condensed Consolidated Statements of Income and Comprehensive Income for the three months ended March 31, 2009 (unaudited) and March 31, 2010 (unaudited)</a>	F-37
<a href="#">Condensed Consolidated Statements of Changes in Stockholders' Equity for the three months ended March 31, 2010 (unaudited)</a>	F-38
<a href="#">Condensed Consolidated Statements of Cash Flows for the three months ended March 31, 2009 (unaudited) and March 31, 2010 (unaudited)</a>	F-39
<a href="#">Notes to Condensed Consolidated Financial Statements (unaudited)</a>	F-40

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Board of Directors and  
Stockholders of Ameresco, Inc. and Subsidiaries

We have audited the accompanying consolidated balances sheets of Ameresco, Inc. and Subsidiaries as of December 31, 2009 and 2008, and the related consolidated statements of income and comprehensive income, changes in stockholders' equity and cash flows for each of the three years in the period ended December 31, 2009. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal controls over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's controls over financial reporting. Accordingly, we express no such opinion. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Ameresco, Inc. and Subsidiaries as of December 31, 2009 and 2008, and the results of their operations and their cash flows for each of the years in the period ended December 31, 2009, in conformity with U.S. generally accepted accounting principles.

/s/ Caturano and Company, Inc.  
CATURANO AND COMPANY, INC.

July 20, 2010

Boston, Massachusetts

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**AMERESCO, INC.**  
**CONSOLIDATED BALANCE SHEETS**

	December 31,	
	2008	2009
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 18,149,145	\$ 47,927,540
Restricted cash	7,743,238	9,249,885
Accounts receivable, net	49,073,084	61,279,515
Accounts receivable retainage	12,907,288	9,242,288
Costs and estimated earnings in excess of billings	9,755,691	14,009,076
Inventory, net	7,460,671	4,237,909
Prepaid expenses and other current assets	6,368,279	8,077,761
Deferred income taxes	9,540,208	9,279,473
Project development costs	10,434,641	8,468,974
Total current assets	<u>131,432,245</u>	<u>171,772,421</u>
Federal ESPC receivable financing	25,585,217	51,397,347
Property and equipment, net	3,713,218	4,373,256
Project assets, net	103,053,353	117,637,990
Deferred financing fees, net	1,032,506	3,582,560
Goodwill	13,640,265	16,132,429
Other assets	13,570,169	10,648,605
	<u>160,594,728</u>	<u>203,772,187</u>
	<u>\$ 292,026,973</u>	<u>\$ 375,544,608</u>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Current portion of long-term debt	\$ 5,142,757	\$ 8,093,016
Accounts payable	46,387,522	75,578,378
Accrued expenses	16,367,193	18,362,674
Billings in excess of cost and estimated earnings	20,860,311	28,166,364
Income taxes payable	2,209,386	2,129,529
Total current liabilities	<u>90,967,169</u>	<u>132,329,961</u>
Long-term debt, less current portion	90,980,463	102,807,203
Subordinated debt	2,998,750	2,998,750
Deferred income taxes	12,160,724	11,901,645
Deferred grant income (Note 5)	—	4,158,508
Other liabilities	20,833,612	18,578,754
	<u>126,973,549</u>	<u>140,444,860</u>
Commitments and contingencies (Note 13)		
Stockholders' equity:		
Series A convertible preferred stock, \$0.0001 par value, 3,500,000 shares authorized, 3,210,000 shares issued and outstanding	321	321
Common stock, \$0.0001 par value, 60,000,000 shares authorized, 14,260,168 shares issued and 9,688,784 outstanding at December 31, 2008, 17,998,168 shares issued and 13,282,284 outstanding at December 31, 2009	1,426	1,800
Additional paid-in capital	4,346,077	10,466,312
Retained earnings	77,975,837	97,882,985
Less — treasury stock, at cost, 4,571,384 shares and 4,715,884 shares, respectively	(7,538,653)	(8,413,601)
Accumulated other comprehensive (loss) income	(698,753)	2,831,970
Total stockholders' equity	<u>74,086,255</u>	<u>102,769,787</u>
	<u>\$ 292,026,973</u>	<u>\$ 375,544,608</u>

AMERESCO, INC  
CONSOLIDATED STATEMENTS OF INCOME AND COMPREHENSIVE INCOME

	Year Ended December 31,		
	2007	2008	2009
Revenue:			
Energy efficiency revenue	\$ 345,935,912	\$ 325,031,789	\$ 340,635,122
Renewable energy revenue	32,541,298	70,821,940	87,881,467
	<u>378,477,210</u>	<u>395,853,729</u>	<u>428,516,589</u>
Direct expenses:			
Energy efficiency expenses	285,966,267	259,018,970	282,344,502
Renewable energy expenses	26,071,557	59,550,958	66,472,031
	<u>312,037,824</u>	<u>318,569,928</u>	<u>348,816,533</u>
Gross profit	<u>66,439,386</u>	<u>77,283,801</u>	<u>79,700,056</u>
Operating expenses:			
Salaries and benefits	25,892,212	30,288,750	28,273,987
Project development costs	8,062,996	13,106,407	9,599,862
General, administrative and other	13,087,106	9,212,872	16,532,355
	<u>47,042,314</u>	<u>52,608,029</u>	<u>54,406,204</u>
Operating income	<u>19,397,072</u>	<u>24,675,772</u>	<u>25,293,852</u>
Other (expense) income, net (Note 16)	<u>(3,138,067)</u>	<u>(5,187,545)</u>	<u>1,562,910</u>
Income before provision for income taxes	16,259,005	19,488,227	26,856,762
Income tax provision	<u>(5,713,590)</u>	<u>(1,215,127)</u>	<u>(6,949,614)</u>
Net income	<u>10,545,415</u>	<u>18,273,100</u>	<u>19,907,148</u>
Other comprehensive income (loss):			
Foreign currency translation adjustment	3,306,152	(5,059,128)	3,530,723
Comprehensive income	<u>\$ 13,851,567</u>	<u>\$ 13,213,972</u>	<u>\$ 23,437,871</u>
Net income per share attributable to common shareholders			
Basic	\$ 0.95	\$ 1.71	\$ 1.99
Diluted	\$ 0.28	\$ 0.54	\$ 0.61
Weighted average common shares outstanding			
Basic	11,121,022	10,678,110	9,991,912
Diluted	37,552,953	33,990,547	32,705,617

**AMERESCO, INC.**  
**CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY**

	Series A Preferred Stock		Common Stock		Additional Paid-in Capital	Retained Earnings	Treasury Stock		Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
	Shares	Amount	Shares	Amount			Shares	Amount		
Balance, December 31, 2006	3,210,000	\$ 321	14,080,168	\$ 1,408	\$ 6,583,437	\$ 49,426,862	2,504,000	\$ (103,239)	\$ 1,054,223	\$ 56,963,012
Cumulative effect of change in accounting	—	—	—	—	—	(269,540)	—	—	—	(269,540)
Repurchase of restricted stock	—	—	—	—	—	—	728,050	(2,521,245)	—	(2,521,245)
Exercise of stock options	—	—	152,000	15	74,000	—	—	—	—	74,015
Stock-based compensation expense	—	—	—	—	2,678,638	—	—	—	—	2,678,638
Foreign currency translation adjustment	—	—	—	—	—	—	—	—	3,306,152	3,306,152
Net income	—	—	—	—	—	10,545,415	—	—	—	10,545,415
Balance, December 31, 2007	3,210,000	\$ 321	14,232,168	\$ 1,423	\$ 9,336,075	\$ 59,702,737	3,238,050	\$ (2,624,484)	\$ 4,360,375	\$ 70,776,447
Repurchase of stock	—	—	—	—	—	—	1,333,334	(4,914,169)	—	(4,914,169)
Repurchase of warrants	—	—	—	—	(7,998,001)	—	—	—	—	(7,998,001)
Exercise of stock options	—	—	28,000	3	67,247	—	—	—	—	67,250
Stock-based compensation expense	—	—	—	—	2,940,756	—	—	—	—	2,940,756
Foreign currency translation adjustment	—	—	—	—	—	—	—	—	(5,059,128)	(5,059,128)
Net income	—	—	—	—	—	18,273,100	—	—	—	18,273,100
Balance, December 31, 2008	3,210,000	\$ 321	14,260,168	\$ 1,426	\$ 4,346,077	\$ 77,975,837	4,571,384	\$ (7,538,653)	\$ (698,753)	\$ 74,086,255
Vesting of 2006 stock issuance	—	—	2,000,000	200	2,076,928	—	—	—	—	2,077,128
Repurchase of restricted stock	—	—	—	—	—	—	144,500	(874,948)	—	(874,948)
Exercise of stock options	—	—	1,738,000	174	874,586	—	—	—	—	874,760
Stock-based compensation expense	—	—	—	—	3,168,721	—	—	—	—	3,168,721
Foreign currency translation adjustment	—	—	—	—	—	—	—	—	3,530,723	3,530,723
Net income	—	—	—	—	—	19,907,148	—	—	—	19,907,148
Balance, December 31, 2009	3,210,000	\$ 321	17,998,168	\$ 1,800	\$ 10,466,312	\$ 97,882,985	4,715,884	\$ (8,413,601)	\$ 2,831,970	\$ 102,769,787

AMERESCO, INC.  
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
	2007	2008	2009
Cash flows from operating activities:			
Net income	\$ 10,545,415	\$ 18,273,100	\$ 19,907,148
Adjustments to reconcile net income to cash provided by operating activities:			
Depreciation of project assets	2,845,131	2,713,407	5,260,805
Depreciation of property and equipment	1,056,197	1,064,859	1,372,885
Impairment of projects assets	1,997,003	3,500,000	—
Amortization of deferred financing fees	323,587	238,454	254,705
Provision for bad debts	208,159	1,092,294	552,368
Gain relating to certain business acquisitions	—	(5,850,479)	—
Gain on sale of assets	(2,300,217)	—	(691,292)
Unrealized (gain) loss on interest rate swaps	1,365,813	2,831,524	(2,263,802)
Stock-based compensation expense	2,678,638	2,940,756	3,168,721
Deferred income taxes	(3,630,780)	(2,071,600)	3,400,628
Changes in operating assets and liabilities:			
(Increase) decrease in:			
Restricted cash draws	20,720,436	25,519,347	33,051,426
Accounts receivable	(8,063,037)	(3,227,279)	(11,033,926)
Accounts receivable retainage	(3,692,345)	(115,488)	5,029,832
Federal ESPC receivable financing	(9,320,783)	(26,301,019)	(52,900,979)
Inventory	(63,196)	(3,821,507)	3,222,762
Costs and estimated earnings in excess of billings	7,163,330	3,939,285	(3,651,857)
Prepaid expenses and other current assets	2,830,274	(2,337,926)	(1,591,213)
Project development costs	(2,851,011)	(3,623,396)	1,987,761
Other assets	(200,471)	(1,934,563)	3,846,224
Increase (decrease) in:			
Accounts payable and accrued expenses	(4,019,297)	(2,472,682)	27,280,548
Billings in excess of cost and estimated earnings	9,847,732	(4,602,608)	6,819,869
Other liabilities	6,224,033	(6,932,531)	8,945
Income taxes payable	(3,404,810)	2,525,472	2,264,752
Net cash provided by operating activities	<u>30,259,801</u>	<u>1,347,420</u>	<u>45,296,310</u>
Cash flows from investing activities:			
Purchases of property and equipment	(1,789,416)	(1,863,243)	(1,797,949)
Purchases of project assets	(21,019,927)	(41,158,695)	(19,841,648)
Acquisitions, net of cash received	(10,780,467)	—	(674,110)
Net cash used in investing activities	<u>(33,589,810)</u>	<u>(43,021,938)</u>	<u>(22,313,707)</u>

**AMERESCO, INC.**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS — (Continued)**

	Year Ended December 31,		
	2007	2008	2009
<b>Cash flows from financing activities:</b>			
Payments of financing fees	(73,652)	(880,044)	(2,804,759)
Proceeds from exercise of stock options	74,015	67,250	874,760
Repurchase of stock	(2,521,245)	(4,914,169)	(874,948)
Repurchase of warrants	—	(7,998,001)	—
Proceeds from (repayments of) revolving senior secured credit facility	—	34,493,460	(14,578,242)
Repayment of senior secured term and revolving credit facility	(2,500,000)	(2,500,000)	—
Proceeds from long-term debt financing	6,173,948	9,277,043	28,196,538
Restricted cash	—	(2,400,580)	(3,092,590)
Payments of long-term debt	(4,382,782)	(2,940,368)	(3,592,073)
Net cash (used in) provided by financing activities	<u>\$ (3,229,716)</u>	<u>\$ 22,204,591</u>	<u>\$ 4,128,686</u>
Effect of exchange rate changes on cash	<u>\$ 1,998,055</u>	<u>\$ (3,273,211)</u>	<u>\$ 2,667,108</u>
Net (decrease) increase in cash and cash equivalents	<u>(4,561,670)</u>	<u>(22,743,138)</u>	<u>29,778,395</u>
Cash and cash equivalents, beginning of year	45,453,953	40,892,283	18,149,145
Cash and cash equivalents, end of year	<u>\$ 40,892,283</u>	<u>\$ 18,149,145</u>	<u>\$ 47,927,540</u>
<b>Supplemental disclosure of cash flow information:</b>			
Cash paid during the period for:			
Interest	<u>\$ 2,481,849</u>	<u>\$ 2,431,534</u>	<u>\$ 2,904,970</u>
Income taxes	<u>\$ 8,063,883</u>	<u>\$ 5,304,148</u>	<u>\$ 2,145,742</u>
<b>Supplemental disclosure of noncash investing and financing transactions:</b>			
Acquisitions, net of cash received:			
Accounts receivable	\$ 2,419,386	\$ —	\$ —
Inventory	3,575,968	—	—
Prepays and other assets	132,500	—	18,177
Property and equipment	78,613	—	113,842
Goodwill	7,645,805	—	2,492,165
Accounts payable	(2,440,437)	—	(345,181)
Accrued expenses	(422,839)	—	(1,222,340)
Long-term debt, net	—	—	(382,553)
Other liabilities	(208,529)	—	—
	<u>\$ 10,780,467</u>	<u>\$ —</u>	<u>\$ 674,110</u>
Noncash ESPC receivable financing	<u>\$ 21,957,882</u>	<u>\$ 11,925,101</u>	<u>\$ 27,088,849</u>



AMERESCO, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

**1. DESCRIPTION OF BUSINESS**

Ameresco, Inc. and subsidiaries (the, "Company") was organized as a Delaware corporation on April 25, 2000. The Company is a provider of energy efficiency solutions for facilities throughout North America. The Company operates in one business segment — providing solutions, both products and services, that enable customers to reduce their energy consumption, lower their operating and maintenance costs and realize environmental benefits. The Company's comprehensive set of services includes upgrades to a facility's energy infrastructure and the construction and operation of small-scale renewable energy plants. It also sells certain photovoltaic equipment worldwide. The Company operates in the United States, Canada, and Europe.

The Company is compensated through a variety of methods, including: 1) direct payments based on fee-for-services contracts (utilizing lump-sum or cost-plus pricing methodologies); 2) the sale of energy from the Company's generating assets; and 3) direct payment for photovoltaic equipment and systems.

**2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

***Codification***

The accompanying consolidated financial statements have been prepared in accordance with accounting standards set by the Financial Accounting Standards Board ("FASB"). The FASB sets generally accepted accounting principles ("GAAP") that the Company follows to ensure its financial condition, results of operations, and cash flows are consistently reported. References to GAAP issued by the FASB in these notes to the consolidated financial statements are to the FASB Accounting Standards Codification ("ASC"), which was effective for the Company in 2009.

A summary of the significant accounting policies consistently applied in the preparation of the accompanying consolidated financial statements follows.

***Principles of Consolidation***

The accompanying consolidated financial statements include the accounts of Ameresco, Inc. and its wholly-owned subsidiaries. All significant intercompany accounts and transactions have been eliminated. Gains and losses from the translation of all foreign currency financial statements are recorded in the accumulated other comprehensive income (loss) account within stockholders' equity.

***Stock Split***

Prior to the consummation of the initial public offering of the Company's Class A common stock, the number of authorized shares of common stock was increased to 60,000,000. In addition, all common share and per share amounts in the consolidated financial statements and notes thereto have been restated to reflect a two-for-one stock split effected on July 20, 2010.

***Use of Estimates***

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. The most significant estimates with regard to these consolidated financial statements relate to the estimation of final construction contract profit in accordance with accounting for long-term contracts, allowance for doubtful accounts, inventory reserves, project development costs, fair value of derivative financial instruments and stock-based awards, impairment of long lived assets, income taxes and estimating potential liability in conjunction with certain commitments and contingencies. Actual results could differ from those estimates.

## AMERESCO, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

**Cash and Cash Equivalents**

Cash includes cash on deposit, overnight repurchase agreements, and amounts invested in highly liquid money market funds. Cash equivalents consist of short term investments with original maturities of three months or less. The Company maintains accounts with financial institutions and the balances in such accounts, at times, exceed federally insured limits. This credit risk is divided among a number of financial institutions that management believes to be of high quality. The carrying amount of cash and cash equivalents approximates their fair value.

**Restricted Cash**

Restricted cash consists of cash held in an escrow account in association with construction draws for energy savings performance contracts (“ESPCs”), as well as cash required under term loans to be maintained in debt service reserve accounts until all obligations have been indefeasibly paid in full.

**Accounts Receivable**

Accounts receivable are stated at the amount management expects to collect from outstanding balances. An allowance for doubtful accounts is provided for those accounts receivable considered to be uncollectible based upon historical experience and management’s evaluation of outstanding accounts receivable at the end of the year. Bad debts are written off against the allowance when identified. Changes in the allowance for doubtful accounts for the years ended December 31, 2007, 2008 and 2009 are as follows:

	2007	2008	2009
Balance at beginning of period	\$ 1,331,280	\$ 1,539,439	\$ 1,049,711
Charges to costs and expenses	249,631	385,418	1,670,589
Account write-offs and other deductions	(41,472)	(875,146)	(1,118,221)
Balance at end of period	<u>\$ 1,539,439</u>	<u>\$ 1,049,711</u>	<u>\$ 1,602,079</u>

At each of December 31, 2008 and 2009, the Company had one customer that accounted for approximately 12% and 14%, respectively, of the Company’s total accounts receivable.

**Accounts Receivable Retainage**

Accounts receivable retainage represents amounts due from customers, but where payments are withheld contractually until certain construction milestones are met. Amounts retained typically range from five percent to ten percent of the total invoice.

**Inventory**

Inventories, which consist of photovoltaic solar panels, batteries and related accessories, are stated at the lower of cost (“first-in, first-out” method) or market (determined on the basis of estimated realizable values). Provisions have been made to reduce the carrying value to the realizable value.

**Prepaid Expenses**

Prepaid expenses consist primarily of short-term prepaid expenditures that will amortize within one year.

**Federal ESPC Receivable Financing**

Federal ESPC receivable financing represents the amount to be paid by various federal government agencies for work performed and earned by the Company under specific ESPCs. The Company assigns certain of its rights to receive those payments to third-party lenders that provide construction and permanent financing for such contracts. The receivable is recognized as revenue as each project is constructed. Upon completion

## AMERESCO, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

and acceptance of the project by the government, the assigned ESPC receivable and corresponding related project debt are eliminated from the Company's financial statements.

**Project Development Costs**

The Company capitalizes as project development costs only those costs incurred in connection with the development of energy projects, primarily direct labor, interest costs, outside contractor services, consulting fees, legal fees and travel, if incurred after a point in time where the realization of related revenue becomes probable. Project development costs incurred prior to the probable realization of revenue are expensed as incurred. The Company classifies project development costs as a current asset as the development efforts are expected to proceed to construction activity in the twelve months that follow.

**Property and Equipment**

Property and equipment consists primarily of office and computer equipment. These assets are recorded at cost. Major additions and improvements are capitalized as additions to the property and equipment accounts, while replacements, maintenance and repairs that do not improve or extend the life of the respective assets, are expensed as incurred. Depreciation and amortization of property and equipment are computed on a straight-line basis over the following estimated useful lives:

<u>Asset Classification</u>	<u>Estimated Useful Life</u>
Furniture and office equipment	Five years
Computer equipment and software costs	Five years
Leasehold improvements	Lesser of term of lease or five years
Automobiles	Five years

**Project Assets**

Project assets consist of costs of materials, direct labor, interest costs, outside contract services and project development costs incurred in connection with the construction of small-scale renewable energy plants that the Company owns and the implementation of energy savings contracts. These amounts are capitalized and amortized over the lives of the related assets or the terms of the related contracts.

The Company capitalizes interest costs relating to construction financing during the period of construction. The interest capitalized is included in the total cost of the project at completion. The amount of interest capitalized for the years ended December 31, 2007, 2008 and 2009 was \$0, \$233,767 and \$1,395,483, respectively.

Routine maintenance costs are expensed in the current year's consolidated statements of income and comprehensive income to the extent that they do not extend the life of the asset. Major maintenance, upgrades and overhauls are required for certain components of the Company's assets. In these instances, the costs associated with these upgrades are capitalized and are depreciated over the shorter of the life of the asset or until the next required major maintenance or overhaul period. Gains or losses on disposal of property and equipment are reflected in general, administrative and other expenses in the consolidated statements of income and comprehensive income.

The Company evaluates its long-lived assets for impairment as events or changes in circumstances indicate the carrying value of these assets may not be fully recoverable. The Company evaluates recoverability of long-lived assets to be held and used by estimating the undiscounted future cash flows before interest associated with the expected uses and eventual disposition of those assets. When these comparisons indicate that the carrying value of those assets is greater than the undiscounted cash flows, the Company recognizes an impairment loss for the amount that the carrying value exceeds the fair value.

During 2007, the Company decommissioned one of its landfill gas ("LFG") energy facilities as the power sales agreement with the local utility company expired in December 2006. During 2007, the plant was

AMERESCO, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

temporarily shut down. The plant equipment had been in service for 20 years and the cost of maintaining the aged equipment was economically unfeasible. The remaining book value of approximately \$2.0 million was written off, and is included in direct expenses in the accompanying consolidated statements of income and comprehensive income for 2007.

During 2008, the Company determined that impairment had occurred on two of its LFG facilities. One facility's landfill owner was experiencing permanent operational issues with its existing well field equipment. The volume of LFG supplied to the Company's facility was impaired by this factor, resulting in a write-down of the asset value. The second facility's industrial customer filed for bankruptcy in 2008. The Company assessed the likelihood of the industrial customer emerging from bankruptcy and the resulting impact on future cash flows to the project in determining the amount of the impairment. A total of \$3,500,000 was written down for these two facilities, and is included in direct expenses in the accompanying consolidated statements of income and comprehensive income for 2008.

**Deferred Financing Fees**

Deferred finance fees relate to the external costs incurred to obtain financing for the Company. All deferred financing fees are amortized over the respective term of the financing.

**Goodwill**

The Company has classified as goodwill the excess of fair value of the net assets (including tax attributes) of companies acquired in purchase transactions. The Company assesses the impairment of goodwill and intangible assets with indefinite lives on an annual basis (December 31<sup>st</sup>) and whenever events or changes in circumstances indicate that the carrying value of the asset may not be recoverable. The Company would record an impairment charge if such an assessment were to indicate that, more likely than not, the fair value of such assets was less than their carrying values. Judgment is required in determining whether an event has occurred that may impair the value of goodwill or identifiable intangible assets.

Factors that could indicate that an impairment may exist include significant underperformance relative to plan or long-term projections, significant changes in business strategy, significant negative industry or economic trends or a significant decline in the base stock price of our public competitors for a sustained period of time.

The first step (defined as "Step 1") of the goodwill impairment test, used to identify potential impairment, compares the fair value of the equity with its carrying amount, including goodwill. If the fair value of the equity exceeds its carrying amount, goodwill of the reporting unit is considered not impaired, thus the second step of the impairment test is unnecessary. If the carrying amount of a reporting unit exceeds its fair value, the second step of the goodwill impairment test shall be performed to measure the amount of impairment loss, if any. The Company performed a Step 1 test at its annual testing dates of December 31, 2007, 2008 and 2009, and determined that the fair value of equity exceeded the carrying value of equity, therefore goodwill was not impaired.

The Company completed its Step 1 test utilizing both an income approach and a market approach. The discounted cash flow method is used to measure the fair value of equity under the income approach. A terminal value utilizing a constant growth rate of cash flows was used to calculate a terminal value after the explicit projection period. Determining the fair value using a discounted cash flow method requires the Company to make significant estimates and assumptions, including long-term projections of cash flows, market conditions and appropriate discount rates. The Company's judgments are based upon historical experience, current market trends, pipeline for future sales, and other information. While the Company believes that the estimates and assumptions underlying the valuation methodology are reasonable, different estimates and assumptions could result in a different outcome. In estimating future cash flows, the Company relies on internally generated projections for a defined time period for sales and operating profits, including

AMERESCO, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

capital expenditures, changes in net working capital, and adjustments for non-cash items to arrive at the free cash flow available to invested capital.

Under the market approach, the Company estimates the fair value based on market multiples of revenue and earnings of comparable publicly-traded companies and comparable transactions of similar companies. The estimates and assumptions used in the calculations include revenue growth rates, expense growth rates, expected capital expenditures to determined projected cash flows, expected tax rates and an estimated discount rate to determine present value of expected cash flows. These estimates are based on historical experiences, projections of future operating activity and weighted average cost of capital.

In addition, the Company periodically reviews the estimated useful lives of identifiable intangible assets, taking into consideration any events or circumstances that might result in either a diminished fair value or revised useful life. If the “Step 1” test concludes an impairment is indicated, the Company will employ a second step to measure the impairment. If the Company determines that an impairment has occurred, the Company will record a write-down of the carrying value and charge the impairment as an operating expense in the period the determination is made. Although the Company believes goodwill and intangible assets are appropriately stated in the accompanying consolidated financial statements, changes in strategy or market conditions could significantly impact these judgments and require an adjustment to the recorded balance.

**Other Assets**

Other assets consist primarily of notes and contracts receivable due to the Company.

**Asset Retirement Obligations**

The Company recognizes a liability for the fair value of required asset retirement obligations (“AROs”) when such obligations are incurred. The liability is estimated on a number of assumptions requiring management’s judgment, including equipment removal costs, site restoration costs, salvage costs, cost inflation rates and discount rates and is accreted to its projected future value over time. The capitalized asset is depreciated using the convention of depreciation of plant assets. Upon satisfaction of the ARO conditions, any difference between the recorded ARO liability and the actual retirement cost incurred is recognized as an operating gain or loss in the consolidated statements of income and comprehensive income. As of December 31, 2007, 2008 and 2009, the Company had no AROs.

**Other Liabilities**

Other liabilities consist primarily of deferred revenue related to multi-year operation and maintenance contracts which expire as late as 2031. Other liabilities also include the fair value of derivatives.

**Revenue Recognition**

The Company derives revenue from energy efficiency and renewable energy products and services. Energy efficiency products and services include the design, engineering, and installation of equipment and other measures to improve the efficiency, and control the operation, of a facility’s energy infrastructure. Renewable energy products and services include the construction of small-scale plants that produce electricity, gas, heat or cooling from renewable sources of energy, the sale of such electricity, gas, heat or cooling from plants that the Company owns, and the sale and installation of solar energy products and systems.

Revenue from the installation or construction of projects is recognized on a percentage-of-completion basis. The percentage-of-completion for each project is determined on an actual cost-to-estimated final cost basis. Maintenance revenue is recognized as related services are performed. In accordance with industry practice, the Company includes in current assets and liabilities the amounts of receivables related to construction projects realizable and payable over a period in excess of one year. The Company recognizes

AMERESCO, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

revenue associated with contract change orders only when the authorization for the change order has been properly executed and the work has been performed and accepted by the customer.

When the estimate on a contract indicates a loss, or claims against costs incurred reduce the likelihood of recoverability of such costs, the Company records the entire expected loss immediately, regardless of the percentage of completion.

Billings in excess of costs and estimated earnings represents advanced billings on certain construction contracts. Costs and estimated earnings in excess of billings under customer contracts represent certain amounts that were earned and billable but not invoiced at December 31, 2008 and 2009.

The Company sells certain products and services in bundled arrangements, where multiple products and/or services are involved. The Company divides bundled arrangements into separate deliverables and revenue is allocated to each deliverable based on the relative fair value of all elements. The fair value is determined based on the price of the deliverable sold on a stand-alone basis.

The Company recognizes revenue from the sale and delivery of products, including the output from renewable energy plants, when produced and delivered to the customer, in accordance with specific contract terms, provided that persuasive evidence of an arrangement exists, the Company's price to the customer is fixed or determinable and collectibility is reasonably assured.

The Company recognizes revenue from O&M contracts and consulting services as the related services are performed.

For a limited number of contracts under which the Company receives additional revenue based on a share of energy savings, such additional revenue is recognized as energy savings are generated.

**Direct Expenses**

Direct expenses include the cost of labor, materials, equipment, subcontracting and outside engineering that are required for the development and installation of projects, as well as preconstruction costs, sales incentives, associated travel, inventory obsolescence charges, and, if applicable, costs of procuring financing. A majority of the Company's contracts have fixed price terms; however, in some cases the Company negotiates protections, such as a cost-plus structure, to mitigate the risk of rising prices for materials, services and equipment.

Direct expenses also include the costs of maintaining and operating the small-scale renewable energy plants that the Company owns, including the cost of fuel (if any) and depreciation charges.

**Income Taxes**

The Company provides for income taxes based on the liability method. The Company provides for deferred income taxes based on the expected future tax consequences of differences between the financial statement basis and the tax basis of assets and liabilities calculated using the enacted tax rates in effect for the year in which the differences are expected to be reflected in the tax return.

The Company accounts for uncertain tax positions using a "more-likely-than-not" threshold for recognizing and resolving uncertain tax positions. The evaluation of uncertain tax positions is based on factors that include, but are not limited to, changes in tax law, the measurement of tax positions taken or expected to be taken in tax returns, the effective settlement of matters subject to audit, new audit activity and changes in facts or circumstances related to a tax position. The Company evaluates uncertain tax positions on a quarterly basis and adjusts the level of the liability to reflect any subsequent changes in the relevant facts surrounding the uncertain positions. The Company's liabilities for uncertain tax positions can be relieved only if the contingency becomes legally extinguished through either payment to the taxing authority or the expiration of

AMERESCO, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

the statute of limitations, the recognition of the benefits associated with the position meet the “more-likely-than-not” threshold or the liability becomes effectively settled through the examination process. The Company considers matters to be effectively settled once the taxing authority has completed all of its required or expected examination procedures, including all appeals and administrative reviews; the Company has no plans to appeal or litigate any aspect of the tax position; and the Company believes that it is highly unlikely that the taxing authority would examine or re-examine the related tax position. The Company also accrues for potential interest and penalties, related to unrecognized tax benefits in income tax expense.

**Foreign Currency Translation**

The local currency of the Company’s foreign operations is considered the functional currency of such operations. All assets and liabilities of the Company’s foreign operations are translated into U.S. dollars at year-end exchange rates. Income and expense items are translated at average exchange rates prevailing during the year. Translation adjustments are accumulated as a separate component of stockholders’ equity. Foreign currency translation gains and losses are reported in the consolidated statements of income and comprehensive income.

**Financial Instruments**

Financial instruments consist of cash and cash equivalents, restricted cash, accounts receivable, long-term contract receivables, accounts payable, long-term debt and interest rate swaps. The estimated fair value of cash and cash equivalents, restricted cash, accounts receivable, long-term contract receivables and accounts payable approximates their carrying value. See below for fair value measurements of long-term debt. See Note 17 for fair value of interest rate swaps.

**Stock-Based Compensation Expense**

Stock-based compensation expense results from the issuances of shares of restricted common stock and grants of stock options and warrants to employees, directors, outside consultants and others. The Company recognizes the costs associated with restricted stock, option and warrant grants using the fair value recognition provisions of ASC 718, Compensation — Stock Compensation (formerly SFAS No. 123(R), Share-Based Payment) on a straight-line basis over the vesting period of the awards.

Stock-based compensation expense is recognized based on the grant-date fair value. The Company estimates the fair value of the stock-based awards, including stock options, using the Black-Scholes option-pricing model. Determining the fair value of stock-based awards requires the use of highly subjective assumptions, including the fair value of the common stock underlying the award, the expected term of the award and expected stock price volatility.

The assumptions used in determining the fair value of stock-based awards represent management’s estimates, which involve inherent uncertainties and the application of management judgment. As a result, if factors change, and different assumptions are employed, the stock-based compensation could be materially different in the future. The risk-free interest rates are based on the U.S. Treasury yield curve in effect at the time of grant, with maturities approximating the expected life of the stock options. The Company has no history of paying dividends. Additionally, as of each of the grant dates, there was no expectation to pay dividends over the expected life of the options. The expected life of the awards is estimated using historical data and management’s expectations. Because there was no public market for the Company’s common stock prior to this offering, management lacked company-specific historical and implied volatility information. Therefore, estimates of expected stock volatility were based on that of publicly-traded peer companies, and it is expected that the Company will continue to use this methodology until such time as there is adequate historical data regarding the volatility of the Company’s publicly-traded stock price.

AMERESCO, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The Company is required to recognize compensation expense for only the portion of options that are expected to vest. Actual historical forfeiture rate of options is based on employee terminations and the number of shares forfeited. These data and other qualitative factors are considered by the Company in determining to use a 25% forfeiture rate in recognizing stock compensation expense. If the actual forfeiture rate varies from historical rates and estimates, additional adjustments to compensation expense may be required in future periods. If there are any modifications or cancellations of the underlying unvested securities or the terms of the stock option, it may be necessary to accelerate, increase or cancel any remaining unamortized stock-based compensation expense.

The Company also accounts for equity instruments issued to non-employee directors and consultants at fair value. All transactions in which goods or services are the consideration received for the issuance of equity instruments are accounted for based on the fair value of the consideration received or the fair value of the equity instrument issued, whichever is more reliably measurable. The measurement date of the fair value of the equity instrument issued is the date on which the counterparty's performance is complete. No awards to individuals who were not either an employee or director of the Company occurred during the years ended December 31, 2007, 2008 and 2009.

**Fair Value Measurements**

On January 1, 2007, the Company adopted the guidance for fair value measurements. The guidance defines fair value, establishes a framework for measuring fair value in accordance with generally accepted accounting principles and expands disclosures about fair value measurements. In addition, in 2009, the Company adopted fair value measurements for all of its non-financial assets and non-financial liabilities, except for those recognized at fair value in the financial statements at least annually. These assets include goodwill and long-lived assets measured at fair value for impairment assessments, and non-financial assets and liabilities initially measured at fair value in a business combination. The Company's adoption of this guidance did not have a material impact on its consolidated financial statements.

The Company's financial instruments include cash and cash equivalents, accounts and notes receivable, interest rate swaps, accounts payable, accrued expenses, equity-based liabilities and short-and long-term borrowings. Because of their short maturity, the carrying amounts of cash and cash equivalents, accounts and notes receivable, accounts payable, accrued expenses and short-term borrowings approximate fair value. The carrying value of long-term variable-rate debt approximates fair value. As of December 31, 2009, the carrying value of the Company's fixed-rate long-term debt exceeds its fair value by approximately \$741,000. This is based on quoted market prices or on rates available to the Company for debt with similar terms and maturities.

The Company accounts for its interest rate swaps as derivative financial instruments in accordance with the related guidance. Under this guidance, derivatives are carried on the consolidated balance sheets at fair value. The fair value of the Company's interest rate swaps are determined based on observable market data in combination with expected cash flows for each instrument.

**Derivative Financial Instruments**

Effective January 1, 2009, the Company adopted new guidance which expands the disclosure requirements for derivative instruments and hedging activities.

In the normal course of business, the Company utilizes derivatives contracts as part of its risk management strategy to manage exposure to market fluctuations in interest rates. These instruments are subject to various credit and market risks. Controls and monitoring procedures for these instruments have been established and are routinely reevaluated. Credit risk represents the potential loss that may occur because a party to a transaction fails to perform according to the terms of the contract. The measure of credit exposure



## AMERESCO, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

is the replacement cost of contracts with a positive fair value. The Company seeks to manage credit risk by entering into financial instrument transactions only through counterparties that the Company believes to be creditworthy. Market risk represents the potential loss due to the decrease in the value of a financial instrument caused primarily by changes in interest rates. The Company seeks to manage market risk by establishing and monitoring limits on the types and degree of risk that may be undertaken. As a matter of policy, the Company does not use derivatives for speculative purposes. The Company considers the use of derivatives with all financing transactions to mitigate risk.

During 2009, the Company purchased an interest rate cap from a major bank to mitigate effects of rising interest rates on a fixed rate customer contract for \$2.2 million. The Company terminated the agreement in 2009 and realized a gain of \$2.5 million. The Company did not designate this derivative as a cash flow hedge; therefore hedge accounting was not applied.

A portion of the Company's project financing includes two projects that utilize an interest rate swap instrument. During 2007, the Company entered into two fifteen-year interest rate swap contracts under which the Company agreed to pay an amount equal to a specified fixed rate of interest times a notional principal amount, and to in turn receive an amount equal to a specified variable rate of interest times the same notional principal amount.

The Company did not apply hedge accounting based upon the criteria established by the related guidance as the Company did not designate its derivatives as cash flow hedges. The Company recognizes all derivatives in the consolidated balance sheets and statements of income and comprehensive income at fair value. Cash flows from derivative instruments are reported as operating activities on the consolidated statements of cash flows.

With respect to the Company's interest rate swaps, the Company recorded the unrealized gain (loss) in earnings in 2007, 2008 and 2009, of approximately \$(1,365,813), \$(2,831,524) and \$2,263,802, respectively, as other (expenses) income in the consolidated statements of income and comprehensive income.

See Notes 16, 17 and 18 for additional information on the Company's derivative instruments.

***Earnings Per Share***

Basic earnings per share is calculated using the Company's weighted-average outstanding common shares, including vested restricted shares. When the effects are not anti-dilutive, diluted earnings per share is calculated using the weighted-average outstanding common shares and the dilutive effect of preferred stock, warrants and stock options as determined under the treasury stock method.

	Year Ended December 31,		
	2007	2008	2009
Basic and diluted net income	\$ 10,545,415	\$ 18,273,100	\$ 19,907,148
Basic weighted-average shares outstanding	11,121,022	10,678,110	9,991,912
Effect of dilutive securities			
Preferred stock	19,260,000	19,260,000	19,260,000
Stock options	3,576,712	3,647,523	3,048,675
Warrants	3,595,219	404,914	405,030
Diluted weighted-average shares outstanding	37,552,953	33,990,547	32,705,617

## AMERESCO, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

**Business Segments**

The Company reports four segments: U.S. federal, central U.S. region, other U.S. regions and Canada. Each segment provides customers with energy efficiency and renewable energy solutions. The other U.S. regions segment is an aggregation of three regions: northeast U.S., southeast U.S. and southwest U.S. These regions have similar economic characteristics — in particular, expected and actual gross profit margins. In addition, they sell products and services of a similar nature, serve similar types of customers and use similar methods to distribute their products and services. Accordingly, these three regions meet the aggregation criteria set forth in ASC 280. The “all other” category includes activities, such as O&M and sales of renewable energy and certain other renewable energy products, that are managed centrally at the Company’s corporate headquarters. It also includes all corporate operating expenses — salary and benefits, project development costs and general administrative and other — not specifically allocated to the segments. For the years ended December 31, 2007, 2008 and 2009, unallocated corporate expenses were \$28,761,803, \$31,938,110 and \$25,090,295, respectively. Income before taxes and unallocated corporate expenses for all other in 2007, 2008 and 2009 was \$18,297,472, \$21,265,539 and \$21,318,368, respectively. See Note 19.

**Recent Accounting Pronouncements**

In 2009, the FASB issued an accounting pronouncement establishing the ASC as the source of authoritative accounting principles recognized by the FASB to be applied by non-governmental entities. This pronouncement was effective for financial statements issued for interim and annual periods ending after September 15, 2009, for most entities. On the effective date, all non-SEC accounting and reporting standards were superseded. The Company adopted this new accounting pronouncement during 2009, and it did not have a material impact on the Company’s consolidated financial statements.

In May 2009, the FASB issued guidance on subsequent events, which sets forth general standards of accounting for and disclosure of events that occur after the balance sheet date but before financial statements are issued or are available to be issued. The Company adopted the guidance during 2009, and it did not have a material impact on the Company’s consolidated financial statements.

In January 2010, the FASB issued guidance on improving disclosures about fair value measurements. This guidance has new requirements for disclosures related to recurring or nonrecurring fair-value measurements including significant transfers into and out of Level 1 and Level 2 fair-value measurements and information on purchases, sales, issuances and settlements in a rollforward reconciliation of Level 3 fair-value measurements. This guidance is effective for the first reporting period beginning after December 15, 2009, and, as a result, it was effective for the Company beginning January 1, 2010. The Level 3 reconciliation disclosures are effective for fiscal years beginning after December 15, 2010, which will be effective for the Company for the year ending December 31, 2011. The Company does not expect its adoption of the guidance to have a material impact on its consolidated financial statements.

In September 2009, the FASB issued guidance related to revenue arrangements with multiple deliverables as codified in ASC 605, Revenue Recognition (“ASC 605”). ASC 605 provides greater ability to separate and allocate arrangement consideration in a multiple element revenue arrangement. In addition, ASC 605 requires the use of estimated selling price to allocate arrangement considerations, therefore eliminating the use of the residual method of accounting. ASC 605 will be effective for fiscal years beginning after June 15, 2010 and may be applied retrospectively or prospectively for new or materially modified arrangements. Earlier application is permitted. The Company does not expect its adoption of this guidance will have a material effect on its consolidated financial statements.

## AMERESCO, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

**3. BUSINESS ACQUISITIONS AND RELATED TRANSACTIONS**

On May 2, 2007, the Company entered into a stock purchase agreement to expand its product lines and operations. The Company paid \$11.5 million in cash to acquire the stock of Southwestern Photovoltaic, Inc., \$10.8 million, net of cash received.

On September 18, 2009, the Company entered into a share purchase agreement with Byrne Engineering, Inc. ("Byrne"). The Company made an initial cash payment of \$674,110 to acquire the stock of Byrne. The agreement also provides for an earn out which is estimated to be \$1,222,340. The total fair value of the consideration is \$1,896,450.

The 2007 acquisition was accounted for using the purchase method of accounting. The 2009 acquisition was accounted for using the acquisition method in accordance with ASC-805, Business Combinations. The purchase price has been allocated to the assets based on their estimated fair values at the date of acquisition. The excess purchase price over the estimated fair value of the net assets acquired has been recorded as goodwill. In each acquisition, identified intangible assets had de minimis value as the Company was primarily acquiring an assembled workforce in addition to the tangible net assets identified below.

	2007	2008	2009
Cash	\$ 692,007	\$ —	\$ —
Accounts receivable	2,419,386	—	—
Inventory	3,575,968	—	—
Prepaid expenses and other current assets	132,500	—	18,177
Property and equipment	78,613	—	113,842
Goodwill	7,645,805	—	2,492,165
Accounts payable	(2,440,437)	—	(345,181)
Accrued liabilities	(422,839)	—	(1,222,340)
Long-term debt, net	—	—	(382,553)
Other liabilities	(208,529)	—	—
Purchase price	\$ 11,472,474	\$ —	\$ 674,110
Total, net of cash received	\$ 10,780,467	\$ —	\$ 674,110
Total fair value of consideration	\$ 11,472,474	\$ —	\$ 1,896,450

The allocation of the purchase price for the 2007 acquisition is final and is based on management's best estimates. During 2008, no acquisitions or related transactions occurred. The allocation of the purchase price for 2009 is preliminary, as the settlement of the pre-existing litigation and contractual disputes that existed at the 2009 acquisition date may vary from estimates in the purchase price allocation.

The results of the acquired companies since the date of the acquisitions have been included in the Company's operations as presented in the accompanying consolidated statements of income and comprehensive income and consolidated statements of cash flows. Pro forma financial information has not been presented as the acquisitions are not material. The revenue and pre-tax loss of Byrne in 2009 was \$1,176,953 and \$97,138, respectively, following the acquisition date.

## AMERESCO, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

**4. PROPERTY AND EQUIPMENT**

Property and equipment consisted of the following at December 31, 2008 and 2009:

	<u>2008</u>	<u>2009</u>
Furniture and office equipment	\$ 1,211,596	\$ 1,271,569
Computer equipment and software costs	6,903,526	8,453,230
Leasehold improvements	823,635	1,311,625
Automobiles	424,088	505,029
	<u>9,362,845</u>	<u>11,541,453</u>
Less — accumulated depreciation	5,649,627	7,168,197
Property and equipment, net	<u>\$ 3,713,218</u>	<u>\$ 4,373,256</u>

Depreciation expense on property and equipment for the years ended December 31, 2007, 2008 and 2009 was approximately \$1,056,197, \$1,064,859 and \$1,372,885, respectively, and is included in general, administrative and other expenses in the accompanying consolidated statements of income and comprehensive income.

**5. PROJECT ASSETS**

Project assets consisted of the following at December 31, 2008 and 2009:

	<u>2008</u>	<u>2009</u>
Project assets	\$ 117,935,266	\$ 137,957,879
Less — accumulated depreciation and amortization	14,881,913	20,319,889
Project assets, net	<u>\$ 103,053,353</u>	<u>\$ 117,637,990</u>

In 2009, the Company received \$12,864,644 in grant awards from the U.S. Treasury Department (the "Treasury") under Section 1603 of the 2009 American Recovery and Reinvestment Act (the Act). The Act authorizes the Treasury to make payments to eligible persons who place in service qualifying renewable energy projects. The grants are paid in lieu of investment tax credits. All of the proceeds from the grants were used and recorded as a reduction in the cost basis of the applicable project assets. If the Company disposes of the property, or the property ceases to qualify as a specified energy property, within five years from the date the property is placed in service, then a prorated portion of the Section 1603 payment must be repaid. For tax purposes, the Section 1603 payments are not included in federal and certain state taxable income and the basis of the property is reduced by 50% of the payment received. Deferred grant income of \$4,158,508 in the accompanying consolidated balance sheets at December 31, 2009, represents the benefit of the basis difference to be amortized to income tax expense over the life of the related property.

Depreciation and amortization expense on the above project assets for the years ended December 31, 2007, 2008 and 2009 was approximately \$2,845,131, \$2,713,407 and \$5,260,821, respectively, and is included in direct expenses in the accompanying consolidated statements of income and comprehensive income.

AMERESCO, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

6. UNCOMPLETED CONTRACTS

Costs, estimated earnings and related billings on uncompleted contracts at December 31, 2008 and 2009, respectively, are as follows:

	2008	2009
Cost incurred to date	\$ 510,818,791	\$ 822,280,622
Estimated earnings	96,436,131	161,849,274
	607,254,922	984,129,896
Less — billings to date	(618,359,542)	(998,287,184)
	<u>\$ (11,104,620)</u>	<u>\$ (14,157,288)</u>

Included in the accompanying consolidated balance sheets are the following at December 31, 2008 and 2009:

	2008	2009
Costs and estimated earnings in excess of billings on uncompleted contracts	\$ 9,755,691	\$ 14,009,076
Billings in excess of costs and estimated earnings on uncompleted contracts	(20,860,311)	(28,166,364)
	<u>\$ (11,104,620)</u>	<u>\$ (14,157,288)</u>

7. LONG-TERM DEBT

Long-term debt at December 31, 2008 and 2009 consisted of the following:

	2008	2009
Federal ESPC receivable financing	\$ 29,234,584	\$ 33,411,009
Revolving senior secured credit facility, due June 2011, interest at varying rates monthly in arrears	34,493,460	19,915,218
7.299% term note payable in quarterly installments through March 2013	5,132,000	4,115,000
6.90% term loan payable in quarterly installments through September 2014	6,248,569	5,415,426
8.673% term loan payable in quarterly installments through December 2015	6,035,625	5,220,000
6.345% term loan payable in quarterly installments through February 2021	3,039,683	2,901,845
6.345% term loan payable in quarterly installments through June 2024	11,939,299	12,866,491
Variable rate construction to term loan due September 2024	—	27,055,230
	96,123,220	110,900,219
Less — current maturities	5,142,757	8,093,016
Long-term debt	<u>\$ 90,980,463</u>	<u>\$ 102,807,203</u>

## AMERESCO, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Aggregate maturities of long-term debt are as follows for the years ended December 31,:

2010	\$	8,093,016
2011		22,754,963
2012		3,023,020
2013		2,360,278
2014		1,685,031
Thereafter		72,983,911
	\$	<u>110,900,219</u>

**Federal ESPC Receivable Financing**

Represents construction draws received during the construction or installation of certain energy savings equipment or facilities in association with agreements to sell long-term receivables arising from ESPCs related to said equipment and facilities. These financings are with financial institutions and carry discount rates that vary by project ranging from 6.5% to 8.9%.

**Revolving Senior Secured Credit Facilities**

On June 10, 2008, the Company entered into a credit and security agreement with a bank, consisting of a \$50,000,000 revolving facility. The agreement requires the Company to pay monthly interest at various rates in arrears, based on the amount outstanding. At December 31, 2009, the weighted-average interest rate was 3.34%. This facility has a maturity date of June 30, 2011. At December 31, 2008 and 2009, \$34,493,460 and \$19,915,218, respectively, was outstanding under the facility. The agreement contains various restrictive covenants and is secured by a lien on all of the assets of the Company other than renewable energy projects that the Company owns and that are financed by others.

On December 29, 2004, the Company entered into a credit and security agreement with a bank, consisting of a \$10,000,000 term loan and a \$15,000,000 revolving facility. The agreement required the Company to pay interest at various rates in arrears, based on the amounts outstanding. The term loan was payable in quarterly principal installments of \$625,000, beginning in March 2005 and continuing through June 10, 2008, the amended maturity date of the term loan. The term loan and revolving facility matured and was paid in full on June 10, 2008.

At December 31, 2007, the term loan had a balance of \$2,500,000, and \$0 was outstanding under the revolving loan. The agreement contained various restrictive covenants and was secured by a lien on all of the assets of the Company other than renewable energy projects that the Company owns and that are financed by others.

**7.299% Term Loan**

The Company has a term loan with a bank with an original principal amount of \$10,000,000. The notes evidencing the loan bear interest at a rate of 7.299%. The principal payments are due in semi-annual installments ranging from \$404,000 to \$638,500, plus interest, with remaining principal balances and unpaid interest due March 31, 2013. In the event a payment is defaulted on, the payee has the option to accelerate payment terms and make due the remaining principal and accrued interest balance. As of December 31, 2008 and 2009, \$5,132,000 and \$4,115,000, respectively, was outstanding under the term loan.

AMERESCO, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

**6.90% Term Loan**

The Company has a construction and term loan with a bank with an original principal amount of \$9,500,000. The notes evidencing the loan bear interest at a rate of 6.90%. The principal payments are due in semi-annual installments ranging from \$306,000 to \$698,000, plus interest, with remaining principal balances and unpaid interest due September 30, 2014. In the event a payment is defaulted on, the payee has the option to accelerate payment terms and make due the remaining principal and accrued interest balance. As of December 31, 2009, the Company was in default of one of its covenants, as the offtaker/counterparty of one of the underlying LFG facilities was working through Chapter 11 bankruptcy. The Company is currently working with the bank to renegotiate the facility. Renegotiations are ongoing and expected to be completed during the second quarter of 2010. The debt is recourse to the subsidiary only and there are no cross-default provisions. The Company has classified the entire debt as current on the accompanying consolidated balance sheets as of December 31, 2009. As of December 31, 2008 and 2009, \$6,248,569 and \$5,415,426, respectively, was outstanding under the term loan.

**8.673% Term Loan**

The Company has a construction and term loan agreement with a finance company with a total commitment amount of \$7,250,000. The notes evidencing the construction portion of the loan bear interest at a variable rate based on LIBOR. In February 2007, the Company converted the construction loan into a term loan in accordance with the loan agreement. The original balance of the term loan was equal to the commitment amount and bears interest at a fixed rate of 8.673%. The principal payments are due in quarterly installments ranging from \$96,000 to \$217,500, plus interest, with remaining principal balances and unpaid interest due December 31, 2015.

As of December 31, 2008 and 2009, \$6,035,625 and \$5,220,000, respectively, was outstanding under the term loan. In the event a payment is defaulted on, the payee has the option to accelerate payment terms and make due the remaining principal and accrued interest balance.

**Variable-Rate Construction and 6.345% Term Loans**

On January 30, 2006, the Company entered into a master construction and term loan facility with a bank for use in providing limited recourse financing for certain of its LFG to energy projects. The total loan commitment is \$17,156,395, and is comprised initially of two tranches, but structured for the addition of subsequent projects that meet lender credit requirements.

The first loan has an original balance of \$3,239,734, and bears an interest rate of 6.345%. The principal payments are due in semi-annual installments ranging from \$32,000 to \$275,000, plus interest, with the remaining principal and unpaid interest due February 26, 2021.

The second loan was originated on September 28, 2007. During 2007 and 2008, the Company made draws as construction loans under the facility totaling \$11,939,299, the amount outstanding at December 31, 2008. During 2009, the Company drew additional amounts totaling \$1,141,308. The Company converted the construction loans into a term loan in August 2009 for a total term loan balance of \$13,080,607. The loan bears interest at a variable rate and matures on June 30, 2024. As of December 31, 2008 and 2009, \$14,978,982 and \$15,768,336, respectively, was collectively outstanding under this facility.

In the event a payment is defaulted on, the payee has the option to accelerate payment terms and make due the remaining principal and accrued interest balance.

**Variable-Rate Construction and Term Loan**

In February 2009, the Company entered into a construction and term loan financing agreement with a bank for use in providing limited resource financing for certain of its landfill gas to energy projects. The total

## AMERESCO, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

loan commitment under the agreement is \$37,905,983, and bears interest at a variable rate. The rate at December 31, 2009 was 3.74%. As of December 31, 2009, \$27,055,230 in construction loans was outstanding under the agreement. See Note 19.

**Other**

On December 31, 2007, in a refinancing and securitization transaction, the Company sold certain long-term receivables, contract rights and refinanced certain project finance debt acquired and assumed during the Company's 2006 acquisition. The investors and securitization trusts have no recourse to the Company for failure of the debtors to pay when due. The Company recognized a gain of approximately \$2.3 million on this transaction, which is included in energy efficiency revenue on the accompanying consolidated statements of income and comprehensive income in 2007.

**8. SUBORDINATED DEBT**

In connection with the organization of the Company, on May 17, 2000, the Board of Directors authorized the Company to issue a subordinated note to the Company's principal and controlling shareholder in the amount of \$2,998,750. The subordinated note bears interest at the rate of 10.00% per annum, payable monthly in arrears, and is subordinated to the Company's senior secured credit facility. The subordinated note is payable upon demand, subject to the subordination agreement described below. The Company incurred interest related to the subordinated note during the years ended December 31, 2007, 2008 and 2009, of \$300,000, \$300,000 and \$300,000, respectively.

In conjunction with the Company entering into the senior secured credit facility (see Note 7), the holder of the subordinated note entered into an Intercreditor Subordination Agreement. Under the agreement, the subordinated lender agreed that the payment of principal, interest and all other charges with respect to the subordinated note is expressly subordinated in right of payment to the prior payment and satisfaction in full of the revolving senior secured credit facility. The intercreditor subordination agreement allows for the payment of interest on the subordinated note provided the Company is in compliance with all other covenants.

At December 31, 2009, the Company did not have any intention to make principal payments on the subordinated note and thus the subordinated note has been classified as long-term in the accompanying consolidated balance sheets.

**9. INCOME TAXES**

The components of domestic and foreign income before income taxes as of December 31, 2007, 2008 and 2009 are as follows:

	<u>2007</u>	<u>2008</u>	<u>2009</u>
Domestic	\$ 10,194,751	\$ 15,333,845	\$ 22,702,229
Foreign	6,064,254	4,154,382	4,154,533
	<u>\$ 16,259,005</u>	<u>\$ 19,488,227</u>	<u>\$ 26,856,762</u>



## AMERESCO, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The income tax provision for the years ended December 31, 2007, 2008 and 2009 is as follows:

	2007	2008	2009
Current:			
Federal	\$ 5,214,147	\$ (565,975)	\$ (1,415,107)
State	1,522,594	1,862,654	548,246
Foreign	2,607,629	1,990,048	4,146,311
	<u>9,344,370</u>	<u>3,286,727</u>	<u>3,279,450</u>
Deferred:			
Federal	(2,483,856)	(3,517,257)	7,095,001
State	(1,146,924)	(1,029,898)	587,252
Foreign	—	2,475,555	(4,012,089)
	<u>(3,630,780)</u>	<u>(2,071,600)</u>	<u>3,670,164</u>
	<u>\$ 5,713,590</u>	<u>\$ 1,215,127</u>	<u>\$ 6,949,614</u>

The Company's deferred income tax assets and liabilities result primarily from temporary differences between financial reporting and tax recognition of depreciation, reserves, and certain accrued liabilities. Deferred income tax assets and liabilities at December 31, 2008 and 2009 consist of the following:

	2008	2009
Deferred income tax assets:		
Compensation accruals	\$ 3,745,551	\$ 1,852,578
Reserves	431,672	1,940,919
Other accruals	3,058,596	2,500,316
Net operating losses	—	877,518
Goodwill	349,654	76,270
State items	264,467	444,523
Interest rate swaps	1,690,268	801,180
Credits	—	786,169
Gross deferred income tax assets	<u>9,540,208</u>	<u>9,279,473</u>
Deferred income tax liabilities:		
Depreciation	(4,430,097)	(7,645,315)
Contract refinancing	(3,749,313)	(3,147,505)
Canada	(3,981,314)	(338,435)
Acquisition accounting	—	(770,390)
Gross deferred income tax liabilities	<u>(12,160,724)</u>	<u>(11,901,645)</u>
Deferred income tax assets and liabilities, net	<u>\$ (2,620,516)</u>	<u>\$ (2,622,172)</u>

AMERESCO, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The provision for income taxes is based on the various rates set by federal and local authorities and is affected by permanent and temporary differences between financial accounting and tax reporting requirements. The following is a reconciliation of the effective tax rates for 2007, 2008 and 2009:

	2007	2008	2009
Income before income tax	\$ 16,259,005	\$ 19,488,227	\$ 26,856,762
Federal statutory tax expense	\$ 5,690,652	\$ 6,820,879	\$ 9,399,917
State income taxes, net of federal benefit	748,190	595,632	1,259,719
Net state impact of deferred rate change	—	(141,358)	(997,011)
Meals and entertainment	66,986	87,068	88,798
Stock-based compensation expense	131,621	177,972	459,439
Energy efficiency preferences	(1,212,142)	(7,965,383)	(2,973,669)
Foreign items and rate differential	210,140	1,359,105	(413,467)
Other state benefits	—	—	(309,752)
Miscellaneous	78,143	281,212	435,640
	<u>\$ 5,713,590</u>	<u>\$ 1,215,127</u>	<u>\$ 6,949,614</u>

	2007	2008	2009
Effective tax rate:			
Federal statutory rate expense	35.0%	35.0%	35.0%
State income taxes, net of federal benefit	4.6%	3.1%	4.7%
Net state impact of deferred rate change	—%	(.7)%	(3.7)%
Meals and entertainment	.4%	.4%	.3%
Stock-based compensation expense	.8%	.9%	1.7%
Energy efficiency preferences	(7.5)%	(40.9)%	(11.1)%
Foreign rate differential	1.3%	7.0%	(1.5)%
Other state benefits	—%	—%	(1.2)%
Miscellaneous	.5%	1.4%	1.6%
	<u>35.1%</u>	<u>6.2%</u>	<u>25.8%</u>

The Company adopted ASC 740-10 — Uncertain Tax Positions as of January 1, 2007, as required. As a result, the Company recorded a cumulative effect related to adopting ASC 740-10 through retained earnings of approximately \$270,000.

The Company had a gross unrecognized tax benefit of \$4,500,000 and \$4,400,000 at December 31, 2008 and 2009, respectively. The Company also had accrued interest and penalties of approximately \$800,000 and \$1,100,000 for years ended December 31, 2008 and 2009, respectively.

A reconciliation of the beginning and ending balances of the total amounts of gross unrecognized tax benefits for the years ended December 31, 2008 and 2009 is as follows:

	2008	2009
Balance, beginning of year	\$ 3,500,000	\$ 4,500,000
Additions for prior year tax positions	1,300,000	100,000
Settlements paid to tax authorities	—	—
Reductions of prior year tax positions	(300,000)	(200,000)
Balance, end of year	<u>\$ 4,500,000</u>	<u>\$ 4,400,000</u>

AMERESCO, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

At December 31, 2009, the Company had net operating loss carryforwards of \$2.1 million, which will expire from 2011 through 2029.

The tax years 2006 through 2009 remain open to examination by major taxing jurisdictions. The Company accounts for interest and penalties related to uncertain tax positions as part of its provision for federal and state income taxes.

**10. STOCKHOLDERS' EQUITY**

*Stock Split*

Prior to the consummation of the initial public offering of the Company's Class A common stock, the number of authorized shares of common stock was increased to 60,000,000. In addition, all common share and per share amounts in the consolidated financial statements and notes thereto have been restated to reflect a two-for-one stock split effected on July 20, 2010.

*Common Stock*

The Company has authorized 60,000,000 shares of common stock, par value \$0.0001 per share ("Common Stock"), as of December 31, 2009. Each share of Common Stock entitles the holder to one vote on all matters submitted to a vote of the Company's stockholders. Holders of Common Stock are entitled to receive dividends, if any, as declared by the Company's board of directors, subject to any preferential dividend rights of the Preferred Stock ("Preferred Stock").

*Preferred Stock*

The Company issued 3,220,000 shares of Series A Preferred Stock (the "Series A Preferred Stock") during the period from inception (April 25, 2000) to December 31, 2000. The Series A Preferred Stock was issued to several officers of the Company as well as a related party at a price of \$1.00 per share. Each share of Series A Preferred Stock is convertible, at the option of the holder, at any time and from time to time and without the payment of additional consideration by the holder, into three fully paid and nonassessable shares of Common Stock. On any matter presented to the stockholders of the Company, each holder of outstanding shares of Series A Preferred Stock is entitled to the number of votes equal to the number of whole shares of Common Stock into which the Series A Preferred Stock are convertible. The Company had authorized 3,500,000 shares of Series A Preferred Stock, par value \$0.0001 per share, as of December 31, 2009.

The Company is not permitted to declare or pay any cash dividends on shares of Common Stock until the holders of shares of Series A Preferred Stock have first received a cash dividend on each outstanding share of Preferred Stock in an amount at least equal to the product of the per share amount and the whole number of common shares into which such shares of Series A Preferred Stock are then convertible. Additionally, all Series A Preferred Stock holders receive preferential treatment in the event of the liquidation or dissolution of the Company. During the year ended December 31, 2002, 10,000 shares of Series A Preferred Stock were converted into 30,000 shares of Common Stock and repurchased by the Company. These shares have been recorded, at cost, as treasury stock in the accompanying consolidated statements of changes in stockholders' equity. Dividends were not declared in 2007, 2008 or 2009.

*Warrants*

As part of a previous debt agreement, the Company issued fully vested warrants to acquire 2,000,000 and 1,600,000 shares of common stock in 2001 and 2002, respectively. The warrants have an exercise price of \$0.005 and \$0.30, respectively. The warrants may be exercised upon cash payment determined by multiplying the number of shares exercised by the warrant price. The warrants are entitled to receive a proportionate share of any distributions made to holders of the Common Stock. The warrants will expire on June 29, 2011.

AMERESCO, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

During 2008, the Company repurchased a selected number of warrants at an estimated average market value of \$2.505 per share. There were a total of 3,194,714 warrants repurchased at a total net price of \$7,998,001. This transaction is recorded in additional paid-in capital in the accompanying consolidated balance sheets for 2008.

*Share Repurchases*

On April 27, 2007, the Company repurchased a selected number of shares of Common Stock from certain employees at \$3.41 per share. There were 734,050 shares repurchased at a total net price of \$2,521,245.

During 2008, through three separate transactions, the Company repurchased 1,333,334 shares of Common Stock from certain employees and stockholders at \$3.315 per share, or a total net price of \$4,914,169. The repurchased shares are recorded as treasury stock in the accompanying consolidated balance sheets for 2008.

During 2009, the Company repurchased 144,500 shares of Common Stock from an employee at \$6.055 per share, or a total net price of \$874,948. The repurchased shares are recorded as treasury stock in the accompanying consolidated balance sheets for 2009.

**11. STOCK INCENTIVE PLAN**

On October 27, 2000, the Company's Board of Directors approved the Company's 2000 Stock Incentive Plan (the "Plan") and authorized the Company to reserve 12,000,000 shares of common stock for issuance under the Plan. On August 7, 2001 and April 25, 2002, the Company's Board of Directors authorized the Company to reserve an additional 4,000,000 shares of common stock for issuance under the Plan, bringing the total number of shares of common stock reserved under the Plan to 16,000,000. On June 1, 2003 and October 25, 2006, the Company's Board of Directors authorized the Company to reserve an additional 4,500,000 shares of common stock for issuance under the Plan, bringing the total number of shares of common stock reserved under the Plan to 20,500,000. The Plan provides for the issuance of restricted stock grants, incentive stock options and nonqualified stock options. On July 22, 2009, the Company's Board of Directors authorized the Company to reserve an additional 8,000,000 shares of common stock for issuance under the Plan, bringing the total number of shares of common stock reserved under the Plan to 28,500,000.

*Grants of Restricted Shares*

On October 25, 2006, the Company issued 2,000,000 shares of restricted stock to the Company's principal and controlling shareholder under the 2000 Stock Incentive Plan as consideration for providing an indemnification to the Company's surety provider (see Note 15). The shares vested entirely upon the date three years from the date of grant. The stock was issued when the fair value was estimated to be \$3.41 per share. The Company recorded an expense of \$2,273,333, \$2,273,333 and \$1,856,036 in 2007, 2008 and 2009, respectively, related to this award. On October 25, 2009, these shares vested. The Company recorded excess tax benefits of \$2,077,128 related to the vesting of these shares in the accompanying consolidated statements of changes in stockholders' equity in 2009.

## AMERESCO, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

*Stock Option Grants*

The Company has also granted stock options to certain employees and directors under the Plan. At December 31, 2009, 8,445,600 shares were available for grant under the Plan. The following table summarizes the activity under the Plan:

	Number of Options	Weighted- Average Exercise Price
Outstanding at December 31, 2006	10,013,300	\$ 1.705
Granted	1,407,000	3.93
Exercised	(152,000)	(0.485)
Forfeited	(225,800)	(2.94)
Outstanding at December 31, 2007	11,042,500	1.98
Granted	303,000	5.60
Exercised	(28,000)	(2.40)
Forfeited	(582,000)	(2.945)
Outstanding at December 31, 2008	10,735,500	2.03
Granted	862,000	6.055
Exercised	(1,738,000)	(0.505)
Forfeited	(409,300)	(2.02)
Outstanding at December 31, 2009	9,450,200	\$ 2.68
Options exercisable at December 31, 2009	7,033,550	\$ 2.145
Expected to vest at December 31, 2009	1,880,164	\$ 4.69
Options exercisable at December 31, 2008	8,428,306	\$ 1.535

The weighted-average remaining contractual life of options expected to vest at December 31, 2009 was 5.01 years. The total intrinsic value of options exercised during the years ended December 31, 2008 and 2009 was \$500,390 and \$18,213,570, respectively.

