

ENVIRONMENTAL POWER CORP

Form 10-K

March 30, 2007

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**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

Washington, DC 20549

**FORM 10-K**

**FOR ANNUAL AND TRANSITION REPORTS PURSUANT TO SECTION 13 OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934**

(Mark One)

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT  
OF 1934**

For the fiscal year ended December 31, 2006

OR

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE  
ACT OF 1934**

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number: 001-32393

**Environmental Power Corporation**

(Exact name of registrant as specified in its charter)

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

**75-3117389**  
(IRS Employer Identification Number)

**One Cate Street, 4<sup>th</sup> Floor, Portsmouth, New Hampshire 03801**  
(Address of principal executive offices)

(Zip Code)

Registrant's telephone number, including area code: **(603) 431-1780**

Securities registered pursuant to Section 12(b) of the Act:

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**Title of Each Class**  
**Common Stock, \$0.01 par value per share**

**Name of Exchange on Which Registered**  
**American Stock Exchange**

**Securities registered pursuant to Section 12(g) of the Act: None**

(Title of Class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes  No

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer or a non-accelerated filer. See definition of accelerated filer and large accelerated filer in Rule 12b-2 of the Exchange Act (Check one).

Large accelerated filer  Accelerated filer  Non-accelerated filer

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

The aggregate market value of the registrant's common stock held by non-affiliates of the registrant as of June 30, 2006, was approximately \$55 million based on \$6.55, the price at which the registrant's common stock was last sold on that date.

As of February 28, 2007, the registrant had 9,652,025 shares of common stock outstanding.

**DOCUMENTS INCORPORATED BY REFERENCE**

Specified portions of the registrant's proxy statement for the registrant's 2007 annual meeting of stockholders currently expected to be held on June 12, 2007, which are expected to be filed pursuant to Regulation 14A within 120 days after the end of the registrant's fiscal year ended December 31, 2006, are incorporated by reference into Part III of this report.

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**ANNUAL REPORT**

**ON FORM 10-K**

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### **Item 1. Business Company Overview**

We are a developer, owner and operator of renewable energy production facilities. Our goal is to produce energy that is Beyond Renewable, which we define as energy that not only uses waste materials instead of precious resources, but energy that is also clean, reliable and cost-effective. Today, we have two operating subsidiaries, Microgy, Inc., referred to as Microgy, which, together with its affiliates, constructs, owns and operates facilities that utilize animal and food industry wastes to produce biogas and pipeline-grade methane, and Buzzard Power Corporation, referred to as Buzzard, which owns a leasehold interest in an approximately 83 megawatt waste coal electrical generation facility, referred to as Scrubgrass.

Unlike many renewable energy sources, our projects are intended to be profitable without the need for subsidies or other governmental assistance. We believe that a number of factors, including increased energy prices, greater desire for renewable energy sources and more stringent environmental and waste management requirements, will continue to provide a favorable market environment for our business. We believe that Microgy represents a substantial portion of the future potential growth of Environmental Power Corporation and, as such, we are investing substantially all of our available resources, in terms of both financial and human capital, to take advantage of Microgy's opportunities.

#### **Microgy**

##### ***Microgy Overview***

Microgy, which we acquired in 2001, is a developer of renewable energy facilities for the production and commercial application of methane-rich biogas from agricultural and food industry wastes. The biogas can be used to produce pipeline-grade methane or marketable biogas, liquefied natural gas, or LNG, renewable electrical energy or thermal energy, as well as other useful by-products. Microgy's systems utilize a proven European biogas production technology that we believe is superior to other such technologies. Microgy owns the exclusive North American license to this technology. In addition, Microgy has developed, for itself, significant engineering, construction and process knowledge regarding these systems.

At current rates for conventional energy in many U.S. markets, we believe Microgy's systems can be profitable without the need for subsidies, credits or other enhancements. Nevertheless, we believe that tax credits, renewable energy credits, pollution offset credits and other such incentives may be available to Microgy's projects, and such incentives would serve to enhance the economics of our projects. In addition, the energy output from Microgy's systems may carry a premium price in some areas, as numerous environmentally responsible entities are seeking renewable energy sources. Further, many states have either passed or may be in the process of passing legislation requiring utilities to obtain a certain percentage of their power from renewable sources.

In addition to the value generated from the production and sale of renewable gas, we believe that our facilities can generate additional environmental benefits with significant economic and social value by providing a valuable waste management solution for farms and other producers of organic wastes, such as those in the food industry. Federal and state agencies either have passed or may be in the process of passing regulations that require concentrated animal feeding operations, referred to as AFOs, to implement changes to their current waste management practices. We believe that these increasingly stringent environmental regulations will be another significant factor driving adoption of our systems.

Microgy continues to focus on its strategy of developing large-scale facilities utilizing an ownership model, pursuant to which Microgy will construct, own and operate the facility, either on its own or with one or more financial or operational partners, and profit from the ongoing sale of pipeline-grade methane or biogas produced by the facility. In this way, we intend to accumulate gas production reserves over time. In addition, Microgy continues to standardize and streamline both its system design and its approach to the marketplace in order to allow for rapid and cost-effective scale-up of its business.

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Having validated the single-tank core module of its system in three currently operating installations in Wisconsin, Microgy is concentrating on an ownership model of system development, and is principally focused on developing single-site multi-digester gas pipeline projects and on smaller-scale installations for customers with multiple-site potential, in each case based on Microgy's proven single-tank core module. Microgy's development efforts are focused on applications of its technology that are readily scalable and resource efficient and where it can reap economies of scale, such as large-scale, single-site installations and on smaller installations as part of a multi-site roll-out for a single customer.

Microgy, together with its affiliate, Microgy Holdings, LLC, a wholly owned subsidiary of Environmental Power, referred to as Microgy Holdings, is currently developing its first four multi-digester facilities for the production of pipeline-grade methane in Texas. Each of these facilities is expected to consist of eight 916,000-gallon digesters which, when operating together, will be sufficient to process the manure from up to 10,000 cows and is expected to produce an aggregate of over one billion cubic feet of biogas per year with an energy content of approximately 650,000 MMBTU, resulting in salable RNG production of over 591,000 MMBTU per year. The gas is to be treated and compressed to produce pipeline-grade methane that will be sold as a commodity and delivered directly into nearby natural gas pipelines. We refer to this pipeline-grade methane as renewable natural gas, or RNG, because it comes from sources, manure and food industry wastes, which are continually being replenished, unlike a well, which taps a finite natural gas field and depletes over time. Microgy is nearing completion of construction and commencement of commercial operations at the first of these facilities in Stephenville, Texas, known as the Huckabay Ridge facility. Microgy Holdings has entered into an agreement to sell the first eighteen months of the Huckabay Ridge facility's output to the Lower Colorado River Authority.

Microgy has also executed agreements for the location and supply of manure to four multi-digester RNG facilities in California. These facilities are expected to supply gas to Pacific Gas & Electric Company, referred to as PG&E, pursuant to the terms of a gas purchase and sale agreement between PG&E and Microgy. This long-term agreement commits PG&E to purchase up to 8,000 mcf of RNG daily from Microgy, which is approximately equivalent to the expected output of the planned facilities.