AMERESCO, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The following table summarizes information about stock options outstanding at December 31, 2009.

Exercise Prices	Outstanding Options			Exercisable Options	
	Number Outstanding	Weighted-Average Remaining Contractual Life	Weighted-Average Exercise Price	Number Exercisable	Weighted-Average Exercise Price
\$0.0084	32,000	0.86	\$ 0.0084	32,000	\$ 0.0084
0.45	406,000	1.10	0.45	406,000	0.45
0.75	500,000	1.97	0.75	500,000	0.75
0.875	1,776,200	2.55	0.875	1,776,200	0.875
1.50	50,000	3.08	1.50	50,000	1.50
1.75	410,000	3.53	1.75	410,000	1.75
1.875	200,000	3.73	1.875	200,000	1.875
2.75	1,510,000	4.52	2.75	1,510,000	2.75
3.00	60,000	5.07	3.00	57,000	3.00
3.25	1,387,000	3.71	3.25	1,032,650	3.25
3.41	1,083,000	3.54	3.41	601,100	3.41
4.22	970,000	4.21	4.22	409,000	4.22
6.055	1,076,000	5.92	6.055	59,600	6.055
	<u>9,450,200</u>			<u>7,033,550</u>	

Cash received from option exercise under all stock-based payment arrangements for the years ended December 31, 2008 and 2009 was \$67,250 and \$874,760, respectively. Total shares exercised during 2008 included cashless exercises. No actual tax benefit was realized from option exercises during these periods.

Under the terms of the Plan, all options expire if not exercised within ten years after the grant date. The options generally vest over five years at a rate of 20% after the first year, and at a rate of five percent every three months beginning one year after the grant date. If the employee ceases to be employed by the Company for any reason before vested options have been exercised, the employee has 90 days to exercise vested options or they are forfeited.

The Company uses the Black-Scholes option pricing model to determine the weighted-average fair value of options granted. The Company will recognize the compensation cost of stock-based awards on a straight-line basis over the vesting period of the award.

The determination of the fair value of stock-based payment awards utilizing the Black-Scholes model is affected by the stock price and a number of assumptions, including expected volatility, expected life, risk-free interest rate and expected dividends. The following table sets forth the significant assumptions used in the model during 2007, 2008 and 2009:

	Years Ended December 31,		
	2007	2008	2009
Future dividends	\$ —	\$ —	\$ —
Risk-free interest rate	4.26-4.84%	2.90-5.07%	2.00-2.94%
Expected volatility	32%-43%	48%-54%	57%-59%
Expected life	6.5 years	6.5 years	6.5 years

The Company will continue to use judgment in evaluating the expected term, volatility and forfeiture rate related to the stock-based compensation on a prospective basis, and incorporating these factors into the Black-

## AMERESCO, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Scholes pricing model. Higher volatility and longer expected lives result in an increase to stock-based compensation expense determined at the date of grant. In addition, any changes in the estimated forfeiture rate can have a significant effect on reported stock-based compensation expense, as the cumulative effect of adjusting the rate for all expense amortization is recognized in the period that the forfeiture estimate is changed. If a revised forfeiture rate is higher than the previously estimated forfeiture rate, an adjustment is made that will result in a decrease to the stock-based compensation expense recognized in the accompanying consolidated financial statements. If a revised forfeiture rate is lower than the previously estimated rate, an adjustment is made that will result in an increase to the stock-based compensation expense recognized in the accompanying consolidated financial statements. These expenses will affect the direct expenses, salaries and benefits and project development costs expenses.

The weighted-average fair value of stock options granted during the years ended December 31, 2007, 2008 and 2009, under the Black-Scholes option pricing model was \$3.765, \$5.455 and \$7.91, respectively per share. For the years ended December 31, 2007, 2008 and 2009, the Company recorded stock-based compensation expense of approximately \$376,000, \$508,000 and \$1,312,685, respectively, in connection with stock-based payment awards. The compensation expense is allocated between direct expenses, salaries and benefits and project development costs in the accompanying consolidated statements of income and comprehensive income based on the salaries and work assignments of the employees holding the options. As of December 31, 2009, there was approximately \$6.8 million of unrecognized compensation expense related to non-vested stock option awards that is expected to be recognized over a weighted-average period of 4.02 years.

**12. EMPLOYEE BENEFITS**

The Company has salary reduction/profit sharing plans under the provisions of Section 401(k) of the Internal Revenue Code. The plans cover all employees who have completed the minimum service requirement, as defined by the plans. The plans require the Company to contribute 100% of the first six percent of base compensation that a participant contributes to the plans. Matching contributions made by the Company were approximately \$1,211,000, \$1,495,000 and \$2,238,373 for the years ended December 31, 2007, 2008 and 2009, respectively.

**13. COMMITMENTS AND CONTINGENCIES**

The Company leases certain administrative offices. The leases are long-term noncancelable real estate lease agreements, expiring at various dates through fiscal 2017. The agreements generally provide for fixed minimum rental payments and the payment of utilities, real estate taxes, insurance and repairs. Rent and related expenses for the years ended December 31, 2007, 2008 and 2009 was approximately \$2,912,000, \$3,442,000 and \$3,328,646, respectively.

The Company's lease obligations under operating leases are as follows:

	<b>Operating Leases</b>
Years ended December 31,:	
2010	\$ 2,194,694
2011	1,064,930
2012	753,758
2013	491,144
2014	254,148
Thereafter	762,443
Total minimum lease payments	<u>\$ 5,521,117</u>

## AMERESCO, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

**Legal Proceedings**

In the ordinary course of business, the Company may be involved in a variety of legal proceedings.

In 2009, a lawsuit was filed against the Company. In the lawsuit, the plaintiff alleged that the Company caused action for damages by soliciting and hiring the plaintiff's employees. The Company and the plaintiff settled the lawsuit by the Company paying \$1.8 million to the plaintiff and in exchange both parties agreed to dismiss the lawsuit and reciprocally release and discharge each other from all claims stated or which could have been stated in the action against each other. The settlement was not construed as an admission of any wrongdoing, but rather was an economic decision to settle and compromise disputed claims. The settlement was recorded in 2009 in general, administrative and other expenses in the accompanying consolidated statements of income and comprehensive income.

At the time of the Company's 2006 acquisition of Select Energy Systems, Inc., the U.S. government was conducting an investigation of contracting practices at a site where the acquired company had performed energy conservation work. The Company negotiated financial concessions from the seller and had accrued for this contingency as part of its estimated opening balance sheet. Therefore, the Company had recorded \$5.9 million as the best estimate of costs associated with managing and settling this contingency at May 5, 2006. During 2008, based on consultations with the customer and with legal advisors, the Company concluded that the contingency was no longer required. The recovery of \$5.9 million was recorded for 2008 and is included in general, administrative and other expenses in the accompanying consolidated statements of income and comprehensive income.

On February 27, 2009, the Company received notice of a default termination from a customer for which the Company was performing construction services. The dispute involves the customer's assertion of its understanding of the contractual scope of work involved and with the completion date of the project. The Company disputes the customer's assertion as it believes that the basis of the default arose from a delay due to the discovery of and need for remediation of previously undiscovered hazardous materials not identified by the customer during contract negotiations. In February 2010, the Company filed a motion for summary judgment as to a portion of the complaint. In March 2010, the customer filed its response. Discovery is currently ongoing and no date has been set for a hearing on the Company's motion. The Company did not record an additional accrual for this matter beyond the adjustments made to the Company's expected profit on this contract because the Company believes that the likelihood is remote that any additional liability would be incurred related to this matter. Based on the contract termination notice, the Company has adjusted its expected contract revenue and profit until such time as this contingency is resolved. The Company had claims of approximately \$3.0 million outstanding with the customer as of December 31, 2009. As of December 31, 2009, the Company has not recognized any revenue or profit associated with these claims.

**14. GEOGRAPHIC INFORMATION**

The Company attributes revenue to customers based on the location of the customer. The composition of the Company's assets as of December 31, 2008 and 2009, and revenues from sales to unaffiliated customers for the years ended December 31, 2007, 2008 and 2009, between those in the United States and those in other locations, is as follows:

	2008	2009
Assets:		
United States	\$ 251,179,388	\$ 322,599,256
Canada	40,847,585	52,945,352
	<u>\$ 292,026,973</u>	<u>\$ 375,544,608</u>



AMERESCO, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

	2007	2008	2009
Revenue:			
United States	\$ 278,074,041	\$ 308,559,860	\$ 341,607,504
Canada	100,403,169	84,070,159	83,632,845
Other	—	3,223,710	3,276,240
	<u>\$ 378,477,210</u>	<u>\$ 395,853,729</u>	<u>\$ 428,516,589</u>

**15. RELATED PARTY TRANSACTIONS**

The Company's principal and controlling shareholder provides a limited personal indemnification to the surety companies that provide performance and payment bonds and other surety products to the Company. In 2006, the Company issued 2,000,000 shares of restricted stock to the Company's principal and controlling shareholder under the 2000 Stock Incentive Plan (see Note 11) as compensation for providing the personal indemnification. In 2009, the Company issued 600,000 stock options to the principal and controlling shareholder under the 2000 Stock Incentive Plan as compensation for providing the personal indemnification.

**16. OTHER INCOME (EXPENSE), NET**

Other income (expense), net, consisted of the following items at December 31, 2007, 2008 and 2009:

	2007	2008	2009
Gain realized from derivative	\$ —	\$ —	\$ 2,493,980
Unrealized (loss) gain from derivatives	(1,365,813)	(2,831,524)	2,263,802
Interest expense, net of interest income	(1,448,667)	(2,117,567)	(2,993,250)
Amortization of deferred financing costs	(323,587)	(238,454)	(201,622)
	<u>\$ (3,138,067)</u>	<u>\$ (5,187,545)</u>	<u>\$ 1,562,910</u>

During 2009, the Company purchased an interest rate cap from a major bank to mitigate effects of rising interest rates on a fixed rate customer contract for approximately \$2.2 million. The Company terminated the agreement in 2009 and realized a gain of approximately \$2.5 million. The Company did not designate this derivative as a cash flow hedge; therefore hedge accounting was not applied.

**17. FAIR VALUE MEASUREMENT**

On January 1, 2008, the Company adopted new guidance for its financial assets and liabilities recognized at fair value on a recurring basis (at least annually). The guidance defines fair value as the price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The guidance also describes three levels of inputs that may be used to measure fair value:

*Level 1:* Inputs are based upon unadjusted quoted prices for identical instruments traded in active markets.

*Level 2:* Inputs are based upon quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model based valuation techniques for which all significant assumptions are observable in the market or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

*Level 3:* Inputs are generally unobservable and typically reflect management's estimates of assumptions that market participants would use in pricing the asset or liability. The fair values are therefore determined using model-based techniques that include option pricing models, discounted cash flow models, and similar techniques.

AMERESCO, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The following table presents the input level used to determine the fair values of the Company's financial instruments measured at fair value on a recurring basis for the years ended December 31, 2008 and 2009:

	Level	Fair Value as of December 31,	
		2008	2009
<b>Liabilities:</b>			
Interest rate swap instruments	2	\$ 4,197,337	\$ 1,933,535
<b>Total liabilities</b>		<b>\$ 4,197,337</b>	<b>\$ 1,933,535</b>

The fair value of the Company's interest rate swaps was determined using cash flow analysis on the expected cash flow of the contract in combination with observable market-based inputs, including interest rate curves and implied volatilities. As part of this valuation, the Company considered the credit ratings of the counterparties to the interest rate swaps to determine if a credit risk adjustment was required.

The Company is also required periodically to measure certain other assets at fair value on a nonrecurring basis, including long-lived assets, goodwill and other intangible assets. The Company determined the fair value used in the impairment analysis with its own discounted cash flow analysis. The Company has determined the inputs used in such analysis as Level 3 inputs. The Company did not record any impairment charges on goodwill or other intangible assets as no significant events requiring non-financial assets and liabilities to be measured at fair value occurred during the years ended December 31, 2007, 2008 and 2009. The Company did record an impairment charge on long-lived assets during 2007 and 2008 (see Note 2).

**18. DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES**

As of December 31, 2008 and 2009, the following table presents information about the fair value amounts of the Company's derivative instruments:

	Liability Derivatives as of December 31,			
	2008		2009	
	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value
Derivatives not designated as hedging instruments:				
Interest rate swap contracts	Other liabilities	\$ 4,197,337	Other liabilities	\$ 1,933,535

The following table presents information about the effects of the Company's derivative instruments on the consolidated statements of income and comprehensive income:

	Location of Gain (Loss) Recognized in Income on Derivative	Amount of (Loss) Gain Recognized in Income on Derivative for the Years Ended December 31, are as follows:		
		2007	2008	2009
<b>Derivatives Not Designated as Hedging Instruments</b>				
Interest rate swap contracts	Interest (expense) income	\$ (1,365,813)	\$ (2,831,524)	\$ 2,263,802
Interest rate cap	Interest (expense) income	\$ —	\$ —	\$ 2,493,980

**19. BUSINESS SEGMENT INFORMATION**

The Company reports four segments: U.S. federal, central U.S. region, other U.S. regions and Canada. Each segment provides customers with energy efficiency and renewable energy solutions. The other U.S. regions segment is an aggregation of three regions: northeast U.S., southeast U.S. and southwest

AMERESCO, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

U.S. These regions have similar economic characteristics — in particular, expected and actual gross profit margins. In addition, they sell products and services of a similar nature, serve similar types of customers and use similar methods to distribute their products and services. Accordingly, these three regions meet the aggregation criteria set forth in ASC 280. The “all other” category includes activities, such as O&M and sales of renewable energy and certain other renewable energy products, that are managed centrally at the Company’s corporate headquarters. It also includes all corporate operating expenses — salary and benefits, project development costs, and general administrative and other — not specifically allocated to the segments. The Company does not allocate any indirect expenses to the segments. For the years ended December 31, 2007, 2008, and 2009 unallocated corporate expenses were \$28,761,803, \$31,938,110 and \$25,090,295, respectively. Income before taxes and unallocated corporate expenses for all other in December 31, 2007, 2008 and 2009 was \$18,297,472, \$21,265,539 and \$21,318,368, respectively. The accounting policies are the same as those described in the summary of significant accounting policies.

**Ameresco, Inc. and Subsidiaries  
Fiscal 2009 Segment Reporting**

	US Federal	Central U. S. Region	Other U.S. Regions	Canada	All Other	Total
Total revenue	\$ 87,579,580	\$ 88,067,983	\$ 77,828,302	\$ 83,632,845	\$ 91,407,879	\$ 428,516,589
Interest income	\$ —	\$ —	\$ —	\$ 23,511	\$ 74,439	\$ 97,950
Interest expense	\$ —	\$ —	\$ —	\$ —	\$ (1,464,960)	\$ (1,464,960)
Depreciation	\$ 91,884	\$ 17,900	\$ —	\$ 254,110	\$ 6,269,796	\$ 6,633,690
Income (loss) before taxes	\$ 11,276,053	\$ 10,121,160	\$ 5,076,943	\$ 4,154,533	\$ (3,771,927)	\$ 26,856,762
Total Assets	\$ 66,104,336	\$ 25,501,159	\$ 109,502,883	\$ 52,945,352	\$ 121,490,878	\$ 375,544,608
Capital expenditures	\$ 113,515	\$ 8,528	\$ 780,576	\$ 914,980	\$ 19,821,998	\$ 21,639,597

**Ameresco, Inc. and Subsidiaries  
Fiscal 2008 Segment Reporting**

	US Federal	Central U. S. Region	Other U.S. Regions	Canada	All Other	Total
Total revenue	\$ 69,325,020	\$ 74,989,373	\$ 78,708,984	\$ 84,000,159	\$ 88,830,193	\$ 395,853,729
Interest income	\$ 2,911	\$ —	\$ —	\$ 186,101	\$ 18,031	\$ 207,043
Interest expense	\$ 67	\$ —	\$ —	\$ —	\$ 5,394,521	\$ 5,394,588
Depreciation	\$ 103,869	\$ 24,305	\$ —	\$ 164,731	\$ 3,485,361	\$ 3,778,266
Income (loss) before taxes	\$ 5,016,832	\$ 8,156,402	\$ 12,833,182	\$ 4,154,382	\$ (10,672,571)	\$ 19,488,227
Total Assets	\$ 46,348,552	\$ 8,334,915	\$ 67,758,222	\$ 40,847,585	\$ 128,737,699	\$ 292,026,973
Capital expenditures	\$ 76,367	\$ 24,422	\$ 1,372,869	\$ 160,653	\$ 41,387,627	\$ 43,021,938

## AMERESCO, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Ameresco, Inc. and Subsidiaries  
Fiscal 2007 Segment Reporting

	US Federal	Central U. S. Region	Other U.S. Regions	Canada	All Other	Total
Total revenue	\$ 62,213,324	\$ 65,700,900	\$ 81,045,485	\$ 100,211,169	\$ 69,306,332	\$ 378,477,210
Interest income	\$ —	\$ —	\$ —	\$ 290,038	\$ 28,284	\$ 319,051
Interest expense	\$ 35,438	\$ —	\$ —	\$ —	\$ 3,421,680	\$ 3,457,118
Depreciation	\$ 98,890	\$ 8,496	\$ —	\$ 265,933	\$ 3,528,009	\$ 3,901,328
Income (loss) before taxes	\$ 4,231,306	\$ 8,778,343	\$ 7,649,433	\$ 6,064,254	\$ (10,464,331)	\$ 16,259,005
Total Assets	\$ 37,489,816	\$ 10,675,350	\$ 78,468,049	\$ 52,914,033	\$ 82,676,578	\$ 262,223,826
Capital expenditures	\$ 187,387	\$ 7,878	\$ 1,361,282	\$ 242,149	\$ 21,010,647	\$ 22,809,343

**20. SUBSEQUENT EVENTS**

During 2010, the Company drew additional construction draws totaling \$812,397 under the construction and term loan financing agreement that it entered into in February 2009 (see Note 7). In March 2010, the Company converted the construction loans to a term loan totaling \$27,867,626. The loan bears interest at a fixed rate of 6.95%, with quarterly principal payments ranging from \$206,211 to \$2,424,302. The loan matures in 2024.

During 2010, the Company entered into four federal ESPC receivable financing arrangements. These financings are with various financial institutions and total approximately \$40,417,000. Discount rates vary by project, ranging from 6.80% to 7.81%.

The Company has evaluated subsequent events through the date of this filing.

**AMERESCO, INC.**  
**CONDENSED CONSOLIDATED BALANCE SHEETS**

	December 31, 2009	March 31, 2010 (Unaudited)
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 47,927,540	\$ 24,361,479
Restricted cash	9,249,885	13,344,727
Accounts receivable, net	61,279,515	50,762,670
Accounts receivable retainage	9,242,288	12,788,553
Costs and estimated earnings in excess of billings	14,009,076	16,851,772
Inventory, net	4,237,909	4,780,024
Prepaid expenses and other current assets	8,077,761	11,617,738
Deferred income taxes	9,279,473	9,459,602
Project development costs	8,468,974	8,348,019
Total current assets	<u>171,772,421</u>	<u>152,314,584</u>
Federal ESPC receivable financing	51,397,347	74,275,828
Property and equipment, net	4,373,256	4,460,842
Project assets, net	117,637,990	121,767,502
Deferred financing fees, net	3,582,560	3,698,288
Goodwill	16,132,429	16,132,429
Other assets	10,648,605	9,548,406
	<u>203,772,187</u>	<u>229,883,295</u>
	<u>\$ 375,544,608</u>	<u>\$ 382,197,879</u>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Current portion of long-term debt	\$ 8,093,016	\$ 11,742,110
Accounts payable	75,578,378	53,545,690
Accrued expenses	18,362,674	14,776,668
Billings in excess of cost and estimated earnings	28,166,364	27,623,326
Income taxes payable	2,129,529	2,538,830
Total current liabilities	<u>132,329,961</u>	<u>110,226,624</u>
Long-term debt:		
Long-term debt, less current portion	102,807,203	128,373,573
Subordinated debt	2,998,750	2,998,750
Deferred income taxes	11,901,645	11,901,645
Deferred grant income	4,158,508	4,158,508
Other liabilities	18,578,754	19,378,556
	<u>140,444,860</u>	<u>166,811,032</u>
Commitments and contingencies (Note 5)		
Stockholders' equity:		
Series A convertible preferred stock, \$0.0001 par value, 3,500,000 shares authorized, 3,210,000 shares issued and outstanding	321	321
Common stock, \$0.0001 par value, 60,000,000 shares authorized, 17,998,168 shares issued and 13,282,284 outstanding at 12/31/2009, 17,998,168 shares issued and 13,282,284 outstanding at 3/31/2010	1,800	1,800
Additional paid-in capital	10,466,312	10,905,398
Retained earnings	97,882,985	99,160,663
Less — treasury stock, at cost, 4,715,884 shares and 4,715,884 shares, respectively	(8,413,601)	(8,413,601)
Accumulated other comprehensive income	2,831,970	3,505,642
Total stockholders' equity	<u>102,769,787</u>	<u>105,160,223</u>
	<u>\$ 375,544,608</u>	<u>\$ 382,197,879</u>

The accompanying notes are an integral part of these condensed consolidated financial statements.

## AMERESCO, INC.

## CONDENSED CONSOLIDATED STATEMENTS OF INCOME AND COMPREHENSIVE INCOME

	Three Months Ended March 31,	
	2009	2010
	(Unaudited)	
Revenue:		
Energy efficiency revenue	\$ 57,228,057	\$ 74,887,569
Renewable energy revenue	16,159,024	30,741,017
	<u>73,387,081</u>	<u>105,628,586</u>
Direct expenses:		
Energy efficiency expenses	46,770,268	62,524,147
Renewable energy expenses	12,923,828	24,705,410
	<u>59,694,096</u>	<u>87,229,557</u>
Gross profit	<u>13,692,985</u>	<u>18,399,029</u>
Operating expenses:		
Salaries and benefits	6,065,740	8,157,029
Project development costs	2,737,707	3,129,437
General, administrative and other	4,222,161	4,549,938
	<u>13,025,608</u>	<u>15,836,404</u>
Operating income	<u>667,377</u>	<u>2,562,625</u>
Other income (expenses), net (see Note 8)	(24,441)	(855,689)
Income before provision for income taxes	642,936	1,706,936
Income tax provision	(225,027)	(429,258)
Net income	<u>417,909</u>	<u>1,277,678</u>
Other comprehensive income (loss):		
Unrealized loss from interest rate hedge, net of tax	—	(320,227)
Foreign currency translation adjustment	(663,738)	993,899
Comprehensive (loss) income	<u>\$ (245,829)</u>	<u>\$ 1,951,350</u>
Net income per share attributable to common shareholders:		
Basic	\$ 0.04	\$ 0.10
Diluted	\$ 0.01	\$ 0.03
Weighted average common shares outstanding:		
Basic	9,621,351	13,282,284
Diluted	32,957,183	36,587,847

The accompanying notes are an integral part of these condensed consolidated financial statements.

AMERESCO, INC.

CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY

	Series A Preferred Stock		Common Stock		Additional Paid-in Capital	Retained Earnings	Treasury Stock		Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
	Shares	Amount	Shares	Amount			Shares	Amount		
Balance, December 31, 2009	3,210,000	\$ 321	17,998,168	\$ 1,800	\$ 10,466,312	\$ 97,882,985	4,715,884	\$ (8,413,601)	\$ 2,831,970	\$ 102,769,787
Stock-based compensation expense	—	—	—	—	439,086	—	—	—	—	439,086
Foreign currency translation adjustment	—	—	—	—	—	—	—	—	993,899	993,899
Unrealized loss from interest rate hedge, net of tax	—	—	—	—	—	—	—	—	(320,227)	(320,227)
Net income	—	—	—	—	—	1,277,678	—	—	—	1,277,678
Balance, March 31, 2010	3,210,000	\$ 321	17,998,168	\$ 1,800	\$ 10,905,398	\$ 99,160,663	4,715,884	\$ (8,413,601)	\$ 3,505,642	\$ 105,160,223

The accompanying notes are an integral part of these condensed consolidated financial statements.

AMERESCO, INC.

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

	Three Months Ended March 31,	
	2009	2010
	(Unaudited)	
Cash flows from operating activities:		
Net income	\$ 417,909	\$ 1,277,678
Adjustments to reconcile net income to cash provided by operating activities:		
Depreciation of project assets	803,407	1,755,132
Depreciation of property and equipment	303,194	387,531
Amortization of deferred financing fees	65,202	70,350
Provision for bad debts	229,316	17,834
Unrealized (gain) loss on interest rate swaps	682,367	(133,591)
Stock-based compensation expense	616,600	439,086
Deferred income taxes	2,400,493	1,602,408
Changes in operating assets and liabilities:		
(Increase) decrease in:		
Restricted cash draws	2,188,442	214,939
Accounts receivable	10,109,426	10,914,236
Accounts receivable retainage	(756,789)	(3,294,743)
Federal ESPC receivable financing	(1,944,586)	1,850,132
Inventory	(584,885)	(543,415)
Costs and estimated earnings in excess of billings	(8,258,230)	(2,704,612)
Prepaid expenses and other current assets	755,176	(3,516,043)
Project development costs	(516,366)	132,260
Other assets	1,404,315	1,199,776
Increase (decrease) in:		
Accounts payable and accrued expenses	(10,334,494)	(28,098,390)
Billings in excess of cost and estimated earnings	(3,760,182)	(705,848)
Other liabilities	(11,264,490)	933,533
Income taxes payable	(2,209,367)	266,389
Net cash used in operating activities	<u>(19,653,542)</u>	<u>(17,935,358)</u>
Cash flows from investing activities:		
Purchases of property and equipment	(376,548)	(424,376)
Purchases of project assets	(9,487,717)	(5,874,481)
Net cash used in investing activities	<u>(9,864,265)</u>	<u>(6,298,857)</u>
Cash flows from financing activities:		
Payments of finance fees	(70,063)	(186,078)
Repurchase of stock	(874,948)	—
Proceeds from (repayments of) senior secured credit facility	5,865,896	5,017,004
Proceeds from long-term debt financing	15,093,753	812,398
Restricted cash	(230,382)	(4,309,781)
Payments of long-term debt	(1,153,221)	(1,342,551)
Net cash provided by (used in) financing activities	<u>\$ 18,631,035</u>	<u>\$ (9,008)</u>
Effect of exchange rate changes on cash	\$ (332,306)	\$ 677,162
Net increase (decrease) in cash and cash equivalents	<u>(11,219,078)</u>	<u>(23,566,061)</u>
Cash and cash equivalents, beginning of year	18,149,145	47,927,540
Cash and cash equivalents, end of year	<u>\$ 6,930,067</u>	<u>\$ 24,361,479</u>
<b>Supplemental disclosure of cash flow information:</b>		
Cash paid during the period for:		
Interest	\$ 897,096	\$ 817,393
Income taxes	<u>\$ 266,613</u>	<u>\$ 959,060</u>

The accompanying notes are an integral part of these condensed consolidated financial statements.



AMERESCO, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

**1. DESCRIPTION OF BUSINESS**

Ameresco, Inc. and Subsidiaries (the "Company") was organized as a Delaware corporation on April 25, 2000. The Company is a provider of energy efficiency solutions for facilities throughout North America. The Company operates in one business segment — providing solutions, both products and services, that enable customers to reduce their energy consumption, lower their operating and maintenance costs and realize environmental benefits. The Company's comprehensive set of services includes upgrades to a facility's energy infrastructure and the construction and operation of small-scale renewable energy plants. It also sells certain photovoltaic equipment worldwide. The Company operates in the United States, Canada, and Europe.

The Company is compensated through a variety of methods, including: 1) direct payments based on fee-for-services contracts (utilizing lump-sum or cost-plus pricing methodologies); 2) the sale of energy from the Company's generating assets; and 3) direct payment for photovoltaic equipment and systems.

The condensed consolidated financial statements as of December 31, 2009, and March 31, 2010, and for the three months ended March 31, 2009 and 2010, include the accounts of the Company and its wholly-owned subsidiaries. All significant intercompany transactions have been eliminated. The condensed consolidated financial statements as of March 31, 2010, and for the three months ended March 31, 2009 and 2010, are unaudited. In addition, certain information and footnote disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States ("GAAP") have been condensed or omitted. The interim condensed consolidated financial statements reflect all adjustments that are, in the opinion of management, necessary for a fair presentation in conformity with GAAP. The interim condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes thereto included on pages F-3 to F-35. The results of operations for the interim periods should not be considered indicative of results to be expected for the full year.

**2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

A summary of the significant accounting policies consistently applied in the preparation of the accompanying consolidated financial statements follows.

***Principles of Consolidation***

The accompanying consolidated financial statements include the accounts of Ameresco, Inc. and its wholly-owned subsidiaries. All significant intercompany accounts and transactions have been eliminated. Gains and losses from the translation of all foreign currency financial statements are recorded in the accumulated other comprehensive income (loss) account within stockholders' equity.

***Stock Split***

Prior to the consummation of the initial public offering of the Company's Class A common stock, the number of authorized shares of common stock was increased to 60,000,000. In addition, all common share and per share amounts in the consolidated financial statements and notes thereto have been restated to reflect a two-for-one stock split effected on July 20, 2010.

***Use of Estimates***

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period.

## AMERESCO, INC.

## NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) — (Continued)

The most significant estimates with regard to these consolidated financial statements relate to the estimation of final construction contract profit in accordance with accounting for long-term contracts, allowance for doubtful accounts, inventory reserves, project development costs, fair value of derivative financial instruments and stock based awards, impairment of long lived assets, income taxes and estimating potential liability in conjunction with certain commitments and contingencies. Actual results could differ from those estimates.

**Cash and Cash Equivalents**

Cash includes cash on deposit, overnight repurchase agreements, and amounts invested in highly liquid money market funds. Cash equivalents consist of short term investments with original maturities of three months or less. The Company maintains accounts with financial institutions and the balances in such accounts, at times, exceed federally insured limits. This credit risk is divided among a number of financial institutions that management believes to be of high quality. The carrying amount of cash and cash equivalents approximates their fair value.

**Restricted Cash**

Restricted cash consists of cash held in an escrow account in association with construction draws for energy savings performance contracts ("ESPCs"), as well as cash required under term loans to be maintained in debt service reserve accounts until all obligations have been indefeasibly paid in full.

**Accounts Receivable**

Accounts receivable are stated at the amount management expects to collect from outstanding balances. An allowance for doubtful accounts is provided for those accounts receivable considered to be uncollectible based upon historical experience and management's evaluation of outstanding accounts receivable at the end of the year. Bad debts are written off against the allowance when identified. Changes in the allowance for doubtful accounts for the quarterly periods ended March 31, 2009 and 2010, are as follows:

	<u>2009</u>	<u>2010</u>
Balance at beginning of period	\$ 1,049,711	\$ 1,602,079
Charges to costs and expenses	229,316	17,834
Account write-offs and other deductions	(10,417)	(32,356)
Balance at end of period	<u>\$ 1,268,610</u>	<u>\$ 1,587,557</u>

At December 31 2009, the Company had one customer that accounted for approximately 14% of the Company's total accounts receivable. At March 31, 2010, no customer accounted for more than 10% of the Company's total accounts receivable.

During the quarter ended March 31, 2009, no customer accounted for more than 10% of the Company's total revenue. During the quarter ended March 31, 2010, one customer accounted for 14.1% of the Company's total revenue.

**Accounts Receivable Retainage**

Accounts receivable retainage represents amounts due from customers, but where payments are withheld contractually until certain construction milestones are met. Amounts retained typically range from 5% to 10% of the total invoice.

## AMERESCO, INC.

## NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) — (Continued)

**Inventory**

Inventories, which consist of photovoltaic solar panels, batteries, and related accessories, are stated at the lower of cost (“first-in, first-out” method) or market (determined on the basis of estimated realizable values). Provisions have been made to reduce the carrying value to the realizable value.

**Prepaid Expenses**

Prepaid expenses consist primarily of short-term prepaid expenditures that will amortize within one year.

**Federal ESPC Receivable Financing**

Federal ESPC receivable financing represents the amount to be paid by various federal government agencies for work performed and earned by the Company under specific ESPCs. The Company assigns certain of its rights to receive those payments to third-party lenders that provide construction and permanent financing for such contracts. The receivable is recognized as revenue as each project is constructed. Upon completion and acceptance of the project by the government, the assigned ESPC receivable and corresponding related project debt are eliminated from the Company’s financial statements.

**Project Development Costs**

The Company capitalizes as project development costs only those costs incurred in connection with the development of energy projects, primarily direct labor, interest costs, outside contractor services, consulting fees, legal fees and travel, if incurred after a point in time where the realization of related revenue becomes probable. Project development costs incurred prior to the probable realization of revenue are expensed as incurred. The Company classifies project development costs as a current asset as the development efforts are expected to proceed to construction activity in the twelve months that follow.

**Property and Equipment**

Property and equipment consists primarily of office and computer equipment. These assets are recorded at cost. Major additions and improvements are capitalized as additions to the property and equipment accounts, while replacements, maintenance and repairs that do not improve or extend the life of the respective assets, are expensed as incurred. Depreciation and amortization of property and equipment are computed on a straight-line basis over the following estimated useful lives:

<u>Asset Classification</u>	<u>Estimated Useful Life</u>
Furniture and office equipment	Five years
Computer equipment and software costs	Five years
Leasehold improvements	Lesser of term of lease or five years
Automobiles	Five years

**Project Assets**

Project assets consist of costs of materials, direct labor, interest costs, outside contract services and project development costs incurred in connection with the construction of small-scale renewable energy plants that the Company owns and the implementation of energy savings contracts. These amounts are capitalized and amortized over the lives of the related assets or the terms of the related contracts.

The Company capitalizes interest costs relating to construction financing during the period of construction. The interest capitalized is included in the total cost of the project at completion. The amount of interest capitalized for the periods ended March 31, 2009 and 2010, was \$324,893 and \$252,113, respectively.

AMERESCO, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) — (Continued)

Routine maintenance costs are expensed in the current year's consolidated statement of income and comprehensive income to the extent that they do not extend the life of the asset. Major maintenance, upgrades and overhauls are required for certain components of the Company's assets, including its landfill gas ("LFG") facilities. In these instances, the costs associated with these upgrades are capitalized and are depreciated over the shorter of the life of the asset or until the next required major maintenance or overhaul period. Gains or losses on disposal of property and equipment are reflected in general, administrative and other expenses in the consolidated statements of income and comprehensive income.

The Company evaluates its long-lived assets for impairment as events or changes in circumstances indicate the carrying value of these assets may not be fully recoverable. The Company evaluates recoverability of long-lived assets to be held and used by estimating the undiscounted future cash flows before interest associated with the expected uses and eventual disposition of those assets. When these comparisons indicate that the carrying value of those assets is greater than the undiscounted cash flows, the Company recognizes an impairment loss for the amount that the carrying value exceeds the fair value.

**Deferred Financing Fees**

Deferred finance fees relate to the external costs incurred to obtain financing for the Company. All deferred financing fees are amortized over the respective term of the financing.

**Goodwill**

The Company has classified as goodwill the excess of fair value of the net assets (including tax attributes) of companies acquired in purchase transactions. The Company assesses the impairment of goodwill and intangible assets with indefinite lives on an annual basis (December 31<sup>st</sup>) and whenever events or changes in circumstances indicate that the carrying value of the asset may not be recoverable. The Company would record an impairment charge if such an assessment were to indicate that, more likely than not, the fair value of such assets was less than their carrying values. Judgment is required in determining whether an event has occurred that may impair the value of goodwill or identifiable intangible assets.

Factors that could indicate that an impairment may exist include significant underperformance relative to plan or long-term projections, significant changes in business strategy, significant negative industry or economic trends or a significant decline in the base stock price of public competitors for a sustained period of time.

Although the Company believes goodwill and intangible assets are appropriately stated in the accompanying consolidated financial statements, changes in strategy or market conditions could significantly impact these judgments and require an adjustment to the recorded balance.

**Other Assets**

Other assets consist primarily of notes and contracts receivable due to the Company.

**Asset Retirement Obligations**

The Company recognizes a liability for the fair value of required asset retirement obligations ("AROs") when such obligations are incurred. The liability is estimated on a number of assumptions requiring management's judgment, including equipment removal costs, site restoration costs, salvage costs, cost inflation rates and discount rates and is accreted to its projected future value over time. The capitalized asset is depreciated using the convention of depreciation of plant assets. Upon satisfaction of the ARO conditions, any difference between the recorded ARO liability and the actual retirement cost incurred is recognized as an operating gain or loss in the consolidated statement of income and comprehensive income. As of December 31, 2009, and March 31, 2010, the Company had no AROs.

AMERESCO, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) — (Continued)

**Other Liabilities**

Other liabilities consist primarily of deferred revenue related to multi-year operation and maintenance contracts which expire as late as 2031. Other liabilities also include the fair value of derivatives.

**Revenue Recognition**

The Company derives revenue from energy efficiency and renewable energy products and services. Energy efficiency products and services include the design, engineering, and installation of equipment and other measures to improve the efficiency, and control the operation, of a facility's energy infrastructure. Renewable energy products and services include the construction of small-scale plants that produce electricity, gas, heat or cooling from renewable sources of energy, the sale of such electricity, gas, heat or cooling from plants that the Company owns, and the sale and installation of solar energy products and systems.

Revenue from the installation or construction of projects is recognized on a percentage-of-completion basis. The percentage-of-completion for each project is determined on an actual cost-to-estimated final cost basis. Maintenance revenue is recognized as related services are performed. In accordance with industry practice, the Company includes in current assets and liabilities, amounts related to construction projects realizable and payable over a period in excess of one year. The Company recognizes revenue associated with change orders only when the authorization for the change order has been properly executed and the work has been performed and accepted by the customer.

When the estimate on a contract indicates a loss, or claims against costs incurred reduce the likelihood of recoverability of such costs, the Company records the entire expected loss immediately, regardless of the percentage of completion.

Billings in excess of costs and estimated earnings represents advanced billings on certain construction contracts. Costs and estimated earnings in excess of billings under customer contracts represent certain amounts that were earned and billable but not invoiced at December 31, 2009, and March 31, 2010.

The Company sells certain products and services in bundled arrangements, where multiple products and/or services are involved. The Company divides bundled arrangements into separate deliverables and revenue is allocated to each deliverable based on the relative fair value of all elements. The fair value is determined based on the price of the deliverable sold on a stand-alone basis.

The Company recognizes revenue from the sale and delivery of products, including the output from renewable energy plants, when produced and delivered to the customer, in accordance with specific contract terms, provided that persuasive evidence of an arrangement exists, the Company's price to the customer is fixed or determinable and collectibility is reasonably assured.

The Company recognizes revenue from O&M contracts and consulting services as the related services are performed.

For a limited number of contracts, under which the Company receives additional revenue based on a share of energy savings, such additional revenue is recognized as energy savings are generated.

**Direct Expenses**

Direct expenses include the cost of labor, materials, equipment, subcontracting and outside engineering that are required for the development and installation of projects, as well as preconstruction costs, sales incentives, associated travel, inventory obsolescence charges and, if applicable, costs of procuring financing. A majority of the Company's contracts have fixed price terms; however, in some cases the Company negotiates protections, such as a cost-plus structure, to mitigate the risk of rising prices for materials, services and equipment.

AMERESCO, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) — (Continued)

Direct expenses also include the costs of maintaining and operating the small-scale renewable energy plants that the Company owns, including the cost of fuel (if any) and depreciation charges.

**Income Taxes**

The Company provides for income taxes based on the liability method. The Company provides for deferred income taxes based on the expected future tax consequences of differences between the financial statement basis and the tax basis of assets and liabilities calculated using the enacted tax rates in effect for the year in which the differences are expected to be reflected in the tax return.

The Company accounts for uncertain tax positions using a “more-likely-than-not” threshold for recognizing and resolving uncertain tax positions. The evaluation of uncertain tax positions is based on factors that include, but are not limited to, changes in tax law, the measurement of tax positions taken or expected to be taken in tax returns, the effective settlement of matters subject to audit, new audit activity and changes in facts or circumstances related to a tax position. The Company evaluates uncertain tax positions on a quarterly basis and adjusts the level of the liability to reflect any subsequent changes in the relevant facts surrounding the uncertain positions.

The Company’s liabilities for uncertain tax positions can be relieved only if the contingency becomes legally extinguished through either payment to the taxing authority or the expiration of the statute of limitations, the recognition of the benefits associated with the position meet the “more-likely-than-not” threshold or the liability becomes effectively settled through the examination process.

The Company considers matters to be effectively settled once the taxing authority has completed all of its required or expected examination procedures, including all appeals and administrative reviews; the Company has no plans to appeal or litigate any aspect of the tax position; and the Company believes that it is highly unlikely that the taxing authority would examine or re-examine the related tax position. The Company also accrues for potential interest and penalties, related to unrecognized tax benefits in income tax expense.

**Foreign Currency Translation**

The local currency of the Company’s foreign operations is considered the functional currency of such operations. All assets and liabilities of the Company’s foreign operations are translated into U.S. dollars at year-end exchange rates. Income and expense items are translated at average exchange rates prevailing during the year. Translation adjustments are accumulated as a separate component of stockholders’ equity. Foreign currency translation gains and losses are reported in the consolidated statements of income and comprehensive income.

**Financial Instruments**

Financial instruments consist of cash and cash equivalents, restricted cash, accounts receivable, long-term contract receivables, accounts payable, long-term debt and interest rate swaps. The estimated fair value of cash and cash equivalents, restricted cash, accounts receivable, long-term contract receivables and accounts payable approximates their carrying value. See below for fair value measurements of long-term debt. See Note 9 for fair value of interest rate swaps.

**Stock-Based Compensation Expense**

Stock-based compensation expense results from the issuances of shares of restricted common stock and grants of stock options and warrants to employees, directors, outside consultants and others. The Company recognizes the costs associated with restricted stock, option and warrant grants using the fair value recognition provisions of ASC 718, *Compensation — Stock Compensation* (formerly SFAS No. 123(R), *Share-Based Payment*) on a straight-line basis over the vesting period of the awards.

AMERESCO, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) — (Continued)

Stock-based compensation expense is recognized based on the grant-date fair value. The Company estimates the fair value of the stock-based awards, including stock options, using the Black-Scholes option-pricing model. Determining the fair value of stock-based awards requires the use of highly subjective assumptions, including the fair value of the common stock underlying the award, the expected term of the award and expected stock price volatility.

The assumptions used in determining the fair value of stock-based awards represent management's estimates, which involve inherent uncertainties and the application of management judgment. As a result, if factors change, and different assumptions are employed, the stock-based compensation could be materially different in the future. The risk-free interest rates are based on the U.S. Treasury yield curve in effect at the time of grant, with maturities approximating the expected life of the stock options.

The Company has no history of paying dividends. Additionally, as of each of the grant dates, there was no expectation to pay dividends over the expected life of the options. The expected life of the awards is estimated using historical data and management's expectations. Because there was no public market for the Company's common stock prior to this offering, management lacked company-specific historical and implied volatility information. Therefore, estimates of expected stock volatility were based on that of publicly-traded peer companies, and it is expected that the Company will continue to use this methodology until such time as there is adequate historical data regarding the volatility of the Company's publicly-traded stock price.

The Company is required to recognize compensation expense for only the portion of options that are expected to vest. Actual historical forfeiture rate of options is based on employee terminations and the number of shares forfeited. This data and other qualitative factors are considered by the Company in determining to use a 25% forfeiture rate in recognizing stock compensation expense. If the actual forfeiture rate varies from historical rates and estimates, additional adjustments to compensation expense may be required in future periods. If there are any modifications or cancellations of the underlying unvested securities or the terms of the stock option, it may be necessary to accelerate, increase or cancel any remaining unamortized stock-based compensation expense.

The Company also accounts for equity instruments issued to non-employee directors and consultants at fair value. All transactions in which goods or services are the consideration received for the issuance of equity instruments are accounted for based on the fair value of the consideration received or the fair value of the equity instrument issued, whichever is more reliably measurable. The measurement date of the fair value of the equity instrument issued is the date on which the counterparty's performance is complete. No awards to individuals who were not either an employee or director of the Company occurred during the year ended December 31, 2009, or the quarterly period ended March 31, 2010.

**Fair Value Measurements**

On January 1, 2007, the Company adopted the guidance for fair value measurements. The guidance defines fair value, establishes a framework for measuring fair value in accordance with generally accepted accounting principles and expands disclosures about fair value measurements. In addition, in 2009, the Company adopted fair value measurements for all of its non-financial assets and non-financial liabilities, except for those recognized at fair value in the financial statements at least annually. These assets include goodwill and long-lived assets measured at fair value for impairment assessments, and non-financial assets and liabilities initially measured at fair value in a business combination. The Company's adoption of this guidance did not have a material impact on its consolidated financial statements.

The Company's financial instruments include cash and cash equivalents, accounts and notes receivable, interest rate swaps, accounts payable, accrued expenses, equity based liabilities and short and long-term borrowings. Because of their short maturity, the carrying amounts of cash and cash equivalents, accounts and notes receivable, accounts payable, accrued expenses and short-term borrowings approximate fair value.

AMERESCO, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) — (Continued)

The carrying value of long-term variable-rate debt approximates fair value. As of March 31, 2010, the carrying value of the Company's fixed-rate long-term debt exceeds its fair value by approximately \$741,000. This is based on quoted market prices or on rates available to the Company for debt with similar terms and maturities.

The Company accounts for its interest rate swaps as derivative financial instruments in accordance with the related guidance. Under this guidance, derivatives are carried on the consolidated balance sheets at fair value. The fair value of the Company's interest rate swaps are determined based on observable market data in combination with expected cash flows for each instrument.

**Derivative Financial Instruments**

Effective January 1, 2009, the Company adopted new guidance which expands the disclosure requirements for derivative instruments and hedging activities.

In the normal course of business, the Company utilizes derivatives contracts as part of its risk management strategy to manage exposure to market fluctuations in interest rates. These instruments are subject to various credit and market risks. Controls and monitoring procedures for these instruments have been established and are routinely reevaluated. Credit risk represents the potential loss that may occur because a party to a transaction fails to perform according to the terms of the contract. The measure of credit exposure is the replacement cost of contracts with a positive fair value. The Company seeks to manage credit risk by entering into financial instrument transactions only through counterparties that the Company believes to be creditworthy.

Market risk represents the potential loss due to the decrease in the value of a financial instrument caused primarily by changes in interest rates. The Company seeks to manage market risk by establishing and monitoring limits on the types and degree of risk that may be undertaken. As a matter of policy, the Company does not use derivatives for speculative purposes. The Company considers the use of derivatives with all financing transactions to mitigate risk.

A portion of the Company's project financing includes two projects that utilize an interest rate swap instrument. During 2007, the Company entered into two fifteen-year interest rate swap contracts under which the Company agreed to pay an amount equal to a specified fixed rate of interest times a notional principal amount, and to in turn receive an amount equal to a specified variable rate of interest times the same notional principal amount.

The Company did not apply hedge accounting based upon the criteria established by the related guidance as the Company did not designate its derivatives as cash flow hedges. The Company recognizes all derivatives in the consolidated balance sheets and statements of income and comprehensive income at fair value. Cash flows from derivative instruments are reported as operating activities on the consolidated statements of cash flows.

During the three months ended March 31, 2010, the Company entered into a fourteen-year interest rate swap contract under which the Company agreed to pay an amount equal to a specified fixed rate of interest times a notional principal amount, and to in turn receive an amount equal to a specified variable rate of interest times the same notional principal amount. The swap covers a notional amount of \$27.9 million variable rate note, at a fixed interest rate of 6.99%, and expires in December 2024. In accordance with accounting standards, the swap has been designated as a cash flow hedge and has met the requirements to be accounted for under the short-cut method, resulting in no ineffectiveness in the hedging relationship. Accordingly, the Company recognizes the fair value of the swap in its condensed consolidated balance sheets and any changes in the fair value are recorded as adjustments to other comprehensive income (loss).



## AMERESCO, INC.

## NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) — (Continued)

With respect to the Company's interest rate swaps, the Company recorded the unrealized gain (loss) in earnings during the periods ended March 31, 2009 and 2010, of approximately \$682,367 and \$(133,591), respectively, as other income (expenses) in the consolidated statements of income and comprehensive income.

**Earnings Per Share**

Basic earnings per share is calculated using the Company's weighted-average outstanding common shares, including vested restricted shares. When the effects are not anti-dilutive, diluted earnings per share is calculated using the weighted-average outstanding common shares and the dilutive effect of preferred stock, warrants and stock options as determined under the treasury stock method.

	Period Ended March 31,	
	2009	2010
Basic and diluted net income	\$ 417,909	\$ 1,277,678
Basic weighted-average shares outstanding	9,621,351	13,282,284
Effect of dilutive securities:		
Preferred stock	19,260,000	19,260,000
Stock options	3,670,881	3,640,446
Warrants	404,951	405,117
Diluted weighted-average shares outstanding	32,957,183	36,587,847

**Business Segments**

*The Company reports four segments:* U.S. federal, central U.S. region, other U.S. regions and Canada. Each segment provides customers with energy efficiency and renewable energy solutions. The other U.S. regions segment is an aggregation of three regions: northeast U.S., southeast U.S. and southwest U.S. These regions have similar economic characteristics — in particular, expected and actual gross profit margins. In addition, they sell products and services of a similar nature, serve similar types of customers and use similar methods to distribute their products and services. Accordingly, these three regions meet the aggregation criteria set forth in ASC 280. The "all other" category includes activities, such as O&M and sales of renewable energy and certain other renewable energy products, that are managed centrally at the Company's corporate headquarters. It also includes all corporate operating expenses — salary and benefits, project development costs and general administrative and other — not specifically allocated to the segments. For the first quarters of 2009 and 2010, unallocated corporate expenses were \$6,449,401 and \$7,339,180, respectively. Income before taxes and unallocated corporate expenses for all other in the first quarters of 2009 and 2010 was \$4,130,045 and \$3,425,154, respectively. See Note 11.

**Recent Accounting Pronouncements**

In 2009, the FASB issued an accounting pronouncement establishing the ASC as the source of authoritative accounting principles recognized by the FASB to be applied by non-governmental entities. This pronouncement was effective for financial statements issued for interim and annual periods ending after September 15, 2009, for most entities. On the effective date, all non-SEC accounting and reporting standards were superseded. The Company adopted this new accounting pronouncement during 2009, and it did not have a material impact on the Company's consolidated financial statements.

In May 2009, the FASB issued guidance on subsequent events, which sets forth general standards of accounting for and disclosure of events that occur after the balance sheet date but before financial statements are issued or are available to be issued. The Company adopted the guidance during 2009, and it did not have a material impact on the Company's consolidated financial statements.

AMERESCO, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) — (Continued)

In January 2010, the FASB issued guidance on improving disclosures about fair value measurements. This guidance has new requirements for disclosures related to recurring or nonrecurring fair-value measurements including significant transfers into and out of Level 1 and Level 2 fair-value measurements and information on purchases, sales, issuances and settlements in a rollforward reconciliation of Level 3 fair-value measurements. This guidance is effective for the first reporting period beginning after December 15, 2009, and, as a result, it was effective for the Company beginning January 1, 2010. The Level 3 reconciliation disclosures are effective for fiscal years beginning after December 15, 2010, which will be effective for the Company for the year ending December 31, 2011. The Company does not expect its adoption of the guidance to have a material impact on its consolidated financial statements.

In September 2009, the FASB issued guidance related to revenue arrangements with multiple deliverables as codified in ASC 605, *Revenue Recognition* ("ASC 605"). ASC 605 provides greater ability to separate and allocate arrangement consideration in a multiple element revenue arrangement. In addition, ASC 605 requires the use of estimated selling price to allocate arrangement considerations, therefore eliminating the use of the residual method of accounting. ASC 605 will be effective for fiscal years beginning after June 15, 2010, and may be applied retrospectively or prospectively for new or materially modified arrangements. Earlier application is permitted. The Company does not expect its adoption of this guidance will have a material effect on its consolidated financial statements.

**3. INCOME TAXES**

The provision for income taxes was approximately \$225,000 and \$429,000, for the quarters ended March 31, 2009 and 2010, respectively. The effective tax rate changed to 25.18% for the quarter ended March 31, 2010, from 34.99% in the quarter ended March 31, 2009. The rate variance between the periods is due mainly to the Company's change in its permanent items from 2009 to 2010. The overall rates vary from the statutory rate due to the benefit of certain energy efficiency preferences the Company generates during the year.

**4. STOCK INCENTIVE PLAN**

On October 27, 2000, the Company's Board of Directors approved the Company's 2000 Stock Incentive Plan (the "Plan") and authorized the Company to reserve 12,000,000 shares of common stock for issuance under the Plan. On August 7, 2001, and April 25, 2002, the Company's Board of Directors authorized the Company to reserve an additional 4,000,000 shares of common stock for issuance under the Plan, bringing the total number of shares of common stock reserved under the Plan to 16,000,000. On June 1, 2003, and October 25, 2006, the Company's Board of Directors authorized the Company to reserve an additional 4,500,000 shares of common stock for issuance under the Plan, bringing the total number of shares of common stock reserved under the Plan to 20,500,000.

The Plan provides for the issuance of restricted stock grants, incentive stock options and nonqualified stock options. On July 22, 2009, the Company's Board of Directors authorized the Company to reserve an additional 8,000,000 shares of common stock for issuance under the Plan, bringing the total number of shares of common stock reserved under the Plan to 28,500,000.

**Grants of Restricted Shares**

On October 25, 2006, the Company issued 2,000,000 shares of restricted stock to the Company's principal and controlling shareholder under the 2000 Stock Incentive Plan as consideration for providing an indemnification to the Company's surety provider (see Note 7). The shares vested entirely upon the date three years from the date of grant. The stock was issued when the fair value was estimated to be \$3.41 per share. The Company recorded an expense during the quarter ended March 31, 2009 of \$526,600 related to this award. On October 25, 2009, these shares vested.

AMERESCO, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) — (Continued)

***Stock Option Grants***

The Company has also granted stock options to certain employees and directors under the Plan. At March 31, 2010, 8,492,600 shares were available for grant under the Plan. The following table summarizes the activity under the Plan as of March 31, 2010:

	Number of Options	Weighted- Average Exercise Price
Outstanding at December 31, 2009	9,450,200	2.68
Granted	—	—
Exercised	—	—
Forfeited	(47,000)	(3.43)
Outstanding at March 31, 2010	<u>9,403,200</u>	<u>\$ 2.805</u>
Options exercisable at March 31, 2010	<u>7,189,650</u>	<u>\$ 2.190</u>
Expected to vest at March 31, 2010	<u>1,723,156</u>	<u>\$ 4.765</u>
Options exercisable at December 31, 2009	<u>7,033,550</u>	<u>\$ 2.145</u>

The weighted-average remaining contractual life of options expected to vest at March 31, 2010 was 4.54 years. No options were exercised during the three months ended March 31, 2010.

The following table summarizes information about stock options outstanding at March 31, 2010:

Exercise Prices	Outstanding Options			Exercisable Options	
	Number Outstanding	Weighted- Average Remaining Contractual Life	Weighted- Average Exercise Price	Number Exercisable	Weighted- Average Exercise Price
\$ 0.45	416,000	0.85	\$ 0.45	416,000	\$ 0.45
0.75	480,000	1.72	0.75	480,000	0.75
0.875	1,778,200	2.31	0.875	1,778,200	0.875
1.50	50,000	2.83	1.50	50,000	1.50
1.75	410,000	3.29	1.75	410,000	1.75
1.875	200,000	3.49	1.875	200,000	1.875
2.75	1,517,000	4.28	2.75	1,517,000	2.75
3.00	60,000	4.83	3.00	60,000	3.00
3.25	1,379,000	3.47	3.25	1,096,800	3.25
3.41	1,083,000	3.29	3.41	655,250	3.41
4.22	964,000	3.96	4.22	455,100	4.22
6.055	1,066,000	5.68	6.055	71,300	6.055
	<u>9,403,200</u>			<u>7,189,650</u>	

Under the terms of the Plan, all options expire if not exercised within ten years after the grant date. The options generally vest over five years at a rate of 20% after the first year, and at a rate of 5% every three months beginning one year after the grant date. If the employee ceases to be employed by the Company for any reason before vested options have been exercised, the employee has 90 days to exercise vested options or they are forfeited.

## AMERESCO, INC.

## NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) — (Continued)

The Company uses the Black-Scholes option pricing model to determine the weighted-average fair value of options granted. The Company will recognize the compensation cost of stock-based awards on a straight-line basis over the vesting period of the award.

The determination of the fair value of stock-based payment awards utilizing the Black-Scholes model is affected by the stock price and a number of assumptions, including expected volatility, expected life, risk-free interest rate and expected dividends. The Company granted no stock options during the three months ended March 31, 2010. The following table sets forth the significant assumptions used in the model during 2009:

	Year Ended December 31, 2009
Future dividends	\$ —
Risk-free interest rate	2.00-2.94%
Expected volatility	57%-59%
Expected life	6.5 years

The Company will continue to use judgment in evaluating the expected term, volatility and forfeiture rate related to the stock-based compensation on a prospective basis, and incorporating these factors into the Black-Scholes pricing model. Higher volatility and longer expected lives result in an increase to stock-based compensation expense determined at the date of grant. In addition, any changes in the estimated forfeiture rate can have a significant effect on reported stock-based compensation expense, as the cumulative effect of adjusting the rate for all expense amortization is recognized in the period that the forfeiture estimate is changed. If a revised forfeiture rate is higher than the previously estimated forfeiture rate, an adjustment is made that will result in a decrease to the stock-based compensation expense recognized in the accompanying consolidated financial statements. If a revised forfeiture rate is lower than the previously estimated rate, an adjustment is made that will result in an increase to the stock-based compensation expense recognized in the accompanying consolidated financial statements. These expenses will affect the direct expenses, salaries and benefits and project development costs expenses.

For the periods ended March 31, 2009 and 2010, the Company recorded stock-based compensation expense of approximately \$90,000 and \$439,086, respectively, in connection with stock-based payment awards. The compensation expense is allocated between direct expenses, salaries and benefits and project development costs in the accompanying consolidated statements of income and comprehensive income based on the salaries and work assignments of the employees holding the options. As of March 31, 2010, there was approximately \$6,349,931 of unrecognized compensation expense related to non-vested stock option awards that is expected to be recognized over a weighted-average period of 3.83 years.

## 5. COMMITMENTS AND CONTINGENCIES

### Legal Proceedings

In the ordinary course of business, the Company may be involved in a variety of legal proceedings.

In 2009, a lawsuit was filed against the Company. In the lawsuit, the plaintiff alleged that the Company caused action for damages by soliciting and hiring the plaintiff's employees. The Company and the plaintiff settled the lawsuit by the Company paying \$1.8 million to the plaintiff and in exchange both parties agreed to dismiss the lawsuit and reciprocally release and discharge each other from all claims stated or which could have been stated in the action against each other. The settlement was not construed as an admission of any wrongdoing, but rather was an economic decision to settle and compromise disputed claims. The settlement was recorded in the second quarter of 2009 in general, administrative and other expenses in the accompanying consolidated statements of income and comprehensive income.

## AMERESCO, INC.

## NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) — (Continued)

On February 27, 2009, the Company received notice of a default termination from a customer for which the Company was performing construction services. The dispute involves the customer's assertion of its understanding of the contractual scope of work involved and with the completion date of the project. The Company disputes the customer's assertion as it believes that the basis of the default arose from a delay due to the discovery of and need for remediation of previously undiscovered hazardous materials not identified by the customer during contract negotiations. In February 2010, the Company filed a motion for summary judgment as to a portion of the complaint. In March 2010, the customer filed its response. Discovery is currently ongoing and no date has been set for a hearing on the Company's motion. The Company did not record an additional accrual for this matter beyond the adjustments made to the Company's expected profit on this contract because the Company believes that the likelihood is remote that any additional liability would be incurred related to this matter. Based on the contract termination notice, the Company has adjusted its expected contract revenue and profit until such time as this contingency is resolved. The Company had claims of approximately \$3.0 million outstanding with the customer as of March 31, 2010. As of March 31, 2010, the Company has not recognized any revenue or profit associated with these claims.

**6. GEOGRAPHIC INFORMATION**

The Company attributes revenue to customers based on the location of the customer. The composition of the Company's assets at March 31, 2010 and December 31, 2009, and revenue from sales to unaffiliated customers for the periods ended March 31, 2010 and 2009, between those in the United States and those in other locations, is as follows:

	December 31, 2009	March 31, 2010
<b>Assets:</b>		
United States	\$ 322,599,256	\$ 327,502,566
Canada	52,945,352	52,912,776
	<u>\$ 375,544,608</u>	<u>\$ 380,415,342</u>
<b>Revenue:</b>		
United States	\$ 59,524,733	\$ 86,912,684
Canada	12,980,153	18,569,416
Other	882,195	146,486
	<u>\$ 73,387,081</u>	<u>\$ 105,628,586</u>

**7. RELATED PARTY TRANSACTIONS**

The Company's principal and controlling shareholder provides a limited personal indemnification to the surety companies that provide performance and payment bonds and other surety products to the Company. In 2006, the Company issued 2,000,000 shares of restricted stock to the Company's principal and controlling shareholder under the 2000 Stock Incentive Plan (see Note 4) as compensation for providing the personal indemnification. In 2009, the Company issued 600,000 stock options to the principal and controlling shareholder under the 2000 Stock Incentive Plan as compensation for providing the personal indemnification.

AMERESCO, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) — (Continued)

8. OTHER INCOME (EXPENSES), NET

Other income (expenses), net, consisted of the following items for the periods ended March 31, 2009 and 2010:

	2009	2010
Unrealized gain (loss) from derivatives	\$ 682,367	\$ (133,591)
Interest expense, net of interest income	(641,606)	(651,748)
Amortization of deferred financing costs	(65,202)	(70,350)
	<u>\$ (24,441)</u>	<u>\$ (855,689)</u>

9. FAIR VALUE MEASUREMENT

On January 1, 2008, the Company adopted new guidance for its financial assets and liabilities recognized at fair value on a recurring basis (at least annually). The guidance defines fair value as the price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The guidance also describes three levels of inputs that may be used to measure fair value:

*Level 1:* Inputs are based upon unadjusted quoted prices for identical instruments traded in active markets.

*Level 2:* Inputs are based upon quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model based valuation techniques for which all significant assumptions are observable in the market or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

*Level 3:* Inputs are generally unobservable and typically reflect management's estimates of assumptions that market participants would use in pricing the asset or liability. The fair values are therefore determined using model-based techniques that include option pricing models, discounted cash flow models, and similar techniques.

The following table presents the input level used to determine the fair values of the Company's financial instruments measured at fair value on a recurring basis as of March 31, 2010 and December 31, 2009:

	Level	Fair Value as of	
		March 31, 2010	December 31, 2009
<b>Liabilities:</b>			
Interest rate swap instruments	2	\$ 2,567,480	\$ 1,933,535
<b>Total liabilities</b>	<b>2</b>	<b>\$ 2,567,480</b>	<b>\$ 1,933,535</b>

The fair value of the Company's interest rate swaps was determined using cash flow analysis on the expected cash flow of the contract in combination with observable market-based inputs, including interest rate curves and implied volatilities. As a part of this valuation, the Company considered the credit ratings of the counterparties to the interest rate swaps to determine if a credit risk adjustment was required.

The Company is also required periodically to measure certain other assets at fair value on a nonrecurring basis, including long-lived assets, goodwill and other intangible assets. The Company determined the fair value used in the impairment analysis with its own discounted cash flow analysis. The Company has determined the inputs used in such analysis as Level 3 inputs. The Company did not record any impairment

AMERESCO, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) — (Continued)

charges on goodwill or other intangible assets as no significant events requiring non-financial assets and liabilities to be measured at fair value occurred during the period ended March 31, 2010, or for the year ended December 31, 2009.

**10. DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES**

At December 31, 2009, and March 31, 2010, the following table presents information about the fair value amounts of the Company's derivative instruments:

	Liability Derivatives as of			
	December 31, 2009		March 31, 2010	
	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value
Derivatives not designated as hedging instruments:				
Interest rate swap contracts	Other liabilities	\$ 1,933,535	Other liabilities	\$ 2,067,126
Derivatives designated as hedging instruments:				
Interest rate swap contract	Other liabilities	\$ —	Other liabilities	\$ 500,354

The following tables present information about the effect of the Company's derivative instruments on accumulated other comprehensive income and the consolidated statements of income and comprehensive income.

	Location of Gain (Loss) Recognized in Income on Derivative	Amount of Gain (Loss) Recognized in Income on Derivative for the Periods Ended March 31, are as follows:	
		2009	2010
		Derivatives Not Designated as Hedging Instruments	
Interest rate swap contracts	Interest income (expense)	\$ 682,367	\$ (133,591)

		As of March 31, 2010	
		Gain (Loss) Recognized in Accumulated Other Comprehensive Income	Gain (Loss) Reclassified from Accumulated Other Comprehensive Income
		Derivatives designated as hedging instruments:	
Interest rate swap contract		\$ (500,034)	\$ (53,947)

**11. BUSINESS SEGMENT INFORMATION**

The Company reports four segments: U.S. federal, central U.S. region, other U.S. regions and Canada. Each segment provides customers with energy efficiency and renewable energy solutions. The other U.S. regions segment is an aggregation of three regions: northeast U.S., southeast U.S. and southwest U.S. These regions have similar economic characteristics — in particular, expected and actual gross profit margins. In addition, they sell products and services of a similar nature, serve similar types of customers and use similar methods to distribute their products and services. Accordingly, these three regions meet the aggregation criteria set forth in ASC 280. The "all other" category includes activities, such as O&M and sales of renewable energy and certain other renewable energy products, that are managed centrally at the Company's

AMERESCO, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) — (Continued)

corporate headquarters. It also includes all corporate operating expenses — salary and benefits, project development costs, and general administrative and other — not specifically allocated to the segments. For the quarters ended March 31, 2009 and 2010, unallocated corporate expenses were \$6,449,401 and \$7,339,180, respectively. Income before taxes and unallocated corporate expenses for all other in the first quarters of 2009 and 2010 was \$4,130,045 and \$3,425,154, respectively. The Company does not allocate any indirect expenses to the segments. The accounting policies are the same as those described in the summary of significant accounting policies.