In addition, Microgy has signed agreements for two smaller-scale multi-digester installations. The first of these agreements is with Gallo Cattle Company, referred to as Gallo, pursuant to which Microgy will lease a site from Gallo and construct, own and operate a multi-digester facility to be located at Gallo's Columbard dairy, one of five dairies owned and operated by Gallo, in Atwater, California. Gallo will purchase the biogas produced by this facility for use as a substitute for propane in its cheese-making operations pursuant to the terms of a 20-year gas purchase agreement. The Gallo-Columbard project is an example of a smaller-scale, multi-digester installation for the direct sale of biogas to an on-site customer with multiple-location potential. Microgy is nearing completion of the permitting process with respect to this facility. Microgy has also entered into binding agreements with Swift & Company, referred to as Swift, relating to a multi-digester renewable gas facility to be located at Swift's flagship Grand Island, Nebraska beef processing plant. Under the terms of the agreements, Microgy will construct, own and operate the facility and sell its gas output to Swift for use in its operations pursuant to a 15-year gas purchase agreement. The Grand Island facility will consist of two, 1.2 million gallon digesters that will consume wastes generated by the Grand Island processing facility and which will be able to produce up to 250,000 MMBTU per year. Engineering and permitting activities for this facility have begun, with construction expected to commence upon the completion of the permitting process, subject to adequate financing. In addition to this facility, Microgy and Swift will work closely together to identify, evaluate and develop project opportunities at Swift's other North American beef and pork processing facilities.

In October 2006, Environmental Power and Microgy entered into a business development agreement with Cargill, Incorporated. We expect to leverage the relationship forged by the execution of this agreement to accelerate our identification and development of both facilities for the production of RNG as well as smaller-scale, multi-digester facilities dedicated to a single customer. Our agreement with Cargill is described in more detail under the heading Business Facility and Business Development Efforts Business Development Agreement with Cargill appearing below.

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In addition, Microgy has completed construction on and is operating three facilities of this type in Wisconsin. Microgy sold these projects to the farms on which they are located, and developed them in conjunction with Dairyland Power Cooperative, an electric cooperative utility. The biogas from these projects is used to generate electricity that is interconnected to Dairyland's power grid.

We believe that a number of factors, including high energy prices in the long term, increasing desire for renewable energy sources and more stringent environmental and waste management requirements, will continue to provide a favorable market environment for our business.

### ***The Microgy Market Opportunity***

Microgy believes that facilities based on its technology can generate profitable quantities of marketable, renewable gas from animal and food wastes. Increased interest in renewable energy sources, as well as a desire for energy not subject to commodity price fluctuations, drives demand for each of these uses of gas produced by Microgy's systems. Also, increasingly stringent environmental regulations concerning handling of animal and other wastes motivate demand for Microgy's systems at or near AFO and food industry sites. The ultimate opportunity to develop projects, as well as to manage and/or operate them profitably, depends on numerous factors, including the value that can be derived from the various markets described below.

#### ***Gas***

Although natural gas prices have fluctuated significantly over the last year, over the past several years natural gas prices have risen substantially due to considerable increases in demand for gas both domestically and overseas. In the United States, this increase has been due principally to the fuel needs of the power plants that have been built in the past decade, as well as relatively limited increases in natural gas delivery capabilities. In addition, developing countries, including China and India, are becoming large consumers of energy, placing further pressure on prices for fossil fuels. Microgy's systems produce commercial quantities of biogas with a high percentage of methane, which is then refined to RNG by processing it with scrubbing devices to remove carbon dioxide, sulfur compounds and other impurities. Microgy's systems for the production of RNG, unlike natural gas wells, do not suffer depletion and are consistent sources of output so long as required waste materials are available.

#### ***Renewable Energy***

We believe that market and political forces will continue to drive increased adoption of renewable energy sources, principally due to increasing concerns about the price, volatility, supply stability and environmental impact of conventional fuels. The demand for energy produced from renewable resources may provide our facilities with a variety of benefits, including federal and state renewable power production and investment credits, tax credits and carbon sequestration credits, as well as a competitive advantage as compared to conventional sources of supply. For example, currently approximately 22 states, including Texas, have enacted a renewable portfolio standard or other state mandates requiring electric utilities to increase their use of renewable energy resources such as wind, solar, and bioenergy. We believe that the directives embodied in the Energy Policy Act of 2005, signed in August 2005, and the accompanying tax credits and related benefits should serve to further drive adoption of renewable energy solutions like Microgy's. The law provides a number of incentives designed to spur development of renewable energy facilities, including, for example, accelerated depreciation provisions for gas gathering facilities. We believe that Microgy's facilities may qualify for some or all of these tax credits and other benefits, either directly or by attracting customers who can benefit from tax credits associated with utilizing renewable energy sources. Furthermore, we believe that the carbon sequestration credits Microgy's facilities are expected to produce will be marketable and will further enhance the potential profitability of its facilities. We have sold approximately 12,000 tons of carbon credits in 2006.

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### *Microgy's Strategy*

Our objective is to become a leader in the renewable energy sector via the production and marketing of pipeline-grade gas and biogas and in the development of pipeline gas production capacity and biogas resources, which will constitute our gas reserves under our control. Key elements of our strategy include:

***Developing facilities that we will own, thereby developing and growing non-depleting biogas reserves under our management.*** We intend to focus on an ownership model, in which we own projects entirely or together with financial or operational partners. We believe that this ownership model will allow us to profit from the sale of biogas or pipeline-grade gas for the operational life of the projects. By owning and operating such facilities, and by securing the supply of required amounts of manure and substrates, we seek to develop and grow a portfolio of gas reserves under our control.

***Capitalizing on the environmental attributes, as well as the renewable nature of the energy, generated by our facilities.*** We believe that the environmental attributes, such as carbon sequestration credits, generated by our facilities represent a potentially significant source of revenue, and we intend to pursue commercialization of these attributes, through sales into trading markets as well as bi-lateral and revenue sharing arrangements. In addition, we believe that the renewable nature of the gas produced by our facilities will be attractive to certain purchasers, including entities required to achieve renewable portfolio standards, and may fetch premium prices in some cases. We intend to aggressively market the renewable quality of our gas to these purchasers.

***Focusing development efforts on markets allowing for rapid and cost-effective scale-up of our business.*** We intend to focus on markets that allow scalability and resource-efficiency. We believe that by doing so we can better leverage our superior technology, process knowledge and market position to take advantage of the rapidly growing demand for renewable energy. We intend to focus on developing large-scale single-site installations for the production of pipeline-grade gas and also on developing smaller system configurations for multi-site installations for single customers, in either case for the sale of gas via interconnection with a natural gas pipeline or for direct sale to an on-site customer. We believe that such a strategy will significantly streamline the development process, and allow us to reap significant economies of scale in the design, procurement, construction and operation of our systems.

***Standardizing systems to allow for rapid and cost-effective replication and scalability.*** We intend to standardize and streamline elements of our systems so that we can drive down their costs and implement them more rapidly. Towards this end, Microgy

has developed, constructed and validated the single-tank core module of its system, currently in operation at three facilities in Wisconsin;

has designed and is refining an eight-tank system based on this core module to provide necessary scale for pipeline gas projects, currently under construction at the Huckabay Ridge site;

is pursuing smaller installations for customers with multiple site potential, such as at Swift and Gallo; and

is standardizing components, procurement channels and vendors to allow for rapid and cost-effective construction.