**Ameresco, Inc. and Subsidiaries**  
**Fiscal First Quarter 2010 Segment Reporting**

	US Federal	Central U. S. Region	Other U.S. Regions	Canada	All Other	Total
Total revenue	\$24,878,648	\$18,606,701	\$21,682,401	\$18,353,817	\$ 22,107,019	\$105,628,586
Interest income	\$ —	\$ —	\$ —	\$ 7,191	\$ 306	\$ 7,497
Interest expense	\$ —	\$ —	\$ —	\$ 51	\$ 863,135	\$ 863,186
Depreciation	\$ 20,400	\$ 1,266	\$ —	\$ 102,185	\$ 2,018,812	\$ 2,142,663
Income (loss) before taxes	\$ 1,982,606	\$ 1,035,080	\$ 2,209,480	\$ 393,796	\$ (3,914,026)	\$ 1,706,936
Total Assets	\$88,780,644	\$15,619,554	\$67,280,695	\$52,912,776	\$157,604,210	\$382,197,879
Capital expenditures	\$ 12,991	\$ 7,638	\$ 353,509	\$ 982,961	\$ 4,941,758	\$ 6,298,857

**Ameresco, Inc. and Subsidiaries**  
**Fiscal First Quarter 2009 Segment Reporting**

	US Federal	Central U. S. Region	Other U.S. Regions	Canada	All Other	Total
Total revenue	\$12,008,969	\$11,110,105	\$17,410,661	\$12,966,529	\$ 19,890,817	\$ 73,387,081
Interest income	\$ 209	\$ —	\$ —	\$ 15,173	\$ 1,735	\$ 17,117
Interest expense	\$ 182	\$ —	\$ —	\$ 1,463	\$ 39,913	\$ 41,558
Depreciation	\$ 22,125	\$ 6,564	\$ —	\$ 34,223	\$ 1,043,689	\$ 1,106,601
Income (loss) before taxes	\$ 1,442,983	\$ 209,779	\$ 1,247,145	\$ 62,385	\$ (2,319,356)	\$ 642,936
Total Assets	\$46,523,965	\$ 9,404,100	\$68,612,936	\$33,255,883	\$133,888,583	\$291,685,467
Capital expenditures	\$ 8,458	\$ 731	\$ 110,109	\$ 251,800	\$ 9,493,167	\$ 9,864,265

**12. SUBSEQUENT EVENTS**

During April and May 2010, the Company granted options to purchase 856,000 shares of common stock under the 2000 Stock Incentive Plan (see Note 4). The options were granted at an exercise price of \$13.045 per share. During April and May 2010, a total of 523,206 shares were issued upon the exercise of options under the 2000 Stock Incentive Plan at an average price of \$0.785 per share. Total proceeds received were \$410,840.

The Company has evaluated subsequent events through the date of this filing.



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Through and including (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

**8,696,820 Shares**



**Class A Common Stock**

**PROSPECTUS**

**BofA Merrill Lynch  
RBC Capital Markets  
Oppenheimer & Co.  
Canaccord Genuity  
Cantor Fitzgerald & Co.  
Madison Williams and Company  
Stephens Inc.**

, 2010

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**Part II****Information Not Required in Prospectus****Item 13. Other Expenses of Issuance and Distribution**

The following table indicates the expenses to be incurred in connection with the offering described in this Registration Statement, other than underwriting discounts and commissions, all of which will be paid by Ameresco. All amounts are estimated except the Securities and Exchange Commission registration fee and the FINRA filing fee.

	<u>Amount</u>
Securities and Exchange Commission registration fee	\$ 11,410
Financial Industry Regulatory Authority fee	16,503
NYSE listing fee	242,285
Accountants' fees and expenses	1,000,000
Legal fees and expenses	1,300,000
Blue Sky fees and expenses	5,000
Transfer Agent's fees and expenses	15,000
Printing and engraving expenses	130,000
Miscellaneous	79,802
Total Expenses	<u>\$ 2,800,000</u>

**Item 14. Indemnification of Directors and Officers**

Section 102 of the General Corporation Law of the State of Delaware permits a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. Our restated certificate of incorporation that will become effective upon the closing of this offering provides that no director of Ameresco shall be personally liable to it or its stockholders for monetary damages for any breach of fiduciary duty as director, notwithstanding any provision of law imposing such liability, except to the extent that the Delaware General Corporation Law prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty.

Section 145 of the Delaware General Corporation Law provides that a corporation has the power to indemnify a director, officer, employee, or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlements actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he is or is threatened to be made a party by reason of such position, if such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation and, in any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Our restated certificate of incorporation provides that we will indemnify each person who was or is a party or threatened to be made a party to any threatened, pending or completed action, suit or proceeding (other than an action by or in the right of Ameresco) by reason of the fact that he or she is or was, or has agreed to become, a director or officer of Ameresco, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership,

joint venture, trust or other enterprise (all such persons being referred to as an Indemnitee), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding and any appeal therefrom, if such Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, and, with respect to any criminal action or proceeding, he or she had no reasonable cause to believe his or her conduct was unlawful. Our restated certificate of incorporation provides that we will indemnify any Indemnitee who was or is a party to an action or suit by or in the right of Ameresco to procure a judgment in our favor by reason of the fact that the Indemnitee is or was, or has agreed to become, a director or officer of Ameresco, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee or trustee or, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise, or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees) and, to the extent permitted by law, amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding, and any appeal therefrom, if the Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of Ameresco, except that no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to us, unless a court determines that, despite such adjudication but in view of all of the circumstances, he or she is entitled to indemnification of such expenses. Notwithstanding the foregoing, to the extent that any Indemnitee has been successful, on the merits or otherwise, he or she will be indemnified by us against all expenses (including attorneys' fees) actually and reasonably incurred in connection therewith. Expenses must be advanced to an Indemnitee under certain circumstances.

We have entered into indemnification agreements with each of our directors. These indemnification agreements may require us, among other things, to indemnify our directors for some expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by a director in any action or proceeding arising out of his service as one of our directors, or any of our subsidiaries or any other company or enterprise to which the person provides services at our request.

We maintain a general liability insurance policy that covers certain liabilities of directors and officers of our corporation arising out of claims based on acts or omissions in their capacities as directors or officers.

In any underwriting agreement we enter into in connection with the sale of our Class A common stock being registered hereby, the underwriters will agree to indemnify, under certain conditions, us, our directors, our officers and persons who control us with the meaning of the Securities Act of 1933, as amended, against certain liabilities.

**Item 15. *Recent Sales of Unregistered Securities***

Set forth below is information regarding securities sold by us within the past three years. Also included is the consideration received by us for such sales and information relating to the section of the Securities Act, or rule of the Securities and Exchange Commission, under which exemption from registration was claimed.

Between January 1, 2007 and December 31, 2007, we granted options to purchase an aggregate of 1,407,000 shares of our Class A common stock with exercise prices ranging from \$3.41 to \$4.22 per share, pursuant to our 2000 stock plan. Between January 1, 2007 and December 31, 2007, we issued an aggregate of 152,000 shares of our Class A common stock upon exercise of options for aggregate consideration of \$74,015.

Between January 1, 2008 and December 31, 2008, we granted options to purchase an aggregate of 303,000 shares of our Class A common stock, with exercise prices ranging from \$4.22 to \$6.055 per share, pursuant to our 2000 stock plan. Between January 1, 2008 and December 31, 2008, we issued an aggregate of 28,000 shares of our Class A common stock upon exercise of options for aggregate consideration of \$67,250.

Between January 1, 2009 and December 31, 2009, we granted options to purchase an aggregate of 862,000 shares of our Class A common stock, with an exercise price of \$6.055 per share, pursuant to our 2000

[Table of Contents](#)

stock plan. Between January 1, 2009 and December 31, 2009, we issued an aggregate of 1,738,000 shares of our Class A common stock upon exercise of options for aggregate consideration of \$874,760.

Between January 1, 2010 and July 20, 2010, we have granted options to purchase an aggregate of 856,000 shares of our Class A common stock, each with an exercise price of \$13.045 per share, pursuant to our 2000 stock plan. Between January 1, 2010 and July 20, 2010, we issued 523,206 shares of our Class A Common stock upon exercise of options for aggregate consideration of \$410,840. On June 21, 2010, we issued 405,286 shares of Class A common stock upon the exercise of a warrant at an exercise price of \$0.005 per share.

The options and shares of our common stock described in this Item 15 were issued pursuant to written compensatory plans or arrangements with our employees, directors and consultants in reliance upon the exemption from the registration requirements of the Securities Act provided by Rule 701 promulgated under the Securities Act or, in some cases, in reliance upon the exemption from the registration requirements of the Securities Act provided by Section 4(2) of the Securities Act and Regulation D promulgated thereunder as sales by an issuer not involving any public offering.

No underwriters were involved in the foregoing issuances of securities. All of the foregoing securities are deemed restricted securities for purposes of the Securities Act. All certificates representing the issued shares of common stock described in this Item 15 included appropriate legends setting forth that the securities had not been registered and the applicable restrictions on transfer.

**Item 16. Exhibits**

The exhibits to the registration statement are listed in the Exhibit Index to this registration statement and are incorporated by reference herein.

**Item 17. Undertakings**

The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement, certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that, in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in the form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of the registration statement as of the time it was declared effective.

(2) For purposes of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

**SIGNATURES**

Pursuant to the requirements of the Securities Act, the Registrant has duly caused this Amendment No. 6 to Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Framingham, Commonwealth of Massachusetts, on the 20th day of July, 2010.

AMERESCO, INC.

By: /s/ George P. Sakellaris  
George P. Sakellaris  
*President and Chief Executive Officer*

Pursuant to the requirements of the Securities Act, this Amendment No. 6 to Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ George P. Sakellaris</u> George P. Sakellaris	Chairman of the Board of Directors, President and Chief Executive Officer (Principal Executive Officer)	July 20, 2010
<u>/s/ Andrew B. Spence</u> Andrew B. Spence	Chief Financial Officer (Principal Financial and Accounting Officer)	July 20, 2010
<u>*</u> David J. Anderson	Director	July 20, 2010
<u>/s/ David J. Corrsin</u> David J. Corrsin	Director	July 20, 2010
<u>*</u> William M. Bulger	Director	July 20, 2010
<u>*</u> Douglas I. Foy	Director	July 20, 2010
<u>*</u> Michael E. Jesanis	Director	July 20, 2010
<u>*</u> Guy W. Nichols	Director	July 20, 2010
<u>*</u> Joseph W. Sutton	Director	July 20, 2010
* By: <u>/s/ David J. Corrsin</u> David J. Corrsin Attorney-in-Fact		

## EXHIBIT INDEX

Exhibit Number	Description
1.1*	Form of Underwriting Agreement
3.1*	Form of Amended and Restated Certificate of Incorporation of the Registrant, to be filed and effective prior to the closing of the offering
3.2*	Form of Amended and Restated Certificate of Incorporation of the Registrant, to be filed promptly following the closing of the offering
3.3*	Form of Amended and Restated By-Laws of the Registrant, to be effective prior to the closing of the offering
4.1*	Specimen Certificate evidencing shares of Class A common stock
5.1*	Opinion of Wilmer Cutler Pickering Hale and Dorr LLP
10.1*	Lease dated November 20, 2000 between the Registrant and BCIA New England Holdings, LLC
10.2*	First Amendment to Lease dated November 2001 by and between Ameresco, Inc. and BCIA New England Holdings, LLC
10.3*	Second Amendment to Lease and Extension Agreement dated April 8, 2005 by and between the Registrant and BCIA New England Holdings, LLC
10.4*	Third Amendment to Lease dated April 17, 2007 by and between RREEF America REIT III-Z1 LLC and the Registrant
10.5*	Amended and Restated Credit and Security Agreement dated June 10, 2008 among the Registrant, certain guarantors party thereto, certain lenders party thereto from time to time and Bank of America, N.A. as Administrative Agent
10.6*	Ameresco, Inc. 2000 Stock Incentive Plan
10.7*	Form of Incentive Stock Option Agreement granted under Ameresco, Inc. 2000 Stock Incentive Plan
10.8*	Form of Non-Qualified Stock Option Agreement granted under Ameresco, Inc. 2000 Stock Incentive Plan
10.9*	Form of Restricted Stock Agreement granted under Ameresco, Inc. 2000 Stock Incentive Plan
10.10*	Ameresco, Inc. 2010 Stock Incentive Plan
10.11*	Form of Incentive Stock Option Agreement granted under Ameresco, Inc. 2010 Stock Incentive Plan
10.12*	Form of Director Stock Option Agreement granted under Ameresco, Inc. 2010 Stock Incentive Plan
10.13*	Form of Executive Employment Agreement
10.14*	Stockholder Agreement dated as of September 25, 2008 by and among the Registrant, Samuel T. Byrne, AMCAP Holdings, Ltd., George P. Sakellaris and such other persons who from time to time become party thereto
10.15*	Form of Indemnification Agreement entered into between the Registrant and each non-employee director
10.16+	Revised Final Proposal, DOE Savannah River Site, Biomass Cogeneration Facility and K and L Area Heating Plants, submitted by Ameresco Federal Solutions, under DOE Contract No. DE-AM36-02NT41457, May 11, 2009
10.17*	Fourth Amendment to Lease dated January 1, 2010 by and between RREEF America REIT III-Z1 LLC and Ameresco, Inc.
10.18*	Form of Indemnification Agreement entered into between the Registrant and each employee director
10.19*	Employment Agreement dated as of June 4, 2010 between the Registrant and David J. Anderson
10.20*	Employment Agreement dated as of June 2, 2010 between the Registrant and Louis P. Maltezos
10.21*	Employment Agreement dated as of June 4, 2010 between the Registrant and David J. Corrsin
10.22*	Employment Agreement dated as of June 3, 2010 between the Registrant and Keith A. Derrington
10.23*	Employment Agreement dated as of June 4, 2010 between the Registrant and Michael T. Bakas
10.24*	Form of Confidential Information, Invention, Non-Solicitation and Non-Competition Agreement entered into between the Registrant and each of the following selling stockholders: John L. Bosch, Mark Bruce, Peter Christakis, Jeanette Coleman-Hall, Janice DeBarros, Paul Dello Iacono, Joseph DeManche, Kathleen DevlinRuggiero, Mark Feichtner, Alex J. Harkness, Vivekanand Hegde, Ben Heuser, Mohsin Huq, Lillian Kamalay, Richard E. Kohrs, Peter W. Kurpiewski, Dean Lebron, Louis P. Maltezos, Jeffrey Metcalf, Stephen Morgan, Patricia Puopolo, William Skosky, Jeffrey Stander, Christopher Sternadore, Kevin A. Sullivan, Bhoopendra N. Tripathi, Thomas Tsaros, Carl Von Saltza and Alan Winkler

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## Table of Contents

<u>Exhibit</u> <u>Number</u>	<u>Description</u>
10.25*	Form of Supplemental Non-Solicitation and Non-Competition Agreement between the Registrant and each of the following selling stockholders: John L. Bosch, Mark Bruce, Peter Christakis, Jeanette Coleman-Hall, Janice DeBarros, Paul Dello Iacono, Joseph DeManche, Kathleen DevlinRuggiero, Mark Feichtner, Alex J. Harkness, Vivekanand Hegde, Ben Heuser, Mohsin Huq, Lillian Kamalay, Richard E. Kohrs, Peter W. Kurpiewski, Dean Lebron, Louis P. Maltezos, Jeffrey Metcalf, Stephen Morgan, Patricia Puopolo, William Skosky, Jeffrey Stander, Christopher Sternadore, Kevin A. Sullivan, Bhoopendra N. Tripathi, Thomas Tsaros, Carl Von Saltza and Alan Winkler
10.26*	Form of Non-Solicitation and Non-Competition Agreement between the Registrant and each of the following selling stockholders: Enzo Colangelo, Anthony DaSilva, Timothy Detlaff, Edward Golfetto, Mario Iusi, David Maksymiuk, Craig Piercey, David Seymour and Douglas Wall
21.1*	Subsidiaries of the Registrant
23.1	Consent of Caturano and Company, Inc.
23.2*	Consent of Wilmer Cutler Pickering Hale and Dorr LLP (included in Exhibit 5.1)
23.3*	Consent of Frost & Sullivan
24.1*	Powers of Attorney of David J. Anderson, William M. Bulger, Guy W. Nichols and Joseph W. Sutton (included on signature page)
24.2*	Power of Attorney of Michael E. Jesanis
24.3*	Power of Attorney of Douglas I. Foy

\* Previously filed

+ Confidential treatment requested as to certain portions, which portions have been omitted and filed separately with the Securities and Exchange Commission.

Confidential Materials omitted and filed separately with the  
Securities and Exchange Commission. Asterisks denote omissions.

REVISED FINAL PROPOSAL  
DOE Savannah River Site  
Biomass Cogeneration Facility and  
K and L Area Heating Plants

Submitted by:  
Ameresco Federal Solutions  
1820 Midpark Road, Suite C  
Knoxville, TN 37921  
Under DOE Contract No. DE-AM36-02NT41457  
May 11, 2009

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**DISCLOSURE OF INFORMATION**

This proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed—in whole or in part—for any purpose other than to evaluate this proposal. If, however, a contract is awarded to this offeror as a result of—or in connection with—the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained on all pages.

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TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
1.0 ECM 1 DESCRIPTION	4
1.1 ECM Summary Schedule DO-4	4
1.2 ECM #1: Biomass Cogeneration Facility	4
1.2.1 Detailed Description of ECM	4
1.2.1.1 ECM Summary	4
1.2.1.2 ECM Design Process	5
1.2.1.3 ECM 1 Operation	17
1.2.2 Location Affected	18
1.2.3 ECM 1 Interface with Government Equipment	20
1.2.4 Proposed Equipment	25
1.2.5 Expected Lifetime	25
1.2.6 Physical Changes to Existing Equipment or Facilities	25
1.2.7 Savings Proposed	25
1.2.7.1 Annual Project Savings Overview	25
1.2.7.2 Annual Energy Baseline Consumption & Costs	27
1.2.7.3 Annual Energy Savings Calculations	30
1.2.7.4 ECM 1 Performance Measurement	30
1.2.8 Utility Interruptions	35
1.2.9 Agency Support Required	35
1.2.10 Potential Environmental Impact	35
1.2.11 ECM Property Ownership	35
1.2.12 ECM Project Schedule	35
1.3 BAMF Project Components	36
1.3.1 BAMF Resource	36
1.3.1.1 BAMF Supply	36
1.3.1.2 BAMF Pricing	37
1.3.1.3 BAMF Acquisition	38
1.3.2 BAMF Transportation, Metering, & Delivery	38
1.3.2.1 BAMF Transportation & Delivery	38
1.3.2.2 BAMF Metering	38
1.3.3 BAMF End-Use Project	39
1.3.3.1 BAMF End-Use Demand	39
1.3.3.2 BAMF End-Use Operations & Maintenance	39
2.0 ECM 2 DESCRIPTION	40

*Use or disclosure of data contained on this sheet is subject to the restriction on the first page of this proposal*

---

2.1 ECM Summary Schedule DO-4	40
2.2 ECM #2: Biomass Heating Plants for K& L Areas	40
2.2.1 Detailed Description of ECM	40
2.2.1.1 ECM Summary	40
2.2.1.2 ECM Process Description	41
2.2.1.3 ECM Operation	42
2.2.2 Location Affected	43
2.2.3 ECM 2 Interface with Government Equipment	44
2.2.4 Proposed Equipment	46
2.2.5 Expected Lifetime	46
2.2.6 Physical Changes to Existing Equipment or Facilities	46
2.2.7 Savings Proposed	46
2.2.7.1 Annual Energy Savings	49
2.2.7.2 Annual Energy Baseline Consumption & Costs	49
2.2.7.3 Annual Heating Plant Performance	51
2.2.8 Utility Interruptions	52
2.2.9 Agency Support Required	52
2.2.10 Potential Environmental Impact	52
2.2.11 ECM Property Ownership	52
2.2.12 ECM Project Schedule	53
3.0 ENVIRONMENTAL IMPACT OVERVIEW	54
3.1 Overview of Environmental Benefits	54
3.2 Overview of Environmental Permitting & Assessment	54
4.0 ECM PERFORMANCE MEASUREMENT	59
4.1 Overview of Proposed Annual Savings	59
4.2 M&V Plan Executive Summary	59
4.3 Whole Project Data / Global Assumptions	60
4.3.1 Risk and Responsibility	60
4.3.2 Energy, Water, and Operations and Maintenance (O&M) Rate Data	60
4.3.3 Schedule & Reporting for Verification Activities	61
4.3.4 Status of Utility Company Incentives	62
4.4 ECM Specific M&V Plan and Savings Calculation Methods	62
4.4.1 Overview of ECM Specific M&V Plans	62
4.4.1.1 ECM 1: Biomass Cogeneration Facility	62
4.4.1.2 ECM 2: Biomass Heating Plants for K& L Areas	62

*Use or disclosure of data contained on this sheet is subject to the restriction on the first page of this proposal*

---

4.4.2 Energy and Water Baseline Development	62
4.4.3 Proposed Energy & Water Savings Calculations and Methodology	62
4.4.4 Operations and Maintenance Cost Savings	62
5.0 MANAGEMENT APPROACH	63
5.1 Integrated Management Review Team (IMRT)	63
5.2 Ameresco Management Approach	64
5.2.1 Ameresco Corporate Management Team	66
5.2.2 Program Manager	68
5.2.3 Engineering	68
5.2.4 Business Operations	68
5.2.5 Safety and Risk Management	68
5.2.5.1 Site Safety Management	68
5.2.6 Construction	69
5.2.6.1 Subcontract Management	69
5.2.6.2 Construction Management	69
5.2.7 Site Operations	70
5.2.7.1 Operations and Maintenance Responsibilities	70
5.2.7.2 Repair & Replacement Responsibilities	74
5.3 ECM Training	74
5.4 Risk/Responsibility Matrix	75
6.0 PROPOSAL PRICING INFORMATION	88
6.1 Interest Rate	88
6.2 Finance Procurement Price	88
6.3 Sales Tax	89
6.4 Property Tax	90
6.5 Insurance	90
6.6 Payment/Term	90
6.7 Cancellation/Termination/Buyout	91
6.8 Prepayments/Buydowns	92
6.9 Protection of Financier's Interest	92
6.10 Security Interest in ECM Equipment	93
6.11 Assignment of Claims	93
6.12 Title to and Responsibility for Contractor Installed-Property	93
6.13 Construction Milestones	94

*Use or disclosure of data contained on this sheet is subject to the restriction on the first page of this proposal*

---

## APPENDICES

Appendices A through E and G are presented in Volume II.  
Appendix F is presented in Volume III.

APPENDIX A – GEOTECHNICAL REPORT	A-1
APPENDIX B – FLOW DIAGRAMS FOR BIOMASS COGENERATION PLANT	B-1
APPENDIX C – EQUIPMENT LIST & MANUFACTURER INFORMATION SHEETS	C-1
APPENDIX D – DESIGN STANDARDS MATRIX	D-1
APPENDIX E – PROJECT SCHEDULE	E-1
APPENDIX F – PRELIMINARY DESIGN DRAWINGS	F-1
APPENDIX G – REVIEW COMMENTS	G-1

*Use or disclosure of data contained on this sheet is subject to the restriction on the first page of this proposal*

---

**List of Figures**

Figure 1.1: Proposed Cogeneration Facility Site Layout	7
Figure 1.2: EPI Fluidized Bed Energy System	10
Figure 1.3: EPI Fluidized Bed Cell	11
Figure 1.4: Cogeneration Facility Site Location	19
Figure 1.5: Biomass Cogeneration Facility Steam Interconnection	21
Figure 1.6: Biomass Cogeneration Facility River Water Interconnection	22
Figure 2.1: K Area Biomass Heating Plant Location	44
Figure 2.2: L Area Biomass Heating Plant Location	44
Figure 5.1: Integrated Management Review Team	64
Figure 5.2: Ameresco's SRS Biomass Project Team	67
Figure 5.3: Proposed Operations Staffing	73

**List of Tables**

Table ES.1: Project Economic Summary	2
Table 1.1: SRS Site Projection Profile – Steam Demand	17
Table 1.2: Utility Interconnection Summary	20
Table 1.3: ECM 1 Annual Savings Summary	26
Table 1.4: O&M Baseline Costs for D-Area Plant	28
Table 1.5: Baseline Energy Consumption	29
Table 1.6: ECM 1 Post-ECM Implementation Facility Performance	33
Table 1.7: Project Milestones	35
Table 2.1: Utility Interconnection Summary	44
Table 2.2: ECM 2 Annual Savings Summary	48
Table 2.3: Baseline Operating and Maintenance Cost for K Area Plant	50
Table 2.4: Baseline Annual Energy Consumption for K Area Plant	51
Table 2.5: ECM 2 Post ECM Heating Plant Performance	52
Table 2.6: ECM 2 Annual Post ECM Non-Fuel Utilities Cost & Consumption	52
Table 3.1: Environmental Permits & Documents	55
Table 3.2: Annual Emissions Summary for Biomass Cogeneration Facility	57
Table 3.3: Annual Emissions Summary for K&L Heating Plants	57
Table 4.1: M&V Plan Summary	59
Table 4.2: Utility Cost for ECM (Post)	60
Table 4.3: NIST Escalation Rates	61

*Use or disclosure of data contained on this sheet is subject to the restriction on the first page of this proposal*

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**LIST OF ABBREVIATIONS & ACRONYMS**

ACSR	Aluminum Conductor, Steel Reinforced
AIA	American Institute of Architects
ASG	Annual Steam Guarantee
BAMF	Biomass & Alternate Methane Fuel
BDF	Bio Derived Fuel
BFB	Bubbling Fluidized Bed
Btu	British Thermal Unit
CATEX	Categorical Exclusion
CO	Carbon Monoxide
CO <sub>2</sub>	Carbon dioxide
CY	Calendar Year
DA	Deaerator
DC	Direct Current
DDC	Direct Digital Control
DES	Detailed Energy Survey
DOE	Department of Energy
EA	Environmental Assessment
ECM	Energy Conservation Measure
EPA	Environmental Protection Agency
EPI	Energy Products of Idaho
ESPC	Energy Savings Performance Contract
°F	Degrees Fahrenheit
FAR	Federal Acquisition Regulation
FEMP	Federal Energy Management Program
FONSI	Finding of No Significant Impact
FY	Fiscal Year
gpm	Gallons per Minute
Hp	Horsepower
ID	Induced Draft
IMRT	Integrated Management Review Team
IPMVP	International Performance Measurement & Verification Protocol
kgal	Kilogallons
kls	Kilopounds
kV	Kilovolts
KVA	Kilovolt Amperes

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kW	Kilowatt
kWh	Kilowatt hour
LEED	Leadership in Energy and Environmental Design
M & O	Management and Operations
M & V	Measurement and Verification
MBtu	Million British Thermal Units (1 x 10 <sup>6</sup> )
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MVAR	Megavolt Ampere Reactive
MW	Megawatts
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Association
NIST	National Institute of Standards & Technology
NOI	Notice of Intent to Award
NOx	Nitrogen Oxide
NPDES	National Pollutant Discharge Elimination System
O & M	Operations and Maintenance
PA	Public Address
PM	Particulate Matter
PMT	Project Management Team
POIC	Point of Interconnection
PPEF	Performance Period Escrow Fund
PPH	Pounds Per Hour
PRV	Pressure Reducing Valve
Psig	Pounds per square inch gauge
PSUP	Power Services Utilization Permit
PT	Potential Transformer
PVC	Polyvinyl Chloride
QC	Quality Control
QCM	Quality Control Manager
REC	Renewable Energy Credit
RO	Reverse Osmosis
ROW	Right of Way
SCADA	Supervisory Control and Data Acquisition
SCDHEC	South Carolina Department of Health & Environmental Control
SCDOT	South Carolina Department of Transportation
SCE&G	South Carolina Electric & Gas

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SNCR	Selective Non Catalytic Reduction
SO <sub>2</sub>	Sulfur Dioxide
SRS	Savannah River Site
SRNS	Savannah River Nuclear Solutions
SSM	Site Safety Manager
VAC	Volts Alternating Current
VFD	Variable Frequency Drive
VOC	Volatile Organic Compound
Yr	Year

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#### EXECUTIVE SUMMARY

This Revised Final Proposal (Final Proposal) submitted by Ameresco Federal Solutions, Inc. (Ameresco) is for the implementation of two biomass Energy Conservation Measures (ECMs) at the Department of Energy's (DOE) Savannah River Site (SRS), located in South Carolina, approximately 18 miles south of Aiken and 20 miles east of Augusta, Georgia. The ECMs are being proposed under the authority and terms of the DOE Biomass and Alternate Methane Fuel (BAMF) Energy Savings Performance Contract number DE-AM36-02-NT41457 as modified by DO RFP # DE-RP09-09SR22572, dated February 26, 2009. This Revised Final Proposal including technical, pricing, and management data shall remain valid through June 15, 2009.

The proposal consists of two Energy Conservation Measures (ECMs). ECM 1 provides for the turnkey installation of a new Biomass Cogeneration Facility with a design capacity of 240,000 pounds per hour (PPH) of steam and 20 megawatts (MW) of electric power. The new facility will replace the existing D Area coal-fired cogeneration plant. ECM 2 includes the turnkey installation of two 10,500 PPH steam heating facilities; one to be located in the K Area and one to be located in the L Area. These systems will replace the aging fuel oil-fired packaged boilers currently serving the K and L Areas of the site.

The existing D Area cogeneration plant produces both steam and electricity that is consumed on site. The steam is delivered through a large distribution pipeline that runs several miles from the plant to the end-user facilities. The plant also produces approximately 15 MW of electricity that is consumed by DOE facilities on site. The 1950s era plant is fueled by coal and in need of significant modifications to bring the plant into compliance with current environmental requirements as well as to be a reliable source of energy. The proposed Biomass Cogeneration Facility, sited near the existing steam interconnection at the intersection of Burma Road and C Road, will significantly reduce the distance from the plant to the end-user, resulting in improved operating efficiency. The new facility will have enough capacity to satisfy all of the site's steam requirements and a significant portion of the electrical demand which will allow for the D Area plant to be shut down.

Currently, the existing heating plant in the K Area provides steam for both the K and L Areas. Steam is delivered from the K Area plant to L Area facilities through a 6", 2.5 mile pipeline. ECM 2 provides for replacing the K Area plant with two 10,500 PPH boilers — one boiler located in K Area and one located in L Area — eliminating the need to use the 2.5 mile distribution line. The existing K Area plant and the steam line will be shut down.

Clean biomass and bio-derived fuels (BDF) will be the primary fuel source for all of the new boilers. The clean biomass consists of various types of forest residues, and the BDF consists primarily of scrapped vehicle tires. Fuel deliveries will be received by Ameresco staff at a fuel handling yard located within the Biomass Cogeneration Facility site at the Burma Road/C Road location. The fuel handling yard includes a fuel receiving, storage, and processing area that will serve the Biomass Cogeneration Facility and the K and L Area Heating Plants. Fuel deliveries to the K and L Area Heating Plants will be made by Ameresco staff on an as-needed basis from the central fuel yard.

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The use of renewable energy fuel sources provides many positive economic and environmental benefits to the SRS and the local community, while providing significant energy and cost savings to SRS. The savings result from fuel switching (coal to biomass), reductions in line losses by locating the new cogeneration facility and heating plants closer to end-user facilities, and improved efficiencies from new equipment sized to better match existing load requirements. Key environmental benefits of the project include:

- Over 2,000,000 MBtu/yr of thermal renewable energy production and a minimum generation of 77,000 mWh (264,444 MBtu) of green power.
- Annual Energy Savings of approximately 500,000 MBtu/yr
- No-cost Renewable Energy Credits (RECs)
- Decrease of water intake from the Savannah River by 1,412,000 kgal/yr, supporting water conservation efforts in the regional drought situation.
- Reduction of 400 tons/yr of Particulate Matter (PM) emissions
- Reduction of 3,500 tons/yr of Sulfur Dioxide (SO<sub>2</sub>) emissions
- Reduction of 100,000 tons/yr of Carbon Dioxide (CO<sub>2</sub>) emissions
- Support of the South Carolina Biomass Council Goals

Ameresco proposes to provide a turnkey package of design, permitting, and installation. Ameresco will also take responsibility for the operation and maintenance of the cogeneration facility and heating plants throughout the contract term. *Table ES.1* below provides an overview of project economics (as shown on Schedule DO-4) for Performance Period Year 1.

**Table ES.1: Project Economic Summary**

Project	Project Implementation Cost*	Total Energy Savings (Year 1, 2012)	O&M Savings (Year 1, 2012)	Water Savings (Year 1, 2012)	Total Savings (Year 1, 2012)
DES Cost	***	N/A	N/A	N/A	N/A
ECM 1: Biomass Cogeneration Facility (D Area Replacement Plant)	***	\$ 21,053,328	\$ 12,482,882	(\$ 355,013)	\$ 33,181,197
ECM 2: Biomass Heating Facilities for K & L Areas	***	\$ 558,208	\$ 638,970	(\$ 25,917)	\$ 1,171,260
Total	\$ 149,172,566	\$ 21,611,535	\$ 13,121,852	(\$ 380,931)	\$ 34,352,457

\* The project Implementation Cost excludes the financial procurement costs.

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Following contract award, the detailed design will be completed and construction of the new facilities will take place. It is expected that thirty months from the date of contract award will be required to complete the final design and construction of the main Biomass Cogeneration Facility. However, Ameresco expects that the K and L Area Heating Plants can be constructed within 18 months of contract award. For this reason, Ameresco proposes an early acceptance of ECM 2.

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## **1.0 ECM 1 DESCRIPTION**

### **1.1 ECM Summary Schedule DO-4**

Pricing Schedule DO-4 is included in *Section 6.0*, Proposal Pricing Information.

### **1.2 ECM #1: Biomass Cogeneration Facility**

#### **1.2.1 Detailed Description of ECM**

##### **1.2.1.1 ECM Summary**

This ECM comprises the design and construction of a Biomass Cogeneration Facility (cogeneration facility) to be located to the northwest of the main distribution steam interconnection at the intersection of Burma Road and C Road. The steam produced from the facility will be exported to the 200 Areas via the existing distribution system; the green power generated will be exported to the SRS electrical distribution system via a new interconnection at the existing F Area substation. The scope of work includes the installation of the cogeneration facility and all equipment, the site work, and the necessary utility interconnections required for plant operation. There are three additional items included in the scope (design drawings for these items to be provided following contract award):

- 1) The procurement and installation of a new skid-mounted river water pump and new pumping systems controls at the river water pump house, Building 681-3G.
- 2) Rework of the electrical feeder from the TNX area to the South Carolina Electric and Gas (SCE&G) utility line at the D Area.
- 3) Relocation of the existing L Area capacitor bank.

The cogeneration facility will be sized to provide a continuous supply of steam to site end-users (based on current and future load projections as presented in the SRS Site Projection Profile provided by the Government) while optimizing the quantity of green power generated. The system is designed using applicable national codes and standards for power plants and specific site standards (refer to *Section 5.2*). Previously, conceptual design drawings were submitted to the site for review prior to issuance of this final proposal; a draft version of the "issued for pricing" drawings is included in Volume III of this proposal. Finalized "issued for construction" drawings will be submitted to the government for concurrence throughout the first year of the construction period, as major equipment items are ordered and the design drawings are finalized.

This ECM will provide an estimated savings of over \$33 million in the first year of operation through the offset of coal purchases, and reduced O&M from the elimination of the existing D Area Power Plant and electrical substation. The renewable energy-fueled cogeneration facility will also provide renewable energy credits (RECs) to SRS at no cost. For purposes of receiving credit for implementing this renewable energy initiative, the RECs attached to ECM 1 and ECM 2 will belong to the Government and will not be claimed nor sold by Ameresco.

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In addition to the design and construction, Ameresco will retain responsibility for fuel delivery, operations, maintenance of the cogeneration facility and site; repair and replacement of the cogeneration facility equipment; air and effluent outfall emissions compliance for the cogeneration facility; and monitoring, measurement, and verification (M&V) throughout the contract term. Refer to *Section 5.2.7* for details on Ameresco's Site Operations.

#### 1.2.1.2 ECM Design Process

The proposed cogeneration facility will provide steam and power to the SRS site. Several configurations and energy models were analyzed during the Detailed Energy Survey (DES) phase to determine the final system sizing and system components. The optimal equipment selection and sizing was selected to balance the current and future thermal needs of the site while maximizing green power generation. Final selection resulted in a system composed of two (2) biomass bubbling fluidized bed boilers, each with an output capacity of 120,000 PPH (240,000 PPH plant total) steam and one (1) condensing steam turbine/generator with an output design capacity of 20 MW.

Superheated steam will be produced in the new combustor/boiler systems at 850 pounds per square inch gauge (psig) and 825 degrees Fahrenheit (°F), for delivery to the turbine/generator unit. Steam is extracted at a reduced pressure (385 psig nominal) from the turbine to meet the demand of the site, as well as for parasitic use. As the primary purpose of the cogeneration facility is to provide a continuous supply of steam, the amount of steam extracted from the turbine will vary to meet the site demand. As the extraction rate varies with the site steam demand, the gross power output from the turbine/generator will also vary. Based on future steam load forecasts as presented in the SRS Site Projection Profile provided by the Government (*Table 1.1* below), output from the turbine/generator will range from 8 to 20 MW. The net power exported will vary from 5 to 17 MW as the new cogeneration facility's in-house (parasitic) loads will range between 2-4 MW. A detailed basis of design is included in the following subsections.

#### Site

The location of the new cogeneration facility was selected during the initial feasibility study of the project. The facility will be located approximately 0.5 miles northwest of the intersection of Burma and C Roads on a 30 acre site. The development on the site will include the following major areas: 1) the fuel handling yard, 2) the boiler/combustion system, 3) the power plant, 4) the cooling tower and outfall piping, and 5) the administration building and site parking. The placement of the cogeneration facility on this site was optimized to minimize fuel handling conveyor runs, and to ensure critical systems are located near the operator control room. The layout was also arranged to make use of the natural topography of the land where possible to minimize disturbance to the environment. The location and layout of the facilities were also optimized to the extent possible with regard to interfaces with site utilities (described in *Section 1.2.3*), a new storm water collection system and outfall, and the new site fire protection system.

The storm water system is designed to collect storm water from the impervious portions of the site. These include building run-off, roadway run-off, and equipment run-off. The system will include a series of

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catch basins to collect the storm water. The site will be graded to direct the storm water to each of the catch basins. The catch basins will be interconnected by 6", 8", and 12" piping. A manhole will be included to provide maintenance access at each change of direction. Ultimately the storm water will be directed by gravity to a storm water detention pond which is sized to hold the expected rainfall peaks in the area. The pond will be complete with a liner and slotted spillway to enable a controlled release of water to the outfall. The system will be installed with a monitoring system to measure flow, pH, and conductivity. Major components include catch basins, piping, manholes for maintenance access, lined 165,000 gallon detention pond, monitoring system, and the 24" outfall.

Extensive soil testing was completed on the site to determine the conditions for the soil and recommended design for structural support of equipment, facilities, and new pavements. The soil composition is primarily sand with light clay and therefore requires treatment of the site with an engineered fill prior to foundation work. A copy of the complete soil report is included in *Appendix A* of this proposal.

Logistics of site traffic are designed to allow biomass delivery trucks and other facility traffic to enter the site from Burma Road. The existing gravel portion of Burma Road will be paved up to the entrance of the site. Delivery trucks will enter the facility from the Burma Road entrance using a new deceleration lane, and exit the facility via a new one-way exit along the former route of Old Burma Road (currently an unmaintained dirt pathway between Burma and C Roads). All other facility traffic will enter into the new parking lot or the on-site access road, and may then exit back to Burma Road or use the new one-way exit to C Road.

Delivery trucks will traverse the entrance road to the fuel yard, and after fuel delivery will exit via Old Burma Road, which will be re-cleared and paved up to C Road at the existing 3-way intersection of C Road and the entry to the F Area. Old Burma Road will be designated and marked as a one-way thoroughfare in accordance with South Carolina Department of Transportation (SCDOT) standards, and the traffic signal at the existing 3-way intersection on C Road will be converted to a new 4-way intersection. This arrangement provides for a safe traffic flow and allows delivery vehicles to make left-hand turns across traffic only at a signal-controlled intersection. Also included in the site scope of work is the removal of the curbed median at the existing 3-way intersection, and the installation of new loop-control vehicle sensor wiring beneath the pavement at the new 4-way intersection. *Figure 1.1* is an illustration of the overall site layout; the specific areas within the site are further described in the following pages.

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**Figure 1.1: Proposed Cogeneration Facility Site Layout**

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#### **Fuel Handling Yard**

The fuel handling yard will serve as the delivery point for all fuel supplies for the cogeneration facility, as well as the two heating plants serving the K and L Areas. Approximately 40-60 trucks will enter the site daily (at staggered delivery times) at the Burma Road facility entrance. The entrance to the yard will include truck scales for weigh-in of all fuel sources for tracking deliveries. Beyond the entrance will be the unloading equipment, fuel storage area, and the fuel handling and processing equipment.

For fuel handling operations at the cogeneration facility, front-end loaders and augers/conveyors will be used at various points in the yard to move fuel between stations, through the yard area, and into the combustion systems. The biomass wood fuel will be unloaded using three (3) automated hydraulic truck-dumping stations. The truck-dumpers discharge into a reclaim pit, where the fuel will be lifted to the first transfer conveyor. The fuel is then screened and processed through a hogger and disc screen onto a second transfer conveyor. The fuel can then be transferred into the outside storage area or directly into the metering bins of the combustors. Stored fuel will be stacked in the outside storage after delivery from the transfer conveyor by use of a circular stacker/reclaimer. In addition to stacking the fuel, the stacker/reclaimer functions as a reclaimer to transfer the fuel from the storage stack to the fuel metering bins prior to entering the combustors.

The total available outside storage for clean biomass is approximately 15 acres, allowing for 30 days of continuous operations without replenishing the on-site fuel storage. The scrap vehicle tires brought to the site will be unloaded and processed in a separate area before being augured into a separate reclaimer. The separate unloading area and reclaimer allow for better process control through mixing with the biomass fuel, and also help to quantify BDF usage in meeting the requirements of the South Carolina Department of Health and Environmental Control (SCDHEC) air permit with regards to limits on BDF combustion.

Fuel supplies for the K and L Area boilers will be loaded at the cogeneration facility fuel handling yard and trucked by Ameresco staff to the K and L Area heating plants as needed, since the heating plants operate only during a limited heating season. One truckload per day is the estimated maximum usage at both the K and L Area heating plants during the coldest periods.

Proposed Fuel Yard Components include:

- Two (2) Truck scales
- Three (3) Hydraulic truck dumps and reclaimers
- Front end loaders
- Dump trucks for site use
- Live bottom trailers for K and L Area
- One (1) Fuel hogger
- One (1) Screener for oversized product
- Two (2) Magnets for metals screening
- One (1) Stacker & Reclaimer
- One (1) Truck Reclaim for Tires

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- One (1) Shredder for tires
- Multiple conveyors for fuel handling
- One (1) Whole Tree Chipper

The final design of the system was developed with primary consideration given to the following: handling and processing of multiple fuel types; safe and plentiful fuel storage area on site; minimized maintenance requirements; reduced downtimes; and provision for flexible operation of the overall systems.

**Combustion/Boiler System**

The combustion/boiler system includes the components from the fuel feeders to the exhaust stack, including the boiler auxiliaries. A bubbling fluidized bed (BFB) combustion technology will be used for this project. BFB technology uses high pressure air to fluidize a 2-3 foot bed of sand (inert material) in suspension. The fuel source is fed into the system through air spouts and mixed into the suspended bed. The system operates using 30-40% theoretical combustion air to reduce bed temperature and minimize nitrogen oxide (NOx) emissions.

BFB technology is preferable for biomass fuels due to its ability to better tolerate various fuel types, as well as larger variations in both fuel mixture density and moisture content. BFBs have the advantage of reduced air emissions due to a more stringently controlled temperature in the combustion process (1400-1600°F). Compared to stoker technology, the bubbling bed offers lower uncontrolled air emission rates, resulting in a lower investment for downstream air pollution control system components. BFBs require less maintenance than the stoker boiler, resulting in less downtime and lower ongoing costs.

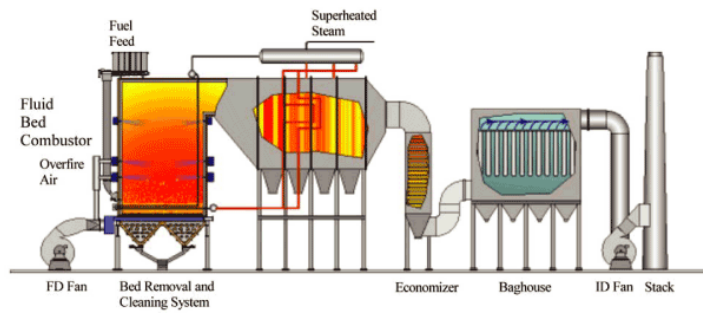
After soliciting competitive bids for the BFB equipment, the Energy Products of Idaho (EPI) equipment was selected for the cogeneration facility [\*\*] The EPI system is shown in *Figure 1.2*. The EPI combustor/boiler offers the following benefits in this size range of BFB equipment:

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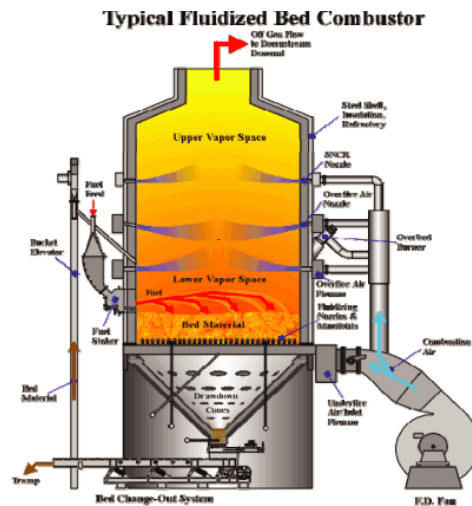
Figure 1.2: EPI Fluidized Bed Energy System



Two identical BFBs will be installed in the new cogeneration facility. Both boilers will be sized for a total design input of 372 MBtu/hr (186 MBtu/hr per boiler) and an output of 240 kpph (120 kpph per boiler). The bubbling bed boiler will produce steam at 850 psig, 825°F. Steam generated will go through a condensing turbine when generating electricity, or through a pressure reducing valve (PRV) station which will reduce the pressure to 385 psig. Steam required by the site and for the cogeneration facility deaerator (DA) tank will be extracted from the turbine at 385 psig. The 385 psig steam will be distributed to the existing system via the interconnection to the existing steam header located just across the street from the new cogeneration facility. Additionally, full capacity fuel oil burners will also be installed in the combustor to serve as a back up fuel source in case the biomass feeders are down. Refer to Section 1.2.1.3 for details of SRS steam demand.

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Figure 1.3: EPI Fluidized Bed Cell



Fuel will enter into the combustion metering bins from the fuel transfer conveyors. Metered fuel is discharged through isolation slide gates and into the fuel spreaders. The spreaders distribute the fuel across the fluidized bed. The fluidized bed cell as shown in *Figure 1.3* includes the equipment to accept, distribute, and mix air, fuel, and limestone in a high temperature thermal oxidation environment. The system is designed in accordance with National Fire Protection Association (NFPA) Section 850. Underbed air and overfire air distribution systems are provided to allow proper air flow for uniform combustion, to provide cooling of tramp material, and to optimize overall bed temperature.

The EPI system is specifically designed to include a bed recycle system to accommodate wood and tire derived fuel containing wires. The tire bed system is a fluidizing bed bottom, wire separation, and screening system designed to handle high concentrations of wire left over from the thermal oxidation of shredded tires and tramp material. The metal is recovered from the rest of the tramp material and bed media then discharged to the hopper for recycling.

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Each of the biomass boilers will include a gas handling system, which includes an induced draft (ID) fan to pull the boiler flue gas through the economizer. The ID fan exhausts into a fabric filter baghouse and then to an integral exhaust stack.

*Pollution Abatement Control*

The fluidized bed system provides an environment to optimize destruction of hazardous air pollutants and volatile organic compounds. Additional pollution abatement control is included in this system to comply with air emission requirements.

**Particulate Matter Control:** Particulate in the gas stream is captured in a pulse-jet baghouse system. The baghouse captures particulate matter from the flue gas and has removal efficiencies of 99.9+%. The flue gas will then exit through a stack adjacent to the ID fan and baghouse located just outside of the new cogeneration facility.

**Nitrogen Oxide Control:** The flue gas from the boiler will be treated in the combustion system using selective non-catalytic reduction (SNCR) technology to reduce nitrogen oxides. Using the SNCR will reduce NOx rates to 0.12 lb/MBtu. Urea is injected into the furnace typically above the over-fire air ports, reacting with the oxides to form nitrogen and hydrogen.

**Sulfur Dioxide Control:** Since tire derived fuel will be used as a fuel source, each biomass boiler will also have a bed additive system. The bed additive system will introduce limestone into the fluidized bed cells in order to reduce sulfur dioxide and other acid emissions. Sulfur dioxide will be controlled to less than 0.2 lb/MBtu in order to comply with air permit conditions.

Each boiler will include an exhaust stack. Each stack will include an aviation lighting system, and a continuous emissions monitoring system to measure the stack emissions and provide data reporting. The system will monitor carbon monoxide (CO), oxygen (O<sub>2</sub>), NO<sub>x</sub>, SO<sub>2</sub>, reagent slip, and opacity. The data is recorded in the facility supervisory control and data acquisition (SCADA) system.

*Ash Handling System*

The fuel will primarily consist of clean biomass sources; therefore, the ash content is expected to be low, less than 1.0-3.0% of the fuel burned. The ash stream consists of a bottom ash stream and a flyash stream. Bottom ash will be automatically removed from the biomass boiler with mechanical conveyors and augered into a hopper outside of the building. Fly ash will be collected at multiple points along the flue gas exhaust train, including boiler hoppers, mechanical dust collector hoppers, and baghouse. The flyash system will be a mechanical pneumatic system consisting of rotary air-lock valves, screw conveyors, drag conveyors, and storage container. The ash collection hoppers will include water nozzles to keep ash wet and minimize dusting into the plant area.

The ash generated from combustion will be delivered to the landfill or taken off site to potential end-users. Ameresco will be responsible for ash removal, and the cost is included in the performance period expenses.

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Major Combustion/Boiler System Components:

- Two (2) 120,000 PPH biomass fluidized bed boilers, including fan systems
- Two (2) Baghouses including Penthouse
- Two (2) SNCR systems (Urea Injection)
- Boiler auxiliaries (boiler feed water pumps, DA tank, chemical treatment, and instrumentation)
- Boiler control SCADA system
- Two (2) Ash bins
- Two (2) Ash storage silos
- Two (2) Ash conveying systems (for each biomass boiler)
- Fuel Oil Storage
- Reagent Storage
- Limestone Storage

**Power Plant**

The power plant will house the boiler feedwater system, the water treatment system, the chemical treatment system, and the steam condensing turbine. The cooling tower and emergency generators will be located outside to the west of the power plant. The building will be a pre-engineered two-tiered metal building and 16,000 sq ft in size. Within the power plant there will be a control room, break room, storage, chemical and sampling area, and the motor control center. The equipment components are described in the sections below.

**Boiler Feedwater System**

A feedwater system will pressurize and deliver deaerated boiler feedwater from the DA tanks and the desuperheater to the boilers. The boiler feed pumps will pull the heated water from the DA tanks. Since there is no condensate return infrastructure in place, the DA tanks will receive makeup water from the water treatment system and from the condensate tank. The feedwater will be delivered to the boiler at 850 psig and 370°F. There are 2 DA tanks for the boilers; one will be used as a backup.

Components of the primary feedwater system include the following:

- Three (3) Boiler feed pumps and motors
- Two (2) DA tanks with instrumentation and trim
- Piping, valves, and controls

**Water Treatment System**

River water will be used as the source of water for the process water, regeneration water, and for fire system water. The river water will be filtered through carbon filters and softeners. Process water will be treated using Reverse Osmosis (RO) technology and then deionized through a mixed bed system. This system was designed based on samples collected from the Savannah River during the DES and from water analysis reports for the D-Area plant. The peak make-up requirement to the cogeneration facility is

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2,200 gallons per minute (gpm); this would occur at the cogeneration facility's full capacity and if the water treatment regeneration cycles were occurring at the same time. Normal flow rate to the water treatment skid will be 600 gpm. Primary components of the water treatment system include:

- Four (4) Carbon Filters
- Two (2) Water Softeners
- Neutralization Tank
- RO System
- Two (2) Deionized Mixed Beds
- Neutralization Skid
- Deionized Water Storage Tank

#### **Chemical Feed System**

Chemical feed systems are designed for the boilers to provide protection from corrosion, scale formation, circulating water biofouling, and to provide pH control. Specific internal boiler water treatment programs will be designed during the implementation phase. Chemical equipment includes the following:

- Boilers
  - Internal Boiler Water Treatment: Chemical feed skid(s) with injection pumps. The skid will be pre-piped, pre-wired, including necessary components and accessories for a complete functional system. Feed skid to be used with chemical totes.
- Circulating Water System
  - Common acid chemical feed skid with injection pumps, pre-piped, pre-wired and including necessary components and accessories for a complete functional system. Feed skid to be used with chemical totes.
  - Corrosion control chemical feed skid with injection pumps (dispersant and corrosion inhibitor), pre-piped, pre-wired and including necessary components and accessories for a complete functional system. Feed skid to be used with chemical totes.
  - Biocide chemical feed skid with injection pumps, pre-piped, pre-wired and including necessary components and accessories for a complete functional system. Feed skid to be used with chemical totes.

#### **Turbine System**

The turbine will be installed in the power plant building. The turbine generator will have a rated output of 20 MW and generate at 13.8 kilovolts (kV). The turbine will be provided by TGM; information on the TGM system is included in *Appendix C*. The TGM turbine is manufactured in Brazil; however, Ameresco selected it for the SRS project because of its higher efficiency, lower cost, and shorter delivery time. Ameresco requested and the contracting officer has added the TGM turbine to the exemption list for Buy American.

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Electrical Generation Equipment:

- One (1) TGM Steam Condensing Turbine (20 MW), Model TMCE 25000A
- Electrical switchgears
- Two (2) fuel oil-fired emergency generators (1.5 MW each)
- Surface Condenser
- High Voltage, Medium Voltage Transformers

Cooling System

- One (1) two-cell Cooling Tower with variable frequency drive (VFD) Fans
- Cooling Tower pumps
- Outfall Sampling Station

**Administration Area**

A 2,200 sq ft building will be constructed to provide office space for cogeneration facility management staff and to also provide an area to allow visitors to gather for facility tours.

**Fire Protection Plan**

The Site Fire Protection Plan includes different methods depending on the type of area and the recommended practice for fire protection. The site will include a stationary pump as well as the following elements described below.

Biofuel receiving and storage areas

- NFPA 850, Recommended Practice for Fire Protection for Electric Generating Plants
  - Fire water loop with hydrants and post indicating valves installed in accordance with NFPA 24 Standard for the Installation of Private Fire Service Mains and Their Appurtenances
- International Fire Code
  - Open access for emergency vehicles

Boiler/Turbine/Equipment yard

- NFPA 850, Recommended Practice for Fire Protection for Electric Generating Plants
  - Fire water loop with hydrants and post indicating valves installed in accordance with NFPA 24 Standard for the Installation of Private Fire Service Mains and Their Appurtenances
- International Fire Code
  - Open access for emergency vehicles

Turbine Hall

- NFPA 850, Recommended Practice for Fire Protection for Electric Generating Plants
  - Oil containment/drainage system

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- A hose connection
- Fixed protection system, detection, and alarm system to cover, as minimum, the Turbine/Generator bearings and oil containment areas.
- Turbine shut down control per NFPA 850

Administration Area

- International Building Code and International Fire Code
- Detection, alarm, and sprinkler system installed in accordance with NFPA 13 Standard for the Installation of Sprinkler Systems and NFPA 72 National Fire Alarm Code

Lab, Breakroom, and Bathrooms

- International Building Code and International Fire Code
- Detection, alarm, and sprinkler system installed in accordance with NFPA 13 Standard for the Installation of Sprinkler Systems and NFPA 72 National Fire Alarm Code

Control Room and Electrical Rooms

- NFPA 850, Recommended Practice for Fire Protection for Electric Generating Plants
- Detection and alarm system installed in accordance with NFPA 72 National Fire Alarm Code
  - Detection, alarm, and fixed protection under raised floors.
  - Fixed protection — Dry Chemical, NFPA 17

Biofuel Conveyors and Transfer Towers

- NFPA 850, Recommended Practice for Fire Protection for Electric Generating Plants
- Protection, detection, and alarm systems are not required but are a good practice
  - Dry type deluge system install in accordance with NFPA 13 Standard for the Installation of Sprinkler Systems
- Detection and alarm system installed in accordance with NFPA 72 National Fire Alarm Code
- Conveyor controls to be interlocked per NFPA 850

Cooling Tower

- NFPA 850, Recommended Practice for Fire Protection for Electric Generating Plants
- Hydrant installed in accordance with NFPA 24 Standard for the Installation of Private Fire Service Mains and Their Appurtenances
- Cooling Tower design and constructed in accordance with NFPA 214, Standard on Water-Cooling Towers

Fuel Oil Storage Tank

- NFPA 30: Flammable and Combustible Liquids Code
- Separation in accordance with NFPA 30
- 100% containment in accordance with NFPA 30

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- Design and construction in accordance with NFPA 30
- Hydrant installed in accordance with NFPA 24 Standard for the Installation of Private Fire Service Mains and Their Appurtenances

**1.2.1.3 ECM 1 Operation**

ECM 1 will be operated continuously to produce steam and power for SRS, with the primary mission of meeting the Annual Steam Guarantee (ASG). The ASG is the total amount of steam output from the biomass boilers as defined in Section 1.2.7.4. During normal operation, steam produced from the boilers will flow through the condensing steam turbine. Steam required for the cogeneration facility auxiliaries and the export steam required by the site will be extracted from the turbine. The balance of steam will continue through the turbine to generate additional green power. As required by SRS, the cogeneration facility will be operated to provide steam at 350 psia through the existing Government-owned distribution system to the users in the F and H Areas.

Scheduled outages will not exceed one per year and only one boiler will be taken down at a time for planned maintenance. In the unlikely event that both boilers are inoperable, Ameresco has made provisions and connections for bringing temporary boilers to the site to ensure the supply of steam.

Projected steam demands of the site are based on information provided in the SRS Site Projection Profile provided by Government personnel. The projections upon which the cogeneration facility performance model is based was provided by government personnel in the SRS Site Projection Profile and shows that annual steam loads will differ for the next 20 years as shown in Table 1.1. Due to these changes in operation and the anticipated variation in weather from year to year, it is proposed that the new cogeneration facility will be operated to produce a fixed quantity of steam each year, the ASG. As the demand for exported steam decreases, the amount of green power generation will increase, up to the ASG.

**Table 1.1: SRS Site Projection Profile — Steam Demand**

Year	Winter peak [kpph]	Winter average [kpph]	Summer average [kpph]
2009	[**]	[**]	[**]
2010	[**]	[**]	[**]
2011	[**]	[**]	[**]
2012	[**]	[**]	[**]
2013	[**]	[**]	[**]
2014	[**]	[**]	[**]
2015	[**]	[**]	[**]
2016	[**]	[**]	[**]
2017	[**]	[**]	[**]
2018	[**]	[**]	[**]
2019	[**]	[**]	[**]

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**Table 1.1: SRS Site Projection Profile — Steam Demand**

Year	Winter peak [kpph]	Winter average [kpph]	Summer average [kpph]
2020	[**]	[**]	[**]
2021	[**]	[**]	[**]
2022	[**]	[**]	[**]
2023	[**]	[**]	[**]
2024	[**]	[**]	[**]
2025	[**]	[**]	[**]
2026	[**]	[**]	[**]
2027	[**]	[**]	[**]
2028	[**]	[**]	[**]
2029	[**]	[**]	[**]
2030	[**]	[**]	[**]
2031	[**]	[**]	[**]

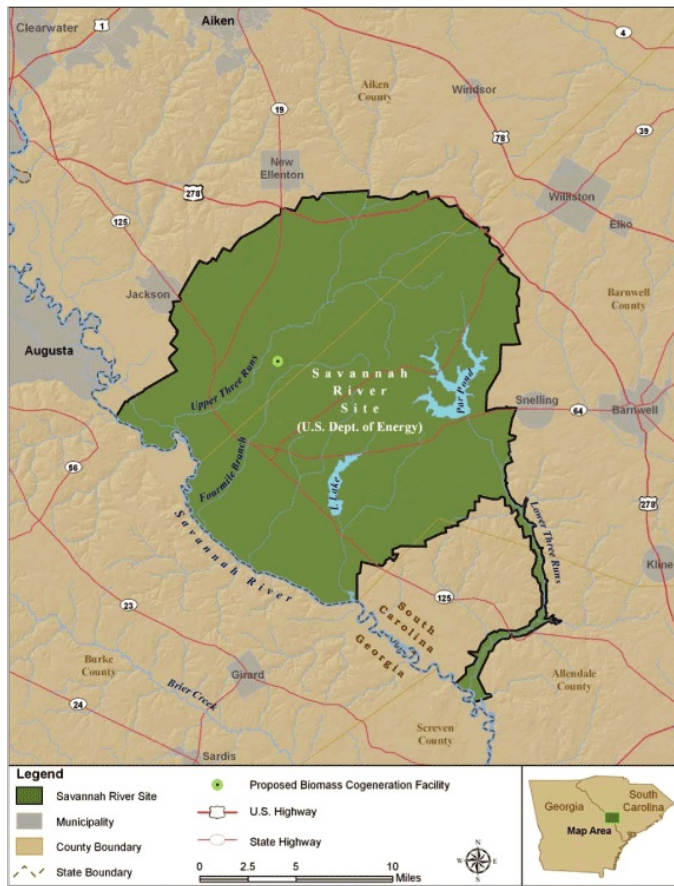
Ameresco staff will be responsible for operating and maintaining the cogeneration facility throughout the contract term as detailed in *Section 5.2.7.1*, and the cogeneration facility will be continuously manned by Ameresco staff as described in *Section 5.2.7*. However, this Final Proposal excludes any operation and maintenance obligations on the part of Ameresco except as detailed in *Section 5.2.7.1*

**1.2.2 Location Affected**

During the Initial Proposal kickoff meeting, the Government presented three sites as potential locations for the new cogeneration facility. The selected site is shown in *Figure 1.4* below and was agreed upon by SRS, the M&O Contractor, and Ameresco based on an evaluation of many factors, including distance to existing utility connections, available acreage, accessibility, security concerns, and environmental impacts. A site-use permit was obtained and is currently being amended to include the electrical feeder to the F Area, the river water piping tie-in from the C Area, the process water outfall to Upper Three Runs Creek, and improvements to the Old Burma Road/C Road intersection.

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Figure 1.4: Cogeneration Facility Site Location



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**1.2.3 ECM 1 Interface with Government Equipment**

Title to all Ameresco installed equipment will transfer to the Government at the time of Government acceptance of an ECM. Title to the biomass fuel will transfer to and vest in the Government simultaneously with Ameresco's receipt of the biomass at the fuel handling yard. For the sake of clarity, ECM 1 will interface with *existing* Government equipment at the utility interconnections as described in this section. The installation of utility interconnections required for the new cogeneration facility are included in the project implementation cost and the installation will be Ameresco's responsibility; however, the SRS M&O Contractor will retain O&M responsibility including repair and replacement for the utility interconnections and utility distribution systems. *Table 1.2* provides a summary of the utility interface and the scope of O&M responsibility for the utility systems. Ameresco and the SRS M&O Contractor will enter into an agreement that will provide the cogeneration facility with utility services to include river water, sanitary sewer service, backup electrical power, and domestic water service. A Power Services Utilization Permit (PSUP) form will be completed by Ameresco prior to construction of utility interconnections. Utility meters will be installed to measure usage. It is proposed the Government will incur the cost for the cogeneration facility's non fuel utilities. These Post-ECM Implementation Costs have been factored into the annual savings. The annual consumption and costs of the utilities are shown in *Table 1.6*, and the unit cost used for each utility is shown in *Table 4.2*. Refer to *Section 5.2.7.1* for operation and maintenance responsibility.

Infrastructure services (site facility operations and maintenance) are primarily the responsibility of the Site M&O Contractor. M&O Contractor personnel operate and maintain the SRS utility systems and manage site environmental programs. On site DOE personnel are charged with oversight of M&O Contractor operations although M&O Contractor personnel often render project or program decisions for the Government. Therefore, for purposes of this proposal, the use of the term "Government" is applicable to DOE and M&O Contractor. For example, the term "Government caused delays" includes any delays caused by government and/or M&O Contractor personnel. Although the M&O Contractor makes operational decisions for the systems they operate and programs they manage, only DOE personnel, i.e. Contracting Officer and Contracting Officer's Representative (COR) will provide project and program decisions affecting work performed by Ameresco or Ameresco subcontractor personnel resulting from this proposal.

**Table 1.2: Utility Interconnection Summary**

Utility	Interconnection	O&M Responsibility
Steam	New 12", 240 kpph line from plant to existing 24" across Burma Road	Ameresco: To the point of the new valve located in a new 12" line near the point of interconnection (POIC) with the existing steam line. SRS: Upstream of the new valve.
Domestic Water	30 gpm, new 2" line from plant to header located outside existing water treatment plant	Ameresco: To the new utility valve outside of power plant. SRS: Downstream of the tie-in to the new valve.

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**Table 1.2: Utility Interconnection Summary**

<u>Utility</u>	<u>Interconnection</u>	<u>O&amp;M Responsibility</u>
River Water	New 12", 2200 gpm line from valve house near C-Area to new biomass plant	Ameresco: Downstream of the interconnection valve. SRS: From existing pump station up to interconnection valve at cogeneration facility.
Outfall	1200 gpm + storm water runoff, new 24" line to Upper Three Runs Creek	Ameresco: To conduct all testing of the effluent; responsible for maintaining compliance of this discharge.
Sanitary Sewer	New 4" line & new lift station, 20 gpm to upside of the existing Lift Station	Ameresco: To the new valve located in the new line outside of power plant. SRS: Downstream of the new utility valve.
Electrical	New 13.8 kV line to/from F Area substation	SRS: From outside of new cogeneration facility
Fire Water System	Tapped off the new river water header, prior to cooling tower	Ameresco: Responsible for fire water system
Telephone Line/Public Address (PA) System	Verizon New Line	Verizon/Ameresco
Data Line	Verizon New Line	Verizon/Ameresco

**Steam Distribution System**

Steam produced from the boiler at 850 psig and 825°F will flow through the turbine, or through a pressure reducing valve (PRV) and desuperheater if the turbine is not operating. From the turbine or PRV, the steam will be exported to the SRS distribution system, with a small percentage going to the cogeneration facility DA tanks. Flash steam from the continuous blowdown flash tank is supplied to a low pressure header to supplement the steam requirements of the DA.

The steam exported to the distribution system will be delivered at 350 psig 450°F. A new 12" carbon steel pipe will be routed above-ground from the cogeneration facility (exiting from the turbine or PRV station) to the existing steam line located across Burma Road. A steam meter will be installed in the line to measure steam exported from the cogeneration facility, as well as a steam meter on the flow exiting the boilers to measure the total amount of steam produced. The new cogeneration facility export connection is approximately 3 miles closer to the F and H Areas than the existing D Area plant, providing increased distribution system efficiency from decreased line losses. The approximate point of interconnection is shown in the photograph below:

**Figure 1.5: Biomass Cogeneration Facility Steam Interconnection**  
 [\*\*]

**Domestic Water**

A 2" domestic water line will be installed to serve plant potable water needs such as bathrooms, utility sinks, showers, and eye wash stations. The new water line will connect to the existing domestic water

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header located outside of the nearby industrial water treatment plant, located approximately 0.3 miles east of the cogeneration facility. Domestic water usage is expected to be minimal (5-10 gpm) and used for sink, lavatory, and maintenance requirements. Annual consumption is expected to be approximately 2600 kilogallons (kgal). The domestic water interconnection will be designed per M&O standards and permitted as required by the SCDHEC.

#### **Process Water**

River water will be used as the water source for all process and fire water. The process water usage includes boiler feedwater, cooling tower makeup water, water treatment regeneration cycles, and cogeneration facility service water. The river water will be supplied from Building 681-3G, the water pump house, through an existing distribution system and pump station. A new 12" ductile iron line will be routed underground from the existing C Area valve house (refer to *Figure 1.6*) to the cogeneration facility site following the route of the abandoned steam line from the C Area, and then diverting off of the route through existing vegetated areas to the site. Routing through the vegetated area will reduce the new distribution pipe route by approximately 1/2 mile. The specific routing is shown on the site drawing which is included in the drawing package (Volume III). The peak make-up requirement to the site is 2200 gpm; this would occur if the system was operating at full capacity and if all the regeneration cycles of the water treatment system were occurring at the same time. Normal operations will use 600 gpm. Annual river water consumption will average around 450,000 kgal.

To ensure there is adequate redundancy and back-up for the site river water source, in addition to the installation of the new distribution line a new pump skid (identical to the P-10 skid) will be installed to replace the pump, P-4, located inside the water pump house (Bldg 681-3G). The new pump will be used as a backup for P-10 and be designed with a 19.8" impeller size (600 hp motor.) Other components to be installed with the new pump include:

- Rework of the existing suction pipe
- Installation of isolation valve in suction pipe
- Installation of flow control valve & flow meter
- Installation of instrumentation and valves setup (duplicate system to the P-10 skid)
- Control modification to allow the pumps to automatically operate based on system requirements

**Figure 1.6: Biomass Cogeneration Facility River Water Interconnection**  
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#### **Site Outfall**

A new 24" high density polyethylene pipe will be routed from the cooling tower basin to Upper Three Runs Creek. The pipe will be installed underground and follow the natural topography of the land. A new outfall structure will be constructed next to the cooling tower to allow for flow monitoring and effluent testing. Process waste water and the storm water runoff will be discharged to the outfall. The storm water system includes collection piping to catch basins which will divert the storm water to the site

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retention pond. The retention pond will discharge to the outfall. The outfall will be permitted under the site National Pollutant Discharge Elimination System (NPDES) permit.

**Sanitary Sewer**

The bathrooms and fixtures located in the cogeneration facility and in the administration building will connect to the existing sanitary sewer system via a 4" polyvinyl chloride (PVC) pipe and be pumped using a new lift station. The line will connect upstream to the 607-91G lift station located approximately 0.3 mile east of the cogeneration facility. The sanitary sewer interconnection will be designed per M&O standards and permitted as required by the SCDHEC. Annual discharge is expected to be 2,600 kgal.

**Electrical System**

Power will be delivered to the existing F Area substation at 13.8 kV from the cogeneration facility. The power feeder from the cogeneration facility will be approximately 7,600 feet and will be routed in a combination of overhead pole mounted transmission line and underground duct bank where required in the F Area. The feeder will connect to an existing spare breaker cell in the metal-clad switchgear lineup at 251-F. The breaker cell shall be unit 101A, 101B, 206A, or 206B as deemed suitable by Ameresco and the Government. The interconnection scope of work includes a compatible circuit breaker, multifunction utility-grade numerical relay and instrumentation, and a 15kV class line potential transformer (PT) (either outdoor on feeder or indoor in a top-hat structure added to the existing switchgear). Existing bus PT secondary sources and existing station direct current (DC) battery sources are to be tapped as-is without improvement. Ameresco will utilize as-is or improve existing lockout relays and circuit breaker auxiliary contacts where no spare contacts or similar status points are available. Where such improvements are not possible due to the limitations of existing equipment, Ameresco will propose a solution to the Government (e.g. interposing relays, SCADA outputs, etc.). Ameresco assumes that the subject devices either as existing or improved, sufficiently indicate the operation of distribution and transmission level switching to determine when the generation system is unintentionally islanded from the utility source. Where transfer trip capability is required or determined to be best practice for protection of the proposed generation system, transfer trip facilities are to be derived from existing utility protective relaying equipment installed at 251-F. The scope excludes special or upgraded SCADA communications between 251-F and electrical utility operator. This scope is limited to the feeder circuit breaker at 251-F used to service the proposed generator plant and the primary protection described. The scope does not include other feeders at 251-F or any other upstream devices that are not impacted by the project (e.g. transformer secondary or primary protective devices and features, transmission-level protective devices and features). To insure appropriate coordination with the existing F area electrical distribution equipment, SRS will need to supply required load-flow, short-circuit, and intertie relay settings. Ameresco will prepare a transient study if deemed necessary for design.

Power at the new cogeneration facility is generated at 13.8 kV and is connected to a main 13.8 kV switchgear unit identified as "HVS". "HVS" is equipped with six (6) breakers. Breaker "52G" is utilized for the main generator breaker and is complete with required protective and synchronizing relaying. Breaker "52-4160" feeds a 7500/9375 kilovolt amperes (KVA) transformer "ATX-2" that steps down to 4160 volts alternating current (VAC) for large motor loads. Breaker "52-480" feeds a 2500/333 KVA

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transformer "ATX-1" that steps down to 480 VAC for all the remaining facility power distribution loads. Breakers "52-SG-1" and "52-SG-2" are utilized as feeders from two 1500 kW standby generators. Breaker "52U" is the tie breaker that feeds power to and from the F Area. This breaker will also be complete with all required protective and synchronizing relaying. The 13.8kV switchgear "HVS" and transformers "ATX1" and "ATX2" are located in the electrical room in the new cogeneration facility.

#### *D Area Electrical Feeder*

A new feeder will be installed in the D Area to provide continued electrical service to both the D Area and the TNX Area when the 484-D Power Plant is either dismantled or demolished and to reduce the annual SCE&G costs associated with O&M of Station 41. The new feeder will be a #2 aluminum conductor, steel reinforced (ACSR) overhead 13.8 KV 3 phase line that will run from the existing overhead line in the vicinity of Barricade 3 at the entrance to D Area, down the east side of the entry road to a point roughly 80' short of the 115 KV line crossing, turn east and run across country paralleling the 115 KV line just outside of its right of way (ROW) until it is terminated with a tie-in to an existing 3 phase line crossing at the back of D Area. By connecting to this line, the new feeder will be able to power the TNX complex without any further modifications to the existing overhead system. Fused sectionalizing switches will be installed at each end of the new line. The recloser currently installed back across the Highway on the line being tapped will be recalibrated to reflect the addition of the line extension to D Area.

Before turning east at the 115 KV line, the new line will cross a CSX railroad main line. A complete design/permitting package will be developed and submitted to the railroad for their review and approval. Initial filing fees for this permitting process are included, but any ongoing fees due CSX are excluded from this proposal and will be the responsibility of the Government.

The addition of this feeder will result in monthly O&M savings currently paid to SCE&G to maintain the equipment in Station 41. The annual savings is \$75,000 (10% reduction of the current O&M charge to SCE&G).

#### *L Area Capacitor Work*

The single 6 megavolt ampere reactive (MVAR) capacitor bank currently sitting on the L Area site will be installed on a new concrete pad in the grassy area across the access drive on the northwest side of the switchgear building, and connected to existing breaker 2-6 within substation 151-1L. New cable and cable tray will be installed in the basement beneath the switchgear to the northwest wall where spare sleeves will be used to exit the building. A new underground duct bank will be run from the building wall under the drive to the new pad for the capacitor bank connecting the capacitor. Spare 4" conduits will also be provided stubbed out from beneath the new pad for future connections to other systems. The capacitor bank will be interfaced with the existing SRS SCADA system. The actual location in the grassy area will be coordinated with the proposed installation of a future grounding transformer. The drive and associated curbs will be replaced after the duct is installed.

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We have been advised that several capacitor cells are defective. These will be replaced with available spare cells to the extent possible. These are the only repair efforts included in the installation of this capacitor bank which has been sitting out in the weather unprotected for some time. Any other repairs necessary to get the bank into fully operational condition are not the responsibility of Ameresco.

Installation of this existing capacitor bank will assist SRS in maintaining their power factor as close as possible to the minimum required by the utility company before penalties are assessed.

#### **1.2.4 Proposed Equipment**

The proposed ECM 1 will include the major components as described in *Section 1.1*. An equipment list and manufacturer's literature for the boiler and turbine system is included in *Appendix C*.

#### **1.2.5 Expected Lifetime**

The combustor/boiler and turbine components have an expected lifetime of 25-30 plus years. Ameresco will repair and replace components to ensure the continuous operation of the equipment throughout the contract performance period.

#### **1.2.6 Physical Changes to Existing Equipment or Facilities**

The cogeneration facility will be located on an unoccupied area of the SRS. The actual site will not impact or require physical changes to the existing facilities; however, there are changes required at other areas of the reservation as a result of operations of the new cogeneration facility.

These include the following:

- D-Area Electrical Feeder
- Pump and Controls Replacement in Building 681-3G, Water Pump Station
- Installation of existing capacitor at the L-Area Substation 151

#### **1.2.7 Savings Proposed**

The annual savings associated with ECM 1 are based on the avoided cost of operating and maintaining the existing D Area Plant. The energy savings result from using a more efficient boiler and steam distribution system and the energy cost savings from using biomass as the primary fuel source in place of coal.

##### **1.2.7.1 Annual Project Savings Overview**

In order to calculate the annual savings, the baseline costs of the D Area plant were collected and the Post-ECM Implementation Costs were computed. The baseline costs of the ECM are [\*\*] of the D Area plant. The avoided baseline costs for utilities are shown as [\*\*] on Schedule DO-4 and the avoided operations and maintenance costs are shown as [\*\*] on Schedule DO-4. The Post-ECM Implementation Costs that will be incurred by SRS are the costs of [\*\*] and the costs for the [\*\*] associated with the

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operation of the [\*\*], as compared to the existing D Area plant. Thus, the annual savings from the ECM equals:

Annual Savings = [\*\*] as escalated annually.

Annual savings will [\*\*] throughout the contract term. *Table 1.3* provides a summary of the annual Post-ECM Implementation Costs, as escalated, that will be determined annually and Other Energy Savings and O&M Cost Savings, as escalated, which are herein agreed to by the Government and Ameresco for the contract term associated with ECM 1. The utility costs and annual savings are based on current year dollars, but are escalated using the appropriate National Institute of Standards and Technology (NIST) factors (refer to *Table 4.3* for the applicable escalation rates) to the date of government acceptance of the project (Project Year 1, CY 2012). Future year O&M cost savings have been escalated at [\*\*]%. The basis of the escalation is the Consumer Price Index for the Southeast region of the US (as reported by the US Department of Labor; Bureau of Labor Statistics) from May 2004 to May 2007, the latest 3 years of data available. The annual increases for those years have been 2.91%, 4.38%, and 2.71%, for an average escalation rate of 3.33%. Utility savings, with the exception of the non-fuel utilities, are escalated using the NIST utility escalation rate for industrial users, sorted by fuel type. Non-fuel utilities are escalated at [\*\*]% per year.

**Table 1.3: ECM 1 Annual Savings Summary**

	Annual Utility Savings	Annual O&M Cost Savings	Post-ECM Implementation Costs	Total Annual Savings
Baseline Year (CY 2009)	[**]	[**]	[**]	\$30,658,617
Escalated to Project Year 1 (CY 2012)	[**]	[**]	[**]	\$33,181,197
Year 2	[**]	[**]	[**]	\$34,404,421
Year 3	[**]	[**]	[**]	\$35,322,289
Year 4	[**]	[**]	[**]	\$36,399,646
Year 5	[**]	[**]	[**]	\$37,676,281
Year 6	[**]	[**]	[**]	\$39,368,611
Year 7	[**]	[**]	[**]	\$40,858,535

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**Table 1.3: ECM 1 Annual Savings Summary**

	Annual Utility Savings	Annual O&M Cost Savings	Post-ECM Implementation Costs	Total Annual Savings
Year 8	[**]	[**]	[**]	\$42,100,018
Year 9	[**]	[**]	[**]	\$43,817,394
Year 10	[**]	[**]	[**]	\$47,247,150
Year 11	[**]	[**]	[**]	\$49,023,439
Year 12	[**]	[**]	[**]	\$50,831,412
Year 13	[**]	[**]	[**]	\$52,654,059
Year 14	[**]	[**]	[**]	\$54,705,813
Year 15	[**]	[**]	[**]	\$56,773,136
Year 16	[**]	[**]	[**]	\$58,856,493
Year 17	[**]	[**]	[**]	\$60,921,492
Year 18	[**]	[**]	[**]	\$63,483,800
Year 19	[**]	[**]	[**]	\$65,849,637
Year 20	[**]	[**]	[**]	\$68,447,514

The following subsections present the assumptions and methodology for establishing the baseline cost and baseline energy consumption for the D Area Plant & Substation, the annual savings calculations, and the performance guarantee for the proposed project.

**1.2.7.2 Annual Energy Baseline Consumption & Costs**

The D Area Plant uses four (4) coal fired boilers to provide steam and power to SRS and is contractor operated and supported by the engineering group of the M&O Contractor. The annual energy consumption and operations costs data for the D-Area Plant was developed to establish the baseline for this ECM. The baseline operations and maintenance table (*Table 1.4*) was developed using the monthly averages of the latest two years of cost data for all O&M of the D Area Plant. The O&M costs include [\*\*]. An additional annual reduction of [\*\*] of the D Area Plant and the Substation, [\*\*] the annual O&M Cost Savings. The detailed breakout of the 2006 — 2007 O&M costs are shown in *Table 1.4*; the

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O&M Cost Savings were escalated two years to accurately represent 2009 as the baseline. Total O&M Cost Savings are escalated to 2012 dollars and are \$[\*\*]

**Table 1.4: O&M Baseline Costs for D-Area Plant**

Month	2006 O&M Costs	2007 O&M Costs	Baseline O&M Cost Savings
January	[**]	[**]	[**]
February	[**]	[**]	[**]
March	[**]	[**]	[**]
April	[**]	[**]	[**]
May	[**]	[**]	[**]
June	[**]	[**]	[**]
July	[**]	[**]	[**]
August	[**]	[**]	[**]
September	[**]	[**]	[**]
October	[**]	[**]	[**]
November	[**]	[**]	[**]
December	[**]	[**]	[**]
<b>Total</b>			<b>\$ 10,692,844</b>

\*\* Data was not available, so used 2006 data with escalation on labor only

\*\*\* Data in this table is presented using 2006 & 2007 dollars and not Baseline year

The annual energy consumption for the D Area plant is based on the amount of coal utilized to produce steam for SRS thermal demand and for SRS power supply. The baseline consumption was determined using monthly averages for the latest two years of fuel usage data. The average annual amount of coal consumed for the past two years was [\*\*] tons, which is used as the agreed upon energy savings baseline. The baseline for energy cost is determined by the product of the baseline energy consumption times the baseline cost of coal. The baseline cost of coal, as provided by SRS and agreed upon, is \$[\*\*] per ton of delivered coal. Thus the baseline energy cost is agreed to be \$[\*\*]. Currently, all electric power required by the site above the net output of the D Area power plant is procured from SCE&G under Rate Schedule 23 and Rate Schedule 60. The energy charge is [\*\*] per kWh and the average demand charge is \$[\*\*] per kW for load over 20 MW. The baseline power export from the D Area plant was determined using monthly averages for the last two years of data. Refer to *Table 1.5* for a summary of the fuel consumption and the net power exported from the D Area plant.

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**Table 1.5: Baseline Energy Consumption**

Month	2006 Energy Use				2007 Energy Use				Baseline Energy Use			
	Coal Use (tons)		Net Output of		Coal Use (tons)		Net Output of		Coal Use (tons)		Net Output of	
	Coal Use (MBtu)	D-Area Plant (MWh)	Power Export (MW)	Coal Use (tons)	Coal Use (MBtu)	D-Area Plant (MWh)	Power Export (MW)	Coal Use (tons)	Coal Use (MBtu)	D-Area Plant (MWh)	Power Export (MW)	
January	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]
February	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]
March	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]
April	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]
May	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]
June	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]
July	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]
August	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]
September	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]
October	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]
November	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]
December	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]
<b>Totals</b>									<b>161,839</b>	<b>3,978,008</b>	<b>131,889</b>	

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### 1.2.7.3 Annual Energy Savings Calculations

The annual savings are determined by calculating the baseline annual O&M cost for the existing plant, plus the annual energy cost as presented in the previous section. The annual savings are then adjusted to account for the cost to be incurred by SRS to purchase additional power from SCE&G and to account for the Post-ECM Implementation Costs to be incurred by SRS for the non fuel utilities of the new cogeneration facility.

The additional future cost of purchased electricity is calculated using the [\*\*] (refer to *Table 1.5*) [\*\*], the annual net “green” power generation of the new cogeneration facility will [\*\*]. Refer to *Table 1.6* for performance of the plant throughout the performance period

Using the projected SRS steam demand of each of the years during the performance period, net annual green power generation will vary each year of the performance period and therefore the amount of power purchased will change. The annual cost associated with the power purchase is determined by the [\*\*]. Future unit cost for electricity is escalated using the applicable NIST factor and is factored into the DO Schedules (defined below).

The annual savings are also adjusted to account for the Post-ECM Implementation Costs incurred by SRS to provide non-fuel utilities to the new facility. This includes the cost for river water, sanitary sewer, and for domestic water. The annual consumption for each of these utilities is shown in *Table 1.6*.

The net estimated annual savings for ECM 1 is \$33,181,197 for the first year of the performance period (2012).

### 1.2.7.4 ECM 1 Performance Measurement

The ECM performance will be measured using the flow output (via a steam flow meter) of the two biomass boilers. Measuring and totalizing the steam production permits for flexibility to make use of this steam to meet the thermal and electrical demands of SRS while allowing for normal seasonal variations and adjustments for expected future load changes. The Annual Steam Guarantee (ASG) for ECM 1 will be 1,759,485 kilopounds per year (klbs/yr) of steam using an annual fuel consumption of [\*\*] MBtu/yr and is shown in *Table 1.6 — ECM 1 Post-ECM Implementation Facility Performance*. The ASG will remain set throughout the performance period; however, the electrical output and the steam export output will vary. Annual biomass costs are calculated based on meeting the ASG and will be adjusted only when the actual steam production for ECM 1 exceeds the ASG; refer to *Section 1.3.1.2*.

Ameresco proposes to produce additional steam from the cogeneration facility above the ASG, unless notified otherwise in writing by the contracting officer, provided that the Government compensates Ameresco for the incremental cost of biomass annually. Additional steam may be used for power generation or for thermal energy. Excess delivered steam above the ASG will be paid for by the Government as described in *Section 1.3*. Further increase in green power generation due to excess steam production will result in additional annual savings and will be documented in the annual M&V report.

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The planned Post-ECM Implementation Costs for Ameresco to operate and maintain ECM 1 are included in the performance period expenses set forth on Schedule DO-3. The performance period expenses include the costs necessary for Ameresco to provide operations and maintenance of the new cogeneration facility including fuel (biomass and fuel oil for backup), personnel, daily operations and maintenance, routine and non-routine repair and replacement costs, and operations management to meet the ASG.

**Post ECM Installation Cogeneration Facility Performance**

The data in *Table 1.6* is derived from the output of energy modeling software (Thermoflex), from vendor data for equipment efficiency, and from using the steam load data provided by the Government (refer to *Table 1.1*). The following paragraphs are an overview of the general methodology of the performance calculations.

**Steam Use:**

**Boiler Design capacity (k-lbs/yr) = [\*\*]**

**Performance Boiler Capacity (k-lbs/yr) = [\*\*]**

**SRS Export Steam (k-lbs/yr) = [\*\*]**

**Auxiliary Steam Load (k-lbs/yr) = [\*\*]**

**Steam Load for Power Generation (k-lbs/yr) = [\*\*]**

**Annual Steam Guarantee (k-lbs/yr) = [\*\*]**

**Power Generation:**

**Net Green Power Generation (kWh/yr)= [\*\*]**

*Power generated from the turbine is based on [\*\*].*

**Net Green Power Generation from Cogeneration Facility (MBtu/yr)= [\*\*]**

**Baseline Power Export from D Area Plant (kWh/yr)= [\*\*]**

**Post-ECM Implementation Electricity Purchased from SCE&G (kWh/yr)= [\*\*]**

**Post-ECM Implementation Electricity Purchased from SCE&G (\$/yr) = [\*\*]**

[\*\*].

**Fuel Supply:**

**Annual Fuel Consumption (MBtu/yr) = [\*\*]**

**Biomass Required for ECM 1 (tons/yr) = [\*\*]**

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**Table 1.6: ECM 1 Post-ECM Implementation Facility Performance**

<b>Plant Parameter</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6-9</b>	<b>Year 10-20</b>
Total Boiler Capacity Steam Load (k-lbs/yr)	2,102,400	2,102,400	2,102,400	2,102,400	2,102,400	2,102,400	2,102,400
<b>Annual Steam Guarantee (k-lbs/yr)</b>	1,759,485	1,759,485	1,759,485	1,759,485	1,759,485	1,759,485	1,759,485
<b>Steam Use</b>							
SRS Export Steam Load (k-lbs/yr)	[**]	[**]	[**]	[**]	[**]	[**]	[**]
Steam Load for Power Generation (k-lbs/yr)	[**]	[**]	[**]	[**]	[**]	[**]	[**]
Aux Steam Load (k-lb/yr)	[**]	[**]	[**]	[**]	[**]	[**]	[**]
<b>Power Generation</b>							
Net Green Generation (kWh/yr)	[**]	[**]	[**]	[**]	[**]	[**]	[**]
Net Green Generation (MBtu/yr)	[**]	[**]	[**]	[**]	[**]	[**]	[**]
Baseline Power Export from D Area Plant (kWh/yr)	[**]	[**]	[**]	[**]	[**]	[**]	[**]
Post-ECM Implementation Electricity Purchased from SCE&G (kWh/yr)	[**]	[**]	[**]	[**]	[**]	[**]	[**]
Post-ECM Implementation electricity Purchased from SCE&G (\$/yr) (*see note)	[**]	[**]	[**]	[**]	[**]	[**]	[**]
<b>Fuel Supply</b>							
<b>Annual Fuel Consumption for ECM 1 (MBtu/yr)</b>	2,727,205	2,727,205	2,727,205	2,727,205	2,727,205	2,727,205	2,727,205
Fuel Required for ECM 1, 100% Biomass (tons/yr)	317,118	317,118	317,118	317,118	317,118	317,118	317,118
Fuel Cost for ECM 1, 100% Biomass (\$/yr) (**see note)	[**]	[**]	[**]	[**]	[**]	[**]	[**]

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**Table 1.6: ECM 1 Post-ECM Implementation Facility Performance**

Plant Parameter	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6-9	Year 10-20
<i>Post-ECM Non Fuel Utilities ***</i>							
River Water (k-gals/yr & \$/yr)	460,215 \$(346,699)	456,015 \$(353,842)	459,033 \$(366,869)	460,261 \$(378,886)	457,981 \$(388,319)	461,026 \$(402,627)	454,418 \$(446,666)
Domestic Water (k-gals/yr & \$/yr)	456 \$ (4,692)	456 \$ (4,833)	456 \$ (4,978)	456 \$ (5,128)	456 \$ (5,281)	456 \$ (5,440)	456 \$ (6,123)
Sanitary Sewer (k-gals/yr)	456 \$ (3,621)	456 \$ (3,730)	456 \$ (3,842)	456 \$ (3,957)	456 \$ (4,076)	456 \$ (4,198)	456 \$ (4,725)

\* The power purchased cost is per 2009 unit cost, however the DO schedules are escalated per NIST to account for future price of power.

\*\* Annual biomass cost for years 7-9 and 11-20 are not shown in this table, but escalated from previous year using an escalation factor of 5%

\*\*\* Non fuel utility consumption is calculated on full load on expected maximum each year so the consumption is constant throughout the term; the actual cost is escalated each year.

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**1.2.8 Utility Interruptions**

The utility interconnections are described in detail in *Section 1.2.3*. It is anticipated that these connections will be made with minimal interruption to the SRS site. Any necessary interruptions will be coordinated and scheduled in advance with SRS personnel and with M&O site personnel. The shutdown of the D area plant and the start-up of the new cogeneration facility will be coordinated with SRS personnel and D Area site personnel to allow for minimal interruptions during transition.

**1.2.9 Agency Support Required**

Ameresco will continue to work with the Government as the project moves through the final design and the construction period. Support from the Government's engineering, contracting, and maintenance units, as well as management will be required for continued success of the proposed project. The Government, through its M&O Contractor Environmental Support Section will be responsible for processing the storm water management permit, the final site use permit, the National Environmental Policy Act (NEPA) document, domestic water permit, sanitary sewer permit, wetland permit, and the new outfall into the site NPDES Permit. Refer to *Section 3.2* for a description of the environmental permit and documentation required for this ECM.

**1.2.10 Potential Environmental Impact**

Refer to *Section 3.0* for environmental benefits and impacts from both ECMs.

**1.2.11 ECM Property Ownership**

As approved under the BAMF Contract, title to all contractor-installed equipment proposed under this ECM will vest with the Government upon its acceptance of such ECM or the date that commercial operations begin, whichever occurs earlier.

**1.2.12 ECM Project Schedule**

The construction schedule will be developed using Primavera P-6 software and submitted to the contracting officer. The following table shows the major milestones of the design and construction period.

**Table 1.7: Project Milestones**

Activity	ECM 1	ECM 2
Site Work	09/01/09	07/01/09
Site Utility*	09/01/09	09/01/09
Concrete/Foundation Work	12/01/09	11/01/09
Building Package	06/01/10	01/01/10
Mechanical Install Work	06/01/10	05/01/10
Process Piping Work	08/01/10	05/01/10
Electrical Plant Work	12/01/10	05/01/10
Instrumentation & Controls Work	12/01/10	05/01/10
Insulation Work	12/01/10	05/01/10
Start up & Commissioning	06/01/11	07/01/10

\* Design Packages to be submitted throughout the first year of project

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### **1.3 BAMF Project Components**

#### **1.3.1 BAMF Resource**

ECMs 1 and 2 will require approximately 322,118 tons of forest residue biomass per year to meet Ameresco's ASG and approximately 385,000 tons of forest residue biomass per year to operate at design capacity. For such calculation of tons, Ameresco used a heating value of 4,300 Btu/lb from forest residue. Ameresco intends to procure both clean biomass and biomass derived fuel (BDF). Clean biomass includes forest residues, some urban waste, untreated wood pallets, and residue from lumber processes. BDF includes urban wood waste and tire derived fuel and will only be used in connection with ECM 1. There are numerous sources of clean biomass within a 100 mile radius of the SRS site, including within the SRS Forest. The following sections describe available BAMF supply, BAMF pricing, and BAMF acquisition.

##### **1.3.1.1 BAMF Supply**

Following several discussions with the local office of the U.S. Forest Service and SRS personnel, Ameresco proposes to assume responsibility for the fuel procurement and intends to meet the biomass fuel requirements for ECMs 1 and 2 through purchases from local biomass suppliers. This responsibility shall include the right to validate, verify, and sell any carbon credits, but not renewable energy certificates, which may be obtainable from the ECMs and their associated operation and activities. Ameresco will consult with the Government concerning the design, validation, and verification for carbon offset credits and will make reasonable commercial efforts to obtain carbon offset credits which may be associated with the ECMs. Those credits may arise from the substitution of biomass residues for use in lieu of fossil fuels, and the use of biomass from onsite activities, including those from forest reforestation and working forest activities.

##### **BAMF Deliveries**

There will be deliveries of biomass and other BAMF fuel scheduled daily, Monday through Friday (normal operations), throughout the contract performance period. It is estimated that up to 60 trucks may enter and depart the C and Burma Road location each day, five days per week. It is anticipated that deliveries will be accepted from 7:00 AM to 7:00 PM although the exact hours may vary by season and/or supplier. Acceptable delivery hours will be established with each biomass supplier. Following meetings with SRS personnel, Ameresco has agreed to minimize the number of deliveries departing the site at the C Road traffic signal from 6:30 to 8:30 AM to accommodate arriving SRS personnel turning left at that traffic signal. Ameresco has been given assurance, and this proposal is predicated upon biomass delivery vehicles being permitted to enter and depart the SRS reservation at any of the available (open) gates and not be limited to just the Aiken and Jackson Barricades.

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Drivers of the BAMF delivery vehicles will be required by Ameresco to obtain a permanent (one year) site badge and to comply with SRS vehicle safety and site entry requirements, except as noted above.

Ameresco has conducted many discussions and met with potential fuel suppliers within the past few months. Ameresco is currently working primarily with [\*\*], to obtain biomass fuel supply contracts needed for the ECMs, although there are additional suppliers within the region that continue to express an interest in becoming a biomass fuel supplier. All are large companies with capabilities of harvesting, collecting, and delivering wood chips to end users and have contracts to harvest timber in the SRS Forest.

[\*\*] offers the following services: [\*\*] of the fuel required by the ECMs. [\*\*]. Further, Ameresco intends to use BDF sources such as urban waste and tires as described below.

#### 1.3.1.2 BAMF Pricing

Ameresco's annual expense for biomass to fuel both ECMs shall be on a [\*\*] in the amounts set forth on Schedule DO-3 under the caption "Other – Biomass Fuel (\$)" which represents Ameresco's Biomass Expense and is based on supplying approximately [\*\*] tons of biomass per year at a unit price of [\*\*] per ton (in 2009 dollars) escalated thereafter at [\*\*] percent ([\*\*]%) per year. Ameresco [\*\*]:

(a) [\*\*]

(b) Ameresco shall establish an interest bearing Performance Period Escrow Fund (PPEF) to be held by a third party bank fiscal agent pursuant to which Ameresco's lender shall have a security interest and control as described in Section 9-104 of the Uniform Commercial Code and in which Ameresco will deposit or cause to be deposited:

(i) approximately [\*\*] into the PPEF upon Government acceptance of both ECMs, provided such amount will be finalized upon contract award, approval by Ameresco's lender and locking the project's interest rate;

(ii) the sales tax reserve, as described in Section 6.3 herein, of approximately four million six hundred thousand dollars (\$4,600,000) upon Government acceptance of both ECMs, provided that Ameresco receives a sales tax exemption certificate from the State of South Carolina;

(iii) [\*\*]; and

(iv) [\*\*].

The intended purpose in establishing the PPEF is to [\*\*]. Therefore, all funds in the PPEF shall be [\*\*] prior consent, such consent not to be unreasonably withheld; provided the [\*\*] prior consent, such consent not to be unreasonably withheld, when [\*\*].

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The PPEF will also be available to the [\*\*] amount set forth on Schedule DO-5(a), as negotiated. [\*\*].

(c) To the extent that Ameresco's [\*\*], Ameresco may [\*\*]; provided, however, that [\*\*], the following shall have occurred (i) Ameresco will have [\*\*], (ii) Ameresco shall have [\*\*] and (iii) Ameresco will have [\*\*]; provided further, however, that such [\*\*] requirement as set forth on Table 1.6 herein under the caption "SRS Export Steam Load (k-lbs/yr)." Should Ameresco make the decision to [\*\*] prior notification will be provided by Ameresco to the [\*\*] in accordance with this Final Proposal and the BAMF Contract.

(d) To the extent that Ameresco's [\*\*], at the end of the final year of the performance period, the parties agree to extend the term of the contract to the later of (i) one year or (ii) until such time as its cumulative actual cost of biomass equal its biomass payments; provided such extension in (i) or (ii) does not exceed statutory term limitation.

(e) Ameresco, upon [\*\*] prior written notice to the [\*\*]. Upon consummation of Ameresco's [\*\*]. The foregoing notwithstanding, Ameresco agrees that it will, [\*\*] as set forth in the contract.

Ameresco may [\*\*]. In the event, any resulting savings above Ameresco's [\*\*] in accordance with this Final Proposal. Ameresco will [\*\*].

#### **1.3.1.3 BAMF Acquisition**

Ameresco may enter into an agreement with one or more biomass suppliers. Ameresco will also attempt to secure from each supplier a fixed fuel price for as long a term as possible.

#### **1.3.2 BAMF Transportation, Metering, & Delivery**

##### **1.3.2.1 BAMF Transportation & Delivery**

The biomass will be delivered from the suppliers using trucks with live bottom feeders, self-dumping trucks, or trucks with high-side trailers. Typically, each of the larger trucks has the capacity to hold approximately 120 cubic yards of fuel per load. The smaller self dumping/end dump trucks typically only carry about 50 cubic yards of fuel and will be used primarily for BDF waste sources or for larger unprocessed fuel. Actual loads may vary with the density of the fuel. Normal truck deliveries will be arranged to be made Monday through Friday.

##### **1.3.2.2 BAMF Metering**

Woodwaste is commonly measured in units of weight and volume such as in tons, truck loads, or cubic yards, rather than in units of energy. For this proposal, the higher heating value of biomass is about 4,300 Btu/lb since the majority of the fuel will be from forest residues and is typically high in moisture. The fuel supply will be tracked and recorded using the truck scale tickets. Periodic testing will be done on the fuel to determine the composition and the heating value.

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**1.3.3 BAMF End-Use Project**

**1.3.3.1 BAMF End-Use Demand**

End use of the biomass source was calculated utilizing forest residue as the main fuel source to meet the ASG. Forest residues for the Carolina area are typically high in moisture with heating values in the range of 4,100-4,600 Btu/lb. For the design basis and end use demand calculations, a higher heating value of 4,300 Btu/lb was used to determine boiler feed input. At this heating value, the boiler efficiency is expected to be 70%. At these conditions, the expected annual fuel use for ECM 1 is 317,118 tons a year of biomass consisting of forest residues.

**1.3.3.2 BAMF End-Use Operations & Maintenance**

Ameresco will retain operational and maintenance responsibility for the cogeneration facility and equipment installed at the cogeneration facility, described in *Section 5.2.7.1* of this proposal.

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## 2.0 ECM 2 DESCRIPTION

### 2.1 ECM Summary Schedule DO-4

Pricing Schedule DO-4 is included in *Section 6.0, Proposal Pricing Information*.

### 2.2 ECM #2: Biomass Heating Plants for K& L Areas

#### 2.2.1 Detailed Description of ECM

##### 2.2.1.1 ECM Summary

ECM 2 includes the installation of biomass heating plants in the K Area and the L Area. These new heating plants will replace the existing fuel oil-fired boiler plant located in the K Area that currently serves heating loads in both the K and L Areas. The two existing 30,000 and 60,000 lb/hr steam boilers are in poor condition and are now vastly oversized for the current load (estimated by SRS personnel to be approximately 7,000 PPH of steam in each area at design conditions). The existing 30,000 lb/hr boiler has been utilized as the primary boiler during the most recent years, due to the large reduction in load from the original design. Currently steam is produced at 150 psig to distribute to the K and L Areas and reduced inside the secure areas for use at 30 psig or less. By decentralizing the existing plant and providing local boiler systems in both the K and L Areas, the losses from the existing aboveground 2.5 mile, 6-inch steam line running from the K Area to the L Area will be eliminated. Additional efficiency gains are made from the right-sizing of the new heating plants to match existing loads.

The heating plants are each sized to provide a continuous availability for supply of steam to site end-users in the K and L areas during the typical heating season of December through mid April. The individual site demand was based on fuel oil consumption data for the past 5 years. The system is designed using applicable national codes and standards for steam plants and specific site standards (refer to *Appendix D*). Previously, conceptual design drawings were submitted to the site for review prior to issuance of this final proposal; a draft version of the "issued for pricing" drawings is included in Volume III of this proposal. Finalized "issued for construction" drawings will be submitted to the government for concurrence throughout the first year of the construction as major equipment items are ordered and the design drawings are finalized.

Implementation of this project provides utility savings resulting from 1) The elimination of losses from 2.5 miles of existing steam distribution piping between the K and L Areas; and 2) Improved operations from properly sized boilers, and the fuel cost differential in switching from fuel oil to clean biomass. Annual savings are over \$1.1 M for this ECM.

This proposal includes the procurement and installation of the new equipment, the support facilities, all auxiliary systems and controls, and utility tie-ins required to connect the new heating plants to the K and L Area distribution systems, as well as ongoing O&M and environmental compliance of both heating plants for the contract duration.

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### 2.2.1.2 ECM Process Description

This ECM includes two major components for each of the proposed heating plants: 1) Biomass fuel storage system, and 2) combustion/boiler system. Each new heating plant will be installed in an enclosed building with an adjacent covered shelter to house the wood fuel storage and delivery equipment. Biomass fuel will be delivered to both heating plants by Ameresco personnel from the fuel processing yard of the Biomass Cogeneration Facility. The fuel delivered to each of these heating plants will be clean biomass (refer to *Section 1.3*). The clean biomass will be used as the primary fuel source for two new wood waste combustor boilers to supply steam to the K and L Areas. Each boiler system will be designed to generate 10,500 PPH of saturated steam at 135 psig.

#### **Biomass Fuel Storage System**

The fuel storage area consists of the storage system and feeder to the combustion system. The components of this system are recommended to minimize equipment at each site and to provide maximum automation to each of the heating plants. Ameresco personnel will employ tractor-trailers to transfer the biomass fuel from the fuel yard at the cogeneration facility to both the K and L Area heating plants. The tractor-trailers will be parked in the new fuel storage shelter bays, one at each heating plant location. Each tractor-trailer is equipped with a walking floor-bed installation for the automated transfer of fuel to the stationary metering bin at each heating plant. The metering bin utilizes augers to feed the fuel into the combustion system.

The flow of fuel is controlled by an integrated direct digital control (DDC) system that automates the flow of fuel from the walking-bed to the metering bin, and from the metering bin to the combustor, based on input signals (and required safeties) to maintain steam pressure at the output of the boiler.

Fuel Storage System components for each area (K and L) includes:

- Tractor trailer with walking bed for fuel feed
- Fuel storage shelter bay
- Main fuel bin and auger to feed combustor

#### **Combustion/Boiler System**

One combustion/boiler system will be located in each area, in a separate, enclosed bay connected to the fuel storage shelter bay. The system proposed is manufactured by Hurst Boiler & Welding Company, Inc., and is designed specifically for the combustion of solid waste fuels to optimize energy recovery and minimize air emissions. Refer to *Appendix C* for manufacturer cut sheets.

When there is a demand for steam the biomass is augered from the fuel storage bin into the combustor, where the biomass begins to burn by the use of three levels of air directed into the combustion zone. The primary air is forced into the combustion zone from beneath the fuel grates (on which the fuel rests during combustion). The secondary air is forced through side grates, and the tertiary air comes through the side

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of the cast refractory to keep unburned ash from exiting the unit. The primary combustion zone is lined with high-insulating value, cast refractory ceramics to minimize radiant heat losses from the unit exterior.

A similar, secondary ceramic chamber fired at 3,100°F is included between the primary combustion zone and the boiler to allow for an extended combustion zone. The extended retention time in the secondary zone ensures the additional combustion of the biomass and reduces emissions. The appropriate combustion temperature is maintained by adjusting fuel feed, fan speed, and air intake.

Each boiler will be equipped with an auxiliary burner to allow for the firing of fuel oil for full output capacity of the boiler. Fuel oil will be used for pilot lighting on startup, and as a back-up emergency fuel source only. Each boiler has the capacity to produce up to 10.5 k-lb/hr of 135 psig steam when the combustion system is operated at full output. Each is a 2,600 sq ft unit, with 2 pass design and includes standard instrumentation, rear furnace access door, and air-operated soot blowers. Downstream of each steam boiler, the exhaust gas will go through a multi cyclone which reduces the particulate matter in the exhaust gas by 70%. The exhaust stacks will be equipped with appropriate lighting as required for on-site helicopter travel.

Boiler/Combustion System components for each area include:

- Metering Bin Feeder
- 10.5 MBtu/hr combustion unit
- Full-capacity fuel oil burner
- Steam heat recovery boiler
- Multi cyclone
- SCADA system
- Automated ash removal system
- Exhaust stack with aviation lights
- Boiler auxiliaries
- Air compressor for L Area
- Water treatment skid for L Area
- Fuel Oil Storage

### 2.2.1.3 ECM Operation

Ameresco will be responsible for operating and maintaining the heating plant facilities and equipment throughout the contract term. Both boilers will be operated by Ameresco as needed to meet the steam demand as more fully described in *Section 2.2.7.3*.

Both heating plants will be remote monitored via a telephone modem and using the Site PA system from the control system at the cogeneration facility. Maintenance and inspection of the systems will be performed by Ameresco operations personnel from the cogeneration facility. Refer to *Table 2.1*, which

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defines the interconnection and utility O&M responsibility for this ECM. Refer to *Section 5.2.7.1* for a detailed description of the O&M responsibilities of each party.

**2.2.2 Location Affected**

The biomass heating plant at the K Area will be constructed in the same vicinity as the existing plant, behind the two existing 30,000 gallon fuel oil tanks. The existing fence will be modified to allow for the construction of a new gate which the biomass delivery trucks will use for accessing the heating plant. A new facility will be constructed to house the biomass heating plant, while the biomass fuel storage and feeder area will be located under a covered bay attached to the new heating plant. For the L Area, a replica of the K Area heating plant will be installed northeast of the abandoned cooling water basin. The footprint for each system is approximately 2,600 square feet, including an enclosed sound proof control booth. Refer to *Figure 2.1* and *Figure 2.2* for site location plans for each area.

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**Figure 2.1: K Area Biomass Heating Plant Location**  
 [\*\*]

**Figure 2.2: L Area Biomass Heating Plant Location**  
 [\*\*]

**2.2.3 ECM 2 Interface with Government Equipment**

Title to all Ameresco installed equipment will transfer to the Government at the time of Government acceptance of an ECM. For the sake of clarity, ECM 2 will interface with *existing* Government equipment at the utility interconnections as described in this section. The installation of utility interconnections required for the new heating plants are included in the project implementation cost and the installation will be Ameresco's responsibility; however, the SRS M&O Contractor will retain O&M responsibility including repair and replacement for the utility interconnections and utility distribution systems. *Table 2.1* provides a summary of the utility interface and the scope of O&M responsibility for the utility systems. Ameresco and the SRS M&O Contractor will enter into an agreement that will provide the heating plants with utility services to include river water, process sewer service, backup electrical power, and domestic water service. A PSUP form will be completed by Ameresco prior to construction of utility interconnections. Utility meters will be installed to measure usage. It is proposed the Government will incur the cost for the cogeneration facility's non fuel utilities. These Post-ECM Implementation Costs have been factored into the annual savings. The annual consumption and costs of the utilities are shown in *Table 2.5*, and the unit cost used for each utility is shown in *Table 4.2*. Refer to *Section 5.2.7.1* for operation and maintenance responsibility.

**Table 2.1: Utility Interconnection Summary**

Utility	Interconnection	O&M Responsibility
Steam	New 6" 150 psig to existing steam line (PRV station in K Area)	Ameresco: to new valve located in new line just prior to POIC with existing steam line; SRS: downstream of valve.
Domestic water (K & L Area)	30 gpm, new 2" line from plant to header located outside existing water treatment plant. A new 2" line will be installed from the domestic water header to the L Area heating plant to be used as a backup source for feedwater and as a source for the safety shower and eyewash.	Ameresco: to new utility valve outside of water treatment building; SRS: downstream of tie-in.
River water (L Area)	New 4", 30 gpm, line from river water header in L Area	Ameresco: to new valve located in new line outside of heating plant; SRS: upstream of utility valve.
Process Sewer	2" connection to existing line to Ash Basin for K Area & 2" connection to basin to L-07 outfall for L Area	Ameresco: to new valve located in new line outside of heating plant; SRS: downstream of utility valve. (Ameresco responsible for meeting discharge emission requirements of these lines from the K and L heating plants)
Electrical	New line from 151-2K in K Area and add new line from 183-2L to the heating plant for the L Area	Ameresco: from connection at heating plant; SRS: upstream of each heating plant.
Telephone Line/PA System	Verizon New Line	Verizon/Ameresco

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**Electrical System**

K Area: At the time Ameresco performed the initial field survey, SRS staff were beginning the process of designing a dedicated overhead 300A, 480V feeder and panel board. This system has not been installed to date, so a new feeder from the 151-2K substation will be provided as part of the ECM 2 work scope. New motor control center(s) and associated low-voltage distribution equipment, lighting, and related requirements associated with the new boiler and fuel handling equipment will be provided.

L Area: Based on information provided by SRS, the switchgear, 183-2L is available for interconnection and has adequate capacity for the load of the heating plant. Ameresco will run a new feeder from 183-2L to serve a new overhead wood-pole distribution line to the proposed boiler plant site. A new feeder will supply the motor control center and distribution panel(s) required for the new equipment.

**Steam Distribution System**

K and L Area: Each new boiler will be connected to the existing steam distribution lines within each area. The new boiler system will operate at 135 psig and pass through the existing PRV station for distribution to end users at 30 psig.

**Boiler Feedwater**

K Area: Existing boiler feedwater services will be utilized for the new heating plant. Ameresco will use and maintain the existing water treatment system. If the existing well water treatment plant is not upgraded to produce domestic water prior to project startup, a small water tank will be installed to hold domestic water for use in the safety shower and eye wash station.

L Area: River water will be used as the source for boiler feedwater for the heating plant. There will also be a domestic water feeder used as a backup source for boiler feedwater and to feed the safety shower and eyewash. A new water treatment facility will be installed to treat the water for suitability of the new biomass boiler.

**Process Sewer**

K Area: The boiler blow down will connect to the process sewer system that runs to the existing ash basin.

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L Area: The boiler blow down will be discharged to the existing L-07 Outfall. Ameresco will be responsible for ensuring this (L Area heating plant) effluent is compliant with the NPDES Site Permit.

#### **2.2.4 Proposed Equipment**

The proposed equipment is described in the previous section and an equipment list and manufacturer information for the combustor/boiler system is included in *Appendix C*.

#### **2.2.5 Expected Lifetime**

The major equipment components have an expected lifetime of 20 — 30 years. Annualized repair and replacement costs have been included in this proposal. Ameresco will be responsible for all repair and replacement required to maintain heating plant operation.

#### **2.2.6 Physical Changes to Existing Equipment or Facilities**

Both proposed heating plants will be located outside of the process areas; however, this ECM proposes to make the following modifications within the K Area:

- The K Area water treatment building will be left in place and existing water treatment components will be utilized. Ameresco will maintain the water treatment equipment and building throughout the term of this contract.
- The air compressor located next to the existing fuel boilers in the K Area will be used for the new biomass combustor system. Ameresco will maintain the air compressor throughout the contract term.

#### **2.2.7 Savings Proposed**

The annual savings associated with this ECM are based on the avoided cost of operating and maintaining the existing K Area Plant including the distribution system between the K and L Area, the annual energy savings resulting from using a more efficient boiler, and by using biomass instead of fuel oil as the primary fuel source. Additional energy consumption savings will be realized by replacing the K Area plant with two smaller heating plants, which eliminates the 2.5 mile distribution line between the two areas.

*Table 2.2* summarizes the annual savings associated with ECM 2. Annual Energy Savings [\*\*] are agreed to be [\*\*]; however, the annual savings are adjusted each year to account for [\*\*] agreed to be [\*\*], resulting in a total of \$1,188,383. Using the current NIST escalation factors for the utility savings, the total annual savings for Project Year 1 (assumed to be CY 2012) are \$1,171,260. Future years have been escalated at [\*\*]%. The basis of the escalation is the Consumer Price Index for the Southeast region of the US (as reported by the US Department of Labor; Bureau of Labor Statistics) from May 2004 to May 2007, the latest 3 years of data available. The annual increases for those years have been 2.91%, 4.38%, and 2.71%, for an average escalation rate of 3.33%. Annual Energy Savings and O&M Cost Savings shown on *Table 2.2* are herein agreed to by the Government and Ameresco for the term of the contract.

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Table 2.2: ECM 2 Annual Savings Summary

	Annual Energy Savings	Annual O&M Cost Savings	Post-ECM Implementation Costs	Total Annual Savings
Current Year (FY 2009)	**	**	**	\$ 1,188,383
Escalated to Project Year 1 (FY 2012)	**	**	**	\$ 1,171,260
Year 2	**	**	**	\$ 1,182,735
Year 3	**	**	**	\$ 1,207,952
Year 4	**	**	**	\$ 1,233,416
Year 5	**	**	**	\$ 1,245,632
Year 6	**	**	**	\$ 1,284,832
Year 7	**	**	**	\$ 1,324,974
Year 8	**	**	**	\$ 1,385,220
Year 9	**	**	**	\$ 1,446,124
Year 10	**	**	**	\$ 1,481,648
Year 11	**	**	**	\$ 1,537,014
Year 12	**	**	**	\$ 1,593,421
Year 13	**	**	**	\$ 1,643,974
Year 14	**	**	**	\$ 1,708,160
Year 15	**	**	**	\$ 1,773,132
Year 16	**	**	**	\$ 1,832,320
Year 17	**	**	**	\$ 1,898,294
Year 18	**	**	**	\$ 1,972,045
Year 19	**	**	**	\$ 2,053,597
Year 20	**	**	**	\$ 2,129,145

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#### **2.2.7.1 Annual Energy Savings**

The annual savings are based on the avoided cost to operate and maintain the K Area plant including the distribution system between the K and L Area and the cost of energy required to produce steam in the existing boilers minus the Post ECM cost of the non fuel utilities for each heating plant. The savings will be applied to fund the capital cost of the project and to fund the ongoing performance period expenses throughout the contract performance period term. The performance period expenses include the costs to operate and maintain the new heating plants such as biomass and fuel oil cost, labor cost, consumable costs, maintenance costs, repair and replacement cost, and operation management. The following subsections show the baseline cost and energy consumption for the existing K Area Plant, the calculations of fuel and operating costs of the new heating plants, and the savings summary for the proposed project.

#### **2.2.7.2 Annual Energy Baseline Consumption & Costs**

Currently the K Area plant utilizes one 60,000 lb/hr fuel oil boiler and one 30,000 lb/hr fuel oil boiler to serve both the K Area and the L Area facilities via a 2.5 mile steam pipeline. Data provided by SRS indicates that the 30,000 lb/hr boiler is the primary boiler, with the 60,000 lb/hr not having run in the past 3 years. Steam is produced at 150 psig and is reduced to an operating pressure of 30 psig for each site. The existing boilers are oversized and past their useful life, and are currently a costly maintenance issue.

In order to calculate the annual savings for this ECM, a baseline was developed to depict the most reasonable representation of the annual energy determined by taking the average consumption of the past 5 years, and to determine the annual O&M costs which were based the average of the past 5 years as shown in the following tables:

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**Table 2.3: Baseline Operating and Maintenance Cost for K Area Plant**

O&M Expense	2003	2004	2005	2006	2007	Baseline Year (2009)	Average Annual Costs
Labor Total	[**]	[**]	[**]	[**]	[**]	[**]	[**]
Material Total	[**]	[**]	[**]	[**]	[**]	[**]	[**]
Other Consumable Total	[**]	[**]	[**]	[**]	[**]	[**]	[**]
Steam Distribution O&M	[**]	[**]	[**]	[**]	[**]	[**]	[**]
Subcontracts for Repair & Replacement	[**]	[**]	[**]	[**]	[**]	[**]	[**]
Overhead for O&M	[**]	[**]	[**]	[**]	[**]	[**]	[**]
<b>Total O&amp;M Cost Savings</b>	[**]	[**]	[**]	[**]	[**]	[**]	[**]

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**Table 2.4: Baseline Annual Energy Consumption for K Area Plant**

<b>K Plant Production</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>Average</b>
<b>Fuel Use</b>						
Fuel Use Gallons	345,594	380,806	343,987	277,061	200,707	309,631
Fuel Use MBtu	47,865	52,742	47,642	38,373	27,798	42,884
<b>Steam Production</b>						
Total k-lbs/yr	36,648	40,382	36,478	29,381	21,284	32,835
Hours in Season	3264	2904	3264	2424	2112	2,794
Average Load lbs/hr	11,228	13,906	11,176	12,121	10,078	11,754

Using the past 5 years of data for fuel oil consumption, the annual average consumption is 309,631 gallons. The current price of fuel oil is \$2.13 per gallon; therefore, the baseline energy cost is \$659,514.

The annual savings for ECM 2 are equal to the O&M cost savings plus the annual energy costs baseline minus the post-ECM non-fuel energy costs. The annual savings for ECM 2 is \$1,188,383 for the current year and \$1,171,260 for Year 1 (2012).

**2.2.7.3 Annual Heating Plant Performance**

For ECM 2, heating plant performance is based on heating plant availability to provide steam to the K and L Areas, with outages no longer than a period of a week (seven continuous days) at any one time, during the typical heating season of December through April up to a maximum of 33,300 klbs/yr (Availability Guarantee). The annual fuel cost for this ECM has been calculated using an annual steam production of 33,300 klbs. If the steam load for the heating season is lower than 33,300 klbs and therefore the fuel consumption is lower, the difference will be reconciled as described in Section 1.3. It is expected there will be a reduction of 10% of the steam load due to the shutdown of the steam line between the two areas. If the steam production is higher due to an increase in either Area's demand, the fuel cost will be adjusted annually. Annual fuel costs are calculated based on meeting the Availability Guarantee and will be adjusted annually on actual steam production and actual fuel consumption (Refer to Section 1.3). The expected heating plant performance is shown in the following table:

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**Table 2.5: ECM 2 Post ECM Heating Plant Performance**

Heating Plant Parameter	ECM Post-ECM Performance
Typical Operation	December- April 15
Expected Steam Production (k-lbs/yr)	33,300
Fuel Required for ECM 2, 100% Biomass (MBtu/yr)	42,844
Fuel Required for ECM 2, 100% Biomass (tons/yr)	5,000
Fuel Cost for ECM 2, 100% Biomass (\$/yr) 2009	\$ 110,000
Fuel Cost for ECM 2, 100% Biomass (\$/yr) 2012 — Year 1	\$ 120,200

The non-fuel utilities consumed at each of the heating plants are to be incurred by the Government. The Post-ECM implementation cost has been deducted from the annual savings for each year of the performance period. The water consumption is based on the Availability Guarantee and the electricity consumption is based on the load of the heating plants for the typical heating season. The annual utility cost was calculated by multiplying the consumption by the unit cost of the utility (refer to *Table 4.2*). The unit cost of the utilities is escalated using the NIST values and the [\*\*]% escalation for the water cost.

**Table 2.6: ECM 2 Annual Post ECM Non-Fuel Utilities Cost & Consumption**

Utility	Annual Consumption	Annual Cost
Domestic Water	2,004 k-gal/yr	\$ 22,861
River Water	2,004 k-gal/yr	\$ 922
Electricity	345,600 kWh/yr	\$ 32,141

**2.2.8 Utility Interruptions**

The utility interconnections are described in detail in *Section 2.2.3*. It is anticipated that these connections will be made with minimal interruption to SRS functions. Any necessary interruption will be coordinated and scheduled in advance with site personnel.

**2.2.9 Agency Support Required**

Ameresco will continue to work with the Government as the project moves through the final design and the construction period. Support from the Government’s engineering, contracting, and maintenance units, as well as management will be required for continued success of the proposed project.

**2.2.10 Potential Environmental Impact**

Refer to *Section 3.0* for environmental benefits and impacts for both ECMs.

**2.2.11 ECM Property Ownership**

As approved under the BAMF Contract, title to all contractor-installed equipment proposed under this ECM will vest with the Government upon its acceptance of such ECM, or the date that commercial

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operations begin, whichever occurs earlier. Refer to *Section 5.2.7.1* for an explanation of O&M responsibilities.

**2.2.12 ECM Project Schedule**

A detailed project schedule (in Primavera) will be issued to the Government following contract award.

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### 3.0 ENVIRONMENTAL IMPACT OVERVIEW

By utilizing on and off site biomass sources (rather than coal and fuel oil) to produce steam and energy, the proposed ECMs will provide a positive impact the environment. However, since both ECMs introduce new equipment and structures onto the site/area, assessments and permits are necessary in order to comply with the applicable local, state, and federal requirements. The positive impacts and benefits of the project are highlighted in *Section 3.1*. *Section 3.2* describes the environmental permitting required by the SCDHEC and other required environmental documents.

#### 3.1 Overview of Environmental Benefits

- The proposed plants will decrease the overall air emissions rates for 1) particulate matter (PM) by more than 400 tons a year, 2) nitrogen oxides (NOx) by more than 2,500 tons a year, and 3) Sulfur Dioxide (SO<sub>2</sub>) by more than 3,500 tons a year. This will result in a positive impact to the air quality of the local area.
- Both ECMs will reduce energy consumption by eliminating over 6 miles of steam distribution lines (3.5 miles for ECM 1 and 2.5 miles for ECM 2). The reduced steam distribution pipe will decrease fuel consumption by at least 10% from reduction of in-line steam losses.
- The proposed cogeneration facility will decrease the amount of river water currently drawn from the Savannah River by over 1,412,000 kgal per year. This is especially significant as the level of the Savannah River is low and this project will support efforts to protect the water level.
- By replacing fossil fuels with a renewable energy fuel source, green house gas emissions will be reduced by at least 100,000 tons a year significantly decreasing the carbon footprint of the SRS.
- Although cogeneration facility and heating plants are not practical feasible buildings for Leadership in Energy and Environmental Design (LEED) certifications, both ECMs will incorporate sustainable design methods and incorporate energy efficient technologies into the design.

#### 3.2 Overview of Environmental Permitting & Assessment

Since the proposed projects will be located at a new site and/or require the installation of new equipment there will be new emission sources for air, water, and waste water. The resulting emissions require environmental permits through the Environmental Protection Agency (EPA), SCDHEC, and SRS. The following table is a summary of the permits required for the project, the status of the permit, and the expected issuance of the permit. Each of these is further described in the paragraphs below. The schedule and proposal are based on the dates in the table; significant deviation of these dates could potentially delay construction. Ameresco will have responsibility for maintaining compliance with the permits through the construction period and the contract performance period.

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**Table 3.1: Environmental Permits & Documents**

<b>Permit/Document (responsible for permit)</b>	<b>Status</b>	<b>Completion Date/ Expected Issuance (responsible for approval)</b>	<b>Schedule Impact</b>
Site Use Permit (M&O)	Site Use Permit approved in October 2007, revision will be submitted to include river water routing, outfall routing and electrical feeder routing.	Initial Site Use Permit Approved, Revision approved in June 2008. (SRS)	Required for Construction & Operation
Power Services Utilization Permit(s) (Ameresco)	PSUP to be submitted upon approval of IFC drawings.	Approval by end of 2009 (M&O)	Approval before operation
Site Clearance Permit (M&O)		Approval by SRS	Approval before start of construction work.
Environmental Assessment (Ameresco/DOE SRS)	Finalizing Draft, currently out for public comment	Issuance of Findings of No Significant Impact (FONSI) received in July 2008	Prior to process discharge to outfall (operation of plant)
Construction Air Permit (Ameresco)	Submitted in February 2008 to SCDHEC	Approval received in November 2008 (SCDHEC)	Required before Construction Start or Issue of Notice to Start Construction by Government
Operating Air Permit (Ameresco)	To be submitted 180 days after plant commissioning	(SCDHEC)	Required within 180 days of plant commissioning
NPDES 2D Permit (National Pollutant Discharge Elimination System) (Ameresco/M&O)	Resubmitted April 11, 2008 to M&O to submit to SCDHEC as modification to site permit	Draft permit issued in March of 2009 (SCDHEC) with June 2009 being likely the permit issue date	Prior to process discharge to outfall (operation of plant)
401 Water Quality Certification (Ameresco)	This permit application is submitted simultaneously with the Section 404 permit,	Expected 120 days from submittal of permit (SCDHEC)	Prior to operation of plant
Wetlands Section 404 Permit (Ameresco/M&O)	To be submitted by June 2009	Expected 120 days from submittal of permit (US Army Corps of Engineers)	Prior to operation of plant
SC.R.19-450 Construction in Navigable Waters Permit (Ameresco)	This permit application is submitted simultaneously with the Section 404 permit	Expected 120 days from submittal of permit (SCDHEC)	Prior to operation of plant

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**Table 3.1: Environmental Permits & Documents**

<u>Permit/Document (responsible for permit)</u>	<u>Status</u>	<u>Completion Date/ Expected Issuance (responsible for approval)</u>	<u>Schedule Impact</u>
Industrial Wastewater Treatment Permit for oil separator, neutralization tank and for retention pond (Ameresco)	To be submitted following the NPDES permit modification approval	Expected by April of 2010 (SCDHEC)	Prior to operation of plant
Notice of Intent for Storm Water Discharges from Large & Small Construction Activities (Ameresco)	To be submitted by June 2009	M&O ESS Review & Approval within 30	Prior to construction of start of any site work activities
Storm Water Pollution Prevention Plan Including Soil & Erosion Control (Ameresco)	To be submitted with NOI for Storm water Discharges from Large/Small Construction Activities	See Above	Prior to construction of start of any site work activities
Grading Permit Application (Ameresco)	To be submitted with NOI for Storm water Discharges from Large/Small Construction Activities	M&O ESS approval expected within 30 days	Prior to construction of start of any site work activities
Construction Permit for Domestic Water Tie-in, Permit 1970 (Ameresco)	To be submitted by December 2009	M&O ESS approval expected within 30 days (M&O ESS acting authority)	Prior to construction of water tie-in & inspection/approval required prior to operation of new line
Construction Permit for Sanitary Sewer Connection, Permit 1970 (Ameresco)	To be submitted by December 2009	M&O ESS approval expected within 30 days (M&O ESS acting authority)	Prior to construction of sanitary sewer tie-in

Additional information is provided below for major permits and for the NEPA compliance.

**Construction & Operating Air Permit**

The equipment in both ECMS are permitted under one new construction air permit and will be under the Ameresco permit rather than site permit. Ameresco will be responsible for the air permit and for future air permit renewals throughout the contract term. The following table shows the potential air emissions

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of the proposed facility for the criteria air pollutants at expected load and at plant capacity. Annual potential air emissions are typically calculated based on the potential to emit, which is defined as the emissions for continuous operation at maximum system capacity. The maximum capacity would be if the boilers are operated at the full load of 120,000 lbs/hr for 8,760 hours. The controlled emission rates are based on vendor supplied data for the technology proposed in previous section.

**Table 3.2: Annual Emissions Summary for Biomass Cogeneration Facility**

<b>Pollutant</b>	<b>Controlled Emission Rate [lb/MBtu]</b>	<b>Annual Potential Emissions Actual/Capacity [tons/yr]</b>
Nitrogen Oxides	0.15 (with SCNR)	227/295
Carbon Monoxide	0.13	137/195
Volatile Organic Compounds (VOCs)	0.15	26/31
Particulate Matter Total	0.023	35/42
Particulate Matter 10	0.0203	31/37
Sulfur Dioxides	0.025/0.2 with BDF fuel	46/143

**Table 3.3: Annual Emissions Summary for K&L Heating Plants**

<b>Pollutant</b>	<b>Controlled Emission Rate [lb/MBtu]</b>	<b>Annual Potential Emissions [tons/yr]</b>
Nitrogen Oxides	0.219	15
Carbon Monoxide	0.6	25
VOCs	0.0128	1
Particulate Matter Total	0.2 (with multiclone)	9
Particulate Matter 10	0.119(with multiclone)	6
Sulfur Dioxides	0.025	1

The construction air permit was issued in November of this year (2008).

**NPDES Permit**

The proposed outfall for ECM 1 will be included as part of the SRS NPDES Permit. The modification to site permit was submitted to the site for approval this past month; it is expected to be incorporated into the Site permit by March 2009. For ECM 2, the K Area boiler blowdown will discharge into the K Area Ash Basin, as opposed to being discharged to an NPDES outfall. The NPDES outfall L-07 was modified to include boiler blowdown discharges for the L Area Biomass Heating Plant. As part of the Memorandum of Understanding/Memorandum of Agreement (MOU/MOA) between Ameresco and M&O Contractor, language will be incorporated to require Ameresco to retain responsibility for compliance of the cogeneration facility outfall and for the K and L Area heating plant effluents.

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**Storm Water Management Permit**

The storm water management prevention plan is currently being developed. Once this plan is submitted, the permit application will be submitted to the M&O Contractor staff for approval. It is expected it will be approved within 30 days of submittal.

**NEPA**

Under the National Environmental Policy Act (NEPA), any modification to a federal facility or site requires determination of the environmental impact of the proposed change or new process. This requires issuance of a CATEX (categorical exclusion), development of an environmental assessment (EA) to determine finding of no significant impact (FONSI), or development of an environmental impact statement. During the DES phase, the EA was developed to include both proposed ECMs. The document has been placed for public review. The FONSI was issued in July of 2008.

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**4.0 ECM PERFORMANCE MEASUREMENT**

**4.1 Overview of Proposed Annual Savings**

Implementation of the proposed ECMs will result in an estimated annual savings of approximately \$34 million. Savings estimates are detailed in DO Schedule 4 in *Section 6.0*.

**4.2 M&V Plan Executive Summary**

Measurement and Verification (M&V) options include A, B, C, and D as detailed in *M&V Guidelines* of the International Performance Measurement and Verification Protocol (IPMVP).

**Table 4.1: M&V Plan Summary**

<b>ECM No.</b>	<b>ECM Description</b>	<b>M&amp;V Option Used*</b>	<b>Summary of M&amp;V Plan</b>
ECM 1	Biomass Cogeneration Facility	B	Equipment and system performance factors continuously measured. Steam produced from the boilers will be measured and totaled for each performance period year. Fuel Usage will be recorded. Power exported to the site will also be measured and recorded to determine annual green power export.
ECM 2	K & L Area Heating Plants	B	Equipment and system performance factors continuously measured. Steam produced from the boilers will be measured and totaled for each performance period year.