In pursuit of this strategy, we are focusing in the short-term on the completion and start up of our Texas facilities to prove the viability of our large-scale, multi-digester model.

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*Pursuing the advantages of our business model, in which we create and manage profitable renewable energy opportunities while alleviating the environmental pressures facing agriculture and food industry participants.* We believe we are the only provider of anaerobic digesters that is aggressively pursuing a business model of creating and managing profitable renewable energy opportunities while simultaneously addressing customers' environmental issues. Furthermore, by operating and maintaining the facilities ourselves, we believe that we will be able to maximize gas production and control the supply of required materials. To our knowledge, many other suppliers of anaerobic digestion systems merely supply the equipment, and leave the ongoing operation of the system to the purchaser. By pursuing our business model, we believe we can supply a compelling value proposition to customers and maximize value from gas production.

### ***Microgy's Products***

With respect to current and future projects such as our multi-digester RNG facilities in Texas and California, as well as our smaller-scale, multi-digester dedicated facilities, such as those being developed for Gallo and Swift, Microgy seeks to own and operate all or part of each facility, thereby profiting from the sale of the gas produced, whether by the sale of gas as a commodity or to end-users pursuant to longer-term supply agreements. Therefore, we expect our principal commercial product to be the RNG or biogas produced by our facilities, together with tradable environmental attributes, such as carbon sequestration credits. In addition, other by-products of the operation of these facilities may have commercial value as compost, fertilizer and animal bedding.

### ***Microgy's Technology***

At the heart of the Microgy system is an enhanced biogas production system. Whereas previous systems had principally focused on the environmental remediation aspects of digestion and produced biogas as a by-product, the Microgy system is designed specifically to maximize biogas production. Methane is the main product of the process, making up approximately 65% of the resulting biogas. Other by-products of the process can include fertilizers, bedding, compost and other bio-solid products that have economic value and are often marketable.

Microgy's proprietary process mixes animal manure with additional substrates, such as food industry wastes containing fats, proteins and carbohydrates. The manure provides the anaerobic bacteria that are the engine of the biogas production process, while also serving as a buffer that assists in maintaining the reaction at proper levels. The addition of substrate significantly increases gas production. Producing the proper recipe of materials, ensuring a consistent supply of these materials and carefully managing the conditions within the tank results in enhanced biogas production. Microgy's system can be easily coupled to standard, generally commercially available gas conditioning equipment in order to clean the biogas to produce RNG.

Microgy's system utilizes sophisticated equipment and control systems. This allows us to optimize the recipe for digestion in each tank, maintain precise temperature control and carefully adjust the mixing rate. In addition, the Microgy system is composed of steel tanks and piping, which are durable and nonporous, allowing for calibration of the process within a controlled environment and appropriate management of ongoing gas production and equipment operations. Furthermore, the high level of gas output and its high methane content allows for application of other technologies, such as those used for gas conditioning. Coupled with the technical advantages of the system is a suite of proprietary processes and know-how to achieve the highest levels of biogas production, resulting in the lowest output costs per unit of input of any anaerobic digestion system known to Microgy.

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Set forth below is a diagram of the Microgy process:

***License Agreement with Danish Biogas Technology A/S***

Microgy licenses the anaerobic digestion portion of its technology from Danish Biogas Technology A/S, referred to as DBT. DBT's parent, Xergi A/S, referred to as Xergi, is 50% owned by Schouw & Co., a Danish public company and 50% by DDH, a Danish environmental and engineering firm. DBT has been a leader in the development of this technology and has constructed 30 anaerobic digester facilities in Europe over the past 15 years. In Denmark, DBT's systems have been successful in providing manure management and viable renewable energy for many years.

On May 12, 2000, Microgy entered into a licensing agreement with DBT that granted Microgy a perpetual and exclusive license in North America for the commercial development and use of certain proprietary technologies, including Microgy's core anaerobic digestion technology. This license agreement was amended in April 2003 and March 2005 to further define certain support obligations of DBT and to amend the structure of the compensation payable to DBT for use of the license. According to the license as amended, DBT will receive fixed payments for its participation in the design phase of each project, including engineering work and construction drawings, and a licensing fee, included in the cost of the facility, that is based on a percentage of the total cost for each project facility where the licensed technology is installed and operating. We believe that our relationship with DBT is good. Microgy is in close contact with DBT personnel on a regular basis regarding the design, construction and operation of our digesters.

**Table of Contents****Facility and Business Development Efforts***Current Facilities Under Development*

The following table sets forth the various facilities under development by Microgy and its affiliates, including information with respect to the type of facility, its location, and its anticipated output:

<b>Facility</b>	<b>Location</b>	<b>Type Gas</b>	<b>RNG Production(a)</b>
Huckabay Ridge	TX	RNG	650,000
Mission	TX	RNG	650,000
Rio Leche	TX	RNG	650,000
Cnossen	TX	RNG	650,000
Maddox	CA	RNG	325,000
Bar 20	CA	RNG	650,000
Gallo-RNG	CA	RNG	650,000
Hollandia/Lancing/Cloverdale	CA	RNG	975,000
Gallo-Columbard	CA	Inside-the-Fence	125,000
Swift-Grand Island	NE	Inside-the-Fence	250,000
<b>Total</b>			<b>5,575,000</b>

(a) Expected gas production in MMBtu / year at full operation.

Of the foregoing facilities, Huckabay Ridge is in the commissioning stage, and the balance of the projects are in various stages of development or permitting.

*Business Development Agreement with Cargill*

In October 2006, Environmental Power and Microgy entered into a Business Development Agreement, referred to as the BDA, with Cargill, Incorporated, acting through its Emerging Business Accelerator Unit, referred to as Cargill. Pursuant to the terms of the BDA, Cargill has agreed to use its reasonable efforts to identify potential anaerobic digester projects for development by Environmental Power and Microgy within Cargill's network of customers, farmers and strategic business partners in North America. Cargill and Microgy will work jointly to identify specific targeted markets for developing such projects within the Cargill network, and Cargill will identify project candidates based upon agreed project guidelines. Environmental Power and Microgy will consider each project candidate and select those candidates they want Cargill to pursue further on their behalf. Cargill will then negotiate with such project candidates with the goal of obtaining a binding agreement whereby such project candidates commit to give Microgy the option to implement an anaerobic digester project. Once a project commitment has been signed, Cargill will present it to Environmental Power and Microgy for their review and consideration. Environmental Power and Microgy will then proceed with the negotiation of mutually acceptable leases and other project agreements with the project candidates in which they are interested.

In consideration of Cargill's services under the BDA, we will grant to Cargill warrants to purchase shares of our common stock equal to 1% of the outstanding shares of our common stock on a fully-diluted basis on such date as Cargill delivers executed project commitments with project candidates relating to anaerobic digester projects covering 10,000 cow equivalents, as defined, and thereafter to issue similar warrants on each succeeding date on which the same warrant issuance conditions have again been satisfied, up to a maximum of 4.99% of the outstanding shares of common stock on such issuance date subject to all warrants in the aggregate. The warrants will be exercisable for a period of five years from the issuance date, and will have an exercise price per share equal to 75% of the closing price of our common stock on the last trading day prior to the issuance date.

As further consideration for Cargill's services under the BDA, for a three-year period beginning with the first date of issuance of a greenhouse gas reduction certificate issued to, owned or controlled by Environmental Power or Microgy derived from an anaerobic digester project subject to a project commitment, referred to as an eligible certificate, Environmental Power and Microgy will convey to Cargill or its designee ownership of 25% of all such eligible certificates, after giving effect to any share of such certificates owed to a project candidate



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pursuant to the terms of any lease or other project agreement with such project candidate. During such three-year period, Cargill will also have the first right to bid on any other proposed sale or conveyance of any eligible certificates. In addition, with respect to each AD Project subject to a project commitment which generates revenue to Environmental Power or Microgy from the sale of gas, electricity or other by-products (but not including sales of greenhouse gas reduction certificates), Environmental Power or Microgy will be obligated to pay to Cargill, within 30 days of receipt of such revenues, 2% of such revenues for a five-year period beginning on the date on which any such revenue is first received. Finally, during a three-year period following the date of first generation of gas or electricity by an anaerobic digestion project subject to a project commitment, Cargill will have the first right to bid on the proposed sale or conveyance of all such gas or electricity.

The BDA will terminate upon the earliest of the following events:

the third anniversary of the date of the BDA;

the delivery by Cargill of project commitments signed by project candidates covering 50,000 cow equivalents;

termination by a party if a court shall have entered a final, non-appealable order, decree, ruling or other action restraining, enjoining or otherwise prohibiting the transactions contemplated by the BDA;

termination by a party if the other party is in material breach or default, which breach or default is not cured within 30 days after the date of notice thereof;

termination by a party if the other party becomes insolvent or unable to pay its debts when due, has a trustee or receiver appointed for any or all of its assets, makes an assignment for the benefit of creditors or has a bankruptcy petition filed by or against it which is not dismissed within 90 days;

termination by a party if the other party ceases, or threatens to cease, to carry on business; or

termination by a party for any reason upon 30 days' written notice to the other party.

Upon any termination of the BDA, the BDA will become void, and the parties will have no liability or obligation thereunder, except for liabilities resulting from breach of the BDA on or prior to the date of termination, and except that Cargill will be entitled to any consideration described above for all AD Projects subject to a Project Commitment entered into prior to the date of termination. Notwithstanding any termination of the BDA, during the term of the BDA and for a period of two years after the date of termination, the Environmental Power and Microgy will not solicit or negotiate with any person who had entered into negotiations with Cargill or its affiliates with respect to an anaerobic digestion project but with whom no project commitment has been concluded, without the prior written consent of Cargill or Cargill's participation.

Pursuant to the terms of the BDA, Environmental Power and Microgy have agreed not to enter into a similar business development agreement with certain prohibited parties identified by Cargill from time to time, provided that there cannot be any more than seven prohibited parties at any given time, and except for any such parties with which we had discussions prior to their being identified by Cargill as prohibited parties.

## ***Customers and Suppliers***

### ***Customers***

Microgy intends to sell the gas generated by its facilities in the spot market as a commodity or pursuant to longer-term purchase and sale commitments. With respect to Microgy's large-scale, multi-digester RNG facilities, Microgy anticipates selling the gas produced by these facilities either directly into local pipelines as a commodity, or to single customers pursuant to longer-term purchase and sale commitments at

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fixed or predictable prices. For example, Microgy Holdings has entered into an agreement with the Lower Colorado River Authority to purchase all of the gas produced by the Huckabay Ridge facility over an 18-month period. In addition, Microgy has entered into a long-term agreement with PG&E to purchase an amount of gas equal to the anticipated daily output of its currently planned facilities in California.

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Microgy's smaller-scale multi-digester facilities will be developed to supply the gas needs of a single customer on-site, such as Gallo or Swift, pursuant to a long-term purchase and sale agreement, though Microgy expects to have the right to market excess gas not used by these customers.

In 2006, about \$825,000 of Microgy's revenues, or 37% of total revenues, was related to one customer, Dairyland Power Cooperative.

### *Suppliers*

Microgy and its affiliates generally obtain the construction materials and equipment necessary to construct and operate their facilities from commercial sources pursuant to purchase orders and similar arrangements. Microgy believes these materials and equipment to be generally commercially available. Microgy and its affiliates generally enter into manure handling agreements with the farms on which their facilities are located for the supply of manure for the operation of such facilities, or arrangements for the operation by third parties of manure composting operations on land owned by Microgy affiliates. Microgy generally seeks to locate its large-scale multi-digester facilities in areas with a high concentration of cow manure from diverse sources. Substrate for a facility can be obtained from a variety of sources, either on an opportunistic basis, pursuant to informal supply relationships, or from the operations of the consumer of the gas, in the case of the smaller-scale, single customer installations.

In July 2006, Microgy entered into a substrate supply and cooperation agreement with Liquid Environmental Solutions Corp., or LESC. LESC is one of the largest companies in the United States specializing exclusively in the collection, treatment and disposal of non-hazardous liquid waste streams, including grease trap waste generated by the food service industry. This grease trap waste represents an excellent source of substrate for use in Microgy's projects. Pursuant to the terms of this agreement, LESC has agreed to supply, and Microgy has agreed to accept, 100% of the substrate requirements for the Huckabay Ridge, Mission and Rio Leche facilities in Texas, in each case pursuant to substrate supply plans to be agreed to by LESC and Microgy. With respect to the Cnossen facility in Texas and other future facilities, LESC has a right of first offer to supply up to 100% of the substrate requirements of each such facility. Microgy is required to give LESC at least nine months' notice of its intention to construct a new facility. Within two months thereafter, LESC must submit to Microgy a substrate supply plan for such proposed facility reasonably acceptable to Microgy. Such substrate supply plan may provide for the supply of up to 100% of the requirements of the proposed facility. If the plan provides for the supply of less than 100% of such facility's requirements, Microgy may obtain substrate from other sources up to the amount of such shortfall. This agreement has a term of 10 years, with automatic five-year renewal terms unless either party gives 12 months' prior notice of its intention not to renew, but remains in effect for a term of 20 years with respect to any facility that LESC has agreed to supply. The agreement may be terminated by either party in the event the other party materially breaches this agreement and such breach remains uncured for a period of 30 days following written notice of such breach by the non-breaching party (or, if the nature of the breach means that it is not reasonably curable within 30 days, because the breaching party has not commenced curative activities), provided however, that if any such breach relates only to a particular facility, then the agreement may be terminated only with respect to such facility. The right to terminate the agreement for breach is in addition to any other rights or remedies the terminating party may have at law or in equity. Microgy has assigned its rights and obligations under this agreement to each of the special purpose entities formed to own the Texas facilities as subsidiaries of Microgy Holdings, to the extent applicable to the facility owned by such entity.