\* M&V options include A, B, C, and D. Guidelines include *M&V Guidelines: Measurement & Verification for Federal Energy Projects, Version 2.2*; and *International Performance Measurement & Verification Protocol (IPMVP), Volume I, March 2002*, available at [www.eere.energy.gov/femp/financing/superespcs\\_mvresources.cfm](http://www.eere.energy.gov/femp/financing/superespcs_mvresources.cfm).

Annually, Ameresco will complete an M&V report for the project following a visit to the site and an analysis of system performance. During the annual site visit, Ameresco staff will collect the monthly performance/operational data, determine the actual fuel use and costs, and then provide report of the output of each of the sites. Further, monthly reports will be made available to SRS which include total steam production from each system and fuel usage. Monthly reports will also include electrical production parameters in addition to steam.

As stated in the individual ECM description sections, annual savings will be based on the avoided baseline energy and operations and maintenance costs for the existing plants. Therefore, the annual savings amount is pre-determined for each year of the contract term and will only change with annual escalation or a mutually agreed upon baseline adjustment, as the existing plants will no longer operate once the new biomass plants become operational. The annual avoided baseline energy and operations and

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maintenance costs for the existing plants are deemed to have been met upon acceptance of the ECMs by the Government.

Annual performance requirements are satisfied if, for ECM 1 the ASG is met, and if for ECM 2 each of the heating plants is operated during the heating season as required to meet the Availability Guarantee.

If Ameresco is able to produce more steam than the ASG in any given year from the cogeneration plant, the Government may receive such additional steam for power generation or for thermal use. If the Government requires and Ameresco is able to produce more than 33,300 klbs in any given year from the total of both the K and L Area heating plants, the Government may receive such excess steam for additional thermal use. To the extent the actual steam production exceeds the ASG, the Government will compensate Ameresco for the additional fuel consumption as proposed pursuant to *Section 1.3.1.2*.

#### 4.3 Whole Project Data / Global Assumptions

##### 4.3.1 Risk and Responsibility

Ameresco will be responsible for project construction including the installation, testing, and commissioning of the equipment to deliver a complete and usable facility. Subsequent to construction, Ameresco will be responsible for ongoing operations and maintenance of the equipment installed under ECM 1 and ECM 2. Additionally, Ameresco will provide annual M&V reconciliation services and an annual M&V report which will include documentation of infrastructure and material condition, and a summary of equipment performance for the previous performance period.

The risk and responsibility of the Measurement and Verification activities for this project are addressed in the Risk/Responsibility Matrix in *Section 5.4* of this proposal.

##### 4.3.2 Energy, Water, and Operations and Maintenance (O&M) Rate Data

###### Utility Rates

The energy costs (rates) used to develop the baseline annual cost for ECMs 1 and 2 were provided by SRS based on historical costs. Annual savings were calculated using the current unit cost and for coal and fuel oil and the baseline consumption data as described in *Sections 1.2.7* and *2.2.7*. Post-ECM implementation non fuel utility costs required for operation of the cogeneration facility and of the heating plants were factored into the savings at the following previously agreed upon unit costs as shown in the following table:

**Table 4.2: Utility Cost for ECM (Post)**

Utility	Unit Costs
Electricity	\$0.093 / kWh
River Water	\$0.69 / k-gallon
Domestic Water	\$9.42 / k-gallon
Sanitary Waste Treatment	\$7.27 / k-gallon

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**Performance Period Rate Adjustment Factors**

For both ECMs, the annual energy rates used for savings calculations were adjusted using the latest escalation factors available from the 2008 National Institute of Standards & Technology (NIST). The applicable NIST escalation rates are shown in *Table 4.3* below. O&M cost savings and the performance period O&M cost use an annual escalation factor of 3%.

**Table 4.3: NIST Escalation Rates**

Year	NIST Electrical Escalation Rates	NIST Coal Escalation Rates	NIST Fuel Oil Escalation Rates	O&M Escalation Rates
2012	[**]	[**]	[**]	[**]
2013	[**]	[**]	[**]	[**]
2014	[**]	[**]	[**]	[**]
2015	[**]	[**]	[**]	[**]
2016	[**]	[**]	[**]	[**]
2017	[**]	[**]	[**]	[**]
2018	[**]	[**]	[**]	[**]
2019	[**]	[**]	[**]	[**]
2020	[**]	[**]	[**]	[**]
2021	[**]	[**]	[**]	[**]
2022	[**]	[**]	[**]	[**]
2023	[**]	[**]	[**]	[**]
2024	[**]	[**]	[**]	[**]
2025	[**]	[**]	[**]	[**]
2026	[**]	[**]	[**]	[**]
2027	[**]	[**]	[**]	[**]
2028	[**]	[**]	[**]	[**]
2029	[**]	[**]	[**]	[**]
2030	[**]	[**]	[**]	[**]

**4.3.3 Schedule & Reporting for Verification Activities**

The modified BAMF Super Energy Savings Performance Contract (ESPC) requires Ameresco to submit to the Government a post-installation report, and thereafter, an annual M&V report documenting equipment performance. Ameresco will follow the Federal Energy Management Program (FEMP) guidelines in generating these reports. The post-installation report will be submitted to the Government within 60 days following notification of an ECM's substantial completion and beneficial use as given by

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Ameresco. The performance period report will be submitted each year within 120 days following the anniversary date of the ECMs substantial completion date.

#### **4.3.4 Status of Utility Company Incentives**

There are no known incentives through the utility company for any of the ECMs in this proposal.

#### **4.4 ECM-Specific M&V Plan and Savings Calculation Methods**

##### **4.4.1 Overview of ECM Specific M&V Plans**

A specific M&V plan based on DOE FEMP Guidelines and the IPMVP for Measurement and Verification activities during the term of the contract is described for both ECMs in the following paragraphs.

##### **4.4.1.1 ECM 1: Biomass Cogeneration Facility**

###### **M&V Overview**

Option B – ECM Isolation will be used for verification of the performance of ECM 1. Option B focuses [\*\*] of this ECM. [\*\*], the performance criteria are satisfied. Annual M&V activities will include [\*\*]. The M&V report will include [\*\*]. The report will also identify the [\*\*]. Further, the M&V report will also include documentation showing [\*\*].

##### **4.4.1.2 ECM 2: Biomass Heating Plants for K& L Areas**

###### **M&V Overview**

Option B will be used for [\*\*] of ECM 2. Option B focuses on [\*\*]. Annual M&V activities will include an [\*\*]. The M&V report will include [\*\*] to the K and L Areas.

#### **4.4.2 Energy and Water Baseline Development**

Refer to the summaries of savings calculations in *Sections 1.7* and *2.7* of this proposal.

#### **4.4.3 Proposed Energy & Water Savings Calculations and Methodology**

Refer to the summaries of savings calculation in *Sections 1.7* and *2.7* of this proposal.

#### **4.4.4 Operations and Maintenance Cost Savings**

The K Area plant is operated by SRS personnel and the D Area plant operations are subcontracted by the M&O Contractor to a subsidiary company. Both ECMs will result in the shutdown of an existing plant and eliminate the operation and maintenance expenses required for these sites. Therefore, SRS will realize an annual savings of \$[\*\*] of O&M costs for ECM 1 and \$[\*\*] of O&M costs for ECM 2 during the first year of the contract performance period. The O&M cost savings have been escalated at a previously agreed upon rate of [\*\*] % per year the contract term.

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## 5.0 Management Approach

### 5.1 Integrated Management Review Team (IMRT)

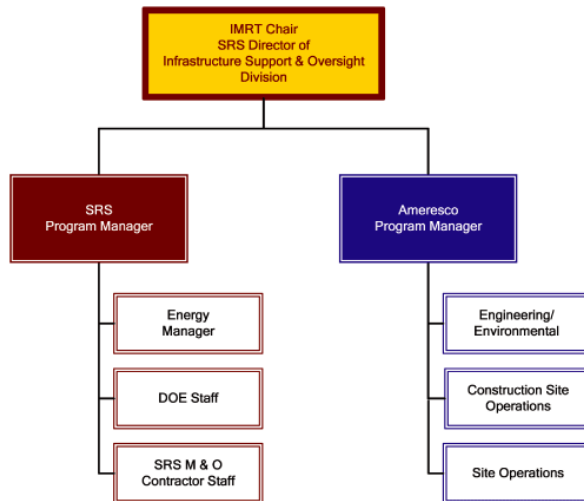
Ameresco's Initial Proposal recommended establishing an Integrated Management Review Team (IMRT) made up of senior managers from both the Government and Ameresco. While there have been frequent meetings, conference calls, and project reviews, it is strongly recommended that the IMRT be activated (in some form) immediately following contract award. As we progress with finalizing the engineering details and begin mobilizing for construction, the IMRT will be a valuable asset for promptly resolving any serious challenges that may arise and ensuring that SRS executive level managers are fully cognizant of project status at all times. It is further recommended the IMRT be chaired by the Director of the Infrastructure Support & Oversight Division or his designee. The primary mission of the IMRT will be to assure that appropriate management personnel from each organization are aware of the project status, informed of key milestones, and if necessary, involved in securing project approvals.

It is recommended that IMRT membership consists of key personnel from each of the four organizations participating in the project – DOE SRS, DOE Headquarters, the site M&O contractor staff, and Ameresco. A proposed IMRT organizational chart, designating team member organizations, is included as *Figure 5.1*. The IMRT should be established immediately and convene at least quarterly throughout the implementation and operations phases to assure senior management is informed, issues resolved, and decisions are rendered timely.

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Figure 5.1: Integrated Management Review Team



### 5.2 Ameresco Management Approach

Ameresco will be responsible for the design, construction, and operation of both ECMs as included in this proposal. This includes the responsibility for the management of design, quality control, safety, construction, and operation. Ameresco's management approach is outlined into following sections and includes the key strategies listed below:

- Design in accordance with applicable industry codes and design standards for industrial heating plants and power plants (Refer to *Appendix D* for list of standards) and in accordance with the electrical standards, fire protection standards and stacking lighting standards provided by Government.
- Design documents will be issued to the Government for review and final concurrence intermittently throughout the first year of the construction period.
- Acceptance of changes to the approved design requested by the government is at the discretion of Ameresco.

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- Ameresco is the responsible authority for the job sites of the proposed ECMs. This includes authority for site management, safety enforcement, document control, quality control, receipt and acceptance of project deliveries, and construction procurement.
- Ameresco will be responsible for document control management including review and approval of all construction submittals. Ameresco will make electronic copies of major construction submittals available to government representatives upon request.

**Project Implementation Phase (Construction)**

Ameresco's approach to managing the implementation (construction phase) of the proposed measures will be to assign a fully competent management staff at the construction site and give them the resources and authority to complete our contract obligations safely, timely, and in a professional manner. Each member of the on-site management team, headed by the Site Manager, will have the authority to make project decisions commensurate with their position. Key members of the site project management team include the Site Manager who will also be the Senior Construction Manager, Project Construction Manager (engineering subcontractor representative), Job Superintendent, Site Safety Manager, and Project Documentation Manager. We are currently recruiting, interviewing, and identifying personnel for most site management positions. However, the Site Safety Manager was identified early in the DES phase and has been involved with the project for some time. Mr. Clinton Sandmel will manage the safety program during the construction phase and has interacted with the SRS Safety Office in completing the project safety analyses and plans, as well as overseeing the safety efforts of the geotechnical subcontractor. He is an experienced safety manager and also has experience managing construction safety programs at DOE installations. Mr. Sandmel and other members of the project management team will be relocated (if not already in the local area) to the Aiken/Augusta area for the 30 month construction period mitigating travel and per diem expenses.

Construction subcontractors are being recruited and interviewed from the local area as well as on a regional and national basis. Ameresco will attempt to maximize the use of local contractor firms in an effort to support the local economy and mitigate mobilization and travel costs associated with using subcontractors from outside the local area. Of course, the construction subcontractors will be key to successful project implementation, and qualifications and price are both considerations in subcontractor selection. Each subcontractor will provide a project foreman and safety and quality control personnel. A detailed plan for completing the implementation phase is included in *Section 5.2.6* below.

The site project team will have all the resources necessary to ensure project success available, including the support of corporate resources from anywhere within the Ameresco organization from anywhere in North America beginning with the Ameresco corporate staff. While most construction and project administration activities will be accomplished by the onsite staff, contract administration, accounting, subcontract administration, and project legal counsel will be self-performed by division or corporate staff. Technical oversight of engineering, construction management, and safety will also be accomplished by the corporate resources.

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**Operations Phase (Contract Performance Period Services)**

Once construction is complete and the Government accepts the project as operational and the Contract Performance Period begins, the Ameresco staff will shift from implementation to operations using primarily an onsite staff of Ameresco managers, technicians, and support personnel supplemented as necessary by subcontractors and other personnel from within Ameresco's corporate resources. The cogeneration facility will operate, and be staffed, 24 hours a days, 7 days a week, 365 days a year while the K and L Area plants, although not staffed, will operate 24 hours a day, 7 days a week during the winter heating season.

The Site Operations Manager will lead all facets of ECM operations. This person has not been determined at this time; however, it is anticipated they will be in place (at the project location) well before testing and commissioning begins. Key members of the operations staff will be the Plant Manager, Safety/Environmental Manager, Fuel Procurement Manager, and the Office Manager. Although we continue to recruit, and have interested candidates, none of the operations staff managers have been identified at this time. Also, maintenance personnel and plant operators currently working at the D Area plant will be given an opportunity to join the Ameresco team at the new cogeneration facility. All site operations and maintenance personnel will reside in the local community eliminating travel and per diem expenses. Detailed plans for operating the cogeneration facility and heating plants are included in *Section 5.2.7* below.

To the maximum extent practical, project implementation and subsequent plant operations will be performed under the watchful eye of the skilled and experienced leadership of the onsite management team; however, the onsite project team will have the full support and backing of additional corporate resources as necessary.

**5.2.1 Ameresco Corporate Management Team**

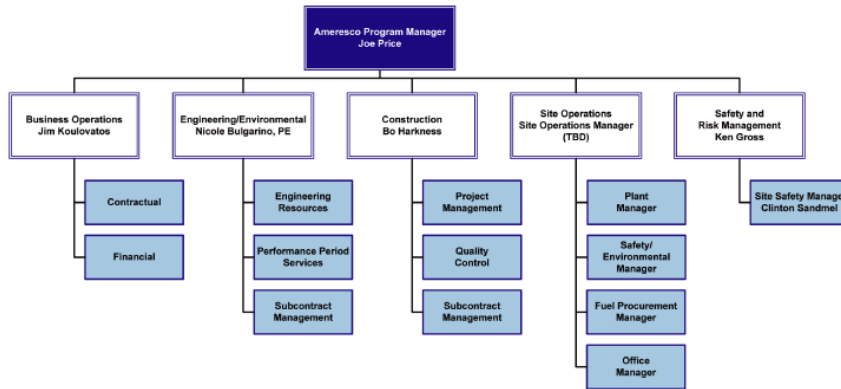
Ameresco's corporate management team from the ESCO Selection Interview, Initial Proposal, and Detailed Energy Survey remains intact and will continue to direct, facilitate, and coordinate Ameresco's activities into the construction and subsequent operational phase of the biomass ESPC. Safety and Risk Management have already been added to the corporate team and other additions, including the Site Manager and Site Operations Manager, will be added at the appropriate time. Mr. Keith Derrington, Vice President and General Manager will continue as the senior corporate executive ultimately responsible for assuring success of Ameresco's Savannah River activities.

An organizational chart depicting the composition of the Ameresco project team is included as *Figure 5.2*.

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Figure 5.2: Ameresco's SRS Biomass Project Team



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#### **5.2.2 Program Manager**

Mr. Joe Price will continue as Program Manager, although much of the interaction and interface that he previously facilitated with the DOE and M&O staffs will be transferred to the Site Manager during construction and ultimately to the Site Operations Manager once the ECMs become operational. Mr. Price reports to Mr. Derrington and has overall responsibility for Ameresco's contract performance and client relationships at SRS. The Program Manager will also lead Ameresco's representation to the IMRT, most likely through the implementation phase before passing that responsibility to the permanent Site Operations Manager, although no decision has been made on that at this time.

#### **5.2.3 Engineering**

Ms. Nicole Bulgarino will continue as Ameresco's Lead Project Engineer for the cogeneration facility and the heating plants and will represent the engineering and environmental activities at the IMRT. Ms. Bulgarino is responsible for project engineering and design, as well as the subsequent construction and performance period services. Responsibility for performance period services including equipment performance issues and annual M&V activities will also fall under purview of the Engineering Team but will be accomplished by the site operations staff.

#### **5.2.4 Business Operations**

Mr. James Koulovatos, Ameresco's Director of Finance, leads the offices within the business operations group. Responsibilities of those offices to support the cogeneration facility and heating plant projects include accounting, contracting, financing, etc. Pending contract award, Mr. Koulovatos' staff will manage the development of competitive financing bid packages, work with 3<sup>rd</sup> party lenders to secure financing for the program, and prepare the final DO Schedules and Termination Liability Schedule once financing is secured and the interest rate is locked. Contractual activities include day to day contract administration functions and accounting will maintain invoicing and accounts receivables ledgers.

#### **5.2.5 Safety and Risk Management**

Mr. Kenneth Gross, Ameresco's Director of Safety and Risk Management, has overall responsibility for the company's safety program. Site or project safety personnel will report directly to Mr. Gross who has been involved with the development of the Worker Health and Safety Plan (WSHP) to ensure compliance with 10 CRF 851 requirements.

##### **5.2.5.1 Site Safety Management**

The Site Safety Manager (SSM) will report to the Director of Safety & Risk Management and is charged with ensuring the safety of the entire job site. The SSM, Mr. Clinton Sandmel, participated in development of the WSHP and the associated Job Hazard Analyses (JHA). The SSM is charged with ensuring that contractor and subcontractor personnel compliance with all applicable safety regulations. In carrying out site safety duties, the SSM will conduct safety (toolbox) meetings and inspections and complete the required periodic reports. The SSM will immediately report unsafe conditions and safety

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incidents to the DOE Facility Representatives and the Ameresco Site Manager, Director of Safety and Risk Management, and the SRS Program Manager.

#### **5.2.6 Construction**

As Director of Construction, Mr. Bo Harkness oversees all construction activities within the federal business unit. The Site Manager, who reports to Mr. Harkness, will be charged with the day-to-day site management responsibilities during the project implementation phase. Mr. Harkness will work hand-in-hand with the Program Manager and Lead Engineer to ensure quality construction completed on schedule and on budget. The Site Manager will also be the on-site point of contact for SRS/ M&O personnel during the construction phase.

##### **5.2.6.1 Subcontract Management**

Onsite construction work will be subcontracted to companies from all parts of the country. The Director of Construction and Subcontract Administrator will manage all subcontracts, while the project Site Manager and project Job Superintendent will execute and oversee the subcontracts, having authority to schedule, inspect, and accept subcontractor work. The Subcontract Administrator or Director of Construction will respond to any financial or contract management issues. Invoicing and payments to subcontractors will be handled through standard accounting procedures and using American Institute of Architects (AIA) contract formats and forms.

##### **5.2.6.2 Construction Management**

The Site Manager will be charged with the day-to-day site management responsibilities during the project construction phase and is tasked with overall responsibility for job site activities. The Site Manager will also be the on-site point of contact for DOE Facility Representatives and other SRS/ M&O personnel during the construction phase. Assisted by other Construction Managers and Job Superintendent personnel, the Site Manager will lead all aspects of project construction including scheduling, coordination, construction, commissioning, and contract closeout with the strictest adherence to safety, quality, and cost control procedures.

Project Quality Control (QC) is the responsibility of everyone involved in project activities; however, ultimate responsibility for the Ameresco QC program rests with the Director of Construction. Those responsibilities are delegated to the site Quality Control Manager (QCM) who is tasked to oversee project specific QC activities. The Site Manager or Job Superintendent may be delegated as the site QCM overseeing the QC activities of all QC personnel, Ameresco and subcontractors, or a dedicated QCM may be assigned to the project team reporting to the Site Manager or Job Superintendent.

The site QCM is responsible for individual project quality control. The QCM maintains the Project Submittal, Testing, and Inspection Logs. The QCM will ensure that project documents (submittals, shop drawings, reports, etc.) are complete, accurate, and processed in a timely manner. The QCM is also charged with ensuring testing and inspections are conducted properly and in a manner that will insure

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accuracy. If necessary, the QCM will contract with specialty/professional testing companies (i.e. concrete tests and welding x-rays).

Ameresco employs the standard Army Corp of Engineers three-phase quality control process that includes the preparatory phase, initial phase, and follow-up phase. The preparatory phase is performed prior to each definable work feature. Actions such as reviewing the drawings and specifications, checking submittal status, and examining the work area, including a hazard analysis, are done at this time. The initial phase is performed at the beginning of each definable work feature. Preliminary work is inspected to insure compliance with the contract, establish the level of workmanship, and ensure compliance with the safety plan. The follow-up phase is ongoing during performance of work to ensure compliance with contract requirements, perform testing, and ensure correction of deficiencies.

#### **5.2.7 Site Operations**

Once the ECMs are accepted by the government the project will transition to the site operations phases, which will continue for the remainder of the delivery order performance term. It is anticipated the cogeneration facility will be staffed with 20 people whose scope of responsibilities will include the Biomass Cogeneration Facility and the K and L Area heating plants.

Ameresco intends to have a Site Operations Manager that will oversee the total operation from fuel procurement and delivery to plant operations and maintenance. The Site Operations Manager has not yet been identified; however, we have already received inquiries and resumes from interested parties.

Ameresco will use reasonable diligence to provide a regular and uninterrupted supply of steam (100% reliability) to the government-owned distribution systems, but shall not be liable for any damages, losses, costs, or expenses to the government for failure, suspension, diminution, or other variations of service occasioned by or in consequence of any cause beyond the control of Ameresco, including but not limited to acts or omissions of the Government and its agents and contractors, force majeure conditions e.g. acts of the public enemy, acts of God, fires, floods, earthquakes, etc., or failure or breakdown of the Government-owned distribution system or end-user facilities.

#### **5.2.7.1 Operations and Maintenance Responsibilities**

Ameresco will perform the following operations and maintenance of the equipment and facilities installed within the Biomass Cogeneration Facility under ECM 1 and for the heating plants installed in the K and L Areas under ECM 2 for the duration of the contract performance period.

- Equipment, instrumentation and control systems installed at the Biomass Cogeneration Facility
- Equipment, instrumentation and control systems installed at the heating plants
- Buildings and Infrastructures installed at the Biomass Cogeneration Facility Site
- Building and Infrastructure installed at the K Area Heating Plant Site
- Building and Infrastructure installed at the L Area Heating Plant Site
- Utilities within the Facility and the Heating Plant (as defined in *Table 1.2* and *Table 2.2*)

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- Access drives and parking lot at the Cogeneration Facility
- Maintenance of Old Burma Road
- The existing boiler water treatment equipment and shed at the K Area
- The existing air compressor at the K Area

The Government, and/or its M&O Contractor will retain responsibility for operating and maintaining the following items:

- Utility interconnections as defined in *Table 1.2* and *Table 2.2*
- Existing utility distribution systems
- All roads except for facility access roads and the reconstructed Old Burma Road
- New pump system installed at the River Pump House
- F Area Substation
- New D Area electrical feeder
- L Area capacitors
- All other existing site infrastructure and systems

The operations and maintenance expenses include the annual costs of labor (Ameresco costs and service contractor costs from major equipment suppliers) to operate and maintain the plant for both ECMs and operating costs including chemical costs, fuel oil cost, ash disposal costs, and other consumables. The operations and maintenance costs are shown on Schedule DO-3 as performance period expenses.

#### **Operations Overview**

The operation of the new plants will be lead by the Ameresco Site Operations Manager or Site Manager. The Site Manager will oversee operations and maintenance activities to ensure the following occur:

- Operate the facility to meet thermal demand of the Savannah River Site in compliance with applicable local, state and federal permits and regulations.
- Provide Quality Control for biomass deliveries.
- Provide a safe work environment for workers and visitors.
- Perform preventive maintenance in accordance with manufacturer recommendations.
- Perform major service requirements in accordance with manufacturer recommendations.
- Maintain professional and positive working relationship with Savannah River Site personnel, SCDHEC, and surrounding neighbors and community.
- Provide reports as required for M&V activities to meet plant performance guarantees.

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The Site Operations Manager will work with four key personnel to attain these objectives: Safety/Environmental Manager, Office Manager, Plant Manager, and Fuel Procurement Manager.

The Safety/Environmental Manager will be responsible for developing, training, and implementing safety program requirements. This Manager will collect and maintain data necessary for permitting compliance and reporting activities, coordinate required stack testing, and continue to work with the SCDHEC to make sure the cogeneration facility and heating plants continue to operate in compliance with regulations.

The Office Manager will oversee daily administrative activities which includes overseeing system documentation, working with the accounting group for purchasing and payroll activities, preparing monthly reports for project performance, coordinating/ordering maintenance service and parts as directed by Plant Supervisor, scheduling visits and inspections with the Plant Supervisor, and general office duties.

The Fuel Procurement Manager will coordinate activities associated with fuel procurement such as fuel deliveries, inspections of fuel, fuel purchases, and recording fuel amounts on site, and will manage the fuel handling yard operators

The Plant Manager will oversee the operations and maintenance of the cogeneration facility and the heating plants. The supervisor will have a team of operators, who will operate the plants as well as maintain the system. The team will include a lead mechanic, an electrician, and other operators.

It is envisioned the cogeneration facility will be operated utilizing three 8-hour shifts of operators. A single shift operations team will include a shift leader, a skilled operator, and one or two additional operator(s). During the last shift of the day the team may consist of only three people on site. There will also be a team of three people who will operate the fuel handling yard. This will include moving fuel piles, accepting fuel deliveries, and delivering biomass to the K and L Areas

The following diagram (*Figure 5.3*) shows the proposed cogeneration facility staffing for operation of the cogeneration facility and the heating plants.

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**Figure 5.3: Proposed Operations Staffing**

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#### **Maintenance Overview**

Ameresco will perform the following:

- Operations including materials and consumables for the cogeneration facility and heating plants, such as costs for the chemicals, urea, diesel fuel, fuel oil, turbine filter, lube oil, and ash disposal.
- Preventive maintenance includes change out of parts, boiler inspection, boiler cleaning, turbine oil/filter changes, DA tank inspection, pump servicing, grinder and hogger inspection, instrumentation calibration, engine testing, HVAC servicing, building upkeep, Old Burma Road repair, and other service as recommended by equipment suppliers.
- Unscheduled maintenance includes cost for service and repair not planned on as part of ongoing maintenance. This mainly consists of contracted service support.

#### **5.2.7.2 Repair & Replacement Responsibilities**

The repair and replacement annual expense includes the annual costs expected for the replacement of materials such as grinder teeth, baghouse filters, sand (bed material) for both boilers, spare part inventory, and limestone replacement for SOx reduction. These costs will occur every year regardless of the age of the plant. The repair and replacement costs also include costs expected to occur for ongoing replacement and repair of boiler in bed tubes, turbine parts, motor bearings, conveyor belts, and general plant repair fund.

Repair and replacement of the equipment and systems for both ECMs as defined above includes budgeting and funding an inventory of spare parts, as well as funding and completing minor and major repairs and equipment replacements. Major repairs and replacements include boiler tubes, turbine seals, combustor refractory, combustion fans, feedwater pumps, grinders, and augers. Examples of minor replacements include minor components such as thermocouples, grinder cutters, instrumentation, motors, motor bearings, filters, chains, and auger components, etc.

#### **5.3 ECM Training**

An ongoing O&M Training and Safety Program will be a necessity and training will be provided to the personnel working at the three sites on a scheduled and recurring basis. Maintaining training and certification current and in good standing will be required of all personnel. The training program will also include training with suppliers to ensure the operators are familiar with the equipment operation and maintenance requirements.

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#### 5.4 Risk/Responsibility Matrix

The following pages contain the ESPC Contract Risk/Responsibility Matrix.

#### RISK/RESPONSIBILITY MATRIX

RESPONSIBILITY/DESCRIPTION	AMERESCO'S PROPOSED APPROACH	DOE-SR ASSESSMENT
<p><b>I. FINANCIAL:</b></p> <p>a. <b>Interest rates:</b> Neither the Contractor nor the agency has significant control over prevailing interest rates. During all phases of the project, interest rates will change with market conditions. Higher interest rates will increase project cost, financing/project term, or both. The timing of the Contract award may impact the available interest rate and project cost.</p>	<p>Ameresco has included preliminary interest rate information in Schedule DO-3. The interest rate shown is indicative of the financial market at the time of this Revised Final Proposal and is provided for information purposes only.</p> <p>Once locked with Ameresco's lender, the interest rate will remain fixed for the term of the contract, thereby providing the DOE-SR with protection against increased interest charges resulting from a variable rate.</p>	<p>In 6.10 of the Revised Final Proposal, the DOE-SR agrees, among other things, to not withhold, reduce, or setoff the "TOTAL DEBT SERVICE" amount on Schedule DO-3 in the event of an Ameresco default. The reason for this is to provide assurance to Ameresco's lender that its investment is secure.</p> <p>The DOE-SR expects the Ameresco to obtain the lowest possible interest rate and will competitively seek financing from several financial institutions. The DOE-SR expects, as consideration for 6.10, that Ameresco will obtain a lower interest rate than the one indicated in the Final Proposal, dated December 8, 2008.</p>
<p>b. <b>Energy prices:</b> Neither the Contractor nor the agency has significant control over actual energy prices. For calculating savings, the value of the saved energy may either be constant, change at a fixed inflation rate, or float with market conditions. If the value changes with the market, falling energy prices place the Contractor at risk of failing to meet cost savings guarantees. If energy prices rise, there is a small risk to the agency that energy</p>	<p>The D Area plant that is being replaced by the Biomass Cogeneration Facility is fueled by coal purchased from SCE&amp;G. Ameresco proposes to establish the pre-installation baseline for ECMs 1 and 2 based on the consumption and cost information provided by SRS and M&amp;O Ameresco personnel. The baseline costs are escalated at 2008 published NIST rates for each year of the performance period.</p> <p>The energy savings for all ECMs are calculated based</p>	<p>The rates used to establish the energy baseline are different than what has been included in DOE HQ's database, Energy Management System 4. Based on the unprecedented increases in coal costs over the previous year, the baseline costs associated with coal will come from SRS's current one-year coal contract for the D-Area Powerhouse, which took effect on</p>

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**RISK/RESPONSIBILITY MATRIX**

<b>RESPONSIBILITY/DESCRIPTION</b>	<b>AMERESCO'S PROPOSED APPROACH</b>	<b>DOE-SR ASSESSMENT</b>
saving goals might not be met while the financial goals are. If the value of saved energy is fixed (either constant or escalated), the agency risks making payments in excess of actual energy cost savings. <b>Clarify how future energy costs will be treated.</b>	<p>on the reduced fuel costs associated with improved system efficiencies. To determine this reduction, the following items are predetermined for establishing the pre-installation baseline: the unit cost of fuel oil and coal, and the amount of energy produced by the existing D Area and K Area plants.</p> <p>The pre-installation baseline data used in this proposal consists of cost and consumption data for a 24 month period as provided by SRS and M&amp;O personnel for ECM 1, and 5 years of data was used to develop the baseline for ECM 2. The future cost of each of these utilities has been escalated by the applicable NIST factors for each year throughout the contract term.</p> <p>Ameresco proposes the DOE-SR assume responsibility for the actual unit cost of utilities (i.e. electricity, coal, water, etc.) including any escalation or de-escalation. If at any time during the term of this contract, the ECMs do not create sufficient savings on an annual basis to fund the amount due Ameresco for reasons within SRS' control or for reasons related to changes in unit price of utilities, then SRS will pay Ameresco as agreed or renegotiate the payment schedule and term in a form mutually agreeable to both parties and Ameresco's lender such that the outstanding balance of contract payments is fully repaid.</p> <p>Ameresco proposes to assume responsibility for biomass procurement and has estimated the price of biomass based on current local market conditions escalated at [**]% per year.</p>	<p>November 1, 2008. Based on market research, coal is not expected to decrease in cost based on current and world demand. In addition, SRS's electrical rates have also increased dramatically over the last two years based on the increased costs of coal and natural gas that the Site's electrical supplier must recoup through its electric rates that have been approved by the South Carolina Public Service Commission. These baseline rates will be escalated in accordance with NIST standards.</p> <p>Throughout the performance period, Ameresco will be supplied utilities at no cost but the consumption data will be metered and supplied to the Site's utility department to be included in calculating the true cost of generating steam and/or electricity from the new biomass plants for inclusion in Site supplied utilities.</p>

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**RISK/RESPONSIBILITY MATRIX**

RESPONSIBILITY/DESCRIPTION	AMERESCO'S PROPOSED APPROACH	DOE-SR ASSESSMENT
c. <b>Construction costs:</b> The Contractor is responsible for determining construction costs and defining a budget. In a fixed-price design/build Contract, the agency assumes little responsibility for cost overruns. However, if construction estimates are significantly greater than originally assumed, the Contractor may find that the project or measure is no longer viable and drop it before Contract award. In any design/build Contract, the agency loses some design control. <b>Clarify design standards and the design approval process (including changes) and how costs will be reviewed.</b>	A significant portion of Ameresco's business is focused on energy engineering, design and consulting. Ameresco staff, complemented by subcontracted experts, are developing the ECM designs for this proposal. Additionally, Ameresco's in-house construction management team has collaborated extensively with the design team, potential subcontractors, and equipment suppliers to assure project constructability, review budgeted costs, and provide insight into procurement options. Having all these functions involved throughout the DES Phase substantially lowers the risk of construction cost overruns, and ensures a realistic and balanced approach to innovation and realism in project design.  To manage the risk associated with escalating prices for construction materials and equipment, Ameresco will hold material and labor pricing set forth in Schedule DO 2 included herein <b>through May 15, 2009</b> . The proposal acceptance period may be extended; however, there may be changes in project pricing. The parties will share the risk of construction cost increases that occur prior to contract award; however, Ameresco will assume sole responsibility for cost increases occurring in normal market conditions after contract award as well as responsibility for managing the risks of such increases. However, should cost increases be caused by extraordinary market conditions, the parties will negotiate changes to the construction completion schedule and/or financial terms of the contract as mutually agreeable to both parties.	Upon submittal of the Revised Final Proposal, a Cost Reasonableness Review of Ameresco's Implementation Costs will be performed. Ameresco shall submit a breakdown of the Implementation costs with the Revised Final Proposal to allow the DOE-SR to perform the review.

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**RISK/RESPONSIBILITY MATRIX**

**RESPONSIBILITY/DESCRIPTION**

**AMERESCO'S PROPOSED APPROACH**

**DOE-SR ASSESSMENT**

Design-build will be the means of project implementation, and the proposed project will be designed and constructed to meet industry and those local SRS standards identified in this proposal, and included with the contract award.

The cost of the DES as shown on the DO-2 schedule includes the following:

[\*\*]. Subsequent to contract award and in accordance with a delivery schedule mutually agreed upon by the DOE-SR and Ameresco, the [\*\*]. Following resolution of any review comments, a final set of record documents will be produced and delivered to the DOE-SR.

Once final concurrence is obtained, the design and project specifications become the basis for construction and no further equipment or materials submittals will be necessary. Should major design changes become necessary during construction, as a result of concealed or environmental conditions, customer requests, or a change in requirements, the proposed changes will be submitted for DOE-SR review.

The basic contract establishes maximums for Ameresco mark-ups for both the implementation and performance periods. Mark-ups proposed in this proposal are below the maximums allowed by the BAMF Contract. Mark-ups associated with changes resulting from concealed or environmental conditions of the project site, customer requests, or a change in contract requirements will be negotiated at the time the change is incorporated into the contract delivery order, but shall never exceed the maximum allowed by the BAMF Contract.

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**RISK/RESPONSIBILITY MATRIX**

<b>RESPONSIBILITY/DESCRIPTION</b>	<b>AMERESCO'S PROPOSED APPROACH</b>	<b>DOE-SR ASSESSMENT</b>
f. <b>Delays:</b> Both the Contractor and the agency can cause delays. Failure to implement a viable project in a timely manner costs the agency in the form of lost savings, and can add cost to the project (e.g., construction interest, remobilization). <b>Clarify schedule and how delays will be handled.</b>	<p>Ameresco will fully support the DOE-SR during the review, approval, and award of the proposed ECMs to mitigate potential delays as much as is within Ameresco's control. Further, Ameresco will honor the pricing proposed herein through May 15, 2009; delays in contract award beyond that time may result in increased project cost and will result in project implementation delays.</p> <p>Major milestones for obtaining project approvals, delivery order award, and project implementation are identified in <i>Table 1.7</i> herein. Ameresco will provide a detailed project schedule subsequent to contract award reflecting the scheduled completion date for each major element of ECM 1 and 2. The schedule will be closely monitored throughout the construction phase by Ameresco's on-site management team as well as corporate management. Their proactive involvement will mitigate the occurrence of delays. Should a delay occur, Ameresco management will immediately develop a mitigation plan, discuss it with the DOE-SR staff, and then take the necessary actions to ensure the project remains on schedule.</p> <p><b>Schedule Risks &amp; Mitigation</b> <b>Schedule Delays</b></p> <p>The potential for schedule delays will be constantly monitored, and immediate and appropriate mitigation</p>	<p>SRS will fully support Ameresco during the review, approval, and award of the proposed ECMs to mitigate potential delays, and award the Delivery Order on schedule. In addition, DOE and the M&amp;O Contractor will work with Ameresco to facilitate a smooth mobilization to the Site and coordinate the interfaces for key support requirements provided by SRS. Critical interface requirements should be identified on Ameresco's schedule to allow for adequate up front coordination.</p>

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**RISK/RESPONSIBILITY MATRIX**

**RESPONSIBILITY/DESCRIPTION**

**AMERESCO'S PROPOSED APPROACH**

**DOE-SR ASSESSMENT**

actions will be taken by Ameresco management personnel if necessary. The schedule is being structured both logically and realistically to minimize the potential for delays; however, should an unavoidable delay occur, Ameresco will work closely with DOE-SR engineers to determine the best course of action and, if necessary, a revised schedule will be developed and proposed. The primary objective of any revision will be to get the work back on track without extending the completion date.

**Subcontractor Management**

Ameresco has pre-qualified many firms and will continue to pre-qualify firms that may be selected as subcontractors. However, Ameresco will continue to evaluate qualifications and the firm's current workload prior to executing any subcontracts. If manpower later becomes an issue, Ameresco will either direct the firm to hire additional personnel, hire additional subcontractors, or replace the subcontractor.

Ameresco will manage subcontractors and suppliers through close control and monitoring of all critical activities. Monitoring and controls include the following procedures: weekly progress meetings, schedule updates, and materials management plan.

**Late Delivery of Materials/Equipment**

In order to protect against late delivery of material or equipment and keep the project on schedule, Ameresco will implement and maintain a materials management plan and constantly monitor production and delivery dates.

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**RISK/RESPONSIBILITY MATRIX**

<u>RESPONSIBILITY/DESCRIPTION</u>	<u>AMERESCO'S PROPOSED APPROACH</u>	<u>DOE-SR ASSESSMENT</u>
g. <b>Major changes in facility:</b> The agency (or Congress) controls major changes in facility use, including closure. <b>Clarify responsibilities in the event of a premature facility closure, loss of funding, or other major change.</b>	<p>The SRS is not considered a candidate for closure at any time in the foreseeable future. Based on information provided by SRS personnel, a build-up in operations is projected to continue past 2020. The electrical and steam demand are projected to change in future years, but it is assumed (almost certain) that the site will be a viable entity throughout the contract term and well beyond.</p> <p>The structure of the proposed project significantly reduces risk associated with changes at the site. Ameresco will be producing steam that will provide two benefits to the DOE-SR; steam for thermal processes and electricity. Should changes at the facility result in reduced thermal requirements, Ameresco will produce more electricity. The first priority will be to satisfy the site's steam needs. Should there be excess capacity (delta between guaranteed steam production and site steam requirements) the steam will be processed through a turbine to produce electricity. The versatility of the process to satisfy both thermal and electrical needs of the site mitigates this risk.</p> <p>Ameresco has assessed the potential for closure of the site and considers it a minimal risk at this time. However, if SRS should close or experience a significant reduction, then Ameresco will be responsible for characterizing and quantifying the impact of the changes on the project. In a severe case, though</p>	<p>The DOE-SR concurs with Ameresco's projection of the longevity of SRS operations. If a termination were necessary, the DOE Contracting Officer and Ameresco would proceed utilizing the applicable Federal Acquisition Regulation (FAR) and Department of Energy Acquisition Regulation (DEAR) requirements.</p>

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**RISK/RESPONSIBILITY MATRIX**

<b>RESPONSIBILITY/DESCRIPTION</b>	<b>AMERESCO'S PROPOSED APPROACH</b>	<b>DOE-SR ASSESSMENT</b>
<p><b>2. OPERATIONAL:</b></p> <p>a. <b>Operating hours:</b> The agency generally has control over the operating hours. Increases and decreases in operating hours can show up as increases or decreases in "savings" depending on the M&amp;V method (e.g. operating hours multiplied by improved efficiency of equipment vs. whole building/utility bill analysis). <b>Clarify whether operating hours are to be measured or stipulated and what the impact will be if they change.</b> If the operating hours are stipulated, the baseline should be carefully documented and agreed to by both parties.</p>	<p>highly improbable, it may necessitate either a partial or full termination for convenience; however, the contract will include a Termination Liability Schedule to facilitate arriving at appropriate termination costs. If a termination becomes necessary, Ameresco would comply with the applicable Federal Acquisition Regulation (FAR) and Department of Energy Acquisition Regulation (DEAR) requirements.</p> <p>Operating hours of the proposed cogeneration facility and heating plants have been pre-determined. The operating hours of SRS facilities obtaining service from the Ameresco plants (i.e., steam and/or electricity) were also determined for purposes of establishing baseline consumption data, but will have little to no impact on the operations of the proposed ECMs unless increased operating hours contributes to the site requiring more steam than provided by the ASG.</p> <p>ECM 1, the cogeneration facility (replacing existing D Area plant) shall operate 24/7 year round and ECM 2, the K and L Area plants will operate 24/7 as necessary over approximately a four month period each year to meet building heating loads. Although operating hours are pre-determined, steam delivery requirements will be both pre-determined and measured.</p> <p>Over the past two years, SRS' energy consumption has been relatively consistent in conjunction with the operating hours. Therefore, the energy baseline and</p>	<p>The DOE-SR concurs with this approach since the ASG will not be dependent on facility operating hours. Excess steam above the customer requirements will be dispatched for electrical generation.</p>

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**RISK/RESPONSIBILITY MATRIX**

RESPONSIBILITY/DESCRIPTION	AMERESCO'S PROPOSED APPROACH	DOE-SR ASSESSMENT
b. <b>Load:</b> Equipment loads can change over time. The agency generally has control over hours of operation, conditioned floor area, intensity of use (e.g. changes in occupancy or level of automation). Changes in load can show up as increases or decreases in "savings" depending on the M&V method. <b>Clarify whether equipment loads are to be measured or stipulated and what the impact will be if they change.</b> If the equipment loads are stipulated, the baseline should be carefully documented and agreed to by both parties.	<p>guarantees assume predetermined operating hours for the term of the delivery order; however, Ameresco will guarantee an annual quantity of steam production that will not be impacted by changes to facility operating hours.</p> <p>The DOE-SR will control and be responsible for its increasing or decreasing facility operating hours.</p> <p>The overall site steam load is expected to decrease in the out years of the contract performance period. Ameresco and DOE-SR personnel worked closely during the DES phase to construct a model of out year steam requirements to accommodate the decreases. Project performance calculations are based on load projections shown in <i>Table 1.1</i>, which were provided by site personnel and are assumed by Ameresco to be correct. Decreasing steam requirements will be accommodated by increasing net green power generation. Increasing steam requirements above ASG (excess production) will be accommodated up to the maximum plant capacity. Compensation for the excess steam production will be included in the annual cost adjustment.</p> <p>It is proposed that the DOE-SR and Ameresco share the risk of increased load requirements. Ameresco will assume responsibility for providing the steam to meet increased loads up to the maximum plant capacity. However, Ameresco will be compensated for steam deliveries above the guaranteed annual production quantities as provided for by the fuel adjustment provision found in <i>Section 1.3.1.2</i> of this proposal.</p>	<p>The DOE-SR agrees with Ameresco's proposed approach. Additional steam requested by the DOE-SR above the ASG will be compensated for at Ameresco's incremental biomass expense with a mutually negotiated markup.</p>

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**RISK/RESPONSIBILITY MATRIX**

RESPONSIBILITY/DESCRIPTION	AMERESCO'S PROPOSED APPROACH	DOE-SR ASSESSMENT
<p>c. <b>Weather:</b> A number of energy efficiency measures are affected by weather. Neither the Contractor nor the agency has control over the weather. Changes in weather can increase or decrease "savings" depending on the M&amp;V method (e.g. equipment run hours multiplied by efficiency improvement vs. whole building utility bill analysis). If weather is "normalized," actual savings could be less than payments for a given year, but will average out over the long run. <b>Clearly specify how weather corrections will be performed.</b></p>	<p>Neither Ameresco nor the DOE-SR has control over the weather and changes in weather can increase or decrease the amount of steam needed by SRS facilities. However, the metric for determining whether Ameresco has satisfied its performance guarantees are not weather dependent; therefore, weather corrections are not necessary. Ameresco proposes that no weather corrections be made as neither ECM will be significantly impacted by the weather since the baseline has been developed from historical consumption data.</p> <p>NOTE: Although weather could impact the amount of steam needed for heating purposes, that risk has been addressed by increased electrical generation as outlined in paragraph b above.</p>	<p>The DOE-SR agrees with Ameresco's proposed approach.</p>
<p>d. <b>User participation:</b> Many energy conservation measures require user participation to generate savings (e.g. control settings). The savings can be variable and the Contractor may be unwilling to invest in these measures. <b>Clarify what degree of user participation is needed and utilize monitoring and training to mitigate risk.</b> If performance is stipulated, document and review assumptions carefully and consider M &amp; V to confirm the capacity to save (e.g. confirm that the controls are functioning properly).</p>	<p>Ameresco will operate and maintain the systems proposed under both ECMs as defined in <i>Section 5.2.7.1</i>. The ECMs will interconnect with site utility distribution systems that will be maintained by the site M&amp;O Contractor, as is currently the case. The DOE-SR will be the end user of the steam produced by the Ameresco plants. The Government must accept steam deliveries and the site M&amp;O contractor must ensure utility services are available for the ECMs to be effective. The risk of either the DOE-SR not accepting steam deliveries (within the baseline amounts) or the utility systems being down over prolonged period of time is minimal.</p>	<p>The DOE-SR agrees with Ameresco's proposed approach.</p>

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**RISK/RESPONSIBILITY MATRIX**

RESPONSIBILITY/DESCRIPTION	AMERESCO'S PROPOSED APPROACH	DOE-SR ASSESSMENT
<b>3. PERFORMANCE:</b>		
a. <b>Equipment performance:</b> Generally the Contractor has control over the selection of equipment and is responsible for its proper installation, commissioning, and performance. Generally the Contractor has responsibility to demonstrate that the new improvements meet expected performance levels including specified equipment capacity, standards of service, and efficiency. <b>Clarify who is responsible for initial and long-term performance, how it will be verified, and what will be done if performance does not meet expectations.</b>	Ameresco will retain responsibility for the performance of the equipment throughout the term of the performance period for both ECMs as defined in <i>Section 5.2.7.1</i> . Ameresco has experience and is familiar with the equipment. It selected the equipment based upon efficiency, performance level, and reliability, and in conjunction with the manufacturer's service and performance guarantees. Performance of the equipment will be reflected in the annual M&V documentation provided by Ameresco.	The DOE-SR agrees with Ameresco's proposed approach.
b. <b>Operations:</b> Responsibility for operations is negotiable, and it can impact performance. <b>Clarify responsibility for operations, the implications of equipment control, how changes in operating procedures will be handled, and how proper operations will be assured.</b>	Ameresco will retain operations responsibility and assumes the risks associated with ECM operations throughout the contract term as defined in <i>Section 5.2.7.1</i> . Proper operations will be assured by appropriate staffing levels of the plant by local Ameresco personnel and/or contracted employees.  Ameresco site management will implement and oversee plant operations to ensure equipment is operated and maintained to provide an efficient and safe operation that satisfies manufacturer and contract requirements.  Title to the biomass fuel will pass to the DOE-SR upon delivery to the plant site. Should the biomass fuel become damaged or destroyed due to the fault or negligence of Ameresco, then Ameresco shall bear responsibility for replacing such damaged biomass fuel.	The DOE-SR agrees with the Ameresco's proposed approach.

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**RISK/RESPONSIBILITY MATRIX**

<b>RESPONSIBILITY/DESCRIPTION</b>	<b>AMERESCO'S PROPOSED APPROACH</b>	<b>DOE-SR ASSESSMENT</b>
<p>c. <b>Preventive Maintenance:</b> Responsibility for maintenance is negotiable, and it can impact performance. Clarify how long-term preventative maintenance will be assured, especially if the party responsible for long-term performance is not responsible for maintenance (e.g., Contractor provides maintenance checklist and reporting frequency). <b>Clarify who is responsible for long-term preventative maintenance to maintain operational performance throughout the Contract term. Clarify what will be done if inadequate preventive maintenance impacts performance.</b></p> <p>d. <b>Equipment Repair and Replacement:</b> Responsibility for repair and replacement of Contractor-installed equipment is negotiable; however it is often tied to project performance. <b>Clarify who is responsible for the replacement of failed components or equipment throughout the term of the Contract.</b> Specifically address potential impacts on performance due to equipment failure. Specify expected equipment life and warranties for all installed equipment. Discuss replacement responsibility when equipment life is shorter than the term of the Contract.</p>	<p>Otherwise, DOE-SRS shall be responsible for any biomass fuel damaged or destroyed for any other reason.</p> <p>Ameresco assumes responsibility for all maintenance and repairs of the equipment installed in the new facility under the contract term as defined in <i>Section 5.2.7.1</i>. This includes a preventative maintenance program, incidental repairs, and warranty work. Ameresco will verify performance of the maintenance on an on-going basis, with an in-depth review of the maintenance program conducted during annual performance reconciliation. The ongoing costs of operations and maintenance for the equipment is included in the performance period expenses and escalated annually at [**]% for the duration of the performance period.</p> <p>Ameresco will assume responsibility for the repair and/or replacement of failed components and equipment throughout the term of the contract as specified in <i>Section 5.2.7.2</i> except for such damaged or destroyed ECM equipment for which the DOE-SR self-insures pursuant to <i>Section 6.5</i> of the Revised Final Proposal.</p>	<p>The DOE-SR agrees with Ameresco's proposed approach.</p> <p>As part of the Performance Period expenses, Ameresco has included, and is clearly responsible for, all Repair &amp; Replacement functions. Only Ameresco-installed equipment that is damaged or destroyed for reasons beyond the control and without the fault or negligence of Ameresco, may result in consideration as noted in <i>Section 6.5</i> of the Revised Final Proposal.</p>

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## 6.0 PROPOSAL PRICING INFORMATION

Schedules DO-1 through DO-5(a) (the "DO—Schedules") presented at the end of this section provide the economic and financial details of the proposed project based on SRS making annual debt service payments at the beginning of each performance period and monthly performance period expenses.

In addition to price quotes and estimates provided by suppliers and vendors, price estimates were developed using Ameresco software cost models, historical project cost data, and cost estimating guides (e.g. RS Means, etc.).

### 6.1 Interest Rate

Ameresco's locked interest rate of 8.19% as shown on Schedule DO-3 is based on Moody's AA Corporate Index, as published by Bloomberg on May 12, 2009, of 6.14% plus a spread above the Index of 2.05%.

### 6.2 Finance Procurement Price

The finance procurement price set forth on Schedule DO-3 consists of the following three components and will fluctuate until the project interest rate mentioned above is fixed:

- a) Performance/Payment Bond — Performance and payment bonds are a requirement of the Contract. The performance bond is purchased by Ameresco to protect the Government and the third party lender against Ameresco non-performance during the implementation period. The performance bond applies only to the installation portion of the work under this contract and does not apply in any way to energy savings guarantees, payments or maintenance provisions, except that the performance bond shall guarantee that the installation will be free of defective materials and workmanship for a period of twelve (12) months following completion and acceptance of the work. Ameresco's lender will require the execution a Dual-Obligee Rider naming such lender as an additional or dual-obligee under the performance bond.
- b) Interest During Construction ("IDC") — This cost represents the interest costs accruing to Ameresco during the proposed implementation period. Ameresco's DO-Schedules assume a traditional upfront funding of the Total Amount Financed into an interest bearing escrow account upon award of the contract, Ameresco will be charged interest on the amount funded at the project interest rate and will net these interest charges with interest earnings on the escrow account's remaining principal balance. Ameresco will receive progress payments

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for implementation expenses from the escrow account. In addition to the traditional escrow funding approach, Ameresco is exploring a delayed funding structure in lieu of the traditional escrow funding structure proposed herein. Under the delayed funding structure, Ameresco's lender will advance progress payments to Ameresco periodically during the construction period. Interest will begin to accrue only on the progress payments made to Ameresco and accrued interest will negatively amortize the outstanding balance. Ameresco believes if it is able to utilize the delayed funding structure it will provide significant savings on interest during construction.

- c) Finance Processing Fee — The finance processing fee represents expenses Ameresco will incur to finance the contract. Typically, this fee is a combination of the following applicable expenses: legal fees, origination fees, fees for rating agencies, rate lock fees to fix the interest rate during the implementation period, trustee or fiscal agent fees, and any rate buydown costs.

### 6.3 Sales Tax

Ameresco intends to pursue a sales tax exemption with the South Carolina Department of Revenue ("SCDOR") with respect to the ECM equipment pursuant to S.C. Code Ann. section 12-36-2120(29). This exemption provides the following sales are exempt from sales tax: "tangible personal property purchased by persons under a written contract with the federal government when the contract necessitating the purchase provides that title and possession of the property is to transfer from the contractor to the federal government at the time of purchase or after the time of purchase. This exemption also applies to purchases of tangible personal property which becomes part of real or personal property owned by the federal government or, as provided in the written contract, is to transfer to the federal government. This exemption does not apply to purchases of tangible personal property used or consumed by the purchaser." The SCDOR also issued South Carolina Revenue Ruling No. 04-9, which outlines the requirements for contractors to qualify for the exemption contained in S.C. Code Ann. section 12-36-2120(29). For the contractor's purchases to be exempt from sales tax, the contractor must have a written contract with the federal government which provides that title and possession of the property is to transfer from the contractor to the federal government at the time of purchase or after the time of purchase and such title and possession actually transfers to the federal government in accordance with the contract or the property becomes part of a real or personal property owned by the federal government or is to transfer to the federal government.

Ameresco must obtain an exemption certificate issued by the SCDOR to purchase tangible personal property exempt from sales tax. Ameresco will submit an application (S.C. Form ST-10G) together with a copy of the executed contract to obtain the required exemption certificate. Due to the fact that Ameresco will not receive an exemption certificate until after contract award is executed, Ameresco has included a sales tax reserve in its proposal in the approximate amount of \$4,600,000. Should Ameresco receive an exemption certificate, Ameresco will request that its lender deposit the sales tax reserve into the PPEF upon the Government's acceptance of the ECMs. Ameresco proposes to wait until acceptance

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to fund the PPEF with the sales tax reserve to avoid paying interest on such reserve during the construction period. To the extent that Ameresco is denied an exemption certificate by the SCDOR, Ameresco will notify the Government of such determination and the sales tax reserve shall be dispersed to Ameresco by its lender via progress payments.

**6.4 Property Tax**

Title to all contractor-installed equipment associated with each ECM shall vest in the Government. Therefore, the Government is the owner of all contractor-installed equipment for property tax purposes and Ameresco has not included property taxes in this proposal. In the event the Government elects not to accept title to the contractor-installed equipment, Ameresco would need to revise this proposal to include all applicable property taxes.

**6.5 Insurance**

Ameresco will maintain builder's risk insurance coverage on all contractor-installed equipment during the implementation period. Ameresco's proposal does not include any cost related to insuring any contractor-installed equipment post-acceptance. Title to all equipment installed by Ameresco shall be vested with the Government after acceptance by the Government of the commercial operation of such ECM and the Government will self-insure all such Contractor-installed equipment throughout the Delivery Order term for the Total Amount Financed as shown on Schedule DO-3. This acceptance shall not relieve Ameresco's responsibility for ECM performance. Ameresco will be responsible for operating and maintaining all ECMs throughout the contract term as set forth herein. If such Ameresco-installed equipment is damaged or destroyed, for reasons beyond the control and without the fault or negligence of Ameresco, the Government shall have the option to (i) terminate the Delivery Order (either in part or in whole) and hold Ameresco harmless for the savings and performance associated with the damaged or destroyed equipment for the remainder of the term, (ii) pay Ameresco, by separate contract action to repair or replace the damaged or destroyed equipment and continue making its scheduled payments to Ameresco, or (iii) repair or replace the damaged or destroyed equipment at its cost and continue making its scheduled payments to the Ameresco. If the repair/replacement work is performed by any party other than Ameresco, a commissioning of the repair/replacement work must be conducted, witnessed and approved by both the Government and Ameresco. This requirement is necessary for Ameresco to continue to guarantee the related energy savings as set herein.

**6.6 Payment/Term**

Ameresco will submit its initial invoice for payment with respect to an ECM upon the earlier of (i) completion of the ECM and acceptance by the Government or (ii) when the Government has beneficial use of such ECM. Following the initial invoice submittals by Ameresco, Ameresco will invoice the Government on or before the first day of April each year thereafter such that the Government's annual

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Debt Service payment will be paid annually on or before the first day of May. Performance Period Expenses will be paid monthly on the first day of each month in an amount equal to one-twelfth (1/12) of the Total Performance Period Expenses due for each Performance Period. Submission of or revisions to the Post Installation Completion Report, As-Built drawings, or O&M Manuals, or delays in providing training that do not affect savings, shall not delay acceptance with respect to the commencement of making payments to Ameresco, but will be noted as punch list items and addressed by Ameresco in a timely manner. Ameresco is proposing annual debt service payments be made at the beginning of each performance period because it reduces the principal balance the fastest and results in the lowest interest expense to the Government. The annual debt service period will occur and payment will be due prior to Ameresco's submission of the applicable year's Annual M&V Report. However, any shortfall in Annual Savings set forth in such report will be adjusted from future performance period payments as provided in Section G.4 of the BAMF Contract. Payments from the government will be applied first to prompt payment interest, then to performance period expenses, then to interest and then to principal.

#### **6.7 Cancellation/Termination/Buyout**

Schedule DO-5(a) — Termination Liability Schedule is provided with this proposal in addition to Schedule DO-5. Schedule DO-5(a) provides an amortization of the project's outstanding principal balance along with the calculation used to determine the Termination Liability and is provided for use in the event that the Government prepays or terminates the project for its convenience. Schedule DO-5(a) represents Ameresco and its third-party lender's recovery of allowable contract expenditures, and associated profit, incurred as of the date of termination or buyout and assumes all payments are received by Ameresco (or its assignee) when due. The column titled "Outstanding Principal Balance" represents Ameresco's recovery of costs associated with the installation work in connection with implementing the ECMs. The column titled "Lender's Termination Premium" over the original project cost represents the third-party lender's immediate recovery of administrative, placement, legal, and investment banking expenses associated with the original financing as well as its termination. These financing costs are not represented in the project cost as a line item, but are built into the interest rate spread and recovered over time as debt service. If Schedule DO-5(a) only reflected the project costs, Ameresco's third party lender would fail to recover their allowable contract expenses and associated profit in the event of a termination or buyout. The lender's termination premium is a cost recovery alternative that the third-party lender must rely on in the event of a termination or buyout in lieu of amortizing fees and costs over time.

In the event of a termination for convenience in whole, cancellation in whole, or prepayment in whole, the Government acknowledges and agrees that it shall be obligated to pay the specific Termination Liability amount set forth on Schedule DO-5(a) for the month corresponding to the effective date the Government intends to make payment to Ameresco. In the event of a termination for convenience in part, cancellation in part or reduction in requirements in part, the Government acknowledges and agrees that Ameresco shall apply any such payment made by the Government to the Outstanding Balance and Lender's Termination Premium amounts set forth on Schedule DO-5(a) corresponding to the effective date of such payment in part. Following the application of such payment in part, the Government will enter into a contract

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modification to incorporate a revised Schedule DO-5(a) reflecting, at the Government's option, a reduction in the total number of payments or reduction in amount per payment over the remaining term such that, in either case, the Outstanding Principal Balance is fully repaid. In the event of a prepayment or buydown, the Government acknowledges and agrees that Ameresco shall apply any such payment made by the Government as set forth in *Section 6.8* below.

Any termination for convenience of the Performance Period portion of the contract shall be handled in accordance with FAR 52.249-2.

**6.8 Prepayments/Buydowns**

In the event the Government chooses to make prepayments or buydowns during the performance period of the contract term, with the purpose of reducing the outstanding unamortized balance of the financing for the ECMs, and thereby reducing the price/payments and overall term of the contract, the following method shall be used to apply those prepayments to the delivery order price:

The prepayment amount will be placed by the third-party financier into an account to be identified in the prepayment modification to the delivery order, to be reinvested at a fixed rate, and at which rate the amount shall earn and accrue interest, for the shorter of (a) the remaining term of the delivery order, as revised by delivery order modification of the award Schedules at the time of any prepayment; or (b) the period up to the date the delivery order may be terminated by the Government. Determination of the fixed rate at which the prepayment amount shall earn and accrue interest shall be by mutual agreement of the parties based on then-current reinvestment rates. The sum of (i) the prepayment amount and (ii) projected accrued interest shall be the total amount applied against the remaining delivery order payments, as reflected in the task order, in reverse order of the scheduled contract payments. Thereby, the scheduled term of the contract shall be reduced, and the payment schedule revised and overall price reduced, as reflected in a revised schedule incorporated into the contract by modification. A revised schedule will also be provided and incorporated into the delivery order award by modification. This process may be repeated to incorporate subsequent prepayments.

**6.9 Protection of Financier's Interest**

All cure or show-cause notices or notices of default will be mailed by the Government to Ameresco's assignee, as set forth in the Notice of Assignment delivered to the Contracting Officer, at least 15 days in advance of any termination of this contract for default. The Government will consider requests by such assignee to extend the applicable cure or show-cause response period so long as such cure is being diligently pursued.

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**6.10 Security Interest in ECM Equipment**

During the implementation period and prior to title to the ECM equipment vesting in the Government, the Government agrees to subordinate any security interest it may have in any Ameresco installed ECM equipment to Ameresco's lender, and grants such lender a first priority security interest in the ECM equipment. Upon the Government's acceptance of each ECM, Ameresco will cause its lender to release its security interest in such ECM equipment and to deliver evidence of such to the Contracting Officer.

**6.11 Assignment of Claims**

Pursuant to DOE FAR subpart 932.803 Policies, Ameresco proposes to finance the ECMs through an assignment of the Government's payments under the contract awarded in connection with this proposal in compliance with FAR 52.232-23 Assignment of Claims, Alternate 1 (Apr 1984). Ameresco or its lender will remit to the Government the required Notice of Assignment together with the Instrument of Assignment. The Government agrees to acknowledge receipt of such notice and incorporate such assignment in a contract modification.

**6.12 Title to and Responsibility for Contractor-Installed Property**

The Government acknowledges that, with respect to the ECMs, the Government is obligated to accept delivery thereof pursuant to the contract upon satisfaction of the conditions thereto. After acceptance by the Government of the installed ECMs and vesting of title with the Government to the equipment installed by Ameresco, the Government agrees that there shall be no withholding, reduction or setoff by the Government in the payment of the specific amounts as set forth in the row labeled "TOTAL DEBT SERVICE" on Schedule DO-3 as a result of (i) any termination for default, in whole or in part, pursuant to FAR Clause 52.249-8 (Default-Fixed Price Supply and Service) by the Government of the Performance Period (as defined in Modification M005 to Contract No. DE-AM36-02NT41457, Section J, Attachment 1) portion of the contract, or (ii) any costs assessed against Ameresco pursuant to FAR Clause 52.246-4 (Inspection of Services-Fixed Price).

In the event of any termination for default, in whole, of the Performance Period portion of the contract, the Government may elect to, but in no way is obligated or required to, buyout the Ameresco installed equipment by paying the sum of the columns labeled "Outstanding Principal Balance" and "Lender's Termination Premium" on Schedule DO-5(a) for the month corresponding to the effective date of such termination (the "Buyout Amount"). In the event of such an election by the Government, the Government agrees that, with respect to the Buyout Amount, there shall be no withholding, reduction or setoff by the Government in the payment thereof.

In the event of any termination for default, in whole or in part, of the Performance Period portion of the contract pursuant to FAR Clause 52.249-8 (Default-Fixed Price Supply and Service) or assessment of costs against Ameresco pursuant to FAR Clause 52.246-4 (Inspection of Services-Fixed Price), the

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Government reserves the right to exercise any and all of its rights and remedies against Ameresco (including any and all rights to recover excess procurement costs that the Government may incur as a result of Ameresco's default and/or Ameresco's failure to perform the Performance Period portion of the contract), except for the withholding, reduction or setoff restrictions expressly provided for herein.

**6.13 Construction Milestones**

The Government agrees, from time to time during the implementation period, to provide its written acknowledgement of the satisfaction of certain predetermined construction milestones set forth on Table 1.7 Project Milestones. Any such acknowledgement by the Government will not constitute acceptance of the ECM on the part of the Government and will not require the Government to commence making payments until such ECM is operational as described herein.

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**DO  
SCHEDULES**

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**SCHEDULE DO-1 (Final)**

**Guaranteed Annual Cost Savings and Annual Contractor Payments**

If selected, the Contractor shall complete the installation of all proposed ECMs not later than 34 months after delivery award.