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**Buzzard**

Buzzard is a subsidiary of our wholly owned subsidiary, EPC Corporation. Buzzard leases the Scrubgrass plant from Scrubgrass Generating Company, L.P. The Scrubgrass plant, located on a 600-acre site in Venango County, Pennsylvania, is an approximately 83 megawatt waste coal-fired electric generating station. The following table describes the current key participants in the Buzzard plant and their relationship and responsibilities:

<b>ENTITY</b>	<b>RELATIONSHIP</b>
Environmental Power Corporation	Parent of EPC Corporation
EPC Corporation	Current owner of Buzzard Power Corporation
Buzzard Power Corporation	Holds the lease rights to the Scrubgrass Plant and all principal project agreements
Scrubgrass Generating Company, L.P.	Owner and lessor of the Scrubgrass Plant
U.S Operating Services Company	Operator of the Scrubgrass Plant
Power Services Company	Manages business activities of the Scrubgrass Plant
Pennsylvania Electric Company, or PENELEC	Purchases energy from the Scrubgrass Plant
Falcon Power Corporation ( Falcon )	General and Limited Partner of Lessor
Scrubgrass Power Corporation ( SPC )	General Partner of Lessor
Cogentrix/Scrubgrass, Inc.	General Partner of Lessor
Aspen Scrubgrass Participant, LLC	Limited Partner of Lessor

Buzzard's lease commenced on June 30, 1994 and provides for a term of 22 years with a renewal option for up to 3 years. Under the lease, Scrubgrass Generating Company assigned to Buzzard all principal project agreements and its rights and obligations under such contracts including the following:

power purchase agreement;

management services agreement;

operating and maintenance agreement;

limestone supply agreements;

ground lease agreements;

fuel agreements;

transportation; and

materials handling agreements.

We have pledged Buzzard's common stock to the Scrubgrass Generating Company, referred to as SGC, as security for Buzzard's performance of its obligations as lessee.

## Edgar Filing: ENVIRONMENTAL POWER CORP - Form 10-K

Our wholly owned subsidiary, EPC Corporation, holds our investment in Buzzard as its sole asset. In September 2003, EPC Corporation obtained a \$3,700,000 loan from an affiliate of ArcLight Energy Partners Fund I, L.P., referred to as ArcLight. This debt is secured by the stock of EPC Corporation. This loan incurs a 20% interest rate. All distributions from Buzzard are required to be used to repay this note. As an incentive fee for providing this note, EPC Corporation also granted to ArcLight a participation right in a portion of the future distributions of Buzzard after the note has been repaid. ArcLight will receive half of the distributions after the note has been repaid in full and after EPC Corporation alone receives a total of \$1,400,000 of distributions. This

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participation right will end on December 31, 2012. EPC Corporation is required to make payments only when it receives distributions. Any unpaid interest by the 15th of any month will be accrued and rolled into the principal. Nevertheless, EPC Corporation is required to make at least one payment of any amount within a 24-month period. As of the date of this filing, it has satisfied this requirement for the next 8 months.

SGC has projected that Buzzard may have a shortfall in revenues available to make certain rental payments which become due commencing in June 2006. Buzzard, SGC and Aspen Scrubgrass Participant, an owner of the Scrubgrass facility and an affiliate of ArcLight, have begun exploratory discussions regarding mutually acceptable options. Possible options include the restructuring of the lease agreement relating to the Scrubgrass facility and other agreements to which Buzzard is party. In the meantime, Buzzard and SGC have entered into a forbearance agreement which runs through July 1, 2007. Should these projections prove accurate, and if Buzzard is not able to reach an agreement with the relevant parties on a restructuring of the Scrubgrass lease, the missed payments would constitute an event of default by Buzzard under the lease which could result in a termination of the lease, unless the missed payments are otherwise cured or excused.

Discussions among Buzzard, SGC and Aspen are ongoing. We have reviewed SGC's projections and have made suggestions to the ownership that we believe would obviate the projected shortfall (and hence avoid a default). Our discussions have been productive and although we have not identified a firm strategy for going forward, we do believe, based on the cooperation among all parties, that a mutually acceptable outcome to all parties can and will be reached.

U.S. Operating Services Company operates the Facility pursuant to a 15-year operating and maintenance agreement. Under the terms of this agreement, U.S. Operating Services can incur a liability not to exceed its management fee if it does not achieve certain targeted output performance levels.

Buzzard sells all of the electric output of the Scrubgrass facility to Pennsylvania Electric Company, known as Penelec, a subsidiary of FirstEnergy Group, under a 25-year power sales agreement, which commenced in June 1993. Accordingly, Penelec is Buzzard's only customer, and accounted for all of its revenues in 2006. Under this contract, except for amounts sold above certain hourly and annual limits, all power was sold at fixed rates that initially averaged \$.0468 per kilowatt hour and escalated by 5% annually through 2004. For years 2005 through 2012, the agreement provides for a rate equal to the greater of a scheduled rate, as adjusted to reflect actual inflation during the contract term compared to the prior 5% annual adjustment, or a rate based on the PJM Billing Rate.

The PJM Billing Rate is the monthly average of the hourly rates for purchases by the FirstEnergy Group from, or sale to, the Pennsylvania-New Jersey-Maryland Interconnection. For years 2013 through 2015 and 2016 through 2018, if Buzzard exercises the renewal term option, terms of the power purchase agreement applicable during these prospective periods will apply. The agreement provides for a rate equal to the lower of the average monthly PJM Billing Rate or the rate paid for calendar year 2012 adjusted annually by the percentage change in the Gross National Product Deflator less one percent.

Buzzard deposits all revenues earned under the power sales agreement into an account administered by a disbursement agent. Before Buzzard can receive cash from the operation of the Scrubgrass plant, Buzzard must first satisfy all operating expenses, base lease payments, restricted cash deposits, and other subordinated obligations. Buzzard's base lease payments consist of Scrubgrass Generating Company's debt service, equity repayment, base return on equity and related expenses. Buzzard must also pay to Scrubgrass Generating Company additional rent of 50% of the net cash flows Buzzard receives from the operation of the Scrubgrass plant. We are not required to fund Buzzard's operating losses, or otherwise invest further from sources outside of the Scrubgrass plant.

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The debt obligations for Scrubgrass Generating Company and Buzzard are described below:

Description of the Obligation	Balance at	Balance at	Interest Rate
	December 31, 2006	December 31, 2005	
<b>Buzzard's lease obligations (maturity):</b>			
Tax-exempt bonds (2012)	120,232,000	130,176,000	Quoted Bond Rates
<b>Buzzard's debt obligations (maturity):</b>			
Working capital loan (2008)	4,154,000		LIBOR + 1.250%
<b>TOTAL</b>	<b>124,386,00</b>	<b>130,176,000</b>	

Scrubgrass Generating Company or Buzzard pays interest on these obligations at either quoted rates for tax-exempt debt, rates fixed by swap agreements for taxable debt, or rates for taxable debt, which are based on the London Interbank Offering Rate, or LIBOR. On December 22, 1995, Scrubgrass Generating Company entered into an interest rate swap arrangement that fixed the LIBOR component for the life of its swap rate term loan at 6.4225%. As a result, the interest rate for the swap rate term loan was fixed at 7.5475% through 2001 and at 7.6725% for its remaining term. This swap rate term loan and the other lease obligations of Buzzard are not debt obligations of Buzzard and are not recorded on our balance sheets.

Under the terms of the loan agreements, Buzzard is subject to various customary financial and operating covenants, with the most critical being debt service coverage. It is required to maintain a 1.20 coverage ratio defined as all cash from revenues minus all operating expenses divided by principal and interest payments. As of December 31, 2006 and 2005, Buzzard was in compliance with all such covenants.

The Environmental Protection Agency and the Pennsylvania Department of Environmental Protection granted Nitrogen Oxide Ozone Transport Region Budget Allowances, or NOx Credits, to Buzzard based on factors that primarily pertain to the design and operation of the Scrubgrass plant. Buzzard is required annually to maintain NOx Credits that equal or exceed the quantity of its nitrogen oxide emissions during a seasonal period known as an ozone season. If the Scrubgrass plant's nitrogen oxide emissions exceed its available NOx Credits, Buzzard would be subject to fines by such agencies. During 1999, Buzzard installed machinery, costing \$811,568, which has significantly reduced its nitrogen oxide emissions. Accordingly, we anticipate that Buzzard may not require a portion of its future NOx Credits to comply with the applicable regulations. NOx Credits are transferable and marketable. Buzzard has sold and may sell, from time to time, its projected excess NOx Credits or purchase additional NOx credits that are necessary to meet the applicable regulations. To date, we have entered into several agreements to sell and purchase, when necessary, NOx credits, but we have not sold any such credits since 2002.

**Competition***Microgy*

Microgy plans to generate revenue from the development and ownership of facilities that market renewable, green energy in addition to providing pollution control features to the agricultural and food industry markets. Microgy's green competitors include other energy producers using biomass combustion, biomass anaerobic digestion, geothermal, solar, wind, new hydro and other renewable sources. These companies represent a significant class of competitors because they will compete with Microgy for sale of marketable renewable energy credits and participation in various renewable portfolios and other programs.

Microgy also faces many forms of competition with respect to the resources required to operate its facilities. Such competition includes other providers of pollution control, including environmental engineers, providers of pollution control systems, private companies, public companies, associations, cooperatives, government

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programs, such as AgStar, foreign companies, and educational pilot programs. Furthermore, there are many companies that offer anaerobic digester systems. We believe that at least 60 companies offer complete systems or components to these systems in the U.S. market. A number of competitors have more mature businesses and have successfully installed anaerobic digester systems in the United States. Microgy may be forced to compete with any of these competitors for access to equipment, construction supplies, skilled labor for the construction and operation of its facilities and the supplies of manure and substrate required to operate its facilities. In addition, Microgy may also have to compete for access to substances that make desirable substrates with other users of these substances, such as recyclers of waste grease and producers of biodiesel and other biofuels. The effect of such competition could be reflected in higher costs associated with obtaining access to these resources, as well as an insufficient supply of these resources for the profitable operation of Microgy's facilities. If Microgy cannot obtain and maintain these supplies, or cannot obtain or maintain them at reasonable costs, its profitability will be adversely affected.

### ***Buzzard***

Buzzard generates electricity using waste coal, an alternative energy source. Buzzard sells all of its electricity at rates established under a long-term power purchase agreement. With the exception of the risk that Penelec would seek and achieve judicial determination that it has a right to renegotiate the terms of the power purchase agreement, the sale of power from the facility is not subject to competition during the term of the power purchase agreement. However, because contracted rates in the later years of the agreement are determined with reference to the Gross National Product Deflator, or GNPD, and future market conditions at the PJM western hub, the rate at which such power is sold is influenced by competitive power rates in the region. Therefore, low wholesale energy rates during the later years of the power purchase agreement would adversely affect Buzzard's profitability and could affect Buzzard's results of operations and financial position.

### **Environmental Regulation**

Our present and any future projects are and will be subject to various federal, state and local regulations pertaining to the protection of the environment, primarily in the areas of water and air pollution and waste management. Microgy intends to build plants in various states. These facilities will be subject to federal, state and local regulatory requirements in all the locations where they may operate.

In many cases, these regulations require a lengthy and complex process of obtaining and maintaining licenses, permits and approvals from federal, state and local agencies. We also have and will have significant administrative responsibilities to monitor our compliance with the regulations. As regulations are enacted or adopted in any of these jurisdictions, we cannot predict the effect of compliance therewith on our business. Our failure to comply with all new applicable requirements could require modifications to operating facilities. During periods of non-compliance, our operating facilities may be forced to shut down until the compliance issues are resolved. We are responsible for ensuring the compliance of our facilities with all the applicable requirements and, accordingly, we attempt to minimize these risks by dealing with reputable contractors and using appropriate technology to measure compliance with the applicable standards. The cost of environmental regulation does and will continue to affect our profitability.

### ***Microgy***

Depending on the location of each individual plant, the federal Clean Water Act and state implementation plans of the federal Clean Air Act as described below, as well as other state and local laws, may apply to Microgy's projects.

The primary federal law affecting manure management on animal operations is the Clean Water Act, under which the National Pollutant Discharge Elimination System, or NPDES, program covers concentrated AFOs.

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Federal NPDES permits may be issued by the EPA or any state authorized by the EPA to implement the NPDES program. The EPA has certified 45 states to issue their own NPDES permits. Furthermore, in December 2002, the EPA issued new rules to regulate manure run-off on farms, one of the nation's leading causes of water pollution. The new rules apply to an estimated 15,500 livestock operations across the country. These farms will need to obtain permits, submit an annual report, and develop and follow a plan that will ensure that measures are being instituted to minimize runoff from wastewater and manure. We believe that these requirements represent a significant opportunity for Microgy, insofar as a Microgy system can play a useful role in any animal waste management program.

### ***Buzzard***

Buzzard's Scrubgrass facility is subject to air quality regulations under the Clean Air Act. The Clean Air Act established air quality standards for certain pollutants including ozone, sulfur dioxide, nitrogen oxides, particulate matter, carbon monoxide and lead. Title I of the Clean Air Act established the Northeast Ozone Transport Region, which includes 12 northeast states and the District of Columbia, to address the concentration of these pollutants in the Northeast. Ozone control is facilitated by the control of pollutant precursors, which are nitrogen oxides, or NOx, and volatile organic compounds. Certain electric generating facilities that use fossil fuels, including the Scrubgrass plant, are considered major sources of NOx emissions.

In recent years, the Pennsylvania Department of Environmental Protection, or PA DEP, established regulations that required reductions in NOx emissions. To administer these regulations, the PA DEP began allocating NOx allowances, referred to as NOx Credits, to certain facilities. A market-based trading system was established to allow companies with excess NOx Credits to trade with companies that required additional NOx Credits to meet the stricter requirements. The Scrubgrass plant, as a result of the efficiency of its original design and recent upgrades, meets the strictest emissions requirements. As a result, Buzzard has been able to benefit from the sale of NOx Credits. To date, Buzzard has sold credits through 2007 in anticipation of meeting the air quality standards for sulfur dioxide, nitrogen oxides, particulate matter, carbon monoxide and lead during this period.

The Scrubgrass plant must also comply with various environmental regulations pertaining to water discharge as well as the handling and disposal of hazardous and non-hazardous wastes. Currently, the Scrubgrass plant employs special handling procedures for the transportation of its fuel, which is classified as a waste, from the waste sites to the Scrubgrass plant. Ash, which is a byproduct of the waste-coal combustion process, is removed from the Scrubgrass facility and returned to the original waste site, which is reclaimed in part by deposit of the ash along with the soil. Under existing regulations, ash is not classified as a hazardous waste. However, various environmental organizations have recently been lobbying for changes to the applicable regulations for the classification of ash. If there are changes to the waste classification of ash, ash disposal costs may significantly increase, which could have material adverse affect on Buzzard's results of operations and financial position.