Performance Period Year	Delivery Order No.:		Contractor Name:		Project Site:	
	DE-AT09-09SR22572 dated 15-May-2009		Ameresco Federal Solutions		Savannah River Site	
	(a)	(b)	(c)			
	Initial Estimated Annual Cost Savings \$	Proposed Guaranteed Annual Cost Savings \$	Annual Contractor Payments \$			
ZERO (6)	[**]	[**]	[**]			
ONE	[**]	[**]	[**]			
TWO	[**]	[**]	[**]			
THREE	[**]	[**]	[**]			
FOUR	[**]	[**]	[**]			
FIVE	[**]	[**]	[**]			
SIX	[**]	[**]	[**]			
SEVEN	[**]	[**]	[**]			
EIGHT	[**]	[**]	[**]			
NINE	[**]	[**]	[**]			
TEN	[**]	[**]	[**]			
ELEVEN	[**]	[**]	[**]			
TWELVE	[**]	[**]	[**]			
THIRTEEN	[**]	[**]	[**]			
FOURTEEN	[**]	[**]	[**]			
FIFTEEN	[**]	[**]	[**]			
SIXTEEN	[**]	[**]	[**]			
SEVENTEEN	[**]	[**]	[**]			
EIGHTEEN	[**]	[**]	[**]			
NINETEEN	[**]	[**]	[**]			
TWENTY	[**]	[**]	[**]			
TWENTY-ONE	[**]	[**]	[**]			
TWENTY-TWO	[**]	[**]	[**]			
TWENTY-THREE	[**]	[**]	[**]			
TWENTY-FOUR	[**]	[**]	[**]			
TWENTY-FIVE	[**]	[**]	[**]			
TOTALS	[**]	[**]	[**]			

- (1) The first year DES Proposed Annual Cost Savings shall reflect technical proposal & engineering estimates as presented in DO-4. above represents a 16 month period (January 2012 to April 2013) and is calculated by dividing the DO-4 savings by 12 months and then multiplying such amount by 16 months.
- (2) The Guaranteed Annual Cost Savings are based on the site specific M&V plan.
- (3) The Annual Contractor Payments represent the deliver order price and should be supported by information submitted in Schedules DO-2 and DO-3.
- (4) The Guaranteed Annual Cost Savings must exceed the Annual Contractor Payments for each performance period year.
- (5) Provider escalation rates applied to DES Proposed Annual Cost Savings in column (a) as follows:
  - (a) Energy Rates — Table S-3; Water Rates — [\*\*]%.
    - (b) Energy Related O&M Savings — [\*\*]%.
- (6) Year Zero Contractor Payment includes \$300,000 deposit into the PPEF.

**SCHEDULE DO-2  
IMPLEMENTATION PRICE BY ECM**

<u>Project Site:</u>		<u>Delivery Order No.:</u>		<u>Contractor Name:</u>		
Savannah River Site		DE-AT09-09SR22572 dated 15-May-2009		Ameresco Federal Solutions		
<u>C.2.2 Technology Category Letter</u>	<u>ECM No.</u>	<u>ECM Description - Title</u>	<u>ECM Size</u>	<u>(a) Total Implementation Expense</u>	<u>(b) Mark-up %</u>	<u>(c) = (a) x (1+b) Implementation Price</u>
						\$ —
		DES/Proposal Development Costs		[**]	[**]%	\$ 1,164,800
r	1	D Area Biomass Replacement Plant	240,000 pph; 20 MW	[**]	[**]%	\$ 137,500,762
r	2	K&L Area Biomass Replacement Plant	(2) 10,500 pph	[**]	[**]%	\$ 10,507,004
Bonded Amount (\$)		\$	149,172,566	[**]		\$ 149,172,566

Notes:

- 1) Total Implementation Expenses shall include direct costs as specified in the Contract or in negotiated B Schedules.
- 2) Contractor shall propose bonded amount representing the basis of establishing performance and payment bonds per Section H in IDIQ.
- 3) Proposed bonded amount is assumed to include markup applied to ECM expenses above, unless otherwise specified by Contractor.
- 4) Bonded Amount (\$) negotiated will be used to establish Performance and Payment Bond sums per Section H.



**SCHEDULE DO-3**  
**Performance Period Cash Flow (PAGE 3)**

**Project Site:** Savannah River Site  
**Delivery Order No:** DE-AT09-09SR22572 dated 15-May-2009  
**Contractor:** Ameresco Federal Solutions  
**Delivery Order No:** SRS BAMF Revised Final Proposal 11-May-2009

<b>Project Capitalization</b>	
Total Implementation Price (DO-2 Total)	\$149,172,566
Finance Procurement Price (\$)	\$ 25,003,318
Add: Financed PPEF Deposit (See Note 5)	\$ 9,200,000
Less: Pre-Performance Period Payments	\$ —
<b>TOTAL AMOUNT FINANCED</b>	<b>\$183,375,883</b>

<b>Applicable Financial Index</b>	
<b>Index</b>	<b>Moody's AA Corporate</b>
<b>Term (Years)</b>	<b>12.0</b>
<b>Index Rate</b>	<b>6.14%</b>
<b>Added Premium</b>	<b>2.05%</b>
<b>Project Interest Rate</b>	<b>8.19%</b>

<b>Issue Date:</b>	<b>May 12, 2009</b>
<b>Source:</b>	<b>Bloomberg</b>

<b>Effective Through:</b>	<b>N/A</b>
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Term	19 years	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Totals
Annual Cash Flow (Performance Period)																							
<b>Debt Service:</b>																							
Interest (\$)		[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]
Principal Repayment (\$)		[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]
<b>TOTAL DEBT SERVICE(a)</b>		[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]
<b>Performance Period Expenses:</b>																							
Management/Administration (\$)		[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]
Maintenance & Operations (\$)		[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]
Repair and Replacement (\$)		[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]
Measurement and Verification (\$)		[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]
Permits and Licenses (\$)		[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]
Insurance (\$)		[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]
Property Taxes (\$)		[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]
Other — Biomass Fuel (\$)		[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]
<b>SUBTOTAL Performance Period Expenses</b>		[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]
Performance Period Mark-Up — All PPEs other than Biomass at 28%		[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]
Performance Period Mark-Up (%) — Biomass at 22%		[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]
Performance Period Mark-Up (\$)		[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]
<b>TOTAL PERFORMANCE PERIOD EXPENSES (b)</b>		[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]
PPEF Deposit — ECM-2 from Year 0 Savings(c)		[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]
<b>Total Amount Contractor Payment(a) + (b) - (c)</b>		[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]	[**]

- Notes:
- Performance Period Expenses shall include only direct costs.
  - Contractor shall specify escalation rate applied to performance period expenses or other sources, in accordance with the IDIQ contract.
  - If applicable, contractor shall specify escalation rate applied to performance period expenses: Applicable escalation is [\*\*]%, with the exception of Biomass which is [\*\*]%
  - Year 0 savings will be applied to Performance Period Expenses for ECM-2 and the PPEF deposit shown in Year 0 above.
  - The PPEF amount represents the aggregate of the following amounts to be financed and deposited into the PPEF:

a) Sales tax reserve (see Section 6.3 of the Final Proposal)	\$4,613,228
b) PPEF Funding Amount upon Acceptance	\$4,586,772
<b>PPEF Deposit from financing proceeds</b>	<b>\$9,200,000</b>

**SCHEDULE DO-4**

**First Year Energy and Cost Savings by ECM, Technology Category and Delivery Order**

Project Site:			Delivery Order No.: DE-AT09-09SR22572 dated 15-May-2009						Contractor: Ameresco Federal Solutions						Project Square Footage (KSF):				N/A		
C.2.2	Savannah River Site		(a)	(b)(1)	(b)(2)	(c)(1)	(c)(2)	(d)(1)	(d)(2)	(e)(1)	(e)(2)	(f)	(g)	(h)		(i)	(j)	(k)	(l)	(m)	(n)
Tech Category Letter	ECM No.	Description	Project or ECM Energy Baseline (MBTU/yr)	Electric Energy Savings (kWh/yr)	Electric Energy Savings (\$/yr)	Electric Demand Savings (kWh/yr)	Electric Demand Savings (\$/yr)	Fuel Oil Savings (Mbtu/yr)	Fuel Oil Savings (\$/yr)	Other Energy Savings (Mbtu/yr)	Other Energy Savings (\$/yr)	Total Energy Savings (Mbtu/yr)	Total Energy Cost Savings (\$/yr)	Other Energy-Related and O&M Cost Savings (\$/yr)	Water Savings (k-gal/yr)	Water Savings (\$/yr)	Estimated Annual Cost Savings (\$/yr)	Implementation Price \$	Simple Payback (yr)		
q		DES/Proposal Development Costs			\$ —		\$ —		\$ —		\$ —		\$ —				\$ —		\$ 1,164,800	N/A	
r	1	D Area Biomass Replacement Plant	3,978,008	(55,415,523)	\$ (3,941,118)		\$ —		\$ —	3,978,008	\$ 24,994,446	3,788,874	\$ 21,053,328	\$ 12,482,882	(460,671)	(355,013)	\$ 33,181,197	\$ 137,500,762	4.14		
r	2	K&I Area Biomass Replacement Plant	42,884	(345,600)	\$ (35,355)		\$ —	42,884	\$ 593,563		\$ —	41,704	\$ 558,208	\$ 638,970	(4,007)	(25,917)	\$ 1,171,260	\$ 10,507,004	8.97		
<b>TOTAL</b>			<b>(55,761,123)</b>	<b>\$ (3,976,474)</b>		<b>\$ —</b>		<b>42,884</b>	<b>\$ 593,563</b>	<b>3,978,008</b>	<b>\$ 24,994,446</b>	<b>3,830,579</b>	<b>\$ 21,611,535</b>	<b>\$ 13,121,852</b>	<b>(464,678)</b>	<b>\$ (380,930)</b>	<b>\$ 34,352,457</b>	<b>\$ 149,172,566</b>	<b>4.34</b>		

- Notes:
- 1) Project Square Footage (in 1000 SF) — Include only building square footage affected by installed ECMs in project.
  - 2) For column (a) insert estimated energy baseline by ECM and total project in MBTU based on M&V approach in technical proposal and DES.
  - 3) Energy conversion factors for MBTU: MBTU=10<sup>6</sup> BTU; Electricity — 3413 BTU/kWh; Natural Gas — 1031 BTU/100CF; Coal — 12,290 BTU/lb; #2 Oil — 138,700 BTU/gal.
  - 4) "Other" energy savings in (e)(1) and (e)(2) represent coal savings.

**SCHEDULE DO-5**  
Annual Cancellation Ceiling Schedule

**Project Site:**  
Savannah River Site

**Delivery Order No.:**  
DE-AT09-09SR22572 dated 15-May-2009  
**Outstanding Capital Investment**

**Contractor Name:**  
Ameresco Federal Solutions  
**Total Cancellation Ceiling**

	\$	\$	\$
Installation Acceptance	\$	183,375,883	\$ 192,544,677
End of Year One	\$	173,872,203	\$ 182,565,813
End of Year Two	\$	169,186,687	\$ 177,646,021
End of Year Three	\$	163,908,479	\$ 172,103,903
End of Year Four	\$	157,863,143	\$ 165,756,300
End of Year Five	\$	150,837,374	\$ 158,379,243
End of Year Six	\$	142,344,922	\$ 149,462,168
End of Year Seven	\$	132,506,118	\$ 139,131,424
End of Year Eight	\$	121,479,677	\$ 127,553,661
End of Year Nine	\$	108,734,351	\$ 114,171,068
End of Year Ten	\$	92,487,417	\$ 97,111,788
End of Year Eleven	\$	74,132,095	\$ 77,838,700
End of Year Twelve	\$	53,511,954	\$ 56,187,552
End of Year Thirteen	\$	30,483,995	\$ 32,008,195
End of Year Fourteen	\$	4,662,037	\$ 4,895,139
End of Year Fifteen	\$	—	\$ —
End of Year Sixteen	\$	—	\$ —
End of Year Seventeen	\$	—	\$ —
End of Year Eighteen	\$	—	\$ —
End of Year Nineteen	\$	—	\$ —
End of Year Twenty	\$	—	\$ —
End of Year Twenty-one	\$	—	\$ —
End of Year Twenty-two	\$	—	\$ —
End of Year Twenty-three	\$	—	\$ —
End of Year Twenty-four	\$	—	\$ —
End of Year Twenty-five	\$	—	\$ —

- (1) Outstanding Capital Investment — Remaining Unamortized principal on Total Amount Financed.
- (2) In the event of contract cancellation or termination for convenience the Termination Liability amount set forth on the Termination Liability Schedule will apply for amounts due Contractor's lender as set forth in Section 6.7 of Contractor's Proposal.
- (3) The Contractor has attached a monthly Financing Termination Liability Schedule which must correspond to the annual amounts submitted above in each year for Outstanding Capital Investment.

SCHEDULE DO-5(a) — TERMINATION LIABILITY SCHEDULE

<b>Termination Premium</b>	<b>5.0%</b>
Service Period Payments	467,331,605
PPEF Deposit — ECMs Savings During Construction	300,000
Interest Payments	144,023,365
Principal Payments	183,375,883
<b>Total Payment</b>	<b>795,030,853</b>

Beginning of Month	Payment Due Date	Project Site: Savannah River Site		Delivery Order No.: DE-AT09-09SR22572 dated 15-May-2009				Contractor Name: Amores Federal Solutions		
		Government Payment	Service Period Expenses	PPEF Deposit	Debt Service Payment	Interest	Principal	Outstanding Principal Balance	Leader's Termination Premium	Termination Liability
0	06/01/09	—	—	—	—	—	—	183,375,883	9,168,794	192,544,677
1	07/01/09	—	—	—	—	—	—	183,375,883	9,168,794	192,544,677
2	08/01/09	—	—	—	—	—	—	183,375,883	9,168,794	192,544,677
3	09/01/09	—	—	—	—	—	—	183,375,883	9,168,794	192,544,677
4	10/01/09	—	—	—	—	—	—	183,375,883	9,168,794	192,544,677
5	11/01/09	—	—	—	—	—	—	183,375,883	9,168,794	192,544,677
6	12/01/09	—	—	—	—	—	—	183,375,883	9,168,794	192,544,677
7	01/01/10	—	—	—	—	—	—	183,375,883	9,168,794	192,544,677
8	02/01/10	—	—	—	—	—	—	183,375,883	9,168,794	192,544,677
9	03/01/10	—	—	—	—	—	—	183,375,883	9,168,794	192,544,677
10	04/01/10	—	—	—	—	—	—	183,375,883	9,168,794	192,544,677
11	05/01/10	—	—	—	—	—	—	183,375,883	9,168,794	192,544,677
12	06/01/10	—	—	—	—	—	—	183,375,883	9,168,794	192,544,677
13	07/01/10	—	—	—	—	—	—	183,375,883	9,168,794	192,544,677
14	08/01/10	—	—	—	—	—	—	183,375,883	9,168,794	192,544,677
15	09/01/10	—	—	—	—	—	—	183,375,883	9,168,794	192,544,677
16	10/01/10	—	—	—	—	—	—	183,375,883	9,168,794	192,544,677
17	11/01/10	—	—	—	—	—	—	183,375,883	9,168,794	192,544,677
18	12/01/10	—	—	—	—	—	—	183,375,883	9,168,794	192,544,677
19	01/01/11	—	—	—	—	—	—	183,375,883	9,168,794	192,544,677
20	02/01/11	141,914	91,914	50,000	—	—	—	183,375,883	9,168,794	192,544,677
21	03/01/11	70,957	45,957	25,000	—	—	—	183,375,883	9,168,794	192,544,677
22	04/01/11	70,957	45,957	25,000	—	—	—	183,375,883	9,168,794	192,544,677
23	05/01/11	70,957	45,957	25,000	—	—	—	183,375,883	9,168,794	192,544,677
24	06/01/11	70,957	45,957	25,000	—	—	—	183,375,883	9,168,794	192,544,677
25	07/01/11	70,957	45,957	25,000	—	—	—	183,375,883	9,168,794	192,544,677
26	08/01/11	70,957	45,957	25,000	—	—	—	183,375,883	9,168,794	192,544,677
27	09/01/11	70,957	45,957	25,000	—	—	—	183,375,883	9,168,794	192,544,677
28	10/01/11	70,957	45,957	25,000	—	—	—	183,375,883	9,168,794	192,544,677
29	11/01/11	70,957	45,957	25,000	—	—	—	183,375,883	9,168,794	192,544,677
30	12/01/11	70,957	45,957	25,000	—	—	—	183,375,883	9,168,794	192,544,677
31	01/01/12	—	—	—	—	—	—	183,375,883	9,168,794	192,544,677
32	02/01/12	—	—	—	—	—	—	183,375,883	9,168,794	192,544,677
33	03/01/12	—	—	—	—	—	—	183,375,883	9,168,794	192,544,677
34	04/01/12	—	—	—	—	—	—	183,375,883	9,168,794	192,544,677
35	05/01/12	31,167,469	6,652,639	—	24,514,830	15,011,150	9,503,680	173,872,203	8,693,610	182,565,813
36	06/01/12	1,330,528	1,330,528	—	—	—	—	173,872,203	8,693,610	182,565,813
37	07/01/12	1,330,528	1,330,528	—	—	—	—	173,872,203	8,693,610	182,565,813
38	08/01/12	1,330,528	1,330,528	—	—	—	—	173,872,203	8,693,610	182,565,813
39	09/01/12	1,330,528	1,330,528	—	—	—	—	173,872,203	8,693,610	182,565,813
40	10/01/12	1,330,528	1,330,528	—	—	—	—	173,872,203	8,693,610	182,565,813
41	11/01/12	1,330,528	1,330,528	—	—	—	—	173,872,203	8,693,610	182,565,813
42	12/01/12	1,330,528	1,330,528	—	—	—	—	173,872,203	8,693,610	182,565,813
43	01/01/13	1,330,528	1,330,528	—	—	—	—	173,872,203	8,693,610	182,565,813
44	02/01/13	1,330,528	1,330,528	—	—	—	—	173,872,203	8,693,610	182,565,813
45	03/01/13	1,330,528	1,330,528	—	—	—	—	173,872,203	8,693,610	182,565,813
46	04/01/13	1,330,528	1,330,528	—	—	—	—	173,872,203	8,693,610	182,565,813
47	05/01/13	20,307,715	1,389,020	—	18,918,695	14,233,179	4,685,516	169,186,687	8,459,334	177,646,021
48	06/01/13	1,389,020	1,389,020	—	—	—	—	169,186,687	8,459,334	177,646,021
49	07/01/13	1,389,020	1,389,020	—	—	—	—	169,186,687	8,459,334	177,646,021
50	08/01/13	1,389,020	1,389,020	—	—	—	—	169,186,687	8,459,334	177,646,021
51	09/01/13	1,389,020	1,389,020	—	—	—	—	169,186,687	8,459,334	177,646,021
52	10/01/13	1,389,020	1,389,020	—	—	—	—	169,186,687	8,459,334	177,646,021
53	11/01/13	1,389,020	1,389,020	—	—	—	—	169,186,687	8,459,334	177,646,021
54	12/01/13	1,389,020	1,389,020	—	—	—	—	169,186,687	8,459,334	177,646,021
55	01/01/14	1,389,020	1,389,020	—	—	—	—	169,186,687	8,459,334	177,646,021
56	02/01/14	1,389,020	1,389,020	—	—	—	—	169,186,687	8,459,334	177,646,021
57	03/01/14	1,389,020	1,389,020	—	—	—	—	169,186,687	8,459,334	177,646,021
58	04/01/14	1,389,020	1,389,020	—	—	—	—	169,186,687	8,459,334	177,646,021
59	05/01/14	20,578,026	1,450,196	—	19,127,830	13,849,622	5,278,208	163,908,479	8,195,424	172,103,903
60	06/01/14	1,450,196	1,450,196	—	—	—	—	163,908,479	8,195,424	172,103,903
61	07/01/14	1,450,196	1,450,196	—	—	—	—	163,908,479	8,195,424	172,103,903
62	08/01/14	1,450,196	1,450,196	—	—	—	—	163,908,479	8,195,424	172,103,903
63	09/01/14	1,450,196	1,450,196	—	—	—	—	163,908,479	8,195,424	172,103,903
64	10/01/14	1,450,196	1,450,196	—	—	—	—	163,908,479	8,195,424	172,103,903
65	11/01/14	1,450,196	1,450,196	—	—	—	—	163,908,479	8,195,424	172,103,903
66	12/01/14	1,450,196	1,450,196	—	—	—	—	163,908,479	8,195,424	172,103,903
67	01/01/15	1,450,196	1,450,196	—	—	—	—	163,908,479	8,195,424	172,103,903
68	02/01/15	1,450,196	1,450,196	—	—	—	—	163,908,479	8,195,424	172,103,903
69	03/01/15	1,450,196	1,450,196	—	—	—	—	163,908,479	8,195,424	172,103,903
70	04/01/15	1,450,196	1,450,196	—	—	—	—	163,908,479	8,195,424	172,103,903
71	05/01/15	20,977,066	1,514,182	—	19,462,884	13,417,548	6,045,336	157,863,143	7,893,157	165,756,300
72	06/01/15	1,514,182	1,514,182	—	—	—	—	157,863,143	7,893,157	165,756,300
73	07/01/15	1,514,182	1,514,182	—	—	—	—	157,863,143	7,893,157	165,756,300
74	08/01/15	1,514,182	1,514,182	—	—	—	—	157,863,143	7,893,157	165,756,300
75	09/01/15	1,514,182	1,514,182	—	—	—	—	157,863,143	7,893,157	165,756,300
76	10/01/15	1,514,182	1,514,182	—	—	—	—	157,863,143	7,893,157	165,756,300
77	11/01/15	1,514,182	1,514,182	—	—	—	—	157,863,143	7,893,157	165,756,300
78	12/01/15	1,514,182	1,514,182	—	—	—	—	157,863,143	7,893,157	165,756,300
79	01/01/16	1,514,182	1,514,182	—	—	—	—	157,863,143	7,893,157	165,756,300
80	02/01/16	1,514,182	1,514,182	—	—	—	—	157,863,143	7,893,157	165,756,300
81	03/01/16	1,514,182	1,514,182	—	—	—	—	157,863,143	7,893,157	165,756,300
82	04/01/16	1,514,182	1,514,182	—	—	—	—	157,863,143	7,893,157	165,756,300

Note: Interest will accrue on the Outstanding Principal Balance monthly between each Debt Service Payment date shown above.

**SCHEDULE DO-5(a) — TERMINATION LIABILITY SCHEDULE**

<b>Termination Premium</b>	<b>5.0%</b>
Service Period Payments	467,331,605
PPEF Deposit — ECMs Savings During Construction	300,000
Interest Payments	144,023,365
Principal Payments	183,375,883
<b>Total Payment</b>	<b>795,030,853</b>

Project Site: Savannah River Site		Delivery Order No.: DE-AT09-09SR22572 dated 15-May-2009				Contractor Name: Amersco Federal Solutions				
Beginning of Month	Payment Due Date	Government Payment	Service Period Expenses	PPEF Deposit	Debt Service Payment	Interest	Principal	Outstanding Principal Balance	Lender's Termination Premium	Termination Liability
83	05/01/16	21,529,558	1,581,111	—	19,948,446	12,922,677	7,025,769	150,837,374	7,541,869	158,379,243
84	06/01/16	1,581,111	1,581,111	—	—	—	—	150,837,374	7,541,869	158,379,243
85	07/01/16	1,581,111	1,581,111	—	—	—	—	150,837,374	7,541,869	158,379,243
86	08/01/16	1,581,111	1,581,111	—	—	—	—	150,837,374	7,541,869	158,379,243
87	09/01/16	1,581,111	1,581,111	—	—	—	—	150,837,374	7,541,869	158,379,243
88	10/01/16	1,581,111	1,581,111	—	—	—	—	150,837,374	7,541,869	158,379,243
89	11/01/16	1,581,111	1,581,111	—	—	—	—	150,837,374	7,541,869	158,379,243
90	12/01/16	1,581,111	1,581,111	—	—	—	—	150,837,374	7,541,869	158,379,243
91	01/01/17	1,581,111	1,581,111	—	—	—	—	150,837,374	7,541,869	158,379,243
92	02/01/17	1,581,111	1,581,111	—	—	—	—	150,837,374	7,541,869	158,379,243
93	03/01/17	1,581,111	1,581,111	—	—	—	—	150,837,374	7,541,869	158,379,243
94	04/01/17	1,581,111	1,581,111	—	—	—	—	150,837,374	7,541,869	158,379,243
95	05/01/17	22,491,123	1,651,124	—	20,839,999	12,347,547	8,492,452	142,344,922	7,117,246	149,462,168
96	06/01/17	1,651,124	1,651,124	—	—	—	—	142,344,922	7,117,246	149,462,168
97	07/01/17	1,651,124	1,651,124	—	—	—	—	142,344,922	7,117,246	149,462,168
98	08/01/17	1,651,124	1,651,124	—	—	—	—	142,344,922	7,117,246	149,462,168
99	09/01/17	1,651,124	1,651,124	—	—	—	—	142,344,922	7,117,246	149,462,168
100	10/01/17	1,651,124	1,651,124	—	—	—	—	142,344,922	7,117,246	149,462,168
101	11/01/17	1,651,124	1,651,124	—	—	—	—	142,344,922	7,117,246	149,462,168
102	12/01/17	1,651,124	1,651,124	—	—	—	—	142,344,922	7,117,246	149,462,168
103	01/01/18	1,651,124	1,651,124	—	—	—	—	142,344,922	7,117,246	149,462,168
104	02/01/18	1,651,124	1,651,124	—	—	—	—	142,344,922	7,117,246	149,462,168
105	03/01/18	1,651,124	1,651,124	—	—	—	—	142,344,922	7,117,246	149,462,168
106	04/01/18	1,651,124	1,651,124	—	—	—	—	142,344,922	7,117,246	149,462,168
107	05/01/18	23,215,526	1,724,367	—	21,491,160	11,652,355	9,838,805	132,506,118	6,625,306	139,131,424
108	06/01/18	1,724,367	1,724,367	—	—	—	—	132,506,118	6,625,306	139,131,424
109	07/01/18	1,724,367	1,724,367	—	—	—	—	132,506,118	6,625,306	139,131,424
110	08/01/18	1,724,367	1,724,367	—	—	—	—	132,506,118	6,625,306	139,131,424
111	09/01/18	1,724,367	1,724,367	—	—	—	—	132,506,118	6,625,306	139,131,424
112	10/01/18	1,724,367	1,724,367	—	—	—	—	132,506,118	6,625,306	139,131,424
113	11/01/18	1,724,367	1,724,367	—	—	—	—	132,506,118	6,625,306	139,131,424
114	12/01/18	1,724,367	1,724,367	—	—	—	—	132,506,118	6,625,306	139,131,424
115	01/01/19	1,724,367	1,724,367	—	—	—	—	132,506,118	6,625,306	139,131,424
116	02/01/19	1,724,367	1,724,367	—	—	—	—	132,506,118	6,625,306	139,131,424
117	03/01/19	1,724,367	1,724,367	—	—	—	—	132,506,118	6,625,306	139,131,424
118	04/01/19	1,724,367	1,724,367	—	—	—	—	132,506,118	6,625,306	139,131,424
119	05/01/19	23,674,383	1,800,991	—	21,873,391	10,846,951	11,026,440	121,479,677	6,073,984	127,553,661
120	06/01/19	1,800,991	1,800,991	—	—	—	—	121,479,677	6,073,984	127,553,661
121	07/01/19	1,800,991	1,800,991	—	—	—	—	121,479,677	6,073,984	127,553,661
122	08/01/19	1,800,991	1,800,991	—	—	—	—	121,479,677	6,073,984	127,553,661
123	09/01/19	1,800,991	1,800,991	—	—	—	—	121,479,677	6,073,984	127,553,661
124	10/01/19	1,800,991	1,800,991	—	—	—	—	121,479,677	6,073,984	127,553,661
125	11/01/19	1,800,991	1,800,991	—	—	—	—	121,479,677	6,073,984	127,553,661
126	12/01/19	1,800,991	1,800,991	—	—	—	—	121,479,677	6,073,984	127,553,661
127	01/01/20	1,800,991	1,800,991	—	—	—	—	121,479,677	6,073,984	127,553,661
128	02/01/20	1,800,991	1,800,991	—	—	—	—	121,479,677	6,073,984	127,553,661
129	03/01/20	1,800,991	1,800,991	—	—	—	—	121,479,677	6,073,984	127,553,661
130	04/01/20	1,800,991	1,800,991	—	—	—	—	121,479,677	6,073,984	127,553,661
131	05/01/20	24,570,813	1,881,160	—	22,689,653	9,944,326	12,745,326	108,734,351	5,436,718	114,171,068
132	06/01/20	1,881,160	1,881,160	—	—	—	—	108,734,351	5,436,718	114,171,068
133	07/01/20	1,881,160	1,881,160	—	—	—	—	108,734,351	5,436,718	114,171,068
134	08/01/20	1,881,160	1,881,160	—	—	—	—	108,734,351	5,436,718	114,171,068
135	09/01/20	1,881,160	1,881,160	—	—	—	—	108,734,351	5,436,718	114,171,068
136	10/01/20	1,881,160	1,881,160	—	—	—	—	108,734,351	5,436,718	114,171,068
137	11/01/20	1,881,160	1,881,160	—	—	—	—	108,734,351	5,436,718	114,171,068
138	12/01/20	1,881,160	1,881,160	—	—	—	—	108,734,351	5,436,718	114,171,068
139	01/01/21	1,881,160	1,881,160	—	—	—	—	108,734,351	5,436,718	114,171,068
140	02/01/21	1,881,160	1,881,160	—	—	—	—	108,734,351	5,436,718	114,171,068
141	03/01/21	1,881,160	1,881,160	—	—	—	—	108,734,351	5,436,718	114,171,068
142	04/01/21	1,881,160	1,881,160	—	—	—	—	108,734,351	5,436,718	114,171,068
143	05/01/21	27,112,968	1,965,040	—	25,147,928	8,900,994	16,246,934	92,487,417	4,624,371	97,111,788
144	06/01/21	1,965,040	1,965,040	—	—	—	—	92,487,417	4,624,371	97,111,788
145	07/01/21	1,965,040	1,965,040	—	—	—	—	92,487,417	4,624,371	97,111,788
146	08/01/21	1,965,040	1,965,040	—	—	—	—	92,487,417	4,624,371	97,111,788
147	09/01/21	1,965,040	1,965,040	—	—	—	—	92,487,417	4,624,371	97,111,788
148	10/01/21	1,965,040	1,965,040	—	—	—	—	92,487,417	4,624,371	97,111,788
149	11/01/21	1,965,040	1,965,040	—	—	—	—	92,487,417	4,624,371	97,111,788
150	12/01/21	1,965,040	1,965,040	—	—	—	—	92,487,417	4,624,371	97,111,788
151	01/01/22	1,965,040	1,965,040	—	—	—	—	92,487,417	4,624,371	97,111,788
152	02/01/22	1,965,040	1,965,040	—	—	—	—	92,487,417	4,624,371	97,111,788
153	03/01/22	1,965,040	1,965,040	—	—	—	—	92,487,417	4,624,371	97,111,788
154	04/01/22	1,965,040	1,965,040	—	—	—	—	92,487,417	4,624,371	97,111,788
155	05/01/22	27,979,151	2,052,809	—	25,926,342	7,571,020	18,355,322	74,132,095	3,706,605	77,838,700
156	06/01/22	2,052,809	2,052,809	—	—	—	—	74,132,095	3,706,605	77,838,700
157	07/01/22	2,052,809	2,052,809	—	—	—	—	74,132,095	3,706,605	77,838,700
158	08/01/22	2,052,809	2,052,809	—	—	—	—	74,132,095	3,706,605	77,838,700
159	09/01/22	2,052,809	2,052,809	—	—	—	—	74,132,095	3,706,605	77,838,700
160	10/01/22	2,052,809	2,052,809	—	—	—	—	74,132,095	3,706,605	77,838,700
161	11/01/22	2,052,809	2,052,809	—	—	—	—	74,132,095	3,706,605	77,838,700
162	12/01/22	2,052,809	2,052,809	—	—	—	—	74,132,095	3,706,605	77,838,700
163	01/01/23	2,052,809	2,052,809	—	—	—	—	74,132,095	3,706,605	77,838,700
164	02/01/23	2,052,809	2,052,809	—	—	—	—	74,132,095	3,706,605	77,838,700
165	03/01/23	2,052,809	2,052,809	—	—	—	—	74,132,095	3,706,605	77,838,700

Note: Interest will accrue on the Outstanding Principal Balance monthly between each Debt Service Payment date shown above.

**SCHEDULE DO-5(a) — TERMINATION LIABILITY SCHEDULE**

<b>Termination Premium</b>	<b>5.0%</b>
Service Period Payments	467,331,605
PPEF Deposit — ECMs Savings During Construction	300,000
Interest Payments	144,023,365
Principal Payments	183,375,883
<b>Total Payment</b>	<b>795,030,853</b>

Beginning of Month	Payment Due Date	Project Site: Savannah River Site		Delivery Order No.: DE-AT09-09SR22572 dated 15-May-2009				Contractor Name: Ameresco Federal Solutions		
		Government Payment	Service Period Expenses	PPEF Deposit	Debt Service Payment	Interest	Principal	Outstanding Principal Balance	Lender's Termination Premium	Termination Liability
166	04/01/23	2,052,809	2,052,809	—	—	—	—	74,132,095	3,706,605	77,838,700
167	05/01/23	28,833,246	2,144,652	—	26,688,594	6,068,453	20,620,141	53,511,954	2,675,598	56,187,552
168	06/01/23	2,144,652	2,144,652	—	—	—	—	53,511,954	2,675,598	56,187,552
169	07/01/23	2,144,652	2,144,652	—	—	—	—	53,511,954	2,675,598	56,187,552
170	08/01/23	2,144,652	2,144,652	—	—	—	—	53,511,954	2,675,598	56,187,552
171	09/01/23	2,144,652	2,144,652	—	—	—	—	53,511,954	2,675,598	56,187,552
172	10/01/23	2,144,652	2,144,652	—	—	—	—	53,511,954	2,675,598	56,187,552
173	11/01/23	2,144,652	2,144,652	—	—	—	—	53,511,954	2,675,598	56,187,552
174	12/01/23	2,144,652	2,144,652	—	—	—	—	53,511,954	2,675,598	56,187,552
175	01/01/24	2,144,652	2,144,652	—	—	—	—	53,511,954	2,675,598	56,187,552
176	02/01/24	2,144,652	2,144,652	—	—	—	—	53,511,954	2,675,598	56,187,552
177	03/01/24	2,144,652	2,144,652	—	—	—	—	53,511,954	2,675,598	56,187,552
178	04/01/24	2,144,652	2,144,652	—	—	—	—	53,511,954	2,675,598	56,187,552
179	05/01/24	29,649,211	2,240,763	—	27,408,448	4,380,489	23,027,959	30,483,995	1,524,200	32,008,195
180	06/01/24	2,240,763	2,240,763	—	—	—	—	30,483,995	1,524,200	32,008,195
181	07/01/24	2,240,763	2,240,763	—	—	—	—	30,483,995	1,524,200	32,008,195
182	08/01/24	2,240,763	2,240,763	—	—	—	—	30,483,995	1,524,200	32,008,195
183	09/01/24	2,240,763	2,240,763	—	—	—	—	30,483,995	1,524,200	32,008,195
184	10/01/24	2,240,763	2,240,763	—	—	—	—	30,483,995	1,524,200	32,008,195
185	11/01/24	2,240,763	2,240,763	—	—	—	—	30,483,995	1,524,200	32,008,195
186	12/01/24	2,240,763	2,240,763	—	—	—	—	30,483,995	1,524,200	32,008,195
187	01/01/25	2,240,763	2,240,763	—	—	—	—	30,483,995	1,524,200	32,008,195
188	02/01/25	2,240,763	2,240,763	—	—	—	—	30,483,995	1,524,200	32,008,195
189	03/01/25	2,240,763	2,240,763	—	—	—	—	30,483,995	1,524,200	32,008,195
190	04/01/25	2,240,763	2,240,763	—	—	—	—	30,483,995	1,524,200	32,008,195
191	05/01/25	30,658,724	2,341,347	—	28,317,378	2,495,420	25,821,958	4,662,037	233,102	4,895,139
192	06/01/25	2,341,347	2,341,347	—	—	—	—	4,662,037	233,102	4,895,139
193	07/01/25	2,341,347	2,341,347	—	—	—	—	4,662,037	233,102	4,895,139
194	08/01/25	2,341,347	2,341,347	—	—	—	—	4,662,037	233,102	4,895,139
195	09/01/25	2,341,347	2,341,347	—	—	—	—	4,662,037	233,102	4,895,139
196	10/01/25	2,341,347	2,341,347	—	—	—	—	4,662,037	233,102	4,895,139
197	11/01/25	2,341,347	2,341,347	—	—	—	—	4,662,037	233,102	4,895,139
198	12/01/25	2,341,347	2,341,347	—	—	—	—	4,662,037	233,102	4,895,139
199	01/01/26	2,341,347	2,341,347	—	—	—	—	4,662,037	233,102	4,895,139
200	02/01/26	2,341,347	2,341,347	—	—	—	—	4,662,037	233,102	4,895,139
201	03/01/26	2,341,347	2,341,347	—	—	—	—	4,662,037	233,102	4,895,139
202	04/01/26	2,341,347	2,341,347	—	—	—	—	4,662,037	233,102	4,895,139
203	05/01/26	7,490,287	2,446,615	—	5,043,672	381,634	4,662,037	—	—	—
204	06/01/26	2,446,615	2,446,615	—	—	—	—	—	—	—
205	07/01/26	2,446,615	2,446,615	—	—	—	—	—	—	—
206	08/01/26	2,446,615	2,446,615	—	—	—	—	—	—	—
207	09/01/26	2,446,615	2,446,615	—	—	—	—	—	—	—
208	10/01/26	2,446,615	2,446,615	—	—	—	—	—	—	—
209	11/01/26	2,446,615	2,446,615	—	—	—	—	—	—	—
210	12/01/26	2,446,615	2,446,615	—	—	—	—	—	—	—
211	01/01/27	2,446,615	2,446,615	—	—	—	—	—	—	—
212	02/01/27	2,446,615	2,446,615	—	—	—	—	—	—	—
213	03/01/27	2,446,615	2,446,615	—	—	—	—	—	—	—
214	04/01/27	2,446,615	2,446,615	—	—	—	—	—	—	—
215	05/01/27	2,556,793	2,556,793	—	—	—	—	—	—	—
216	06/01/27	2,556,793	2,556,793	—	—	—	—	—	—	—
217	07/01/27	2,556,793	2,556,793	—	—	—	—	—	—	—
218	08/01/27	2,556,793	2,556,793	—	—	—	—	—	—	—
219	09/01/27	2,556,793	2,556,793	—	—	—	—	—	—	—
220	10/01/27	2,556,793	2,556,793	—	—	—	—	—	—	—
221	11/01/27	2,556,793	2,556,793	—	—	—	—	—	—	—
222	12/01/27	2,556,793	2,556,793	—	—	—	—	—	—	—
223	01/01/28	2,556,793	2,556,793	—	—	—	—	—	—	—
224	02/01/28	2,556,793	2,556,793	—	—	—	—	—	—	—
225	03/01/28	2,556,793	2,556,793	—	—	—	—	—	—	—
226	04/01/28	2,556,793	2,556,793	—	—	—	—	—	—	—
227	05/01/28	2,672,116	2,672,116	—	—	—	—	—	—	—
228	06/01/28	2,672,116	2,672,116	—	—	—	—	—	—	—
229	07/01/28	2,672,116	2,672,116	—	—	—	—	—	—	—
230	08/01/28	2,672,116	2,672,116	—	—	—	—	—	—	—
231	09/01/28	2,672,116	2,672,116	—	—	—	—	—	—	—
232	10/01/28	2,672,116	2,672,116	—	—	—	—	—	—	—
233	11/01/28	2,672,116	2,672,116	—	—	—	—	—	—	—
234	12/01/28	2,672,116	2,672,116	—	—	—	—	—	—	—
235	01/01/29	2,672,116	2,672,116	—	—	—	—	—	—	—
236	02/01/29	2,672,116	2,672,116	—	—	—	—	—	—	—
237	03/01/29	2,672,116	2,672,116	—	—	—	—	—	—	—
238	04/01/29	2,672,116	2,672,116	—	—	—	—	—	—	—
239	05/01/29	2,792,829	2,792,829	—	—	—	—	—	—	—
240	06/01/29	2,792,829	2,792,829	—	—	—	—	—	—	—
241	07/01/29	2,792,829	2,792,829	—	—	—	—	—	—	—
242	08/01/29	2,792,829	2,792,829	—	—	—	—	—	—	—
243	09/01/29	2,792,829	2,792,829	—	—	—	—	—	—	—
244	10/01/29	2,792,829	2,792,829	—	—	—	—	—	—	—
245	11/01/29	2,792,829	2,792,829	—	—	—	—	—	—	—
246	12/01/29	2,792,829	2,792,829	—	—	—	—	—	—	—
247	01/01/30	2,792,829	2,792,829	—	—	—	—	—	—	—
248	02/01/30	2,792,829	2,792,829	—	—	—	—	—	—	—

Note: Interest will accrue on the Outstanding Principal Balance monthly between each Debt Service Payment date shown above.

**SCHEDULE DO-5(a) — TERMINATION LIABILITY SCHEDULE**

<b>Termination Premium</b>	<b>5.0%</b>
Service Period Payments	467,331,605
PPEF Deposit — ECMs Savings During Construction	300,000
Interest Payments	144,023,365
Principal Payments	183,375,883
<b>Total Payment</b>	<b>795,030,853</b>

Beginning of Month	Payment Due Date	Project Site: Savannah River Site		Delivery Order No.: DE-AT09-09SR22572 dated 15-May-2009				Contractor Name: Ameresco Federal Solutions		
		Government Payment	Service Period Expenses	PPEF Deposit	Debt Service Payment	Interest	Principal	Outstanding Principal Balance	Lender's Termination Premium	Termination Liability
249	03/01/30	2,792,829	2,792,829	—	—	—	—	—	—	—
250	04/01/30	2,792,829	2,792,829	—	—	—	—	—	—	—
251	05/01/30	2,919,191	2,919,191	—	—	—	—	—	—	—
252	06/01/30	2,919,191	2,919,191	—	—	—	—	—	—	—
253	07/01/30	2,919,191	2,919,191	—	—	—	—	—	—	—
254	08/01/30	2,919,191	2,919,191	—	—	—	—	—	—	—
255	09/01/30	2,919,191	2,919,191	—	—	—	—	—	—	—
256	10/01/30	2,919,191	2,919,191	—	—	—	—	—	—	—
257	11/01/30	2,919,191	2,919,191	—	—	—	—	—	—	—
258	12/01/30	2,919,191	2,919,191	—	—	—	—	—	—	—
259	01/01/31	2,919,191	2,919,191	—	—	—	—	—	—	—
260	02/01/31	2,919,191	2,919,191	—	—	—	—	—	—	—
261	03/01/31	2,919,191	2,919,191	—	—	—	—	—	—	—
262	04/01/31	2,919,191	2,919,191	—	—	—	—	—	—	—

Note: Interest will accrue on the Outstanding Principal Balance monthly between each Debt Service Payment date shown above.

APPENDIX A

BIOMASS COGENERATION FACILITY  
SUBSURFACE EXPLORATION  
SAVANNAH RIVER SITE  
AIKEN, SOUTH CAROLINA  
QORE JOB NO. U1629, REPORT NO. 36127

TABLE OF CONTENTS

<b>1.0 INTRODUCTION</b>	1
1.1 General	1
1.2 Report Summary	1
<b>2.0 PROJECT INFORMATION</b>	2
<b>3.0 FIELD EXPLORATION AND TEST METHODS</b>	3
<b>4.0 SUBSURFACE CONDITIONS</b>	4
4.1 Existing Site Conditions	4
4.2 Geology	5
4.3 General Soil Profile	5
4.4 Groundwater	6
<b>5.0 LIMITATIONS OF REPORT</b>	7
<b>6.0 CONCLUSIONS</b>	8
<b>7.0 RECOMMENDATIONS</b>	9
7.1 General	9
7.2 Site Preparation	9
7.3 Excavation and Undercutting	9
7.3.1 Subgrade Evaluation and Preparation	9
7.3.2 Groundwater and Excavation Dewatering	9
7.4 Earth Material Utilization	10
7.5 Settlement Provisions	10
7.6 Foundations	13
7.6.1 Main Boiler/Generator Bulding	13
7.6.2 Stacks, Silos, Cooling Tower, and Stack/Reclaimer Building	13
7.6.3 Other Structures	13
7.6.4 All Foundations	14

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7.7 Floor Slabs Other Than Mat Foundations	14
7.8 Retaining Walls	15
7.9 Slopes	16
7.10 Pavements	17
<b>8.0 SEISMIC SITE CLASSIFICATION</b>	<b>18</b>
<b>9.0 FOLLOW — UP SERVICES</b>	<b>19</b>
<b>APPENDIX</b>	

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**BIOMASS COGENERATION FACILITY  
SUBSURFACE EXPLORATION  
SAVANNAH RIVER SITE  
QORE JOB NO. U1629, REPORT NO. 36127**

**1.0 INTRODUCTION**

1.1 General

QORE, Inc. has completed a subsurface exploration for the referenced project in accordance with our proposal Number 02777 dated February 6, 2008 which was revised by proposal 02777R dated February 29, 2008. The purposes of this exploration were to assess subsurface conditions at the site and provide recommendations for foundation design for the anticipated structures, for seismic design considerations, and for earthwork considerations that should be taken into account during subsequent project planning. Project information was provided through the Soil Boring Location Plan of the site prepared by Ameresco Federal Solutions dated 7, Jan. 2008 and "Bore Map with Boring Locations" plan (undated) prepared by Lynn Mourning of Savannah River Site, our meeting of January 30, 2008 with Ms. Nicole Bulgarino, P.E., Mr. Kenneth W. Gross, and Mr. Joseph T. Price of Ameresco, and Mr. Ross W. Hill, P.E. of ESI Inc. of Tennessee, and follow-up conversations and e-mails with Ms. Bulgarino and Mr. Doug Luckett, P.E. of ESI. This report explains our understanding of the project, documents our findings, and presents our conclusions and engineering recommendations.

1.2 Report Summary

Our findings are summarized below for convenience. This brief tabulation should not be used solely for design and planning purposes without first reviewing the more detailed information presented in the remainder of the report.

- Fourteen (14) soil test borings, three (3) Seismic Cone Penetrometer Test (SCPT) soundings, four (4) Cone Penetrometer Test (CPT) soundings, and one hand auger boring were performed to evaluate the subsurface soil and groundwater conditions at the accessible locations of the project site.
  - The soil profile consists of natural Coastal Plain soils. Very loose to very firm silty and clayey sands were encountered across the site. The fines (particles smaller than a #200 sieve) content of the soils ranged from 11% to 29%. The soils generally contained more clay on the north and
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east sides of the site. The sand soils encountered in our borings can be used as a source of structural fill; however, some wetting or drying may be required. Difficult excavation due to rock will not be encountered during construction.

- Groundwater was measured in the borings at the time of drilling at 54 feet in boring B15 and at 85 feet and 88 feet in SCPT 15a and 19, respectively. Permanent groundwater will likely not be encountered; however, perched groundwater could develop during periods of rain.
- Based on our settlement calculations, we estimate that the mat foundation for the main boiler/turbine building may settle up to 1<sup>1/2</sup> inch. To reduce settlement, we recommend densifying the upper loose sand across the site and preloading the building pad with at least 12 feet of fill. Other structures may be supported by mat foundations with a maximum allowable bearing stress of 1,500 psf and a maximum horizontal dimension of 35 feet, or spread footings with a maximum allowable bearing stress of 2,500 psf and a maximum dimension of 10 feet.
- A Site Specific Seismic Assessment was performed and is included in the Appendix.

## 2.0 PROJECT INFORMATION

The anticipated development of the site consists of the construction of a steel frame building approximately 118 feet by 193 feet with column spacing of 25 feet to 30 feet which will house two boilers, an auxiliary boiler, and a turbine generator. The following information was provided via several telephone conversations with Mr. Doug Luckett, P.E. and his e-mails of March 26 and April 2, 2008. From this information, we understand that a mat is the preferred type of foundation which will support the building as well as the boilers, generator, and ancillary equipment. The mat, as now planned, will be approximately 199 feet by 124 feet, and 3 feet thick. The total load on the mat is anticipated to be 34,418 kips, which results in an average bearing stress of approximately 1.4 kips per square foot. We understand that the allowable vertical deflection across the length of the boilers and the turbine generator cannot exceed 1/8" each and desired total settlement is less than 1/2 inch.

Other structures and loads include:

- Two stacks, 5 to 6 feet in diameter and 150 feet high, with loads of 70 kips each will be supported on separate octagonal foundations.
  - A cooling tower with dimensions of approximately 100 feet by 53 feet and a total load of 411 kips.
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- Stack/reclaimer structure supported by four columns in a square configuration 10<sup>1</sup>/<sub>2</sub> feet apart with a total load of approximately 530 kips each.
- Silo with plan dimensions of 26 feet by 14 feet supported by four columns with a total load of 530 kips each.

The project also includes two bag houses, a cooling tower, conveyor system and maintenance structure, truck scales, tanks, and screens for which complete details were not provided. This report is based on the assumption that these structures are relatively lightly loaded (less than 200 kips), and shallow, spread foundations will be adequate. We are not aware of any deep excavations, high fills, or retaining walls planned for this facility. An access road and parking area will be provided for automobiles and trucks. The anticipated truck loading is 100 tractor trailers per day. Cut and fill slopes will be what are necessary to balance the site during grading. A grading plan was not provided; however, based on our meeting on January 30, 2008, we anticipate maximum cuts and fills on the order of five to ten feet.

### 3.0 FIELD EXPLORATION AND TEST METHODS

The geotechnical exploration began with a visual site reconnaissance performed by a member of our professional staff. Originally, the exploration was planned using 21 soil test borings of varying depths. Three of the borings were to be extended to a depth of 100 feet within the footprint of the boiler/generator building, however the first deep boring attempted (B15), encountered heaving sand at a depth of 70 feet and had to be terminated. As a result of the heaving sand and the fact that only silty sand was encountered, the scope of work was revised to replace seven of the borings with Cone Penetration Tests (CPT) and Seismic CPT (SCPT). This allowed for collection of soil data to the planned depth of 100 feet and provided shear wave velocity data which are better suited for evaluation of cohesionless soils. Fourteen soil test borings, four Cone Penetration Test (CPT) soundings, three CPT soundings with seismic shear wave velocity measurements (SCPT), and one hand auger boring were performed. The original numerical designation for each exploration location on the undated "Bore Map with Boring Locations" plan remain the same, but the prefix (B, CPT, SCPT, and A) were changed to indicate the type of exploration. One additional SCPT sounding was added next to boring B15 and is designated SCPT 15A. The borings and soundings were located, surveyed, and staked in the field by Savannah River Site Personnel. Unless an offset is indicated, the borings and soundings were located within 5 feet of the staked position. The boring and sounding locations are provided on the Exploration Location Plan in the Appendix. The surveyed and provided horizontal coordinates for each boring location are given on each boring or sounding record.

The procedures used by QORE for field sampling and testing were performed in general accordance with ASTM procedures and established engineering practice. Standard Penetration

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tests and split spoon samples were obtained at 2.5 foot intervals in the upper 10 feet and 5 foot intervals thereafter with the exception of borings B17 and B18, where the samples were obtained at 5 foot intervals for the entirety of the borehole. A standard 1.4-inch I.D., 2-inch O.D. split-barrel sampler was used. The sampler was first seated 6 inches and then driven an additional 12 inches with blows of a 140-pound automated hammer falling 30 inches. The number of hammer blows required to drive the sampler the additional 12 inches was recorded and is designated the "standard penetration resistance" with units of blows per foot (bpf).

After completion of the drilling activities, the borings were backfilled with auger cuttings. Selected borings were left open 24 hours for a groundwater measurement. Soil descriptions, standard penetration test results, and other subsurface data are presented in the Soil Test Boring Records in the Appendix.

CPT and SCPT soundings were performed by pushing an electronically instrumented cone shaped probe into the soil at a rate of approximately two centimeters (0.79 inch) per second with the hydraulic system of a truck mounted reaction device. The 1.4-inch diameter, 18-inch long cone is equipped with an instrumented tip and a steel friction sleeve that measures tip resistance and soil-to-steel friction, respectively, as the cone is being pushed. The cone is equipped with a pore pressure transducer that records the pore water pressure in the soil as the cone is advanced. The cone is also instrumented with geophones that allow for the measurement of shear wave velocities at depth. Shear wave velocities were measured at intervals of 1 meter. The CPT and SCPT plots and a more detailed procedure for the CPT are included in the Appendix.

One boring, B3 was located in dense woodlands, inaccessible to our equipment. The boring was completed by hand auger and Dynamic Cone Penetrometer (DCP) to a depth of 7 1/2 feet at which point the soil was too firm to continue.

At our laboratory, the recovered soil samples were visually classified by our geotechnical professional. Samples were selected for index testing consisting of grain size analysis, Atterberg limits, California Bearing Ratio (CBR), Resistivity, and pH. The laboratory test results are contained in the Appendix.

#### 4.0 SITE AND SUBSURFACE CONDITIONS

##### 4.1 Existing Site Conditions

The project site is approximately 60 acres located on the northwest side of Berma Road, approximately 1/2 mile from C Road on the Savannah River Site. According to the information provided, this area appears to be previously undeveloped. The site slopes moderately from north to south with a relief of approximately 12 feet across the main building footprint. The section of land

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that will house the proposed boiler building, cooling tower, biofuel storage silos, and stacks was logged about five years previously and is covered with young trees and brush. The section of the site that will house the proposed stacker/reclaimer, truck scales, dumpsters, and disc screen and hogger has not been cleared and contains mature forest.

#### 4.2 Geology

The site is located in the Coastal Plain Physiographic Province of South Carolina. The Coastal Plain is a wedge-shaped deposit of Cretaceous and younger sediments that range in thickness from near zero at the contact with the Piedmont Physiographic Province (the Fall Line) along its northwest edge, to thousands of feet at the coast. Coastal Plain soils are marine deposits laid down in the geologic past when ocean levels were higher, and can contain various materials including interbedded soft and hard limestones, gravel, sands, silts, and clays, as well as organics.

#### 4.3 General Soil Profile

The borings within the proposed boiler/generator building, stacks, and cooling tower footprints (B9 through B18 and B21) generally encountered about 6 inches of topsoil and loose multi-colored silty sand with alternating zones of loose and firm silty sand to their varying termination depths of 35 to 70 feet below the existing ground surface (bgs). Penetration resistances ranged from 3 to 33 blows per foot (bpf). The fines (particles smaller than a #200 sieve) contents ranged from 11% to 29%. Borings B9 and B10 also encountered very firm silty sand at depths of 23 feet to 28 feet and 6 feet to 13 feet, respectively, with penetration resistances of 21 to 24 bpf. Boring B15 encountered penetration resistances of 27 to 33 bpf from a depth of 63½ feet to 70 feet. An additional SCPT sounding (designated SCPT 15A) was offset from boring B15 approximately 5 feet north and met refusal at a depth of 16 feet. It was offset approximately 5 feet in the other direction and extended to the planned termination depth of 100 feet. Except for B17, the borings also encountered varying amounts of very loose (resistance  $\leq$  4 bpf) silty sand and sand with silt within the upper 10 feet.

Seismic cone penetrometer tests SCPT15A, SCPT19, and SCPT20 encountered soil conditions consistent with the borings previously described, as far as the borings extended. SCPT 19 and SCPT15A encountered dense sand with tip resistance greater than 20 MPa at depths of approximately 53 feet to 63 feet and approximately 63 feet to 73 feet respectively. SCPT20 encountered refusal on clean sand at a depth of 66 feet and was terminated. SCPT15A encountered relatively soft clay and silty clay with tip resistance less than 5 MPa at approximate depths of 75 to 77 feet and 82 to 89 feet. SCPT19 encountered relatively soft clay and silty clay

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with tip resistance less than 5 MPa at approximate depths of 68 to 72 feet and 76 to 81 feet. Shear wave velocities were measured in each of these soundings at intervals of one meter. The shear wave velocities measured, were generally over 1000 feet per second (fps). In SCPT 15A, the mean velocity measured was 1170 fps with a minimum of 800 fps at a depth of 87.2 feet, and a maximum of 1843 fps at a depth of 11.8 feet. In SCPT 19, the mean velocity measured was 1134 fps with a minimum of 850 fps at a depth of 70.8 feet, and a maximum of 1397 fps at a depth of 57.7 feet. In SCPT 20, the mean velocity measured was 1010 fps with a minimum of 715 fps at a depth of 24.9 feet, and a maximum of 1489 fps at a depth of 18.4 feet.

The other explorations to the north and east of the area described above, generally encountered more clayey soils (B6, B7, B11, CPT1, CPT2, CPT4, CPT5 and A3). B6, B7, and CPT4 encountered loose sands with varying degrees of silt (3-10 bpf) to depths of approximately 2 to 7 feet bgs underlain by clayey sand (15 to 19 bpf) to depths of approximately 8½ to 10 feet bgs followed by loose to firm sands with varying concentrations of silt (7 to 20 bpf) to the planned termination depths. Borings B11, CPT1 and CPT2 encountered very loose to firm sand with varying degrees of silt to depths of approximately 5 to 18 feet bgs underlain by firm to stiff clayey sands and silty clay to the planned termination depths. CPT1 encountered very stiff clayey soil to a depth of approximately 14½ feet at which point refusal was encountered (planned termination depth was 15 feet). CPT2 met refusal in clay soil at a depth of approximately 17½ although the planned termination depth was 20 feet. CPT5 met refusal in clayey soil at a depth of approximately 10½ feet, although the planned termination depth was 15 feet.

The above discussion is a relatively brief and general description of subsurface conditions encountered in the borings at the time of our exploration. Detailed descriptions are presented on the individual Soil Test Boring Records. When reviewing these records, one should recognize that the indicated boundaries between soil strata are approximate and the transitions between strata are generally gradual. Also, variations in subsurface conditions from those encountered may exist intermediate of the boring locations.

#### 4.4 Groundwater

QORE recorded groundwater level measurements at the time of drilling. Groundwater was measured at a depth of 54 feet bgs in boring B15, approximately 24 hours after completion. Groundwater was estimated by pore pressure dissipation in SCPT 15 and 19 at 85 and 88 feet bgs,

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respectively. Groundwater levels fluctuate with seasonal and yearly rainfall variations. It is possible that groundwater may be encountered at a shallower depth than indicated by our measurements.

#### 5.0 LIMITATIONS OF REPORT

This report has been prepared for the exclusive use of the Ameresco Federal Solutions and their designers for specific application to this project. Our conclusions and recommendations have been prepared using generally accepted standards of geotechnical engineering practice in the State of South Carolina. No other warranty is expressed or implied. This company is not responsible for the conclusions, opinions, or recommendations of others based on these data.

Our conclusions and recommendations are based on the data obtained from the previously described subsurface exploration and our past experience. They do not reflect variations in the subsurface conditions, which are likely to exist between our exploration locations and in unexplored areas of the site. These variations result from the inherent variability of the subsurface conditions in this geologic region.

If the overall design, location, or elevation of the proposed building is changed, the recommendations contained in this report must not be considered valid unless the changes are reviewed by our firm and our recommendations modified or verified in writing. When the design is finalized, we should be given the opportunity to review the foundation plan, grading plan, and applicable portions of the project specifications. This review will allow us to check whether these documents are consistent with the intent of our recommendations.

Field observations, monitoring, and quality assurance testing during earthwork and foundation installation are an extension of the geotechnical design. We recommend that the owner retain these services and that we be allowed to continue our involvement in the project through these phases of construction. Our firm is not responsible for interpretation of the data contained in this report by others, nor do we accept any responsibility for job-site safety which is the sole responsibility of the contractor.

Subsequent report sections include comments about excavation, foundation construction, earthwork, and related geotechnical aspects of the proposed construction. The recommendations contained herein are not intended to dictate construction methods or sequences. They are based on findings from this subsurface exploration and are furnished solely to help designers understand

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subsurface conditions related to foundation and earthwork plans and specifications. Depending on the final design of the project, the recommendations also may be useful to personnel who observe construction activity.

#### 6.0 CONCLUSIONS

- Due to the very loose sand condition of the near surface soils, we recommend densifying the upper sand with a large vibratory roller. Also, to reduce settlements to within acceptable levels, the foundation for the boiler/generator will require preloading. After preloading the site, the main boiler/generator structure can be supported by a mat foundation with a maximum average contact pressure of 1500 psf.
  - The stacks, silo, and stacker/reclaimer building can be supported on mat foundations placed on natural Coastal Plain soils or properly compacted structural fill, with a maximum average contact pressure of 1500 psf.
  - Other structures, including the hogger, bag house, scales, conveyor, and maintenance facility can be supported on spread footings placed in firm natural soils or on properly compacted structural fill and can be sized for an applied bearing stress of 2,500 psf.
  - Permanent groundwater should not be encountered within the anticipated construction excavation depths. However, temporary perched water may be encountered during extended periods of rainfall.
  - Based on the results of our pH (4.6) and resistivity (86,000 W-cm) tests, the soil sample collected at the site is considered to be highly corrosive.
  - We do not anticipate that rock or difficult excavation conditions will be encountered.
  - We anticipate that most cut materials will be satisfactory for structural fill, although some drying or wetting of the fill material will likely be required.
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## 7.0 RECOMMENDATIONS

### 7.1 General

The following recommendations are based on our geotechnical exploration described above and our knowledge of the site. In developing our recommendations, mat foundations were considered for the boiler/generator building, stacks, cooling tower, and silo. Shallow spread footings were considered for the other structures.

### 7.2 Site Preparation

Topsoil, organics, stumps, large trees and root systems should be stripped to prepare the site for construction. After stripping, the site should be observed by a representative of our firm, and any remaining pockets of organics or large root systems should be undercut and discarded off site or stockpiled for future use in landscaped areas. Stripping should extend at least 10 feet beyond the construction limits.

### 7.3 Excavation and Undercutting

#### 7.3.1 Subgrade Evaluation and Preparation

After designated areas of the site have been stripped and undercut, at-grade areas and areas that are to receive fill should be evaluated by a member of our staff by observing proofrolling with a heavily loaded dump truck or earthmoving scraper. Proofrolling consists of applying repeated passes to the subgrade with this equipment. Any materials judged to deflect excessively under the wheel loads and which cannot be densified by continued rolling should be undercut to more stable soils before placing fill. Following evaluation, we recommend densifying the subgrade with a large vibratory roller with a rated dynamic force of at least 50,000 pounds. This equipment should make at least six passes across the subgrade (three passes in one direction and three passes perpendicular to the initial passes).

#### 7.3.2 Groundwater and Excavation Dewatering

From the results of our borings, we anticipate that permanent groundwater will not be encountered in excavations. Perched groundwater could develop in the upper sand soil during periods of rainfall. We believe that a combination of gravity-drained ditches connected to the storm water drainage system and pumped sumps can be used for the anticipated limited depth of dewatering groundwater.

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#### 7.4 Earth Material Utilization

We anticipate the majority of the site silty sand and clayey sand soils will be satisfactory for structural fill material. Select fill will be required to replace any undercut materials found to be unsatisfactory for structural fill. Structural fill is defined as soil classified as SC, SM, SP-SC, SP-SM, and SP under the Unified Soils Classification System (USCS) which is free of organics and deleterious material, exhibits a plasticity index less than 20, has a maximum particle size less than 3 inches, and is compacted to at least 95 percent of the soil's maximum dry density as determined by the standard Proctor compaction test (ASTM D 698). Structural fill should be placed and compacted in relatively thin (six to eight inch maximum) layers. We recommend that the upper 18 inches of fill beneath the foundations, floor slabs, and pavements be compacted to at least 98 percent. Structural fill placement and compaction should be monitored by our qualified geotechnical personnel on a full time basis to check that the recommended compaction criteria have been achieved.

#### 7.5 Settlement Provisions

We have made calculations to estimate settlement of the boiler/generator building supported by a mat foundation of approximately 199 feet by 124 feet and an average bearing stress of 1500 psf. We also made calculations for smaller mat foundations for the, silo, and cooling tower as well as shallow spread footings. Based on these assumptions, we estimate that the maximum total settlement of the boiler/generator building with the existing soil conditions will be on the order of 1½ inch. In order to reduce the calculated maximum settlement to an acceptable level, we recommend that the site be preloaded. Preloading consists of applying a weight of soil that simulates a portion of the load applied by the structure and allowing it to remain for some period of time before grading the site to the foundation elevation. The weight of the soil will induce settlement to occur before the building is placed. On site soils may be used for the preload and placed in conjunction with grading other areas of the site.

Based on the size of the building loads, and our subsurface data, we recommend a preload of 12 feet of soil across the boiler/generator building site. This loading level should reduce final estimated settlement of the boiler/generator building to a maximum of ½ inch. The soil should be left in place until review of monitored settlement data indicates settlement is essentially complete. We estimate that this will occur within 30 days of completion of the preload, but likely much quicker.

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After stripping of the site, surface densification, and evaluation by our geotechnical engineer as described in preceding paragraphs, structural fill should be placed to bring the fill areas to the foundation bearing elevation. The preload soils should then be placed on the fill and remaining natural topography. The existing soil that is above the final foundation grade may be considered when determining the height of the preload, therefore cut areas should be left in place until after preloading. For example, if the final foundation grade (bottom of the mat foundation) at the east end of the building is in an area requiring 6 feet of cut, then only an additional 6 feet of preload will be required in that area. In these areas, the subgrade should be densified as previously discussed after the pad is cut to grade.

The top elevation of the preload soil should be established a minimum of 12 feet above the final mat foundation grade (bottom of the mat). We recommend that the crest of the preload be marked and controlled by survey techniques. The crest of the preload should extend at least 10 feet beyond the foundation perimeter. Outside slopes should be no steeper than 1.5(H):1(V).

Preload fill can be dumped and spread in as thick of lifts as is practical. It should be compacted enough to permit operation of equipment for placing subsequent lifts. Periodic in-place density testing should be performed to determine the average unit weight of the surcharge material. If the unit weight is less than 100 pounds per cubic foot, some additional compaction may be required. The fill surface should be sealed at the end of each day's grading and when the full thickness has been placed. The final preload surface should be sloped or crowned to facilitate surface drainage. These procedures are important to limit absorption of rainwater because the preload fill will likely be reused as structural fill.

Before preloading the area, settlement plates should be installed at the mat foundation subgrade in three locations along the longitudinal centerline; at the demarcation between cut and fill (point where the natural ground intersects the foundation grade), and at the maximum points of cut and fill, but no closer than 30 feet to the end of the mat. The location of these settlement monitoring devices should be selected by QORE. The settlement plates should be constructed and installed as follows:

- The settlement plates should consist of 3/8-inch thick steel plates that are 2 feet x 2 feet square.
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- A two-inch diameter, threaded steel riser pipe should be welded perpendicular to the plate at the center.
- The pipe should be threaded on each end so that additional sections of pipe can be added using couplings. End caps should be used at the end of the pipe to protect the threads.
- Each section of riser pipe should be painted with fluorescent orange paint for high visibility.
- Four steel braces of 2 inches x 1/4 inch x 2 feet should be welded to the outer edge of the base of the settlement plate and attached to the first section of steel pipe for lateral stability.
- Each settlement plate location should be prepared by leveling the area so that when the plate is placed on the ground the pipe extends vertically and is plumb. This should be checked with a carpenter's level.
- The elevation of the base plate and the top of the pipe cap should be recorded prior to any filling.
- When filling begins and with the placement of subsequent lifts, soil should be carefully placed around the settlement plate locations so that a mound of soil is always 2 to 3 feet higher than the fill mass surrounding it. The horizontal radius of the mound should extend out from the pipe at least 8 feet. Temporary stakes with fluorescent flagging circling the settlement plate location are recommended for high visibility. This will help keep heavy equipment from destroying the settlement plates during the placement of fill.
- As the filling proceeds, additional sections of threaded steel riser pipe should be coupled to the previous section and capped. The elevation of the top of the pipe cap should be recorded immediately before and immediately after the addition of a new section.