### **Energy Regulation**

As participants in the energy marketplace, Microgy, Buzzard and the facilities they own and operate are and will continue to be affected by the complex matrix of federal and state regulation of the energy sector, including the federal Public Utility Regulatory Policies Act, the Federal Power Act and the regulation and oversight of state public utility commissions. Each of these areas is discussed in more detail below.

#### ***Public Utility Regulatory Policies Act***

The Public Utility Regulatory Policies Act of 1978, or PURPA, and the regulations under PURPA promulgated by the Federal Energy Regulatory Commission, or FERC, have provided incentives for the development of cogeneration facilities and small power production facilities, which are power projects that use

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renewable fuels, generally have a capacity of less than 80 megawatts and meet certain ownership requirements. In general, PURPA requires utilities to purchase electricity produced by facilities using alternative fuels or from cogeneration facilities that meet the FERC's requirements for certification as qualifying facilities, or QFs. The Energy Policy Act of 2005 recently eliminated this purchase requirement with respect to new contracts.

PURPA provides two primary benefits to QFs. First, QFs generally are exempt from compliance with extensive federal and state regulations that control the financial structure of an electric generating plant and the prices and terms on which electricity may be sold by the plant. Such regulations include the Federal Power Act, or FPA. Second, electric utilities are required to purchase electricity generated by QFs at a price that does not exceed the purchasing utility's avoided cost and to sell back-up power to the QFs on a non-discriminatory basis. The term "avoided cost" is defined generally as the price at which the utility could purchase or produce the same amount of power from sources other than the QF. FERC regulations also permit QFs and utilities to negotiate agreements for utility purchases of power at rates other than the utilities' avoided costs. While public utilities are not explicitly required by PURPA to enter into long-term power sales agreements, PURPA, as implemented in many states, has helped to create a regulatory environment in which it has been common for long-term agreements to be negotiated.

In order to obtain QF status under PURPA, any facilities that we might acquire or develop will be required to meet certain size and fuel requirements and/or co-generate. Specifically, a cogeneration facility must produce not only electricity, but also useful thermal energy for use in an industrial or commercial process for heating or cooling applications, while meeting certain energy efficiency standards. With respect to small power production facilities, there is generally no size limit, and the primary energy source of the facility must be biomass, waste, renewable resources, geothermal resources, or any combination thereof.

Our Scrubgrass plant is certified as a QF by the FERC. In addition, we believe that some of the facilities we would build or develop using Microgy's licensed technology would also meet the qualifications required to be a QF. We endeavor to develop our projects and monitor compliance of existing projects with applicable regulations in a manner that minimizes the risks of any project losing its QF status. However, if a facility in which we have an interest should lose its status as a QF, the project would no longer be entitled to the exemptions from the FPA. Loss of QF status, among other things, could trigger certain rights of termination under the facility's power sales agreement, the acceleration of indebtedness related to the facility, could subject the facility to rate regulation as a public utility under the FPA and state law.

### ***Federal Power Act***

Under the FPA, FERC is authorized to regulate the transmission of electric energy and the sale of electric energy at wholesale in interstate commerce. FERC regulation under the FPA includes approval of the disposition of generation facilities, jurisdictional utility property, authorization of the issuance of securities by public utilities, regulation of the rates, terms and conditions for the transmission or sale of electric energy at wholesale in interstate commerce, the regulation of interlocking corporate directors, officers, and officials, and a uniform system of accounts and reporting requirements for public utilities.

FERC regulations provide that a QF is exempt from regulation under many of the foregoing provisions of the FPA. However, QFs remain subject to limited FPA regulation concerning interconnection authority, transmission authority, transmission rates, information requirements, and emergency provisions. However, many of the regulations that customarily apply to traditional public utilities have been waived or relaxed by FERC for power marketers, companies that were exempt wholesale generators, or EWGs, prior to the repeal of the Public Utility Holding Company Act of 1935, and other non-traditional utilities that have demonstrated that they lack market power in the region in which they are located. Such companies are often granted authorization to charge market-based rates, blanket authority to issue securities, and waivers of FERC's requirements pertaining to accounts, reports and interlocking corporate directors, officers, and officials.

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### ***State Regulation***

State public utility commissions, or PUCs, have historically had broad authority to regulate both the rates charged by, and the financial activities of, electric utilities operating in their states and to promulgate regulations for implementing PURPA. Because a power sales agreement generally is incorporated into a utility's cost structure and its retail rates, power sales agreements with power producers, such as EWGs and QFs, are potentially subject to state regulatory scrutiny, including the process in which the utility has entered into the power sales agreement.

Furthermore, independent power producers that are not QFs or EWGs are considered to be public utilities in many states. As such, these entities would be subject to broad regulation by a PUC, ranging from certificates of public convenience and necessity to regulation of organizational structure, accounting, and financial and other matters. In addition, because QF contracts are sometimes at rates that exceed current market rates for electricity, state PUCs sometimes encourage their regulated utilities to take certain actions to reduce the difference between the market price and the contract price. Such actions can include efforts to renegotiate or restructure the contracts, litigation or termination. States may also assert jurisdiction over the siting and construction of electric generating facilities including that associated with QFs and EWGs. States may further assert jurisdiction, with the exception of QFs, over the issuance of securities and the disposition, sale, or transfer of assets by these electric generation facilities. PUCs, pursuant to state legislative authority, may also have jurisdiction over how new federal initiatives associated with power production are implemented in each state. The actual scope of jurisdiction over independent power projects by state public utility regulatory commissions varies from state to state.

### ***Employees***

As of December 31, 2006, we had 47 employees, including executive officers and other marketing, finance, engineering and administrative personnel. None of our employees are represented by a collective bargaining agreement, and we consider our relations with our employees to be good.

### ***Available Information***

We maintain a web site with the address [www.environmentalpower.com](http://www.environmentalpower.com). We are not including the information contained on our web site as part of, or incorporating it by reference into, this annual report. We make available free of charge on or through our web site our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and all amendments to those reports as soon as practicable after such material is electronically filed with or furnished to the Securities and Exchange Commission.

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### **Item 1A. Risk Factors**

*An investment in our common stock is speculative and involves a high degree of risk. You should purchase the common stock only if you are sophisticated in financial matters and business investments. You should carefully consider the following factors before purchasing our common stock.*

#### **Risks Relating to Microgy**

*Microgy has very little operating history from which to evaluate its business and products.*

Microgy was formed in 1999 and remains in the early stages of its development. Microgy is developing facilities that use environmentally friendly anaerobic digestion and other technologies to produce biogas from animal and organic wastes. However, none of the facilities to be owned by Microgy has yet been completed. Although Microgy has developed and is operating three single digester facilities in Wisconsin, Microgy has limited experience in the construction and operation of multiple digester facilities such as those Microgy is currently constructing or intends to construct, and limited experience in gas conditioning or the sale of gas as a commodity. Because of this limited experience, Microgy may never be profitable.