A professional surveyor should establish the vertical and horizontal control required to accurately locate the settlement plates (and/or settlement monuments) in the field. Surveying will be required on a daily basis throughout the fill placement and once every two days thereafter to determine the settlement at each location. The elevation data should be provided to QORE within 24 hours of the time of collection. The accuracy of the survey for the settlement plates or monuments should be within +/- 0.01 feet in the vertical direction and +/- 0.5 feet in the horizontal direction.

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The waiting period begins when placement of the preload soil, is complete. We anticipate that the settlement induced by the preload will be substantially complete within approximately 30 days of placement of the preload. Once the required settlement has occurred, the preload and any required cut soils can be removed and the foundation subgrade re-compacted and re-evaluated.

#### 7.6 Foundations

##### 7.6.1 Main Boiler/Generator Building

The exploration findings and our evaluation indicate that the main structure can be supported on a mat foundation after the preloading described above and the subgrade densification have been accomplished. We recommend a maximum average allowable soil bearing pressure across the mat of 1500 psf. Based on the anticipated size of the mat and the results of our subsurface exploration, we recommend a modulus of subgrade reaction ( $k_s$ ) of 26 kips per cubic foot or 15 pounds per cubic inch be used for design of the mat thickness and reinforcement. We recommend that the mat be designed to withstand a potential differential displacement of  $\frac{1}{4}$  inch across one half of its width. The mat should be embedded not less than 3 feet below the lowest exterior grade as a bearing capacity requirement.

##### 7.6.2 Stacks, Silos, Cooling Tower, and Stacker/Reclaimer Building

The exploration findings and our evaluation indicate that the stacks, silo, and stacker/reclaimer building can be supported on mat foundations placed on natural Coastal Plain soils or properly compacted structural fill. We estimate maximum settlements of  $\frac{1}{2}$  and  $\frac{3}{4}$  inch for average bearing pressures of 1000 psf and 1500 psf respectively for mats with a maximum horizontal dimension of 35 feet. The allowable bearing pressure may be increased by  $\frac{1}{3}$  at the edges to resist transient overturning moments. According to information provided, the cooling tower has dimensions of approximately 100 feet by 53 feet and a total load of 411 kips for which we estimate maximum settlement of less than  $\frac{1}{4}$  inch.

Based on the anticipated size of the mat and the results of our subsurface exploration, we recommend a modulus of subgrade reaction ( $k_s$ ) of 26 kips per cubic foot or 15 pounds per cubic inch be used for design of the mat thickness and reinforcement. These mat foundations should be embedded not less than 2 feet below the lowest exterior grade as a bearing capacity requirement.

##### 7.6.3 Other Structures

The subsurface exploration results indicate that other miscellaneous structures can be supported on shallow individual spread footings up to a maximum dimension of 10 feet (except strip footings). The foundations may be designed for a maximum allowable net soil bearing pressure of 2,500 pounds per square foot (psf). The foundations should bear in firm Coastal Plain soil or new structural fill.

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Even though computed footing dimensions may be less; individual footings and strip footings should be at least 24 inches wide. These dimensions will facilitate hand cleaning of the footing subgrade and placement of reinforcing steel. These dimensions also reduce the potential for localized "punching" shear failure. All footing bottoms should bear at least 24 inches below finished floor level or exterior grade; whichever is lower.

#### 7.6.4 All Foundations

All foundation excavations must be evaluated by a geotechnical engineer from our firm prior to concrete placement to observe that the exposed soils are consistent with the boring results and the recommendations already provided. Based on the engineer's observations during the evaluation, we may recommend additional densification of the soils and/or additional undercutting. Additional densification could be accomplished by undercutting the foundation and using the same soil, provided the soil moisture condition is sufficient to achieve adequate compaction for use as compacted structural fill to bring the foundation to grade. The mat foundation subgrades should be densified with a large vibratory roller as previously described. The engineer can also provide geotechnical guidance should any unforeseen foundation problems develop during construction.

We recommend selectively removing any disturbed or water-softened soils from the foundation excavations before placing reinforcing steel. Also, foundation subgrade soils will soften if exposed to weather extremes. If foundation concrete cannot be placed the same day as the excavation is completed and evaluated, the excavations should be covered with polyethylene sheeting or a thin concrete "mud mat". If these protective measures are not implemented, over-excavation of disturbed soil may be necessary. We recommend budgeting for some undercutting and backfill of foundation excavations.

#### 7.7 Floor Slabs Other Than Mat Foundations

Building floor slabs can be supported on natural firm Coastal Plain soil or structural fill after implementation of the previously described site preparation measures. To reduce the possibility of slab cracking due to minor differential settlement, the floor slab should be structurally separate from the foundations, or transitions from foundation-supported building elements to soil supported floors should be reinforced. Since shallow groundwater was not encountered, we believe that an underslab drainage layer is optional unless moisture-sensitive floor coverings will be used. The subgrade should, however, be covered by an effective vapor retarded to reduce the possibility of slab dampness due to soil moisture.

It has been our experience that between completion of grading and slab construction, floor slab subgrades are often disturbed by weather, footing and utility line installation, and other construction activities. For this reason, the subgrade should be evaluated by a geotechnical engineer

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immediately prior to construction of the slab. During this evaluation, the subgrade should be proofrolled with relatively heavy rubber-tired equipment. Areas judged by the geotechnical engineer to perform unacceptably under the moving load should be aerated and compacted, or undercut and replaced with compacted crushed stone or structural fill as identified in the Structural Fill section of this report.

7.8 Retaining Walls

We understand that there are no major retaining walls planned for this project. For walls up to six feet high which act as retaining walls, which are laterally restrained and not free to deflect or rotate, we recommend that they be designed using the "at-rest" earth pressure condition. Where retaining walls are free to deflect or rotate, they may be designed for the "active" earth pressure condition.

Soils behind the retaining walls are assumed to exert a triangular stress distribution which can be modeled in terms of an "equivalent fluid" for both the active and at-rest cases. If a uniform area surcharge is applied behind the wall, a portion of the surcharge is transferred to the wall in the form of a uniform or rectangular lateral stress distribution. The magnitude of the lateral stress transferred to the wall is a function of the soil's strength and the permissible degree of deflection or rotation. It is computed by multiplying the soil's "earth pressure coefficient" by the magnitude of the surcharge.

For point loads (such as a truck) within a horizontal distance to the wall less than the wall's height, the following equation may be used:

$$\hat{\sigma}_{sh} = 0.48Qx^2z/R^5$$

Where  $R = (x^2 + y^2 + z^2)^{1/2}$

$\hat{\sigma}_{sh}$  = the horizontal stress increase from surcharge load Q at the surface, at some distance x from the wall.

z = the depth below the top of the wall to the point to where the stress is applied.

y = the length along the wall beyond the centerline of load application to where the stress is being applied.

The following table contains values of earth pressure coefficients and equivalent fluid unit weights for both the active and at-rest earth pressure conditions for horizontal fill behind the walls.

<u>Earth Pressure Condition</u>	<u>Earth Pressure Coefficient</u>	<u>Recommended Equivalent Fluid Unit Weight, pcf</u>
Active, Horizontal Backfill	0.33	40
At-Rest, Horizontal Backfill	0.50	60

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Passive earth pressure of soil adjacent to the foundation as well as soil friction at the foundation base may be used to resist sliding. The ultimate friction coefficient between the concrete foundation and soil can be assumed to be 0.30. For computations, the ultimate passive soil resistance may be assumed to act as a fluid with an equivalent unit weight of 345 pcf above the water table.

In computing soil friction at the foundation base, compacted soil placed above the foundation can be assumed to have a unit weight of 115 pounds per cubic foot. We recommend that a safety factor of 2 or more be used when computing restraining forces.

The recommended earth pressure coefficients assume the ground surfaces on both sides of the walls are level. The recommended equivalent fluid pressures also assume that wall backfill will be compacted structurally as previously discussed, that constantly functioning drainage systems are installed between walls and soil backfill to prevent the build-up of hydrostatic pressures.

Wall drainage systems should consist of a filtered granular backfill (No. 57 size crushed stone) or a manufactured material such as Enkadrain or Miradrain. The drainage media should extend to within 2 feet of the ground surface. Compacted structural fill should be placed over the drainage media to prevent direct surface water inflow. In paved areas, the media may extend to the base material. The drainage media should be connected to a positive drainage system, preferably gravity. If crushed stone drainage media are used, we recommend that it be separated from the surrounding soil by a non-woven geotextile filter cloth such as Mirafi 140NS.

The previously recommended soil parameters are "average" values based on our experience. Triaxial shear tests and standard Proctor compaction tests of soils in this geologic region indicate that there could be a potential scatter of  $\pm 30$  percent in soil parameters. Both remolded triaxial shear tests and standard Proctor compaction tests on retaining wall backfill are necessary to obtain more precise design parameters. This testing was not included in our present scope of work. If authorized, we will perform laboratory tests to obtain site-specific design soil parameters.

Existing site soils may be used as backfill behind the retaining walls. We recommend that these materials be compacted to at least 95 percent of their standard Proctor maximum dry density. Either light, hand-operated compaction equipment must be used within 4 feet of walls to reduce the risk of over-stressing the walls, or the walls must be designed to resist the stresses imposed by large compaction equipment.

#### 7.9 Slopes

Generally, permanent cut and fill slopes should be no steeper than 2H:1V and temporary slopes no steeper than 1½H:1V. These slope recommendations are based on our previous experience with similar conditions since no detailed slope stability analysis was performed to justify steeper slopes.

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We recommend a building setback of at least 10 feet from the tops of all slopes and a setback of at least 3 feet for parking area curbs. Drop inlets or storm sewers should not be installed at the crests of slopes because leakage can result in maintenance problems or possible slope failure. Crest areas should be sloped to prevent surface runoff from flowing over the slope faces.

It is difficult to construct fill on the specified slopes without leaving a loose, poorly compacted zone on the slope face. For this reason, we recommend that the fill slopes be slightly over-built, then cut back to firm, well compacted soils prior to applying a vegetative cover. If the slopes cannot be slightly over-built and cut back, we recommend that finished soil slopes be compacted to reduce, as much as practical, the thickness of this soft surficial veneer. The compaction may be done by making several coverages from top to bottom of the slopes with a track-mounted bulldozer or front-end loader.

#### 7.10 Pavements

We have calculated flexible pavement section thicknesses for the site based on the laboratory California Bearing Ratio (CBR) value of 4.4. Prior to paving, we recommend proofrolling the pavement subgrade in the presence of an engineer from our firm. Some additional undercutting and/or compaction of the subgrade soils may be required. Based on information provided, we used a design frequency of 100 semi tractor trailers per day for the heavy duty section. These traffic loading and frequency distributions were used to develop recommendations for a 20-year design period using design procedures based on AASHTO guidelines. The design period is considered the time interval over which the pavement, with proper maintenance, will not require major repairs such as an overlay. A continuing regular maintenance program should be implemented to maintain a satisfactory serviceability level over the design period. The maintenance program should include sealing cracks and repairing minor deficiencies before they become major problems.

The recommended pavement sections are provided in the table below. The heavy duty section should be used where any trucks may operate. The normal duty section should be used where only automobiles and occasional light truck traffic may operate.

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FLEXIBLE PAVEMENT RECOMMENDATIONS

Pavement Component	Normal Duty Section	Heavy Duty Section
Subgrade compacted to 98% standard Proctor density	18"	18"
Graded Aggregate Base compacted to 98% standard Proctor density	6"	8"
Asphaltic Concrete Binder Course	NA	6"
Asphaltic Concrete Wearing Course	2"	2"

The pavement section designs presented here are based upon the assumed traffic loading. Some damage may occur in localized areas during periods of abnormally heavy traffic loads, such as from repeated passage of construction equipment, heavily loaded delivery, haul or concrete trucks, during construction.

We recommend a frequency of at least one density test for every 3,000 square feet of base course. Asphalt placement should be monitored full-time and we recommend a frequency of at least one density test for every 3,000 square feet of asphaltic concrete pavement. Asphalt samples should be obtained periodically and tested for asphalt cement content, aggregate gradation, and Marshall density.

Some damage may occur in localized areas during periods of abnormally heavy traffic loads, such as from repeated passage of construction equipment (heavily loaded delivery, haul, or concrete trucks).

We recommend a frequency of at least one density test for every 3,000 square feet of base. We recommend a frequency of cutting at least one core for every 3,000 square feet of asphaltic concrete pavement for thickness and apparent density verification.

**8.0 SEISMIC SITE CLASSIFICATION**

The Site Specific Seismic Assessment is included in the Appendix.

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**9.0 FOLLOW-UP SERVICES**

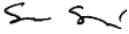
Our services should not end with the submission of this geotechnical report. QORE should be kept involved throughout the design and construction process to maintain continuity and to determine if our recommendations are properly interpreted and implemented. To achieve this, we should review project plans and specifications with the designers to see that our recommendations are fully incorporated and have not been misinterpreted.

QORE's familiarity with the site and with the foundation recommendations makes us a valuable part of your construction quality assurance team. QORE recommends that we be retained by the owner to observe earthwork and foundation construction. Our personnel are uniquely qualified to recognize unanticipated ground conditions and can offer responsive remedial recommendations should these unanticipated conditions occur.

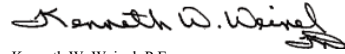
QORE appreciates the opportunity to be of service to you in this phase of the project. We are available to provide consulting services and quality control testing during the construction phase. Please call us if you have any questions concerning this report or if we may be of further service.

Respectfully submitted,

QORE, Inc.



Simone Silvestri  
Staff Engineer



Kenneth W. Weinel, P.E.  
Senior Engineer



Perry E. Dukes, P.E.  
Geotechnical Engineer  
SC 20375



Robert A. Williamson  
Branch Manager

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APPENDIX B

A total of 2 pages were omitted and filed separately with the Securities and Exchange Commission pursuant to a request for confidential treatment.

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APPENDIX C

ECM 1 Equipment List for Biomass Cogeneration Facility

Equipment Description	ESI Equipment #	P&ID	Company	Misc. Notes
Acid Regen Skid	520-522-600-001	D27		
Acid Storage Tank	520-522-300-001	D27		
Air Compressor #1	530-533-100-001	D31		
Air Compressor #2	530-533-100-002	D31		
Air Dryer Skid #1	530-533-500-001	D31		
Air Dryer Skid #2	530-533-500-002	D31		
Air Heater #1 Expansion Joint	610-616-200-004	D07		
Air Heater #2 Expansion Joint	610-616-200-008	D08		
Air Receiver	530-533-400-001	D31		
Amine Chemical Skid #1	510-515-200-002	D22		3 motors
Amine Chemical Skid #2	510-515-200-003	D22		2 motors
Antiscalant Pump	520-522-500-002	D26		
Ash Conditioner	460-462-100-001	D13	EPI	
Ash Conditioner Rotary Valve	460-462-101-001	D13	EPI	
Ash Exhauster #1	460-462-101-001	D13	EPI	
Ash Exhauster #1 Filter	460-462-102-001	D13	EPI	
Ash Exhauster #2	460-462-101-002	D13	EPI	
Ash Exhauster #2 Filter	460-462-102-002	D13	EPI	
Ash Silo	460-461-200-001	D13	EPI	
Ash Silo Aeration Blower	470-471-400-001	D13	EPI	
Ash Silo Double Dump Valve	460-461-201-001	D13	EPI	
Ash Silo Emergency Safety Shower	170-176-200-002	D32	EPI	
Ash Silo Truck Scale	430-431-200-003	D13		
Ash Silo VAC Filter	410-414-400-001	D13	EPI	
Ash Silo Vent Filter	410-414-400-002	D13		

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Equipment Description	ESI Equipment #	P&ID	Company	Misc. Notes
Ash Silo Vent Filter Fan	410-414-303-001	D13	EPI	
Baghouse #1	320-322-100-001	D11	EPI	
Baghouse #1 Expansion Joint	610-616-200-011	D11	EPI	
Baghouse #2	320-322-100-002	D12	EPI	
Baghouse #2 Expansion Joint	610-616-200-017	D12	EPI	
BFB Boiler #1	210-211-100-001	D07	EPI	
BFB Boiler #1 Air Heater #1	250-252-200-001	D07	EPI	
BFB Boiler #1 Economizer #1	250-251-100-001	D07	EPI	
BFB Boiler #2	210-211-100-002	D08	EPI	
BFB Boiler #2 Air Heater #2	250-252-200-002	D08	EPI	
BFB Boiler #2 Economizer #2	250-251-100-002	D08	EPI	
Biofuel Disc Screen	440-441-100-001	D03		
Biofuel Hogger	440-442-100-001	D03		
Biofuel Metering Bin #1	410-412-100-001	D05	EPI	(VFDs) 6 motors
Biofuel Metering Bin #2	410-412-100-002	D05	EPI	(VFD's) 6 motors
Biofuel Truck Dump #1	430-431-100-001	D03		
Biofuel Truck Dump #2	430-431-100-002	D03		
Biofuel Truck Dump #3	430-431-100-003	D03		
Biofuel Truck Reclaimer #1	430-433-300-001	D03		
Biofuel Truck Reclaimer #2	430-433-300-002	D03		
Biofuel Truck Reclaimer #3	430-433-300-003	D03		
Biofuel Truck Scale #1	430-431-200-001	D03		
Biofuel Truck Scale #2	430-431-200-002	D03		
Bleach Chemical Pump Skid	510-515-300-001	D22		2 motors
Boiler #1 CBD Sample Cooler	510-518-100-009	D32	EPI	
Boiler #1 Hopper #1	610-611-100-001	D14	EPI	
Boiler #1 Hopper #2	610-611-100-002	D14	EPI	

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Equipment Description	ESI Equipment #	P&ID	Company	Misc. Notes
Boiler #1 Hopper #3	610-611-100-003	D14	EPI	
Boiler #1 Hopper #4	610-611-100-004	D14	EPI	
Boiler #1 SNCR Distribution Module	340-341-400-001	D21	EPI	
Boiler #1 SNCR Metering Module Skid	340-341-401-001	D21	EPI	
Boiler #1 Steam Drum Sample Cooler	510-518-100-002	D32		
Boiler #2 CBD Sample Cooler	510-518-100-010	D32		
Boiler #2 Hopper #1	610-611-100-005	D14	EPI	
Boiler #2 Hopper #2	610-611-100-006	D14	EPI	
Boiler #2 Hopper #3	610-611-100-007	D14	EPI	
Boiler #2 Hopper #4	610-611-100-008	D14	EPI	
Boiler #2 SNCR Distribution Module	340-341-400-002	D21	EPI	
Boiler #2 SNCR Metering Module Skid	340-341-401-002	D21	EPI	
Boiler #2 Steam Drum Sample Cooler	510-518-100-003	D32		
Boiler Drag Chain	430-436-100-001	D05		
Boiler Feed Water Pump #1	540-541-100-001	D18		VFD
Boiler Feed Water Pump #2	540-541-100-002	D18		VFD
Boiler Feed Water Pump #3	540-541-100-003	D18		VFD
Boiler Feedwater Heater	530-534-100-001	D18		
Bottom Blowdown Separator	530-532-100-001	D33		
Brine Tank	520-522-100-001	D24		
C.I.P. Tank	520-521-700-001	D26		
C.I.P. Tank Pump	520-521-701-001	D26		
Carbon Filter #1	510-511-200-001	D25		
Carbon Filter #2	510-511-200-002	D25		
Carbon Filter #3	510-511-200-003	D25		
Caustic Regen Skid	520-522-600-002	D27		
Caustic Storage Tank	520-522-200-001	D27		

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Equipment Description	ESI Equipment #	P&ID	Company	Misc. Notes
Chemical Injection Antiscalant	520-522-400-002	D26		
Chemical Injection PH Adjustment	520-522-400-001	D26		
Circular Stacker Reclaimer	410-412-400-002	D04		3 motors
Condensate Sample Cooler	510-518-100-008	D32		
Continuous Blowdown Flash Tank #1	530-532-200-001	D33		
Continuous Blowdown Flash Tank #2	530-532-200-002	D33		
Control Oil Filter #1	820-823-600-003	D36		
Control Oil Filter #2	820-823-600-004	D36		
Conveyor #1	430-435-100-001	D03		
Conveyor #1 Tramp Metal Electromagnet	430-438-400-001	D03		
Conveyor #2	430-435-100-002	D03		
Conveyor #2 Diverter Gate #1	430-438-200-001	D03		
Conveyor #3	430-435-100-003	D04		
Conveyor #4	430-435-100-004	D04		
Conveyor #5	430-435-100-005	D04		
Conveyor #6	430-435-100-006	D04		
Cooling Tower	820-821-100-001	D20		
Cooling Tower Fan #1	820-821-300-001	D20		VFD
Cooling Tower Fan #1 Expansion Joint	630-636-200-007	D20		
Cooling Tower Fan #2	820-821-300-002	D20		VFD
Cooling Tower Fan #2 Expansion Joint	630-636-200-008	D20		
Cooling Tower Fan #3	820-821-300-003	D20		
Cooling Water Pump #1	540-546-100-001	D20		VFD
Cooling Water Pump #1 Expansion Joint #1	630-636-200-001	D20		
Cooling Water Pump #2	540-546-100-002	D20		VFD
Cooling Water Pump #2 Expansion Joint #1	630-636-200-003	D20		
Cooling Water Pump #3	540-546-100-003	D20		VFD

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Equipment Description	ESI Equipment #	P&ID	Company	Misc. Notes
Cooling Water Pump #3 Expansion Joint #1	630-636-200-005	D20		
Deaerator #1	530-531-200-001	D18		
Deaerator #2	530-531-200-002	D19		
Deaerator Sample Cooler	510-518-100-004	D32		
Electric Heater	340-341-500-001	D21		
Emergency Oil Pump	820-823-100-003	D35		
Exhaust Fan #1	160-161-300-001	D40		
Exhaust Fan #2	160-161-300-002	D40		
Exhaust Fan #3	160-161-300-003	D40		
Exhaust Fan #4	160-161-300-004	D40		
Extraction Vapor Fan	820-823-700-001	D35		
FAB Fan #1 Expansion Joint	610-616-200-001	D07	EPI	
FAB Fan #2 Expansion Joint	610-616-200-005	D08	EPI	
FGR Fan #1	610-244-100-001	D11	EPI	
FGR Fan #1 Damper	610-615-700-001	D11	EPI	
FGR Fan #1 Damper Actuator	610-615-701-001	D11	EPI	
FGR Fan #1 Damper Expansion Joint	610-616-200-016	D11	EPI	
FGR Fan #1 Expansion Joint	610-616-200-002	D07	EPI	
FGR Fan #2	610-244-100-002	D12	EPI	
FGR Fan #2 Damper	610-615-700-002	D12	EPI	
FGR Fan #2 Damper Actuator	610-615-701-002	D12	EPI	
FGR Fan #2 Damper Expansion Joint	610-616-200-022	D12	EPI	
FGR Fan #2 Expansion Joint	610-616-200-006	D08	EPI	
Fluidizing Air Booster Fan #1	310-313-100-001	D07	EPI	
Fluidizing Air Booster Fan #1 Damper	310-313-500-001	D07	EPI	
Fluidizing Air Booster Fan #1 Damper Actuator	310-313-501-001	D07	EPI	

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Equipment Description	ESI Equipment #	P&ID	Company	Misc. Notes
Fluidizing Air Booster Fan #2	310-313-100-002	D08	EPI	
Fluidizing Air Booster Fan #2 Damper	310-313-500-002	D08	EPI	
Fluidizing Air Booster Fan #2 Damper Actuator	310-313-501-002	D08	EPI	
Fuel Oil Pump #1	520-523-400-001	D41		
Fuel Oil Pump #2	520-523-400-002	D41		
Fuel Oil Stainer	620-623-400-001	D41		
Fuel Oil Storage Tank	520-523-100-001	D41		
Generator	810-813-100-001	D36		
Heater	820-823-201-001	D35		
Hotwell Pump #1	540-542-100-001	D34		VFD
Hotwell Pump #2	540-542-100-002	D34		VFD
Hotwell Pump Expansion Joint #1	630-636-200-016	D34		
Hotwell Pump Expansion Joint #2	630-636-200-017	D34		
Hotwell Pump Expansion Joint #3	630-636-200-018	D34		
Hotwell Pump Expansion Joint #4	630-636-200-019	D34		
Hotwell Sump Pump	540-542-100-001	D34		
Hydrazine Chemical Pump Skid	510-515-100-001	D22		3 motors
ID Fan #1	310-311-100-001	D11	EPI	
ID Fan #1 Damper #1	310-311-500-001	D11	EPI	
ID Fan #1 Damper #1 & 2 Actuator	310-311-501-001	D11	EPI	
ID Fan #1 Damper #1 Expansion Joint	610-616-200-013	D11	EPI	
ID Fan #1 Damper #2	310-311-500-002	D11	EPI	
ID Fan #1 Damper #2 Expansion Joint	610-616-200-014	D11	EPI	
ID Fan #1 Damper Expansion Joint	610-616-200-012	D11	EPI	
ID Fan #2	310-311-100-002	D12	EPI	
ID Fan #2 Damper #1	310-311-500-003	D12	EPI	

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Equipment Description	ESI Equipment #	P&ID	Company	Misc. Notes
ID Fan #2 Damper #1 & 2 Actuator	310-311-501-002	D12	EPI	
ID Fan #2 Damper #1 Expansion Joint	610-616-200-019	D12	EPI	
ID Fan #2 Damper #2	310-311-500-004	D12	EPI	
ID Fan #2 Damper #2 Expansion Joint	610-616-200-020	D12	EPI	
ID Fan #2 Damper Expansion Joint	610-616-200-018	D12	EPI	
Injector	340-341-600-005	D21		
Injector	340-341-600-001	D21		
Injector	340-341-600-008	D21		
Injector	340-341-600-007	D21		
Injector	340-341-600-006	D21		
Injector	340-341-600-004	D21		
Injector	340-341-600-002	D21		
Injector	340-341-600-003	D21		
Interstage Storage Tank	520-521-900-001	D26		
Lube / Control Oil Tank	820-823-400-001	D35		
Lube Oil Filter #1	820-823-600-001	D35		
Lube Oil Filter #2	820-823-600-002	D35		
Lube Oil Purifier System	820-823-200-001	D35		
Main Oil Pump	820-823-100-001	D35		
Mist Separator	820-823-800-001	D35		
Mixed Bed System Emergency Safety Shower	170-176-200-003	D32		
Mixed Bed Unit #1	510-513-100-001	D27		
Mixed Bed Unit #2	510-513-100-002	D27		
Multi-media Filter #1	510-511-100-001	D23		
Multi-media Filter #2	510-511-100-002	D23		
Multi-media Filter #3	510-511-100-003	D23		

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Equipment Description	ESI Equipment #	P&ID	Company	Misc. Notes
Neutralization Pump #1	520-521-801-001	D30		
Neutralization Pump #2	520-521-801-002	D30		
Neutralization Tank	520-521-800-001	D30		
Oil Cooler #1	820-823-500-001	D35		
Oil Cooler #2	820-823-500-002	D35		
PFA Fan #1 Expansion Joint	610-616-200-003	D07		
PFA Fan #2 Expansion Joint	610-616-200-007	D08		
PH Adjustment Pump	520-522-500-001	D26		
Phosphate Chemical Pump Skid	510-515-200-001	D22		3 motors
Primary Fluidizing Air Fan #1	310-312-100-001	D07	EPI	
Primary Fluidizing Air Fan #1 Damper	310-312-500-001	D07	EPI	
Primary Fluidizing Air Fan #1 Damper Actuator	310-312-501-001	D07	EPI	
Primary Fluidizing Air Fan #1 SCAH	250-253-100-001	D07	EPI	
Primary Fluidizing Air Fan #1 Silencer	310-312-600-001	D07	EPI	
Primary Fluidizing Air Fan #2	310-312-100-002	D08	EPI	
Primary Fluidizing Air Fan #2 Damper	310-312-500-002	D08	EPI	
Primary Fluidizing Air Fan #2 Damper Actuator	310-312-501-002	D08	EPI	
Primary Fluidizing Air Fan #2 SCAH	250-253-100-002	D08	EPI	
Primary Fluidizing Air Fan #2 Silencer	310-312-600-002	D08	EPI	
Primary Superheater #1	210-211-200-001	D15	EPI	
Primary Superheater #2	210-211-200-002	D16	EPI	
Process Lift Pump #1	530-532-400-001	D33		
Process Lift Pump #2	530-532-400-002	D33		
RO Feed Pump #1	510-511-400-001	D26		
RO Feed Pump #1 Filter	510-511-401-001	D26		
RO Feed Pump #2	510-511-400-002	D26		

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Equipment Description	ESI Equipment #	P&ID	Company	Misc. Notes
RO Feed Pump #2 Filter	510-511-401-002	D26		
RO Forwarding Pump #1	510-511-400-003	D26		
RO Forwarding Pump #2	510-511-400-004	D26		
RO System	510-511-300-001	D26		
Sample Cooler Emergency Safety Shower	170-176-200-001	D32		
Sand Bucket Elevator #1	430-434-100-001	D14		
Sand Bucket Elevator #2	430-434-100-002	D14		
Sand Drag Chain #1	430-436-100-002	D14		
Sand Drag Chain #2	430-436-100-003	D14		
Sand Drag Chain #3	430-436-100-004	D14		
Sand Drag Chain #4	430-436-100-005	D14		
Sand Silo #1	410-411-310-001	D14		
Sand Silo #1 Bin Vent Filter	410-414-300-004	D14		
Sand Silo #1 Screw Conveyor	420-423-100-003	D14		VFD
Sand Silo #1 Vent Filter Fan	410-414-301-001	D14		
Sand Silo #2	410-411-310-002	D14		
Sand Silo #2 Bin Vent Filter	410-414-300-005	D14		
Sand Silo #2 Screw Conveyor	420-423-100-004	D14		VFD
Sand Silo #2 Vent Filter Fan	410-414-301-002	D14		
Secondary Superheater #1	210-211-200-004	D15		
Secondary Superheater #2	210-211-200-003	D16		
Stack #1	610-614-100-001	D11		
Stack #1 Expansion Joint	610-616-200-015	D11	EPI	
Stack #2	610-614-100-002	D12	EPI	
Stack #2 Expansion Joint	610-616-200-021	D12	EPI	
Burner #1 Boiler #1	240-241-200-002	D06	EPI	
Start-up Burner #1 Boiler #2	240-241-200-004	D06	EPI	Not shown on P&ID

*Use or disclosure of data contained on this sheet is subject to the restriction on the first page of this proposal*

Equipment Description	ESI Equipment #	P&ID	Company	Misc. Notes
Burner #2 Boiler #1	240-241-200-003	D06	EPI	
Start-up Burner #2 Boiler #2	240-241-200-005	D06	EPI	Not shown on P&ID
Steam Turbine	810-811-300-001	D36		
Sulphuric Acid Chemical Pump Skid	510-515-300-002	D22		2 motors
Supply Fan #1	160-161-200-001	D40		
Supply Fan #2	160-161-200-002	D40		
Supply Fan #3	160-161-200-003	D40		
Supply Fan #4	160-161-200-004	D40		
Supply Fan #5	160-161-200-005	D40		
Supply Fan #6	160-161-200-006	D40		
Supply Fan #7	160-161-200-007	D40		
Supply Fan #8	160-161-200-008	D40		
Surface Condenser	820-822-100-001	D34		
Surface Condenser Expansion Joint #1	630-636-200-011	D34		
Surface Condenser Expansion Joint #2	630-636-200-012	D34		
Surface Condenser Expansion Joint #3	630-636-200-013	D34		
Surface Condenser Expansion Joint #4	630-636-200-014	D34		
Surface Condenser Expansion Joint #5	630-636-200-015	D34		
TDF Reclaimer	430-433-300-004	D05		
Treated Water Storage Tank	520-521-300-001	D28		
Treated Water Transfer Pump #1	540-544-100-001	D28		
Treated Water Transfer Pump #2	540-544-100-002	D28		
Urea Circulation Module	340-341-301-001	D21	EPI	
Urea Circulation Pump #1	340-341-300-001	D21	EPI	
Urea Circulation Pump #2	340-341-300-002	D21	EPI	
Urea Metering Pump #1	340-341-300-003	D21	EPI	
Urea Metering Pump #2	340-341-300-004	D21	EPI	

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Equipment Description	ESI Equipment #	P&ID	Company	Misc. Notes
Urea Metering Pump #3	340-341-300-005	D21	EPI	
Urea Metering Pump #4	340-341-300-006	D21	EPI	
Urea Storage Tank	340-341-200-001	D21	EPI	
Urea Storage Tank Inlet Expansion Joint	630-636-200-009	D21	EPI	
Urea Storage Tank Outlet Expansion Joint	630-636-200-010	D21	EPI	
Urea Tank / Acid / Bleach Emergency Safety Shower	170-176-200-004	D32	EPI	
Vacuum Pump #1	820-822-201-001	D34		
Vacuum Pump #2	820-822-201-001	D34		
Vibrating Feeder #1	320-321-300-001	D14		2 motors
Vibrating Feeder #2	320-321-300-002	D14		2 motors
Water Booster Pump #1	540-543-100-001	D21		
Water Booster Pump #2	540-543-100-002	D21		
Water Booster Pump #3	540-543-100-003	D21		
Water Booster Pump #4	540-543-100-004	D21		
Water Softener #1	510-512-100-001	D24		
Water Softener #2	510-512-100-002	D24		

*Use or disclosure of data contained on this sheet is subject to the restriction on the first page of this proposal*



ECM 2 Equipment List for Heating Plants for K&L Areas

Equipment Description	Equipment #	P&ID	Company	Misc. Notes
Area 'K' Air Accumulator	530-533-400-002	D05	Hurst Boiler & Welding Co., Inc.	
Area 'K' Air Heater	250-252-200-001	D05	Hurst Boiler & Welding Co., Inc.	
Area 'K' Amine to Steam Line Chemical Pump #2	510-515-300-001	D23		
Area 'K' Air Compressor	530-533-100-001	D05	Existing Air Compressor	
Area 'K' Air Receiver	530-533-400-001	D05	Existing Air Compressor	
Area 'K' BFW Pump #1	540-541-100-001	D11	Hurst Boiler & Welding Co., Inc.	
Area 'K' BFW Pump #2	540-541-100-002	D11	Hurst Boiler & Welding Co., Inc.	
Area 'K' BFW Sample Cooler	510-518-100-003	D19	Process Power & Equipment Sales, Inc.	
Area 'K' Biofuel Metering Bin	440-443-200-001	D03	Hurst Boiler & Welding Co., Inc.	
Area 'K' Blowdown Separator Tank	530-532-100-001	D21	Hurst Boiler & Welding Co., Inc.	
Area 'K' Blowdown Sump Pump #1	540-549-300-001	D21		
Area 'K' Blowdown Sump Pump #2	540-549-300-002	D21		
Area 'K' Brine Tank	510-512-100-003	D19		
Area 'K' Building Exhaust Fan	160-161-300-001	D26		
Area 'K' Building Supply Fan	160-161-200-001	D26		
Area 'K' CBD Sample Cooler	510-518-100-002	D19	Process Power & Equipment Sales, Inc.	
Area 'K' DCS of PLC System (BFW)	720-725-100-002			
Area 'K' DCS or PLC System (Boiler)	720-725-100-001		Hurst Boiler & Welding Co., Inc.	
Area 'K' Deaerator	530-531-100-001	D11	Hurst Boiler & Welding Co., Inc.	
Area 'K' Duplex Water Softener A	510-512-100-001	D19		
Area 'K' Duplex Water Softener B	510-512-100-002	D19		
Area 'K' Electric Heater #1	160-162-500-001	D26		
Area 'K' Electric Heater #2	160-162-500-002	D26		

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Equipment Description	Equipment #	P&ID	Company	Misc. Notes
Area 'K' Electric Heater #3	160-162-500-003	D26		
Area 'K' Feeder Magnet	430-438-400-001	D03		
Area 'K' Fly Ash Multiclone	320-321-100-001	D05	Hurst Boiler & Welding Co., Inc.	
Area 'K' Fly Ash Reinjection Fan	610-244-100-001	D07	Hurst Boiler & Welding Co., Inc.	
Area 'K' Fly Ash Rotary Air Valve #1	320-321-200-001	D07	Hurst Boiler & Welding Co., Inc.	
Area 'K' Fly Ash Rotary Air Valve #2	320-321-200-002	D07	Hurst Boiler & Welding Co., Inc.	
Area 'K' Fuel Oil Back-Up Burner	240-241-200-001	D15	Hurst Boiler & Welding Co., Inc.	
Area 'K' Fuel Oil Pump	240-243-100-002	D15	Hurst Boiler & Welding Co., Inc.	
Area 'K' Fuel Oil Pump #1 (ON HOLD)	HOLD	D13		
Area 'K' Fuel Oil Pump #2 (ON HOLD)	HOLD	D13		
Area 'K' Fuel Oil Storage Tank	520-523-100-001	D13		
Area 'K' Fuel Sizing Screen	440-441-100-001	D03	Hurst Boiler & Welding Co., Inc.	
Area 'K' Hybrid Boiler	210-213-100-001	D05	Hurst Boiler & Welding Co., Inc.	
Area 'K' Hydrazine to DA Chemical Pump #1	510-515-100-001	D23		
Area 'K' ID Fan	310-311-200-001	D05	Hurst Boiler & Welding Co., Inc.	
Area 'K' Inclined Drag Chain Conveyor	430-436-100-001	D03	Hurst Boiler & Welding Co., Inc.	
Area 'K' MCC/PLC Room A.C.	160-162-300-001	D26		
Area 'K' Metering Bin Screw Conveyor #1	430-432-100-001	D03	Hurst Boiler & Welding Co., Inc.	
Area 'K' Metering Bin Screw Conveyor #2	430-432-100-002	D03	Hurst Boiler & Welding Co., Inc.	
Area 'K' Non Return Valve	220-221-100-001	D09	Hurst Boiler & Welding Co., Inc.	
Area 'K' Oil Burner Fan	310-313-100-001	D15	Hurst Boiler & Welding Co., Inc.	
Area 'K' Overfire Air Fan	310-314-100-001	D05	Hurst Boiler & Welding Co., Inc.	
Area 'K' Phosphate to BFW Chemical Pump #3	510-515-200-001	D23		
Area 'K' Pit Sump Pump	540-549-300-005	D03		

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Equipment Description	Equipment #	P&ID	Company	Misc. Notes
Area 'K' Reciprocating Floor Hydraulic System	430-438-700-001	D03	Hurst Boiler & Welding Co., Inc.	
Area 'K' Reciprocating Grate Stoker	230-231-300-001	D07	Hurst Boiler & Welding Co., Inc.	
Area 'K' Reclaim Vibratory Feeder	430-432-200-001	D03	Hurst Boiler & Welding Co., Inc.	
Area 'K' Safety Eyewash & Shower	170-176-200-001	D19		
Area 'K' Sootblower #1	220-223-100-001	D05	Hurst Boiler & Welding Co., Inc.	
Area 'K' Sootblower #2	220-223-100-002	D05	Hurst Boiler & Welding Co., Inc.	
Area 'K' Sootblower #3	220-223-100-003	D05	Hurst Boiler & Welding Co., Inc.	
Area 'K' Sootblower #4	220-223-100-004	D05	Hurst Boiler & Welding Co., Inc.	
Area 'K' Sootblower #5	220-223-100-005	D05	Hurst Boiler & Welding Co., Inc.	
Area 'K' Stack	610-614-100-002	D05	Hurst Boiler & Welding Co., Inc.	
Area 'K' Stainless Steel Lab Sink	170-179-300-001	D19		
Area 'K' Steam Sample Cooler	510-518-100-001	D19	Process Power & Equipment Sales, Inc.	
Area 'K' Truck Reclaimer Reciprocating Floor	430-433-200-001	D03	Hurst Boiler & Welding Co., Inc.	
Area 'K' Truck Unloading Hydraulic System	430-431-100-001	D03	Hurst Boiler & Welding Co., Inc.	
Area 'K' Underfire Air Fan	310-312-100-001	D05	Hurst Boiler & Welding Co., Inc.	
Area 'K' Vacuum Breaker	220-221-200-001	D11D	Hurst Boiler & Welding Co., Inc.	
Area 'L' Air Accumulator	530-533-400-003	D06	Hurst Boiler & Welding Co., Inc.	
Area 'L' Air Compressor	530-533-100-001	D25		
Area 'L' Air Heater	250-252-200-002	D06	Hurst Boiler & Welding Co., Inc.	
Area 'L' Air Receiver	530-533-400-001	D25		
Area 'L' Amine to Steam Line Chemical Pump #2	510-515-300-002	D24		
Area 'L' Ash Removal Drag Chain Conveyor	460-464-600-002	D08	Hurst Boiler & Welding Co., Inc.	
Area 'L' Ash Roll-Off Dumpster	460-461-400-002	D08		

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Equipment Description	Equipment #	P&ID	Company	Misc. Notes
Area 'L' BFW Pump #1	540-541-100-003	D12	Hurst Boiler & Welding Co., Inc.	
Area 'L' BFW Pump #2	540-541-100-004	D12	Hurst Boiler & Welding Co., Inc.	
Area 'L' BFW Sample Cooler	510-518-100-006	D20	Process Power & Equipment Sales, Inc.	
Area 'L' Biofuel Metering Bin	440-443-200-002	D04	Hurst Boiler & Welding Co., Inc.	
Area 'L' Blowdown Separator Tank	530-532-100-002	D22	Hurst Boiler & Welding Co., Inc.	
Area 'L' Blowdown Sump Pump #1	540-549-300-003	D22		
Area 'L' Blowdown Sump Pump #2	540-549-300-004	D22		
Area 'L' Brine Tank	510-512-100-006	D19		
Area 'L' Building Exhaust Fan	160-161-300-002	D27		
Area 'L' Building Supply Fan	160-161-200-002	D27		
Area 'L' CBD Sample Cooler	510-518-100-005	D20	Process Power & Equipment Sales, Inc.	
Area 'L' Coalescing Prefilter	530-533-700-001	D25		
Area 'L' DCS of PLC System (BFW)	720-725-100-004			
Area 'L' DCS or PLC System (Boiler)	720-725-100-003		Hurst Boiler & Welding Co., Inc.	
Area 'L' Deaerator	530-531-100-002	D12	Hurst Boiler & Welding Co., Inc.	
Area 'L' Duplex Water Softener A	510-512-100-004	D20		
Area 'L' Duplex Water Softener B	510-512-100-005	D19		
Area 'L' Electric Heater #1	160-162-500-004	D27		
Area 'L' Electric Heater #2	160-162-500-005	D27		
Area 'L' Electric Heater #3	160-162-500-006	D27		
Area 'L' Feeder Magnet	430-438-400-002	D04		
Area 'L' Fly Ash Multiclone	320-321-100-003	D06	Hurst Boiler & Welding Co., Inc.	
Area 'L' Fly Ash ReInjection Fan	610-244-100-002	D08	Hurst Boiler & Welding Co., Inc.	
Area 'L' Fly Ash Rotary Air Valve #1	320-321-200-004	D08	Hurst Boiler & Welding Co., Inc.	
Area 'L' Fly Ash Rotary Air Valve #2	320-321-200-005	D08	Hurst Boiler & Welding Co., Inc.	

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Equipment Description	Equipment #	P&ID	Company	Misc. Notes
Area 'L' Fuel Oil Back-Up Burner	240-241-200-002	D16	Hurst Boiler & Welding Co., Inc.	
Area 'L' Fuel Oil Pump	240-243-100-001	D16	Hurst Boiler & Welding Co., Inc.	
Area 'L' Fuel Oil Pump #1 (ON HOLD)	HOLD	D14		
Area 'L' Fuel Oil Pump #2 (ON HOLD)	HOLD	D14		
Area 'L' Fuel Oil Storage Tank	520-523-100-001	D14		
Area 'L' Fuel Sizing Screen	440-441-100-002	D04	Hurst Boiler & Welding Co., Inc.	
Area 'L' Hybrid Boiler	210-213-100-002	D06	Hurst Boiler & Welding Co., Inc.	
Area 'L' Hydrazine to DA Chemical Pump #1	510-515-100-002	D24		
Area 'L' ID an	310-311-200-002	D06	Hurst Boiler & Welding Co., Inc.	
Area 'L' Inclined Drag Chain Conveyor	430-436-100-002	D04	Hurst Boiler & Welding Co., Inc.	
Area 'L' MCC/PLC Room A.C.	160-162-300-002	D27		
Area 'L' Metering Bin Screw Conveyor #1	430-432-100-003	D04	Hurst Boiler & Welding Co., Inc.	
Area 'L' Metering Bin Screw Conveyor #2	430-432-100-004	D04	Hurst Boiler & Welding Co., Inc.	
Area 'L' Non Return Valve	220-221-100-002	D-0	Hurst Boiler & Welding Co., Inc.	
Area 'L' Oil Burner Fan	310-313-100-002	D16	Hurst Boiler & Welding Co., Inc.	
Area 'L' Overfire Air Fan	310-314-100-002	D06	Hurst Boiler & Welding Co., Inc.	
Area 'L' Particulate Afterfilter	530-533-700-002	D25		
Area 'L' Phosphate to BFW Chemical Pump #3	510-515-200-002	D24		
Area 'L' Pit Sump Pump	540-549-300-006	D04		
Area 'L' Reciprocating Floor Hydraulic System	430-438-70-002	D04	Hurst Boiler & Welding Co., Inc.	
Area 'L' Reciprocating Grate Stoker	230-231-300-002	D08	Hurst Boiler & Welding Co., Inc.	
Area 'L' Reclaim Vibratory Feeder	430-432-200-001	D04	Hurst Boiler & Welding Co., Inc.	
Area 'L' Refrigerant Air Dryer	530-533-500-001	D25		

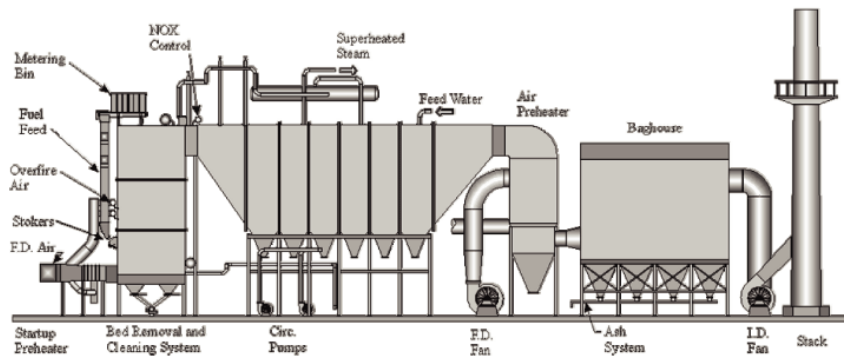
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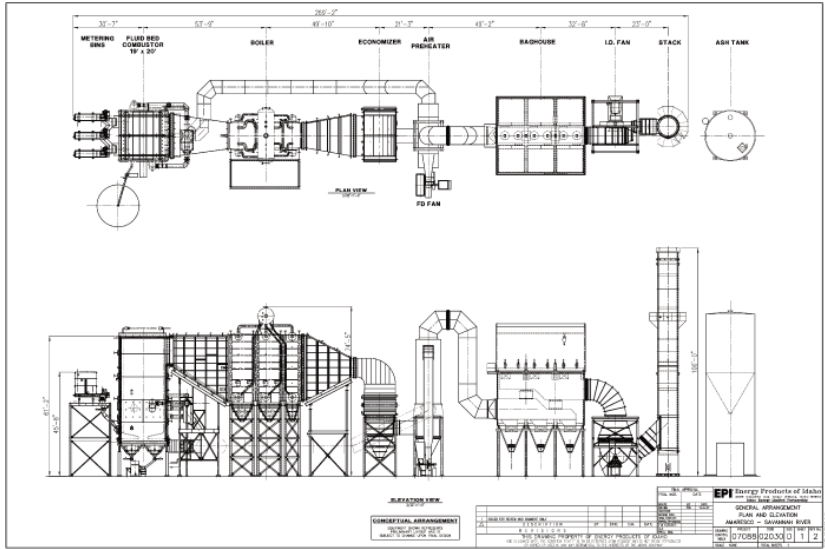
Equipment Description	Equipment #	P&ID	Company	Misc. Notes
Area 'L' Safety Eyewash & Shower	170-176-200-002	D20		
Area 'L' Sootblower #1	220-223-100-006	D06	Hurst Boiler & Welding Co., Inc.	
Area 'L' Sootblower #2	220-223-100-007	D06	Hurst Boiler & Welding Co., Inc.	
Area 'L' Sootblower #3	220-223-100-008	D06	Hurst Boiler & Welding Co., Inc.	
Area 'L' Sootblower #4	220-223-100-009	D05	Hurst Boiler & Welding Co., Inc.	
Area 'L' Sootblower #5	220-223-100-010	D05	Hurst Boiler & Welding Co., Inc.	
Area 'L' Stack	610-614-100-001	D06	Hurst Boiler & Welding Co., Inc.	
Area 'L' Stainless Steel Lab Sink	170-179-300-002	D20		
Area 'L' Steam Sample Cooler	510-518-100-004	D20	Process Power & Equipment Sales, Inc.	
Area 'L' Truck Reclaimer Reciprocating Floor	430-433-200-002	D04	Hurst Boiler & Welding Co., Inc.	
Area 'L' Truck Unloading Hydraulic System	430-431-100-002	D04	Hurst Boiler & Welding Co., Inc.	
Area 'L' Underfire Air Fan	310-312-100-002	D06	Hurst Boiler & Welding Co., Inc.	
Area 'L' Vacuum Breaker	220-221-200-002	D12	Hurst Boiler & Welding Co., Inc.	

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## Typical EPI Energy System





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Station No.	Description % moisture	wood/325	TDF/325
1	<b>Fuel , % Btu (LHV)</b>		
	wood	100.0%	70.0%
	TDF	0.0%	30.0%
	DGS	0.0%	0.0%
	<b>Fuel, TPY</b>		
	wood	184,769	128,575
	TDF	0	13,246
	DGS	0	0
	<b>B.D. Blend Analysis</b>		
	Carbon, %:	50.80	56.08
	Hydrogen, %:	6.00	6.47
	Sulfur, %:	0.08	0.15
	Oxygen, %:	41.43	35.29
	Nitrogen, %:	0.37	0.44
	Chlorine, %:	0.00	0.00
	Ash/Other, %:	1.32	1.38
	As Fired Moisture, %:	50.00	45.43
	As Fired HHV BTU/lb:	4,300	5,338
	As Fired LHV BTU/lb:	3,509	4,545
	Flowrate lb/hr:	42,185	32,379
	H MBtu/hr, LHV:	148.02	147.15
	Ash + Lime Flow, lb/hr:	397	413
	Limestone lb/hr:	105	165
2	<b>FD Fan</b>		
	Ambient Air lb/hr:	175,100	183,000
	Total Air Flow lb/hr:	175,100	183,000
	Temp oF:	80	80
	ACFM:	40,200	42,000
	dPress in WC:	52	52
	Theor Power Hp:	450	470
	Excess Air:	35%	44%
3	<b>Bed</b>		
	Surface area, ft2:	873	873
	Heat trans., MBtu/hr:	29	30
	Bed Dia, ft:	0.00	0
	Bed Width, ft:	20.00	20.00
	Bed Length, ft:	19.10	19.10
	Temp F:	1,514	1,546
4	<b>Vapor Space</b>		
	Temp F:	1,760	1,790
	Surface area, ft2:	650	650
	Heat trans., MBtu/hr:	12	12
	Velocity fps:	9.3	9.2
	Flowrate lb/hr:	217,000	215,100
	ACFM:	213,100	210,400
5	<b>Boiler</b>		
	Gas Flow lb/hr:	217,000	215,100
	ACFM:	213,100	210,400
	Gas H MBtu/hr:	112.08	109.81
	Boiler duty, M Btu/hr:	73.89	73.07
	Steam Temp F:	825	825
	Steam Press (psia):	850	850
	Steam Flow lb/hr:	120,000	120,000
	Ash lb/hr:	100	100
	<b>Consummables</b>		
	Limestone — lb/hr	105	165
	Ammonia-as aqueous, lb/hr	71	317
	Hydrated Lime — lb/hr	0	0
	<b>Air Preheater/ SCAH</b>		
	Gas In Temp, F:	437	441
	Gas out Temp, F:	325	325
	Air Out Temp, F	269	262
	APH Duty., MBtu/hr:	7.00	7.00
	SCAH Duty, M Btu/hr:	0	0
7	<b>Economizer</b>		
	Gas In Temp, F:	685	685
	Gas out Temp, F:	437	441
	H2O in Temp, F:	370	370
	H2O Out Temp, F	487	482
	Heat Trans., MBtu/hr:	15.75	14.99
	Ash lb/hr:	0	0
10	<b>Baghouse</b>		
	flow, lb/hr	217,017	215,106
	ACFM	75,247	73,455
	Temp, F:	325	325
	moisture, wt%:	15.97%	12.68%
	H, MM Btu/hr	15.59	14.91
	Ash lb/hr:	294	306
11	<b>ID Fan</b>		
	ACFM:	75,247	73,455
	Temp, F:	325	325
	SP, in H2O:	19	19
	BHP	341	333
12	<b>Stack</b>		
	Gas Temp F:	334	334
	Gas Flow lb/hr:	217,017	215,106
	ACFM:	76,134	74,321
	Enthalpy MBtu/hr:	16.17	15.46
	Vol (dry)%O2:	5.5%	6.5%
	Wt% H2O:	16.0%	12.7%
	<b>Overall balance</b>		
	Total energy Input, MBtu/hr HHV:	181.4	172.8
	Boiler Duty, MBtu/hr:	128.5	128.5
	Efficiency, %:	70.8	74.3

Rev 2 increase T out back to 325 F

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**Preliminary For information only**

	<u>PROJ. MGR.</u>	<u>DATE</u>	<u>EPI Energy Products of Idaho</u> 4006 Industrial Ave. Coeur d' Alene, Idaho 83814 Idaho Energy Limited Partnership PROCESS FLOW DIAGRAM (Customary U.S. Units) Ameresco Savannah River				
ORIGNTR	BY	DATE	<u>PROJECT</u>	<u>CODE</u>	<u>SHEET</u>	<u>OF</u>	<u>REV</u>
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## Fluidized Bed Combustion



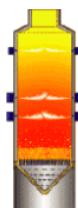
Fluidized bed combustion systems use a heated bed of sand-like material suspended (fluidized) within a rising column of air to burn many types and classes of fuel. This technique results in a vast improvement in combustion efficiency of high moisture content fuels, and is adaptable to a variety of "waste type fuels. The scrubbing action of the bed material on the fuel particle enhances the combustion process by stripping away the carbon dioxide and char layers that normally form around the fuel particle. This allows oxygen to reach the combustible material much more readily and increases the rate and efficiency of the combustion process.



### Bed Recycle System

The key to EPI's dominance of the difficult waste fuel combustion market is our patented bed recycle system. EPI is the only company that offers uniform bed drawdown, integrated air cooling and automatic cleaning and reinjection of the bed material. This innovative feature enables EPI systems to operate on fuels with significant quantities of 4-inch minus noncombustible tramp material (contaminants such as rocks, metal, etc.). In grate style systems, tramp materials and ash slag can cause significant problems requiring a shutdown to correct. In other fluidized bed systems, tramp materials can build to the point that fluidization is no longer possible allowing clinkers to form. In these systems, a shutdown is usually also required to clean out the accumulation.

### Complete and Efficient Combustion.



The turbulence in the combustor vapor space combined with the tumultuous scouring effect and thermal inertia of the bed material provide for complete, controlled and uniform combustion. These factors are key to maximizing the thermal efficiency, minimizing char, and controlling emissions. The high efficiency of a fluid bed combustor makes it particularly well suited to problem fuels with low BTU value and high moisture characteristics. EPI's systems have consistently achieved high combustion efficiencies. In typical units, the carbon burnout percentages within the combustor are well in excess of 99 percent.

### Waste Fuel Diversity

EPI systems have operated on fuels as diverse as agricultural waste, municipal solid waste, wood wastes, industrial and municipal sludges, plastic, tires and coal. Fluidized bed systems are also capable of efficiently combusting fuels of varying consistency. EPI units have demonstrated the ability to handle a variety of wastes within a single combustor. EPI's San Joaquin Valley Energy Project units have logged operating time over 68 varieties of agricultural and urban wood waste. EPI's patented bed cleaning system, which removes large non-combustible material from the bottom of the bed, allows EPI units to burn otherwise problematic fuels with a minimal amount of processing.

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**Low Emissions**

Emissions from a fluidized bed unit are inherently lower than conventional technologies for the following reasons:

- ✦ Low combustion temperatures and low excess air within the bed reduces the formation of certain emissions such as NO<sub>x</sub>.
- ✦ High combustion efficiency results in flue gases that contain low amounts of CO.
- ✦ Emissions such as SO<sub>x</sub> and NO<sub>x</sub> may be abated within the fluidized bed system by injecting limestone into the bed and ammonia into the vapor space.

These features of fluidized bed combustion, combined with EPI's vast experience with a variety of fuels have allowed EPI units to comply with some of the most stringent air quality regulations in the country, including six operating plants in California. EPI units have consistently been accepted as the Best Available Control Technology "BACT" by environmental regulatory agencies.

**Favorable Ash Properties**

The high combustion efficiency of a fluid bed results in a reduced amount of inorganic material as fine ash. The remaining larger material consists mainly of non-combustibles, such as rocks, and wire brought in with the fuel, and coarse sand-like neutral particles. Low combustion temperatures in the fluidized bed minimize the formation of toxic materials that might go into the ash. Ash samples from EPI systems have consistently tested nontoxic, and in many instances the ash is being sold as input for other products such as cement.

**Operating Flexibility**

EPI's fluidized bed systems have demonstrated the ability to operate under a wide range of load conditions. The thermal "flywheel" effect of the bed material allows swings in moisture and heating content of the fuel to be absorbed by the system without negative impact. Conversely, the low fuel inventory present in the unit makes it very responsive to varying loads. The fluidized bed also maintains efficiency during system turn-down. The operating flexibility demonstrated by existing EPI units has proven quite valuable for some of EPI's customers allowing them to take advantage of utility incentive programs for generation that follows electric demand.

**Low Operating Costs**

The lack of moving parts in a fluid bed reduces maintenance costs and down time. EPI units have achieved operating availabilities above 98% and have kept operating costs relatively low given the difficult fuels they are burning.

**Environmentally Sound Energy Production from Waste**

Fluidized bed combustion is an environmentally favorable, proven technology for disposal of solid wastes and generation of energy. The combination of EPI's vast experience in developing solutions for a wide variety of applications, with the favorable characteristics of

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fluidized bed combustion make EPI the leader in providing environmentally sound waste disposal solutions.

**Energy Products of Idaho**

4006 Industrial Ave

Coeur d'Alene, Idaho USA 83815-8928

Phone (208) 765-1611 ~ Fax (208) 765-0503

Email: [epi2@energyproducts.com](mailto:epi2@energyproducts.com)

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Last modified: April 3, 2008

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#### **Benefits of Fluidized Bed Combustion**

Fluidized bed combustion systems use a heated bed of sand-like material suspended (fluidized) within a rising column of air to burn many types and classes of fuel. This technique results in a vast improvement in combustion efficiency of high moisture content fuels, and is adaptable to a variety of "waste" type fuels. The scrubbing action of the bed material on the fuel particle enhances the combustion process by stripping away the carbon dioxide and char layers that normally form around the fuel particle. This allows oxygen to reach the combustible material much more readily and increases the rate and efficiency of the combustion process.

#### **Bed Recycle System**

The key to EPI's dominance of the difficult waste fuel combustion market is our patented bed recycle system. EPI is the only company that offers uniform bed drawdown, integrated air cooling and automatic cleaning and reinjection of the bed material. This innovative feature enables EPI systems to operate on fuels with significant quantities of 4-inch minus noncombustible tramp material (contaminants such as rocks, metal etc.). In grate style systems, tramp material and ash slag can cause significant problems requiring a shutdown to correct. In other fluidized bed systems, tramp material can build to the point that fluidization is no longer possible allowing clinkers to form. In these systems, a shutdown is usually also required to clean out the accumulation.

#### **Complete and Efficient Combustion**

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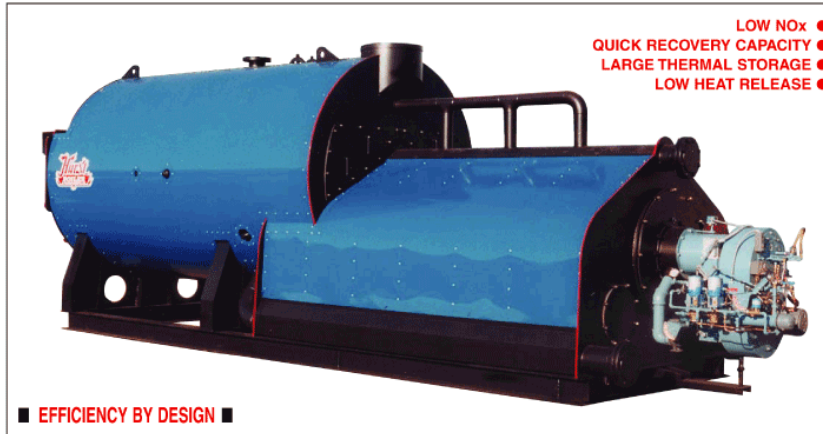


## TWO PASS HYBRID PACKAGED BOILERS

■ HURST "PERFORMANCE" BOILERS ■

HD SERIES

Fire Tube / Water Tube Hybrid Design



Fires on any liquid or gaseous fuel. Sizes from 100 to 2500 horsepower with pressures to 450 PSI.

The Only Boiler with the Recovery of a Watertube and the Thermal Reserve of a Firetube...

This model features an external furnace, which opens a whole new range for packaged boilers. Inherently low heat release enhances firing performance to reach outputs and emissions requirements not possible with other shell type boilers.

Designed, constructed and stamped in accordance with the requirements of the ASME Boiler Codes.



Inspected and registered with the National Board of Boiler & Pressure Vessel Inspectors.





- Efficient 2-Pass Design
- Flexibility- Gas, Oil, Heavy Oil and Combination Gas/Oil
- ASME Code Constructed & Stamped for 15 PSI Steam/30 Water
- Registered with the National Board of Boiler Inspectors
- Competitively Priced, Easily maintained, Designed for Efficiency
- Large Furnace Volume for Ultimate Combustion Efficiency
- Unified Refractory Base Floor
- Steel Skids / Lifting Eyes
- Easy Access to fireside Surfaces
- Low Heat Release — 5 Sq. Ft./HP.
- Ample Waterside Cleanout Openings
- Fully Automatic Operations
- U.L. Listed, Forced Draft Burners
- Hybrid (Water/Fire Tube) Design
- U.L. Listed Controls & Trim



#### **STANDARD FEATURES**

**Durability** - Built in accordance with the ASME Code, the wet back design has proven to give much longer useful life cycles than dry back boilers.

**Quality** - Each unit is tested and inspected and registered with the National Board of Boiler and Pressure Vessel Inspectors.

**Design** - Hurst Boiler utilizes state of the art computer design techniques in every boiler. This accounts for accurate calculations of construction materials and optimum utilization of the boiler's performance criteria.

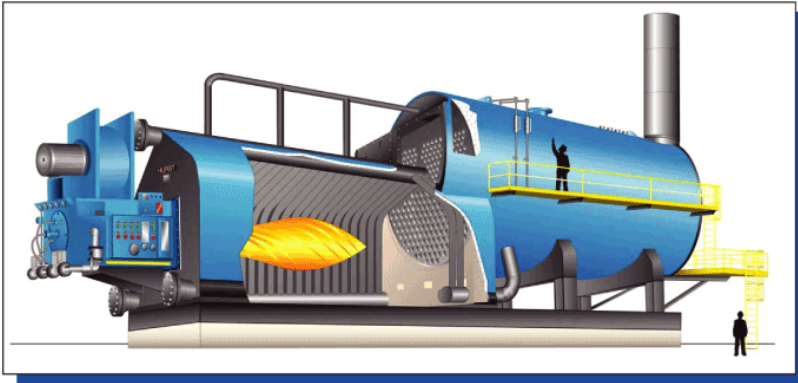
**Combustion** - Hurst uses name brand burner components with proven reliability. Every unit is boiler/burner compatible and tested at the factory prior to shipment.

#### **Standard Steam Trim**

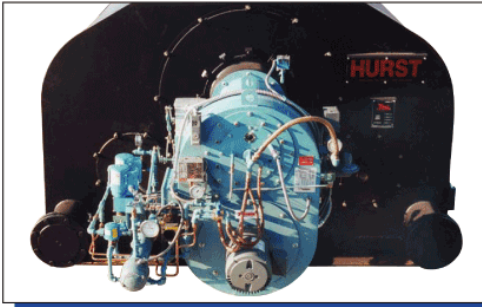
- Operating & limit pressure control
- Modulating pressure control (when appl.)
- Water column with gauge glass probe type combination low water cut-off & pump control (not shown)
- Probe type auxiliary low water cut-off with manual reset
- Water column drain valve
- Safety relief valve(s) per ASME Code
- Steam Gauge

#### **Standard Water Trim**

- Operating & limit temperature control
  - Modulating temperature control (when appl.)
  - Low water cut-off control with manual reset
  - Combination pressure, temperature gauge
  - Hot water return baffle for shock resistance
  - Safety relief valve(s) per ASME Code
  - Stack thermometer
-



The Hurst HD Hybrid Series combines the benefits of a watertube furnace along with a multi-pass firetube boiler vessel. The resulting efficiency of the Hybrid design is higher than conventional packaged boilers. This efficiency is achieved by superior utilization of the fuel's radiant heat within the water-cooled furnace as well as the Hybrid's balanced multi-pass firetube vessel resulting in low stack temperatures.



The HD Series will efficiently burn any liquid or gaseous fuel and is available from 100 to 2500 horsepower with pressures of 160-PSI hot water or 450-PSI steam.

UL Approved Forced Draft Burners 

The HD Series will efficiently burn any liquid or gaseous fuel and is available from 100 to 2500 horsepower with pressures of 160-PSI hot water or 450-PSI steam.

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### *Solid Fuel Fired Steam Boilers*



Hurst Hybrid Series involves years of engineering and construction of the wood, coal, and solid waste fired fuel systems.

The Hybrid design combines the benefits of a watertube furnace along with a multipass firetube boiler vessel. The resulting efficiency of the Hybrid design is higher than conventional solid fuel boilers. This efficiency is achieved by superior utilization of the fuels radiant heat within the water cooled furnace as well as the Hybrid's balanced multi-pass firetube vessel resulting in low stack temperatures. The Hybrid is adaptable to dry wood, wet wood, coal and an array of other waste fuels. Furthermore, the watertube furnace allows for efficient firing of auxiliary fuels (gas, fuel oil, and waste oil).



### *FEEDWATER DEAERATORS*

#### **WHY DEAERATE?**

The use of deaerators has long been used in power plants and water tube type boilers, primarily because they remove undissolved oxygen and raise the temperature of the feedwater. These advantages are important today for firetube boilers as well, due to higher capital investments.

Operating costs can be reduced by recovering flash steam when returned by high temperature condensate. This feature also raises the feedwater temperature, thus requiring less boiler fuel to convert the feedwater to useable steam.

Boiler tubes, condensate lines, and process piping have a much longer useful life by eliminating the pitting action of untreated water. This advantage alone justifies the cost of an "OXY-MISER" deaerator.



[hurstboiler.com](http://hurstboiler.com)



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Represented by:

Revised 07/03

**Hurst Boiler & Welding Co., Inc.**

Post Office Box 529  
Coolidge, Georgia 31738

Phone: 229-346-3545

Fax: 229-346-3874

**PROPOSAL NUMBER: 121807-300/150  
300 HORSEPOWER / 150 PSIG DESIGN  
WOOD WASTE FIRED STEAM BOILER  
(10,350 POUNDS OF STEAM PER HOUR)**

**FOR**

**ESI, INC. OF TENNESSEE  
1250 ROBERTS BOULEVARD  
KENNESAW, GEORGIA 30144**

**ATTENTION: MR. JIM PITMAN, P.E.  
JOB SITE: SAVANNAH RIVER**

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**GENERAL SPECIFICATIONS**  
**300 HORSEPOWER BOILER / 150 PSIG DESIGN**

- |    |  |  |
|----|--|--|
| 1. | Scope of Equipment:                            | 300 Horsepower / 150 psig<br>Design Wet Wood Fired<br>Boiler to include:<br><br>- Deaerator<br>- Oil back-up burner<br>- Combustion air pre-heater<br>- Stack, 100' free standing<br>- Reciprocating floor, 6 section<br>- Cross-over conveyor with screen |
| 2. | Fuel Requirements:                             | 1 1/2" x 2 1/2" x 5/8" or less in size and 50% by weight or less in moisture content.  |
| 3. | Approximate Fuel Usage at Maximum Firing Rate: | 3200 lbs. per hour based on 50% moisture content.  |
| 4. | Boiler Rating:                                 | 300 Boiler horsepower (10,350 lbs. of steam per hour from and at 212° f)   |
| 5. | Boiler Pressure:                               | 150 psig design.<br>Maximum recommended operating pressure is 135 psig   |
| 6. | Boiler Design:                                 | High Pressure Hybrid<br>(Fire Tube/Water Tube Design)<br>Built in accordance with the<br>ASME Code   |

**1.1 ENGINEERING SERVICES**

Hurst Boiler & Welding Co., Inc. will supply all required design and specifications for the proposed equipment.

Engineering will include:

1. Boiler room/storage layout drawings for locating new equipment.
2. Foundation details for proposed waste fired boiler based on 2000 PSF soil conditions.
3. Assistance in completing and filing of boiler's environmental emission permit.
4. All required installation prints and specifications required to install the proposed equipment.
5. Two (2) sets of operating and maintenance manuals.

**1.2 SYSTEM START-UP**

When installation is complete, Hurst Boiler & Welding Co., Inc. will start the equipment and train personnel on the proper maintenance and operation of the system to include:

1. Check out of all system components to assure proper rotation, alignment, sequencing, function, etc.
2. Start-up of the system to test operation of controls, conveyors and other related equipment.
3. Adjustment of controls to provide efficient operation of all boiler functions
4. Start-up of the equipment with mill personnel to familiarize them with proper operation and maintenance procedure.
5. Hurst Boiler & Welding Co., Inc.'s personnel will be on site until all equipment is started-up and operating to the satisfaction of the Purchaser. Start-up services are a part of this proposal, and no additional charges will be billed to the purchaser for these services.
6. Hurst Boiler & Welding Co., Inc. start-up personnel will be on site for a minimum of ten days.

## **2.1 WOOD FUEL GASIFIER**

Substoichiometric wood fuel gasifier to include:

1. Metering bin / retort type underfed stoker complete with AC-type variable speed controller
2. Cast-iron grates with angle and tee bars
3. Substoichiometric combustion air system to include:
  - Dual belt driven blowers with VFD, TEFC motor and OSHA belt guard
  - Zoned undergrate plenum.
4. Gasification chamber casing to include:
  - Furnace front of 1/2" steel plate
  - Furnace sides and rear of 1/4" steel plate reinforced with angle and channel irons
5. Chamber lining of:
  - 9" refractory wall, and radiant arch with a service temperature of: 3000F
  - 2" "M" block, service temperature of: 1900F
  - 2" mineral wool, service temperature: 1200F
6. Two air cooled observation ports with heat shields and tinted site glasses
7. Two cast iron overfire access doors with heat shield and lockable handles
8. Undergrate access doors
9. Skids and support assembly.



## **2.2 WOOD GAS BURNER**

For the combustion of fuel gas Hurst Boiler & Welding Co., Inc. will furnish:

1. Combustion air system to include:
  - Belt driven blower with VFD, TEFC motor and OSHA belt guard
  - Prefabricated combustion air duct work for interconnection of blower to zoned air port plenum.
2. Combustion chamber casing complete with the following:
  - Casing of 1/4" steel plate with inlet and outlet flanges
  - Angle and channel iron reinforcement
3. Chamber lining of:
  - 9" refractory wall, and radiant arch with a service temperature: 3000F
  - 2" "M" block, service temperature: 1900F
  - 2" mineral, wool, service temperature: 1200F.

In addition, one #2 oil fired burner, rated same as boiler, will be provided.

### **2.3 PRESSURE VESSEL**

Hurst Hybrid boiler with extended waterwall radiant section designed for efficient heat recovery from solid fuel combustion. Unit built in strict accordance with the ASME Code and stamped, and rated at no less than 6.5 square feet of heating surface per boiler horsepower.

1. The generator (firetube) section includes:
  - Front and rear smoke boxes complete with twin hinged air tight doors. Doors internally insulated and incorporate abrasion resistant shield on the interior of the doors.
  - Steam, water inspection and blowdown openings.
  - Lugs for connecting support structure.
2. The radiant (watertube) section includes:
  - $\frac{1}{2}$ " front plate and rear plate.
  - Support assembly for attaching to combustion chamber casing.
  - Blowdown openings on each lower drum.
  - Flanged inspection openings on the end of each drum.
3. Both the generator and radiant sections of the Hybrid boiler are insulated with 2" of high density fiberglass and clad with 22 gauge "Paint-Grip" zinc coated steel jacket material and galvanized screws for attachment and joining
4. Pressure vessel manufactured by Hurst Boiler & Welding Co., Inc. and guaranteed to be free from defects in materials and workmanship for a period of one year.

#### **2.4 BOILER TRIM AND LIMIT CONTROLS**

1. Relief valves per ASME Code
2. Boiler bottom blowdown valves
  - Two (2) in generator section, quick-opening
  - Two (2) in radiant section, quick-opening
  - One (1) slow opening
3. Surface blowdown valves consisting of one (1) needle and one (1) check
4. Main steam valving to include: angle non-return, pp spool and gate per ASME.
5. Steam line necessary for the installation of the steam flow transmitter, approximately 20'
6. Chemical feed valves consisting of one (1) gate and two (2) check valves
7. Steam pressure gauge with pigtail and gauge cock.
8. Boiler feedwater valving to include: globe valve, two (2) check valves and stop valve.
9. Low water limits:
  - Primary: Probe type with tricocks, gauge glass and pump controller
  - Secondary: Probe type. (Probe type high water cut-off)
10. Pressure limits include:
  - Opening limit
  - High pressure limit
  - Low pressure limit
  - 4-20 milliamp pressure transmitter for fuel feed /combination air modulation.

11. Blowdown separator built in accordance with the ASME Code to include:
  - Blowdown inlet (screwed)
  - Drain (flanged)
  - Vent (flanged)
  - Exhaust stack (flanged) to vent above building roof line.
12. Access platforms, ladders and one set of stairs will be provided to access:
  - Rear smoke box
  - Water column
  - Feedwater valve train
  - Main steam valving
  - Induced draft fan
13. Soot blowers, fixed zone, air with necessary piping, header and valving.
14. Necessary pipe and fittings for the installation of the above trim.
15. Steam flow meter with totalizer and transmitter.

**2.5 POLLUTION CONTROL AND INDUCED DRAFT EQUIPMENT**

**HURST BOILER & WELDING CO., INC. GUARANTEES THIS PLANT NOT TO EXCEED THE EMISSION RATE OF .3#/ MILLION BTU INPUT OR MEET STATE EPA STANDARDS, WHICHEVER IS GREATER.**

Pollution control and induced draft system provided for each boiler consisting of:

1. Flanged breeching, prefabricated of angle iron reinforced 3/16" steel plate for routing flue gas from boiler to multi-clone
2. Combustion air preheater, vertical configuration, oversized to include
  - Collection hopper with flanged inlet, outlet and access door
  - Rotary airlock ash discharge valve with drive
3. Dry mechanical multiple cyclone flyash arrestor with 9" diameter clones to include:
  - Collection hopper with flanged inlet, outlet and access door
  - Rotary airlock ash discharge valve with drive
4. Flyash conveyor to transfer flyash to boiler room exterior
5. Flanged transition of angle iron reinforced 3/16" steel plate for routing flue gas from multicyclone to induced draft fan
6. Centrifugal type induced draft fan designed for combustion air service complete with:
  - Pillow block roller bearings (located outside hot gas stream)
  - Heavy duty shaft with heat slinger
  - Variable frequency drive
  - TEFC motor, belt drive and OSHA belt guard
7. Ground mounted induced draft fan and 100' self-supporting stack with EPA stack test ports.

## **2.6 DEAERATING BOILER FEEDWATER SYSTEM**

Deaerating boiler feedwater system, 22mpph to include:

1. 12' support structure
2. Factory insulation and jacketing
3. Boiler feedwater pumps, two each for proposed boiler to include:
  - Electric motors
  - Variable frequency drive
  - Suction manifold
  - Pump suction piping, isolation valving and strainers
  - Pump discharge manifold with isolation valving and pressure gauges
4. Water gauge glass set, pressure gauge and thermometer
5. Over flow trap
6. McDonnell Miller high and low water switches
7. ASME safety relief valves
8. Vent and vacuum breaker
9. Steam pressure reducing valve, Fisher pneumatic globe valve
10. Freshwater make-up valve, Fisher pneumatic globe valve
11. Tank drain valve

**2.7 WOOD FUEL RECEIVING AND SYSTEM**

Hurst Boiler & Welding Co., Inc. will provide one fuel storage facility to include:

1. Six section reciprocating floor to include:
  - Hydraulic cylinders
  - Hoses and fittings
2. Concrete imbedment for mounting hydraulic cylinders
3. Hydraulic power unit with reservoir and valve block
4. Vibrating cross-over conveyor with fuel screening section
5. Incline chain conveyor
  - WD110 chain
  - UHMW ware plate
  - Shafts, sprockets, bearings and drive

## **2.8 ELECTRICAL CONTROL SYSTEM**

An integrated control system housed in a free standing, pre wired panel for automatic operation will be provided for each boiler to include:

1. Control Panel
  - NEMA 12 control enclosure
  - Enclosure prefabricated of 10 gauge plate
  - Primed and painted interior and exterior.
2. Main disconnect
3. Control voltage transformer
4. Cooling as required, air to air exchanger
5. Allen Bradley MicroLogix / 1756 System processor
6. Power supply Rack Communication modules
7. Input and output modules
8. Allen Bradley RS View runtime package to represent system required parameters and variables running on a desktop computer. Operator interface is through this interface.
9. Allen Bradley PowerFlex 70 and 700 480v variable frequency drives
10. Input line reactors
11. DeviceNet communication to processor
12. Variable frequency drives will be provided for:
  - Metering bin drive
  - Underfire combustion air fan
  - Overfire combustion air fan
  - Induced draft fan
13. Local motor disconnects are provided at each motor



14. Control enclosure is completely wired, shop tested and Includes terminal strip terminations, ready for connection to field devices

15. Control system incorporates equipment mounted, 4-20 milliamp transmitters for controlling/monitoring:

- Steam flow
- Steam pressure
- Boiler water level
- Furnace temperature

16. Limits and Alarms:

• Primary boiler low water	Limit/Alarm	Automatic Reset
• Secondary boiler low water	Limit/Alarm	Manual Reset
• High water cut-off	Limit/Alarm	Automatic Reset
• Low boiler steam pressure	Alarm	Automatic Reset
• High boiler steam pressure	Limit/Alarm	Automatic Reset
• Low draft (Furnace)	Limit/Alarm	Automatic Reset
• High temperature (Furnace)	Limit/Alarm	Automatic Reset

17. A separate feedwater pump panel will be provided for the proposed feedwater pumps to include motor controls

**3.1 INSTALLATION SERVICES**

To be installed by others than Hurst Boiler

15 of 21  
**ESI, INCORPORATED.**

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SAVANNAH RIVER PROJECT  
CONDENSING / EXTRACTION  
TURBINE GENERATOR SET  
ADVANCED POWER PRODUCTS  
PROJECT 10167 Rev 2  
March 26, 2008

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## 1. Turbine general description

The machine is an extraction-condensing multistage steam turbine, model **TMCE 25000A** manufactured by TGM Turbines. The machine is provided with a horizontally split casing. The top portion has a built-in block with **independent steam control valves**, directly actuated by **independent hydraulic servo-motors**, which provides excellent speed stability and part load performance.

There are two emergency trip valves, one installed at upper casing steam block and the other is supplied loose to be installed in the client's extraction steam line. Both are hydraulically actuated.

The rotor consists of 01 control wheel and several stages which designed to meet the stated performance. **Wheels and shaft are made of a single and integral forged steel piece**. The shaft rests on **tilting pads type radial and axial** bearings.

The rotor assembly includes a balance piston, which compensates the axial forces acting on the rotor by using the steam exhaust pressure to reduce the axial thrust. Labyrinth seals provide the sealing.

The turbine is provided with thermal insulation and lagging in steel plates.

A sound enclosure can be provided over the turbine and gear to the reduce noise level below 85 dba.

The turbine and speed reducer is furnished on a common baseplate.

The complete lube oil system including the AC auxiliary oil pump, DC emergency oil pump, dual oil coolers, dual oil filters, and oil reservoir are provided on a separate skid, The main oil pump is shaft driven off the low speed side of the gear.

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2. Turbine Technical Information

**Operating Conditions**

Turbine model Load point	TMCE 25000A			
	1	2	3	
Power at generator output	18,700	17,000	8,180	KW
Inlet pressure	850	850	850	Psia
Inlet temperature	825	825	825	° F
Throttle flow	240,000	240,000	240,000	Lb/h
Extraction pressure	385	385	385	Psig
Extraction flow	80,000	100,000	195,000	Lb/h
Exhaust pressure	3.3	2.7	1.5	"HgA
Exhaust flow	160,000	140,000	45,000	Lb/h
Turbine speed	6000	6000	6000	Rpm
Generator speed	1800	1800	1800	Rpm
Tolerance	1	—	—	%

Rotation direction – turbine: **Counter Clockwise**

- 1) Rotation direction seen from turbine to generator
- 2) Gearbox efficiency (approx.): 98,5% Generator efficiency 97,6% (approx. WEG)

The above guaranteed performance is given with a tolerance of 1%, with all control valves completely open, all blades free from scaling and cooling equipment with all cooling surfaces free from deposits, in accordance with the rules of TGM procedure IT-AT-004\_r1 of 07/01/2005 based on ASME PTC 6.

**Turbine Materials**

Steam chest	ASTM A 217 WC1
Turbine Casing	ASTM A 217 WC1
Exhaust casing	ASTM A 516 Gr.60
Rotor (integral)	SAE 4340
Nozzles	AISI 420
Blades	AISI 420
Internal parts of valves	SAE 4340
Bearing lining	Babbitt (white metal)
Steam piping / Oil piping	ASTM A 106 / AISI 304 (*)

(\*) Oil piping will be supplied in SS for pressure and return lines

**Design parameters**

Based on IEC standard, publishing 45:  
 Inlet steam pressure: 880 psig  
 Inlet steam temperature: 839,4 °F

**Steam connections (turbine flanges)**

	Inlet	Extraction	Outlet
DN (in)	10	10	95 X 38
PN (psi)	900	600	30
Norma	ANSI B 16.5	ANSI B 16.5	—
Direction	Right - Downwards (*)	Up or Down	Up or Down

(\*) Seen from the turbine to the generator

**Turbine protection system**

The TGM trip valve for the TM turbine is provided with a special device that allows for testing the valve during the turbine operation in compliance with the API 612 standard. The trip valve will actuate whenever one or more conditions below occur:

- Overspeed (mechanical / electronic)
- 3-way solenoid valve (electric)
- Manual trip
- Excessive radial bearings vibration
- Excessive axial displacement
- High bearing metal temperature

**Turbine governing system**

By electronic Governor Woodward 505E, NEMA D, which operates via current- to- pressure converter on the steam control valve servo-motors. The system includes:

Woodward 505 E governor  
Woodward CPC (2)  
Servo-motors by TGM  
Magnetic pick-ups (3)

**Noise Level**

Approximate noise level for turbine and gearbox is 96db (A)  $\pm$  2, for measurements at 1 meter of distance, not taking into account environmental conditions, based on ISO 3740 and VDI 2159 standards. **Sound enclosure for turbine and gearbox is proposed as an option (See commercial offer)**

**Vibration Limits**

As per ISO 10816 Standard, part 3 – group 1 – zone A/B, level below 2.3 mm/s for rigid support or 3.5 mm/s for flexible support

3. Gearbox, Turning Gear and Couplings

**Gearbox**

Type	Parallel shafts, horizontally split casing
Input power	19240 kW
Input/Output speed	6000/1800 rpm
Gearing type	Double-helical
Teeth	Case hardened and grounded
Bearing	Babbitt
Casing	Cast iron
Service Factor (AGMA)	1.3

**Turning Gear**

Type	Electric
Power	15 kW (approx.)
Engage / disengage	Manual / automatic

**Couplings**

*High Speed*

Type	Disk
Speed	6000 rpm
Lubrication	Not required
Protection	SAE 1020 plate

*Low Speed*

Type	Rigid
Speed	1800 rpm
Lubrication	Not required
Protection	SAE 1020 plate

#### 4. Hydraulic System

##### Main oil pump

- Type Worm
- Oil pressure 10 kgf/cm<sup>2</sup>
- Driven by Low speed gearbox shaft
- Oil specification ISO VG 68

##### Auxiliary oil pump

- Type Worm
- Oil pressure 10 kgf/cm<sup>2</sup>
- Driven by Electric motor
- Current type A/C
- Frequency 60 Hz
- Speed 1760 rpm
- Configuration B 3
- Protection IP 55

##### Emergency oil pump

- Type Gear
- Oil pressure 1,5 kgf/cm<sup>2</sup>
- Driven by Electric motor
- Current type DC
- Speed 1800 rpm

##### Oil cooler duplex (Standard TGM)

- Cooling water temperature inlet (max.) 86 °F (\*)
- Cooling water temperature outlet 95 °F
- Oil inlet temperature 140 °F
- Oil outlet temperature 113 °F
- Pressure drop 4 psig
- Cooling water pressure 100 psig

(\*) To be confirmed by the customer

##### Materials

- Tubes AISI 304
- Tubes sheets ASTM A 285 Gr. C
- Water chamber ASTM A 285 Gr. C
- Casing ASTM A 285 Gr. C



**Hydraulic system – continuation**

**Oil filter (lubrication and control) – Turbine**

- |                     |                         |
|---------------------|-------------------------|
| ▪ Type              | Duplex                  |
| ▪ Strainer mesh     | 25 µm                   |
| ▪ Pressure drop     | 0,2 kgf/cm <sup>2</sup> |
| ▪ Strainer material | Stainless steel         |

**Oil tank**

- |            |                                 |
|------------|---------------------------------|
| ▪ Oil type | ISO VG 68                       |
| ▪ Material | Structural steel (carbon steel) |

**OBS.:** Oil tank and lube oil system to be supplied separate from the turbine and gearbox baseplate.

Lube oil system to be mounted together with oil tank. Oil coolers will be positioned under the oil tank.



All variables, according to the list of instruments below, will be indicated through a local panel to be installed beside the turbine.

**Panel and indicators to be provided by APP. Instruments listed under column "LC = LOCAL" to be provided by TGM.**

Measurement points	QT	LC	PA	AL	TR
<b>Governing system</b>					
Woodward governor 505 E	1		X		
CPC	2	X			
Magnetic Pick-ups	3	X			
<b>Steam System</b>					
Inlet steam pressure	1	PIT	PI		
Wheel chamber pressure	1	PIT	PI		
Extraction pressure	1	PIT	PI		
Exhaust pressure	1/1	PIT/PS	PI	H	HH
Inlet steam temperature	1	TE	TI		
Extraction temperature	1	TE	TI		
Exhaust steam temperature	1	TE	TI		
<b>Lubrication system</b>					
Pressure after oil pumps	1	PIT	PI		
Oil pressure at gearbox inlet	1	PI			
Lubrication oil pressure	1/1	PIT/PS	PI		LL
Differential pressure in the oil filter	1	DPS		H	
Oil temperature before the oil cooler	1	TI			
Oil temperature after the oil cooler	1	TE	TI	H	
Turbine bearing metal temperature (RTD Pt 100)	4	TE	TI	H	HH
Gearbox bearing metal temperature (RTD Pt 100)	4	TE	TI	H	HH
<b>Control System</b>					
Impulse oil pressure	1/1	PIT/PS	PI	L	
Control oil pressure	1	PIT	PI		
<b>Others</b>					
Manual trip	1	HV	HS		
Turbine trip indicator	1	ZS	ZI	X	
Turbine speed	1	SE	SI		HH
Auxiliary oil pump motor (on-off)	1		HS		
Oil tank low level	1	LE	LI	L	
Electronic overspeed system	1	SE	SI	H	HH
Radial vibration probes – turbine	4	VE	VI	H	HH
Radial vibration probes – gearbox	8	VE	VI	H	HH
Radial vibration probes — generator	4	VE	VI	H	HH
Keyphasor	1	ZE	ZI	H	HH
Axial displacement – turbine (probes by TGM)	2	ZE	ZI	H	HH

**Remark:**

1) Pressure/temperature transmitters, electric motors and magnetic pick-ups will be UL listed. CPC, RTD's, cables, cable trays, conduits, junction boxes and further instruments/accessories will be supplied as per TGM standard.

**Instrumentation (Continuation)****Legend**

AL: Alarm  
PS: Pressure switch  
DPS: Differential pressure switch  
TR: Trip  
HS: Manual Key  
LC: Local  
LI: Level indicator  
LT: Level transmitter  
PA: Panel  
PI: Pressure indicator  
PIT: Pressure transmitter  
L: Low signal  
LL: Very low signal  
SI: Rotation indicator  
SE: Rotation sensor  
TE: Temperature sensor  
TI: Temperature indicator  
VI: Vibration indicator  
VE: Vibration sensor  
VT: Vibration transmitter  
ZE: Displacement sensor  
ZI: Displacement indicator  
ZS: Limit switch  
H: High signal  
HH: Very high signal  
HV: Hand Valve

**Instruments Voltage**

<u>Function</u>	<u>Voltage</u>	<u>Frequency</u>	<u>Observation</u>
Safety	125 Vdc		
Auxiliary for control panel	220 Vac	60 Hz	
Instrumentation	24 Vdc		
Direct current	24 Vdc		
Auxiliary pump	220/380/440 Vac	60 Hz	
Emergency pump	125 Vdc		

**OBS.:** All voltages indicated above are generic. The customer shall confirm them all later on.

## 6. Switchgear & Controls

### Medium Voltage Switchgear

Section #1 - Generator Section  
1 Vacuum Breaker Element, 1200A 15kV 500mVA  
1 Vacuum Breaker Compartment, 1200A 5kV  
1 Vacuum Breaker MOC/TOC Switch  
1 Generator Voltage Transformer Drawout Tray  
1 Generator Control Transformer Drawout Tray  
1 Section, indoor vertical section  
1 Section, main copper buswork  
2 Voltage Transformers  
1 Control Power Transformer, 3kVA  
3 Current Transformers

Section #2 - Bus VTs  
1 Bus Voltage Transformer Drawout Tray  
1 Section, indoor vertical section  
1 Section, main copper buswork  
2 Voltage Transformers  
  
1 Set, space heaters and cabinet lamps  
1 Set, breaker standard accessories  
1 Sets, control wire, wiretags, terminal blocks, fuses

### Surge Cabinet

1 Vertical housing NEMA 4 Stainless Steel  
3 Lightning Arrestors  
3 Surge Capacitors  
1 Space Heater  
1 Cabinet Lamp  
1 PT drawout tray  
1 CPT drawout tray  
3 voltage transformers  
1 control transformer

### Neutral Grounding Resistor

1 NGR, 400A 10 Second, NEMA 4 Stainless Steel enclosure  
3 Differential Current Transformers

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Turbine / Generator Control Panel

1	NEMA 4 Stainless Steel vertical section w/vortex air cooler & temperature controller
1	Woodward 505 Governor
1	Woodward SPM-D11/LSXR Synchronizer
1	Woodward Protech 203 Electronic Trip
1	Basler DECS-200
1	GE SR-489 Multilin Generator Protection Relay
1	Lot, Test Blocks
1	Synchroscope
1	Lockout Relay
16	Auxiliary Relays
1	Lot, Control Switches
1	Lot, Relay Surge Suppressors
1	Space Heater
1	Thermostat
1	Interior Light
1	Interior Light Switch
1	Switch — Generator Circuit Breaker Trip/Close
1	Switch — Governor Speed Lower/N/Raise
1	Switch — AVR Voltage Lower/N/Raise
2	24VDC Power supply-20A (redundant)
1	Lot, Wire, Terminal blocks, fuses, fuseblocks
1	Lot, commissioning spare parts
1	Lot of Nameplates & Engraving
1	Lot of Pilot Lights & Pushbuttons
1	Lot of Meters (KW/Kvar/V/A, Frequency etc...)
1	Lot, miscellaneous controls, etc
	<b>PLC Control Material</b>
1	ControlLogix Processor, 64 MB CompactFlash (1756-L61))
1	Backup Battery, (1756-BA1)
1	ControlLogix Chassis, 17 slot (1756-A17)
1	ControlLogix Power supply, 75 Watts (1756-PA75/C)
1	Prosoft Modbus Interface Card (MV156-MCM)
1	Ethernet Interface Card (1756-ENBT)
1	16-Channel Analog Input, single ended (1756-IF16)
3	6-Channel RTD Input (1756-IR61)
1	16-Input Card, AC (1756-IA16)

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- 2 16-channel input Card , DC (1756-IB16)
- 3 16-Relay Output Card, Isolated (1756-OW161)
- 8 Removable Terminal Block, 36 point (1756-TBCH)
- 4 Removable Terminal Block, 20 point (1756-TBNH)
- 4 Extended Housing Terminal Block (1756-TBE)
- 2 DH-485 Interface Module (1761-NET-AIC)
- 1 PanelView+ 1000 w/Ethernet (2711P-T10C4A2)
- 1 RSViewME Software for HMI (9701-VWSTMENE)
- 1 Miscellaneous Communications Cables for HMI & PLC
- 1 Industrial Network Switch (Hirschmann RS2-4TX/1FX)

**Bently Nevada**

- 1 19" Rack, 14 slots (P/N 3500/05-01-00-00)
- 1 Rack Interface Module (P/N 3500/20-01-02-00)
- 1 Rack Power Supply, 120VAC & 24VDC (P/N 3500/15-01- 04-00)
- 1 Keyphasor Module (P/N 3500/25-01-01-00)
- 5 Proximity/Seismic Monitor Module (P/N 3500/42-01-00)
- 2 4-Channel Relay Module (P/N 3500/32-01-00)
- 1 Communication Gateway, Modbus RS-485 (P/N 3500/92- 02-01)
- 1 3-Channel Overspeed Protection System (P/N 3500/53- 03-00)

**DC Emergency Oil Pump**

Starter for emergency oil pump

Batteries a charger for DDC emergency oil pump

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## 7. GENERATOR

### **GENERATOR 23125 kVA/ 13800 V/ 1800 rpm**

Three phase synchronous generator, industrial type, with BRUSHLESS excitation system, electronic voltage regulator, with welded steel frame, 1040/45 steel shaft, class "F" insulation (155°C), sleeve bearings, CW and CCW rotation; manufactured according to ABNT and IEC standards, having the following characteristics:

Quantity	: 01
Model	: SSW 1000
Frame	: 1000
Output	: 23125 kVA
Poles/ Nominal speed	: 04 / 1800 rpm
Over Speed	: 20%
Voltage	: 13800 V
Frequency	: 60 HZ
Power factor	: 0,80
Protection degree	: IP-54
Cooling system (CACW)	: Totally enclosed - 2 X 65% water-air cooled
Mounting	: B3 (Horizontal)
Environment	: 40°C and 1000 m
Duty	: S1
Insulation class	: F
Temperature rise	: 80°C
Bearing type	: Sleeve Bearing

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**ACCESSORIES INCLUDES:**

- (06) Winding temperature detector (02 per phase): PT-100
- (02) Bearing temperature detector (01 per bearing): PT-100
- Space heaters, 220 V, 600 Watts;
- Oil Flow Sight-Viewer
- Water Flow Viewer
- Water Flow detector in the water inlet (heat exchanger)
- Water leakage detector
- Water temperature detector inlet and outlet: PT-100
- Air temperature detector inlet and outlet: PT-100
- Grounding Brush
- Neutral connection box
- Air water cooling system, two heat exchangers for each generator.
- Water leakage detector
- Bently Nevada Probes (DE + NDE bearings). Installed by WEG but supplied by steam turbine manufacturer.

**GENERAL INFORMATION:****APPLICABLE STANDARDS:**

The machines are designed, manufactured and tested according to standards ABNT, NEMA, IEEE, IEC and DIN, where applicable. Specifically we can mention:

- NBR 5110 — Cooling methods.
- NBR 5052 — Synchronous machines.
- NBR 5117 — Synchronous machines.
- ISO 1940 — Balancing quality.
- VDE 0530 — Turning electrical machines.
- NEMA MG-1 Part 32 and 33 — Synchronous Generators.

**GENERAL CONSTRUCTION:**

An alternating-current generator consists essentially of a magnetic circuit, dc field winding, ac armature winding and mechanical structure, which includes cooling and lubrication. The magnetic circuit and field windings are arranged in certain way that, as the machine spins, the magnetic flow linking the armature windings

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changes cyclically, and for this reason induces alternate voltage in armature winding.

There are many possible geometrical arrangements for these elements, and each one with its own advantages. Usually the salient pole construction is used for low speed rotors such as the ones used in diesel and hydroelectric power stations, and the cylindrical rotor machine for steam-turbine driven generators. WEG's standard for high-speed application is the cylindrical rotor type because of the lower centrifugal forces created, and also because it lessens/eliminates some harmonics and high frequency interference with other equipments.

**FUNCTIONS:**

The mechanical and electrical characteristics as well as the performance of an electric generator are a consequence of the magnetic circuit design. Because output results from the interaction between current-carrying armature conductors, the air-gap flux and it is proportional to their product, when designing the magnetic circuit WEG design provides the correct space for the windings and the right path for the magnetic flux.

**DESIGNING THE MAGNETIC CIRCUIT:**

The right design of the pole pitch and the number of poles assures always the best path for the circuit. As the number of poles decreases, the restrictions in space available in the rotor result in most of the magnetic circuit dimensions being a smaller proportion of the pole pitch. The armature slot width is determined principally by the insulation thickness required for the machine voltage and is commonly such that the resulting total copper width per slot is 40 to 60% of the slot width.

**MATERIALS AND LOSSES:**

To reduce Foucault currents caused by variations of the air gap flux density, and also to reduce losses in the rotor pole faces, WEG selected the cylindrical type rotor instead of the high stressed salient pole machines. Always when this type of pole is used we notice the air gap is relatively large and the losses decrease to acceptable values. Most salient-pole machines on the other hand, have smaller air gaps relative to the armature slot widths.

To improve the good characteristics of the cylindrical-pole configuration, our design also use laminated poles. We can use one-piece laminations or segmental laminations, depending on the machine size and the available widths of the electrical sheet of steel. Mostly WEG uses 3.5% silicon electrical sheet steel in 0.014 to 0.025 in thickness. This sheets are stamped at WEG, because quality and grain orientation. The correct finishing includes polishing and painting

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of each individual sheet. During testing, when submitted to high flux densities the advantages of this construction come to view in the general efficiency.

**PERFORMANCE:**

The field current required for a particular load condition is determined by the magnetic circuit in conjunction with its armature and field windings. This is calculated during design by evaluating the flux densities and the corresponding ampere-turns in all parts of the magnetic circuit. After the machine is built, the magnetic characteristics are shown in the performance report.

**FRAME:**

WEG's electric generator's frames are built entirely using steel sheets and MIG welded profiles. It's well known by its strength and mechanical resistance. It can be manufactured in many different arrangements, and the most usual ones are B3 (with terminal boxes placed sideways) or D5 whose characteristics include pedestal bearings and terminal box located at the bottom of the generator, inside air outlet.

**CLASSES OF INSULATION:**

To assure long electrical/overall life, the temperature of operation should never surpass the insulation class temperature of the materials used in the generator construction.

As result, the table below shows standard temperatures for the most common classes used for this size of generators:

Insulation Class	Temperature Class	Temperature rise °C
F	155°C	105°C max (or 80°C)

**ARMATURE WINDING INSULATION:**

As standard armature voltages can vary from 220 up to 18,000 V, it is necessary to ensure the appropriate amounts of turn-turn and turn-ground insulation used to withstand different situations, such as steady state or transients. In low voltage systems the turn-turn insulation may be applied directly to the conductor as a film. In higher voltages it is necessary special methods to prevent corona effects.

Despite of this recommendation, WEG assures all equipment here manufactured use the same treatment, which consists in Vacuum and Pressure Impregnation.

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**IMPREGNATION WITH VARNISH:**

After winding both stator and rotor are submitted to deep vacuum varnish impregnation (VPI), which fills completely all existing remaining gaps. We use polyester varnish, and it assures an insulation class F (or superior) with temperature class of 155°C (337°F).

**COOLING SYSTEM:**

Heat generated by internal losses must be exhausted to keep the internal temperature stable and under standard values. Usually heat is transferred directly to air and this air can either be cooled in a closed circuit by an outside water or air-cooling system (indirectly cooling system) or can be exhausted (directly cooled system). In the first case, a closed circuit, there is no possibility of debris formation on the coils, as it may occur in the second case.

WEG manufactures generators for both applications with a protection degree of IP-23 (open) or IP-54/55/65 (closed).

Stators are frequently cooled by blowing air over the coil ends and through radial channels in the armature core. The channels are normally in the range of 6 up to 8mm wide, with spacing between each other of about 50mm, but they may be omitted entirely on machines with short core lengths.

**MECHANICAL COMPARISON BETWEEN SALIENT POLE AND PLAIN POLE ROTORS:**

The field configuration, salient pole and plain pole rotors distinguish two fundamental variations in the mechanical construction. In most but the smallest modern alternators and in some ac brushless exciters, the field is the rotating element, and the armature is the stationary element (stator). Salient pole construction, where the field windings are on pole pieces attached to a rotor body, is used on slower speed machines, 1200 rpm and lower, because of its relatively lower cost. Plain pole construction, where the field windings are inserted in axial slots in a cylindrical rotor body, is used on essentially all 2 poles and on the larger 4 pole machines, because it minimizes the problems of fitting salient poles to the rotor body, which in such high-speed machines become non-practical and too risky. The fundamentals of stator core and winding construction for these two types of design are the same, but as far as the mechanical behaviour and life expectancy is concerned the plain pole cylindrical rotor is superior.

**BEARINGS:**

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Smaller AC generators can be furnished with ball anti-friction bearings when the load and speed are not critical and operate very well as long as a preventative maintenance program is followed.

However, the majority of the AC generators are supplied with oil-lubricated babbit bearings. For horizontal shafts these are self-contained ring-oiled bearings when design conditions permit.

At higher shaft peripheral speeds and higher bearing loadings ring-oiling is supplemented with forced circulation of external cooled oil. The rings may be replaced by an external source, such as the same lubricating system used by the turbine, or WEG can supply a self-sustained lubrication system.

Lead base babbit bearings are commonly used for journal bearings, although tin-base babbit may be employed in heavy-duty applications.

All bearings have an electrical connection to the ground to isolate electrical currents.

**SPACE HEATERS:**

To avoid water condensing inside generator, this equipment is built with an electrical resistance that can be powered from any typical 240 VAC outlet. This way it can be stored for a long time, as long as the heater is on.

**BALANCING:**

The standard mechanical balancing adopted by WEG is stated by ISO 1940, which defines the possible grades, N (Normal), R (reduced) or S (special). Our Quality Control does not allow any rotor to continue in the manufacturing process chain if it reached a degree above R 2,5 (Reduced).

For this reason we can assure a long reliable life, and low bearing wear, as well as no vibration is transmitted to other related machines.

**COATING:**

All generators have its internal and external surface treated with steel debris blasting until it reaches the cleanliness degree Sa 2.1/2.

First coating is applied using polyamide epoxy 35 – 40 microns thick.

Finishing consists into two polyamide epoxy coatings, each one 70-80 microns thick, with standard colour Medium Blue RAL 5007.

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The coating process is designed to allow the machine to be installed in regular-aggressive acid atmosphere with good resistance to alkaloids and humidity, typical for Sugar — Alcohol distilleries, Paper, Wood or related industrial processes, etc...

**QUALITY INSPECTION:**

All Manufactured generators are factory thoroughly tested. There is a standard testing procedure, and it is completed with no exceptions.

Special tests can be performed with or without witness/inspection, but it should be agreed between buyer and seller before the PO is placed so it can be scheduled in advance. Any changes after that may affect final price, delivery time, and the chronology established when the unit is being manufactured. Such chronology is very important due to the available time in the testing lab, as all products are tested, and some of them have a specific deadline to be followed.

**ELECTRONIC/MICROPROCESSED VOLTAGE REGULATOR:**

The main purpose of the voltage regulator is to keep a steady output voltage at any load condition. It may include functions such as allowing synchronization with other generators and/or power utilities, allowing power factor correction, and allowing reactive power compensation throughout the capability curve.

WEG uses an electronic and high-speed micro processed voltage regulator in order to assure such flexible operation.

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## 8. Summary of Supply

- TGM extraction/condensing steam turbine model TMCE 25000A for generator drive
- Gearbox, parallel shafts, single stage, double helical type with tuning gear, s.f.= 1.3
- High/Low speed couplings with coupling guards
- Complete oil unit for turbine, gearbox and generator including mechanical oil pump, auxiliary lube oil pump, emergency oil pump, twin oil filters, twin oil coolers, oil reservoir, and oil vapor extractor. Provided on skid.
- Common baseplate for turbine and gearbox
- CPC (2) + Magnetic Pick-Ups (3)
- Probes for vibration and axial displacement of the TG set (19) factory mounted and wired to junction box
- Junction boxes and wiring to JB (not UL listed but meet NEMA standards)
- UL listed instruments / motors where possible
- Turbine / generator control panel including:
  - Woodward 505 E governor
  - Woodward Protech 203 overspeed protection
  - Bently Nevada 3500 vibration system
  - Allen Bradley ControlLogix with HMI
  - Basler DEC 200
  - GE SR-489 Multilin Generator Protection Relay
  - Auto Synchronization
- Transmitters with mounting rack
- RTD's factory mounted and wired to junction box
- Painting according to TGM export plan
- Manual steam drain valves
- Visual indicators for returning lube oil from bearings
- Weg TEWAC generator mounted on separate sole plate
- Medium voltage switchgear including:
  - Circuit breaker panel
  - Neutral grounding resistor panel
  - Surge protection panel
- Starter, batteries and charger for DC emergency oil pump
- Export packing for Brazilian equipment
- Customs and port handling charges
- Freight and insurance to job site
- Shop tests to manufacturer's standards. Third party inspections not included. (\*)
- Steam sealing system Field piping by others
- Installation, start up, and training supervision (See conditions)
- Acoustic hood for turbine and gearbox (option) (supplied loose)
- Spare parts for 2 year operation (option)

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(\*) In case of external inspection, hired by the customer, TGM will evaluate impacts of demands to its standard Inspections & Tests Plan. Relevant impacts such as costs and delivery time will be charged to the customer.

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## 8. Limits of supply

APP will limit its supply, as shown below:

### Steam

- Inlet flange of the turbine emergency trip valve
- Inlet flange of the gland steam sealing system
- Exhaust flange of the turbine
- Outlet flange of the turbine extraction
- Inlet and outlet flanges of the extraction trip valve

### Cooling water

- Inlet flange of the oil cooler
- Outlet flange of the oil cooler
- Inlet & outlet flange of generator water cooling section

### Electricity

- Junction boxes terminals
- Control panel terminals
- Switchgear panel terminals

### Drains

- Outlet flange of the drain valves

### Air

- Inlet connections of the instruments/devices

### OIL

Supply & return connections of lube oil skid

Supply & return connections on turbine / gear basplate

Supply & return connections of generator bearings

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#### 9. Exclusions of Supply

- Steam, condensate and cooling water lines and accessories/instrumentation (valves, supports, joints, insulation, condensate separator devices, etc...) out of the limits of supply;
  - Civil works and foundation calculations;
  - Overhead crane;
  - Steam condenser and accessories/appurtenances;
  - Cooling water tower and water circulating pumps
  - Gland steam condenser, piping and accessories
  - Fire protection systems;
  - Electrical and mechanical interconnection out of the limits of supply;
  - Utilities such as electric energy, water, compressed air, welding materials and others;
  - Flushing oil and first lube oil filling;
  - Stairways, scaffold, platforms and similar;
  - Safety and control valves out of the limits of supply
  - Anchor bolts set and leveler
  - Explosion proof instruments / accessories
  - Wiring between local junction boxes and control panel
  - Wiring between generator and switchgear panels
  - No-load running test
  - Performance test
  - Heat stability test
  - High speed balancing
  - Any special design, accessory and documentation (submittals) out of standard scope of supply
  - Any other equipment not listed in this proposal
-



**IEC Recommendations**

**45.19 Limiting values for steam pressure and temperature**

Pressure variations

Average steam pressure at turbine throttle during a 12 months period shall not exceed the nominal pressure

Maintaining the average value, the steam pressure shall not exceed 5% of nominal pressure; however instantaneous peak values up to 20% are allowed provided that the total duration of peak loads shall not exceed 12 hours in a period of 12 months of operation.

Temperature variation

Temperature shall never exceed 8°C above the normal operating temperature. Under exceptional circumstances the steam temperature can exceed 14°C above the operating temperature, provided that these conditions do not exceed 400 hours in a period of 12 months of operation.

**Steam line**

In order to assure a good performance of the turbine and prevent damages the steam conditions shall remain within the limits stated above and the steam shall be free of condensate.

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Condensate in the steam line may produce thermal shocks with severe consequences and serious damages, for instance shaft distortion.

**Specifications for lube oil in steam turbines**

Mineral refined oil complying with the characteristics indicated by the DIN 51515 shall be used for the regulation and lube system and must have de following characteristics:

Denomination	Requirement	Test according to
Type of lube oil	TD 68	
Viscosity class — ISO	ISO VG 68	DIN 51519
N° (coordination)	25	
Cinematic viscosity	65,5 mm <sup>2</sup> /s (cSt)	DIN 51550 together with,
at 40°C	8,7 mm <sup>2</sup> /s (cSt)	DIN 51561 or DIN 51562
at 100°C		
Dynamic viscosity — average at 40°C	65,5 x 10 <sup>-3</sup> Pas	
Viscosity index not less than	95	
Density at 15°C not more than	0,9 Kg/l	DIN 51757
Ignition point as per Cleveland not less then	200°C	DIN 51376

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Denomination	Requirement	Test according to
Pourpoint = or <	-6°C	DIN 51597
Neutralization index not to exceed	(+) 0,1 mg KOH/g oil	DIN 51558 part I
Saponification index not to exceed	(+) 0,15mgKOH/g oil	DIN 51559
Ashes (oxide) not to exceed	(+) 0,01% w/w	
Water	g/100g	DIN 51582
Solid foreign matter below detectable levels	g/100g	DIN 59592
Water separation capacity (max)	300 s	DIN 51589 part I
Water separation capacity at 50°C (Max)	5 min	DIN 51381
Corrosion effect on copper — corrosion degree (Max)	2...100 A3	DIN 51759 (3h up to 100°C)
Corrosion protection (steel)	0...A (corrosion free)	DIN 51585
Neutralization index increase after 1000 h	2,0 mg KOH/g oil	DIN 51587
Capacity of specific load (gearbox)	Normal test FZG	DIN 51354 (A/8, 3/90)
	6-7 degree	ASTM D 1947-68
		IP166/65

These values are valid only for mineral oil.

(+) When active substances are used the above values are higher.

#### Recommended quality for cooling water

The materials selection for steam condenser and heat exchanger is directly related to the type of cooling water used (aggressiveness). It becomes clear that water aggressiveness in continuous operation should not increase in relation to the value originally specified, because it may reduce significantly the average lifetime of the equipment.

Besides, deposits on the tubes decrease the heat exchange efficiency and speed up internal corrosions.

In order to assure safe operation, some basic requirements have to be followed, as indicated below:

#### Open circuit cooling

The total amount of salt shall not exceed 100 mg/l. Water shall have adequate chemical composition because treatments are not applicable.

In case of particles in suspension, filtering must be applied. Seaweed can be eliminated by chlorification. To avoid separation of carbonates, it's necessary to keep the balance of the calcium/carbonic acid rate.

#### Closed circuit cooling

The following figures shall be kept:

PH	7
Carbonic acid	3 g/l
Carbonate hardness	6°dH
Carbonate hardness for polymorph phosphates	12°dH
Non-carbonate hardness	80°dH
Chlorides	400 mg/l
Sulfates	500 mg/l
Total salt	3000 mg/l
Total alkalinity	15 mg/l
Silic acid	200 mg/l
Particles in suspension	10 mg/l

**Note:** Water flow shall be periodically inspected. The water chambers must be always clean.

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**APPENDIX D**

Approved by: Ken Stevens, Signature on File  
Chairman, Engineering Standards Board

<u>APPLICATION</u>	<u>COMPONENT</u>	<u>GENERAL SERVICE</u> See Note	<u>PRODUCTION</u> <u>SUPPORT</u>	<u>SAFETY</u> <u>SIGNIFICANT</u>	<u>SAFETY CLASS</u> IEEE-323
<b>ENVIRONMENTAL QUALIFICATIONS</b>		None			
<b>SEISMIC QUALIFICATIONS</b>	EQUIPMENT, COMPONENTS		IBC	Applicable national codes and standards are listed in SRS Engineering Standard 01061 (if seismic qualification is required)	
<b>CHEMICAL &amp; TOXICOLOGICAL HAZARDS</b>		OSHA, AICHE Safety Standards, API Safety Standards, ACGIH Requirements, NEPA*	N/A		
	PRESSURE VESSELS, all services as defined in the ASME BPV Code	ASME VIII-2004 Div. 1 or Div. 2 *		<b>Yes</b>	
	POWER BOILERS	ASME I-2004*		<b>Yes</b>	
	TRANSPORTATION PACKAGING	49 CFR		N/A	
	HEATING BOILERS	ASME IV-2004*		N/A	
<b>PROCESS EQUIPMENT VESSELS &amp; TANKS</b>	FIBER-REINFORCED PLASTIC PRESSURE VESSELS	ASME X-2004* API-12P		N/A	
	STORAGE TANKS	API-620, ANSI/ASME B96.1 (Aluminum Alloy)*		N/A	
	WATER STORAGE TANKS	AWWA D-100*		N/A	
	PROCESS TANKS FOR FLAMMABLE LIQUIDS	API-620, API-650, UL-142 (above ground), NFPA 30, NFPA 326		<b>API-650 and NFPA-30</b>	
	PETROLEUM STORAGE TANKS	API-650* UL-58 and UL-1316 (under ground)		<b>API-650</b>	
	CHEMICAL PROCESS PUMPS	ANSI/ASME B73, 1M & 2M, Hydraulic Institute Standards* API-674, API-675, ASME B73.5M N/A			
<b>PROCESS EQUIPMENT PUMPS</b>	POTABLE & SANITARY WATER PUMPS	AWWA E101*		<b>This standard has been withdrawn</b>	
	FUEL OIL SERVICES PUMPS	API-610*		No, N/A	
	OTHER PROCESS SERVICE PUMPS	Hydraulic Institute Standards, API, ASME *		No	

\* Codes and standards listed in the lower classifications are also requirements for the higher classifications. Where requirements in the lower classifications conflict with requirements in the higher classifications, the more restrictive requirement governs.

APPLICATION	COMPONENT	GENERAL SERVICE See Note	PRODUCTION SUPPORT	SAFETY SIGNIFICANT	SAFETY CLASS
	POWER SYSTEMS (PIPING & VALVES)	ASME B31.1-2001*	Yes		
	PROCESS SYSTEMS (PIPING & VALVES)	ASME B31.3-2002 and B31.3 is for process Clarification in the application of these codes and standards is provided in SRS Engineering Standard 15060 (WSRC-TM-95-1)	No — using B31.1 since it is applicable to power plants and B31.3 is for process No		
PIPING & VALVES	BUILDING SERVICES (PIPING & VALVES)	ASME B31.3-2002 or B31.9-2004*	No		
	WATER DISTRIBUTION SERVICES (PIPING & VALVES)	AWWA C Series*	No — using International Plumbing Code		
	REFRIGERATION PIPING	ASME B31.3-2002 or B31.5-2001	N/A		
	OTHER BASIC CODES & STANDARDS (PIPING & VALVES)	AWWA* API, ASME I-2004 ASME B31.5-2001	No No and Yes as applicable N/A		
PLUMBING	PLUMBING SYSTEMS in infra-structure facilities	International Plumbing Coe (IPC) *	Yes		
PROCESS EQUIPMENT GENERAL	MOISTURE SEPARATORS OIL LUBRICATORS	ANSI/B93.114M (restricted use of nonmetallic bowls)*		N/A, see comment	
GLOVE BOXES		NFPA 801, NFPA 45, NFPA 69, AGS-G001-1998* AGS-G003-1998, ANSI/ASTM C852		N/A	
STRUCTURAL	GENERAL DESIGN	Applicable national codes and standards are listed in SRS Engineering Standard 01060.		No — IBC	
	CIVIL	GENERAL DESIGN	Applicable national codes and standards are listed in SRS Engineering Standard 01060.	No — IBC	
	SURVEYING	FGDC-STD-007.4 (Federal Geographic Data Committee)		No	
	GENERAL DESIGN	OSHA, NFPA 101, 220 & 221, NRCA*		Yes — International Building Code & International Fire Code	
ARCHITECTURAL	PHYSICALLY HANDICAPPED	UFAS*		No, except on administration building	
	BUILDING CODE	International Building Code (IBC)*		Yes	

\* Codes and standards listed in the lower classifications are also requirements for the higher classifications. Where requirements in the lower classifications conflict with requirements in the higher classifications, the more restrictive requirement governs.

APPLICATION	COMPONENT	GENERAL SERVICE See Note	PRODUCTION SUPPORT	SAFETY SIGNIFICANT	SAFETY CLASS	
MECHANICAL HANDLING EQUIPMENT	CRANES	ASE NOG-1 CMAA 70, CMAA 74, CMAA III-5, 11, 12 and 17; ASME B30.2, B30.11* No				
	OTHER HANDLING EQUIPMENT	AISC* ANSI N14.6				
	GENERAL FIRE PROTECTION	NFPA Fire Codes and Standards, Building Code (IBC), Uniform Fire Code, 29-CFR-1910 For exceptions to these codes and standards refer to Standard 01120, Attachment 1*			Yes	
	AUTOMATIC SPRINKLER SYSTEMS	NFPA 13, 15, 25, 72, Building Code (IBC)*		Yes		
	WATER MIST SYSTEMS	NFPA 72, 750, Building Code (IBC)*		Yes		
	STANDPIPE SYSTEMS	NFPA 14, Building Code (IBC)*		Yes		
	FOAM SYSTEMS	NFPA 11, 11A, 16, 18, Building Code (IBC)*		Yes		
	FIRE PUMPS	NFPA 20, 25, 30, 70-2005, 72, Building Code (IBC)*			Yes	
	WATER SUPPLIES	NFPA 13, 20, 22, 24 291, 1142, Building Code (IBC)*		1142 does not apply		
	WATER DISTRIBUTION AND FIRE HOSE	NFPA 24, 25, 1141, 1963, Building Code (IBC)*		Yes		
	LIQUID RUN-OFF CONTROL	NFPA 30, 70-2005, 801, Building Code (IBC)*		801 does not apply. Additional, 850 will be used		
	GASEOUS FIRE SUPPRESSION SYSTEMS	NFPA 12, 2001, Building Code (IBC)*		Yes		
	FIRE PROTECTION SYSTEMS	CHEMICAL FIRE SUPPRESSION	NFPA 17, 17A, 72, 96, Building Code (IBC)*		96 does not apply	
		FIRE ALARM & DETECTION	NFPA 70-2005, 72, 90A, 101, 170, 801, UL 268A, Building Code (IBC)* not apply			No to UL 268A, 801 does
LIFE SAFETY		NFPA 70-2005, 101, 110, 111, Building Code (IBC)*				
FIRE EXTINGUISHERS		29-CFR-1910.57, NFPA 10, 30, 51B, 95, Building Code (IBC)*			Yes	
CONSTRUCTION SITES		29-CFR-1926 SubPart F, NFPA 1, 241, Building Code (IBC)*			Yes	
PERMANENT STRUCTURES		NFPA 220, Building Code (IBC)*		Yes		
TEMPORARY BUILDINGS		Building Code (IBC)*		Yes		
FIRE EXPOSURE PROTECTION		NFPA 1, 80a, 1144, Building Code (IBC)*		1142 does not apply		
VENTILATION SYSTEMS		NFPA 90A, 90B, 91, 92A, 204M, 601, UL 586, UL 900, Building Code (IBC)*		No to UL 586 & UL 900		
FIRE RATED CONSTRUCTION		NFPA 80A, 90A, 101, 220, 221, Building Code (IBC)* Building Code (IBC) (Area Separation) Building Code (IBC) (Occupation Separation) NFPA 80		Yes		
STRUCTURAL DESIGN		NFPA 220, Building Code (IBC)*		Yes		
CABLE INSTALLATIONS	NFPA 13, 70-2005, 70B, 70E-2004, 262, Building Code (IBC)*			Yes		
COOLING TOWERS	NFPA 214, Building Code (IBC)*		Yes			

\* Codes and standards listed in the lower classifications are also requirements for the higher classifications. Where requirements in the lower classifications conflict with requirements in the higher classifications, the more restrictive requirement governs.

APPLICATION	COMPONENT	GENERAL SERVICE See Note	PRODUCTION SUPPORT	SAFETY SIGNIFICANT	SAFETY CLASS
	ELECTRONIC COMPUTER/DATA PROCESSING SYSTEMS	NFPA 75*		Yes	
	ELECTRICAL TRANSFORMERS	NFPA 70-2005, Building Code (IBC)*		Yes	
	EXPLOSIVES	NFPA 68,69, 70-2005, 495, 498, 780, Building Code (IBC) 27-CFR, Parts 55 & 181 49-CFR, Parts 100 to 199		ATF 5400 Title 18 USC 40*	N/A
	GLOVEBOXES, HOT CELLS, HOODS AND CANYONS	NFPA 45, 69, 90A, 91, 801 Building Code (IBC)*		N/A	
	HAZARDOUS MATERIALS	NFPA 30, 30B, 55, 58, 59A, 704, 801, Building Code (IBC)*		<b>30B, 58, 59A &amp; 801 does not apply</b>	
<b>FIRE PROTECTION SYSTEMS</b>	LABORATORIES	NFPA 45, 801, Building Code (IBC)*		N/A	
	LASERS	NFPA 70-2005, 79, 115, 21-CFR 1040, ANSI Z136.1-2000*		N/A	
	PRYOPHORIC MATERIALS & COMBUSTIBLE METALS	NFPA 68, 69, 480, 481, 482, 651, 801, Building Code (IBC)*		N/A	
	Record Storage	NFPA 232*		Yes	
	ABANDONED, SHUTDOWN, or DEACTIVATED BUILDINGS	Abandoned Facilities & Facilities undergoing D&D NFPA 801		N/A	
	FIRE SYSTEM TESTING	Per NFPA installation codes and standards except as revised in the S/RIDs NFPA 25 & 72		Per NFPA installation codes and standards unless permitted by AB documents to allow S/RIDs modified test frequencies	
		NFPA 37, 70-2005, 70E-2004, 101, 110, 111, 708 & 496		IEEE-577*	IEEE-308, 336, 338 IEEE-379, 384, 603
<b>ELECTRICAL SYSTEMS</b>	SYSTEM DESIGN	ANSI/IEEE-C2, NEMA-C84.1, NEMA ICS ASHRAE-90 IES Lighting Handbook IEEE Series C37, C57, C62 IEEE-141, 242, 739, 399, 446, 450, 484, 485, 493 IEEE-1015 UL-508, 96 & 96A*		<b>NFPA Only</b>	
	GROUNDING & LIGHTNING PROTECTION	ANSI/IEEE-C2, NFPA 70-2005, 780 IEEE-80, IEEE-142, IEEE-1050, IEEE-1100*		<b>NFPA Only</b>	

\* Codes and standards listed in the lower classifications are also requirements for the higher classifications. Where requirements in the lower classifications conflict with requirements in the higher classifications, the more restrictive requirement governs.



APPLICATION	COMPONENT	GENERAL SERVICE See Note	PRODUCTION SUPPORT	SAFETY SIGNIFICANT	SAFETY CLASS
<b>HVAC EQUIPMENT and NUCLEAR AIR TREATMENT SYSTEMS (NATS) EQUIPMENT (Installed in Nuclear Facilities)</b>	AIR FLOW & CONTROL	S 29 CFR 1910 Subparts G & H* NFPA 90A, 90B & 91			As required by IFC & International Mechanical Code
	AIR HEATERS	Industry Standards* NFPA As required by IFC & International Mechanical Code			ASME AG-1
	AIR HANDLING UNITS (HVAC only)	ARI 430* As required by IFC & International Mechanical Code			ASME AG-1
	FILTER HOUSINGS (NATS only)	ASME N509* As required by IFC & International Mechanical Code			ASME AG-1
	DAMPERS	SMACNA Standards, ASME N509, NFPA 90A, UL 555 & 555S NFPA 801 (NATS only)* As required by IFC & Inter Mechanical Code			ASME AG-1
	DUCTWORK FANS	SMACNA Standards* As required by IFC & International Mechanical Code AMCA* As required by IFC & International Mechanical Code			
	FILTERS	ASHRAE (HVAC only), ASME N509* The use of ASME AG-1 is required for all HEPA filters that fall within the requirements of Engineering Standard 15888			ASME AG-1 As required by IFC & International Mechanical Code
	ADSORBERS (NATS only)	ASME N509*	N/A		ASME AG-1
	DUCT INSULATION	ASHRAE Fundamentals Handbook, Chapter 26, "Insulation of Mechanical Systems" As required by IFC & International Mechanical Code			
	REFRIGERATION UNITS	ARI 450*	N/A		ASME AG-1
	(HVAC only) COILS	ARI 410*	N/A		ASME AG-1

\* Codes and standards listed in the lower classifications are also requirements for the higher classifications. Where requirements in the lower classifications conflict with requirements in the higher classifications, the more restrictive requirement governs.

APPLICATION	COMPONENT	GENERAL SERVICE See Note	PRODUCTION SUPPORT	SAFETY SIGNIFICANT	SAFETY CLASS	
MATERIALS	COATINGS	SSPC for above ground steel * NACE for concrete & underground steel		No to NACE		
	NDE	ASME V-2004, ASNT, ASME B31.1-2001, B31.3-2002, B&PV Code-2004, * API, AWS, AWWA, ASTM Volume 03.03		AMSE V, ASME B31.1 and AWS		
	GASKETS, PACKAGING, etc.	ANSI B16.5, B1620, B16.21, DIN 3535 Part 4 ASTM D149, D792, D1708, D2000, F36, F37B, F38, F104, F146, F152, F433 ASME Section VIII-2004 Div. 1 for "m" and "y" data *		Yes		
	CORROSION EVALUATION	ASTM A262, A763, G28, NACE *		No		
	INSULATION	For materials specification & testing --- ASTM Volume 04.06 For selection & application - None		Yes		
	STRUCTURAL	MATERIAL				
		Steel	AWS D1.1, (Alternate ASME Section IX-2004) *		Yes	
		Aluminum	AWS D1.2, (Alternate ASME Section IX-2004) *		Yes	
		Sheet Steel	AWS D1.3, (Alternate ASME Section IX-2004) *		Yes	
		Stainless Steel	AWS D1.6, (Alternate ASME Section IX-2004) *		Yes	
HVAC	MATERIAL	AWS D9.1, (Alternate ASME Section IX-2004) *		Yes		
	Sheet Metal					
MATERIALS WELDING & JOINING	PIPING	METALLIC				
		Power	ASME B31.1-2001 *	Yes		
		Process	ASME B31.3-2002, (also see Standard 15060) *	No - B31.1		
		Refrigeration	ASME B31.5-2001 or B31.3-2002 *	N/A		
		Bldg Services	ASME B31.9-2004 or B31.3-2002 *	No - B31.1		
		Fire Protection	NFPA, ASME B31.1-2001 *	Yes		
	Non-Metallic	ASME B31.3-2002 (also see Standard 15060) *	Yes			
		Copper-Solder	Copper Tube Handbook *	No		
	PRESSURE VESSELS	ASME Section VIII-2004, ASME Section I-2004 *		Yes		
	TANKS	API, ASME *		Yes		
WELDING SAFETY	ANSI Z49.1-2005 *		Yes			

\* Codes and standards listed in the lower classifications are also requirements for the higher classifications. Where requirements in the lower classifications conflict with requirements in the higher classifications, the more restrictive requirement governs.

APPLICATION	COMPONENT	GENERAL SERVICE See Note	PRODUCTION SUPPORT	SAFETY SIGNIFICANT	SAFETY CLASS
TELECOMMUNICATIONS SYSTEMS	PATHWAYS AND SPACES	ANSI/TIA/EIA — 569-B, ANSI/TIA/EIA-758-A, TIA/EIA-222-F * NFPA 70-2005 (NEC), NFPA 76, ANSI/IEEE C-2 (NESC) For exceptions/deviations to these standards/codes, see Telecommunications Std 16055, Section 3.3			N/A
	COMMERCIAL BUILDING WIRING	ANSI/TIA/EIA-568-B.1 thru B.3.1, ANSI/TIA/EIA-598-B, ANSI/TIA/EIA-526-7 and 526-14A * ANSI/TIA/EIA-758-A, NFPA 70-2005 (NEC), ANSI/IEEE C-2 (NESC) For exceptions/deviations to these standards/codes, see Telecommunications Std 16055, Section 3.3			N/A
	GROUNDING AND BONDING REQUIREMENTS	ANSI-J-STD-607-A * NFPA 70-20005 (NEC), ANSI/IEEE C-2 (NESC) For exceptions/deviations to these standards/codes, see Telecommunications Std 16055, Section 3.3			N/A
INSTRUMENTATION & CONTROLS	GENERAL DESIGN	ISA-S5.1, S5.3 ANSI N323 *	ISA	Applicable standards are listed in WSRC Eng. Std 01703	IEEE-323, 336, 338 IEEE-379, 384
	SETPOINTS & SCALING MONITORING	None HPS-N13.1, ANSI-N42.18, NFPA 70-2005 *		ANS 8.3 (Nuclear criticality only)	ISA-S67.04 * ANSI-N320
	PROGRAMMABLE DIGITAL EQUIPMENT GENERAL DESIGN		NFPA	Applicable standards are listed in WSRC Eng. Std 01703	
HUMAN FACTORS ENGINEERING	GENERAL DESIGN	IEEE-1023, IEEE-845, NUREG-0700 *		N/A	
EXPLOSIVES SAFETY	GENERAL DESIGN	DOE Manual 440.1-1A, 1/9/2006 * NFPA 69 & 495		N/A	

Note: There are a number of codes and standards listed in the matrix with a specific revision date (e.g. NFPA 70-2005). When a Design Authority or Design Agency wants to use a later revision (successor) of a code or standard that is listed by a specific date, they must first perform an engineering evaluation per WSRC-TM-95-1, Responsibilities and Requirements.

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APPENDIX E

**Project Schedule**

**Note: Appendix E to be provided upon contract award.**

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APPENDIX F

A total of 141 pages were omitted and filed separately with the Securities and Exchange Commission pursuant to a request for confidential treatment.

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APPENDIX G

A total of 46 pages were omitted and filed separately with the Securities and Exchange Commission pursuant to a request for confidential treatment.

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**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

As independent registered public accountants, we hereby consent to the use of the report of Caturano & Company, Inc. dated July 20, 2010 relating to the financial statements of Ameresco, Inc. and Subsidiaries as of December 31, 2009 and December 31, 2008 and for the three years ended December 31, 2009 (which report expresses an unqualified opinion) included in, and to all references to our Firm included in or made a part of, this Amendment No. 6 to Registration Statement on Form S-1.

/s/ Caturano & Company, Inc.

CATURANO AND COMPANY, INC.

Boston, Massachusetts

July 20, 2010

July 20, 2010

BY ELECTRONIC SUBMISSION

U.S. Securities and Exchange Commission  
Division of Corporate Finance  
100 F Street, N.E.  
Washington, DC 20549  
Attn: Hagen Ganem

Re: Ameresco, Inc.  
Registration Statement on Form S-1  
Filed March 31, 2010  
File No. 333-165821

Ladies and Gentlemen:

Submitted herewith for filing on behalf of Ameresco, Inc. (the "Company") is Amendment No. 6 to the Registration Statement referenced above.

Please contact the undersigned (617-526-6421) or Ian Kaminski (617-526-6989) with any questions or comments you may have regarding this filing.

Very truly yours,

/s/ Jason L. Kropp

Jason L. Kropp

Wilmer Cutler Pickering Hale and Dorr LLP, 60 State Street, Boston, Massachusetts 02109

Beijing   Berlin   Boston   Brussels   Frankfurt   London   Los Angeles   New York   Oxford   Palo Alto   Waltham   Washington