*Microgy has experienced losses to date, and we anticipate it will continue to experience losses into at least 2008.*

Microgy has a history of losses. For the twelve months ended December 31, 2006, we incurred a net loss of \$6.8 million. For the years ended December 31, 2005 and 2004, we incurred net losses of \$11.4 million and \$4.0 million, respectively. We expect our Microgy subsidiary to continue to incur losses, reduce our earnings or, as the case may be, add to our earnings deficit as we seek to further develop its business. These ongoing losses will adversely affect our financial condition into at least 2008. As a result of these losses, we anticipate that we will, in all likelihood, have to rely on external financing for most of our capital requirements. Future losses are likely to continue unless we successfully implement our business plan. If we are not successful in reaching and maintaining profitable operations, we may not be able to attract sufficient capital to continue our operations. Our inability to obtain adequate financing would likely result in the need to curtail or cease our business operations and, consequently, a much lower stock price.

*Microgy cannot predict when any facility will be completed, what Microgy's costs will be or, consequently, whether Microgy or any facility developed by Microgy will be profitable.*

Development of Microgy's facilities is an inherently risky activity, subject to significant uncertainties and a lengthy development cycle. Uncertainties and risks include those relating to costs and availability of supplies and labor, fluctuations in the prices available for the sale of facility output and timing of completion of construction. Furthermore, obtaining the large number of agreements, permits and approvals necessary to develop, install, operate and manage any of Microgy's facilities, as well as to market the energy and other co-products and to provide necessary related resources and services, involves a long development cycle and decision-making process. Microgy is required to enter into or obtain some or all of the following in connection with the development of its facilities:

Site agreements;

Supply contracts;

Design/build or other construction-related agreements;

Off-take agreements for gas produced;

Power sales contracts;

Various co-product sales agreements;

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Waste disposal agreements;

Licenses;

Environmental and other permits;

Local government approvals; and

Financing commitments required for the successful completion of facilities under consideration.

Microgy's failure to accomplish any of these objectives could materially increase the cost, or prevent the successful completion of, development or operation of facilities and incur the loss of any investment made. Many of these objectives are dependent upon decisions by third parties. Delays in such parties' decision-making process are outside of our control and may have a negative impact on our development costs, cost of operations, receipt of revenue and sales projections. We expect that, in some cases, it may take a year or more to obtain decisions on permits and approvals and to negotiate and close these complex agreements. Such delays could harm our operating results and financial condition.

As a result of the foregoing uncertainties we are unable to project with certainty Microgy's organizational, structural, staffing or other overhead costs, the construction or operating costs associated with any facility, or whether any facility, or Microgy as a whole, will generate a profit. If Microgy fails to generate a profit, your investment in our securities will be materially adversely affected.

***If we are unable to obtain needed financing for Microgy's facilities, the value of our Microgy investment may be reduced significantly.***

Because we have not yet generated sufficient positive cash flow, and do not expect to do so until at least 2008, we do not have adequate funds on hand to complete construction of the facilities we currently have planned. We are seeking and will require corporate, project or group financing to fund the cost of any development we may decide to pursue for Microgy's facilities. This financing may be difficult or impossible for us to obtain. If we are unable to obtain such financing, the value of our Microgy investment may be reduced significantly, and we may be required to substantially curtail our business or completely cease construction or operation of any facilities. This financing will depend on prospective lenders' or investors' review of our financial capabilities as well as specific facilities and other factors, including assessment of our ability to construct and manage each facility successfully. If we are unable to obtain the required financing, your investment in our securities will be materially adversely affected.

***If Microgy is unable to obtain sufficient manure and substrate for its facilities at an acceptable cost, such facilities, and Microgy as a whole, will likely not be profitable.***

The performance of Microgy's facilities is dependent on the availability of large quantities of animal manure and substrates derived from animal and other organic waste resources to produce raw energy and meet performance standards in the generation of renewable natural gas. While Microgy has or is expected to have agreements relating to the supply of manure and substrate, these agreements may not cover all of Microgy's requirements for such resources. Lack of manure or substrate or adverse changes in the nature or quality of such waste resources or the cost to supply them would seriously affect the ability of Microgy's facilities to produce gas at profitable levels and, consequently, its ability to develop and finance facilities and to operate efficiently and generate income. As a result, its revenue and financial condition would be materially and negatively affected. We cannot assure you that the waste resources Microgy's facilities require will be available in the future for free or at prices that make them affordable or accessible.

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***Microgy is expected to derive a significant portion of its revenues from the sale of gas as a commodity; as a result, it will be exposed to risk relating to volatility in the commodity price of natural gas, which could have a material adverse impact on its profitability.***

Microgy is expected to derive a significant portion of its revenues from the sale of renewable natural gas as a commodity. As a result, Microgy will be exposed to market risk with respect to the commodity pricing applicable to its gas production. Realized commodity prices received for such production are expected to be primarily driven by spot prices applicable to natural gas. Historically, natural gas prices have been volatile, with recent significant price declines, and Microgy expects such volatility to continue. Furthermore, future supply of and demand for natural gas is unpredictable. There are many players in the markets for natural gas and other energy commodities that natural gas tends to track, including large energy companies and foreign cartels, that are of far greater size than Microgy and which can often cause significant movement in the short- and long-term supply and prices of natural gas. Fluctuations in the commodity price of natural gas may have a materially adverse impact on the profitability of some of Microgy's facilities, particularly where the facility does not have a long-term contract for the sale of its output at a fixed or predictable price. At such time as Microgy's facilities begin to produce commercial quantities of gas for sale as a commodity, it intends to explore various strategies, including hedging transactions and long-term sale agreements, in order to mitigate the associated commodity price risk. Furthermore, Microgy Holdings is required by the terms of its tax-exempt bonds to maintain certain gas price protection arrangements for specified periods of time. However, we cannot assure you that any such risk management vehicles will be available or successful. As a result, any such facility, and Microgy as a whole, may become unprofitable.

***We expect Microgy to derive substantial revenues from sales of carbon sequestration credits and other environmental attributes, but the market for such attributes is nascent and may not develop in a manner that allows Microgy to profit from the sales of such credits to the level projected, or at all.***

The multiple digester facilities that we plan to implement through Microgy Holdings and our other subsidiaries are expected to produce carbon sequestration credits and other marketable environmental attributes. While there exist trading markets for these attributes, and additional trading markets or other commercial avenues may develop, the existing trading markets are new and experience thin trading and price volatility, which can hinder sales of credits and make their value unpredictable. Furthermore, much of the participation in these markets is voluntary, in response to social and environmental ethical concerns, as opposed to being driven by regulatory requirements. While many states are pursuing carbon emissions limits and related initiatives that may spur greater development of and participation in these markets, we are unable to determine the effect of these initiatives on these markets. We cannot assure you that these trading markets will develop further, or even that they will continue to exist. In addition, many of our agreements with our business partners and investors require us to share such credits or any revenues we derive from sales of such credits, and agreements we negotiate in the future may also include such requirements. As a result of the foregoing, we may recognize significantly smaller revenues than we anticipate from the sale of carbon sequestration credits or other environmental attributes.

***We have pledged all of our interest in our facilities in Texas as security for the loan relating to Microgy Holdings tax-exempt bond financing in Texas.***

We have invested, and expect to invest, substantial funds and resources in the development of four multi-digester, renewable natural gas facilities in Texas modeled on the facility located in Stephenville, Texas, commonly known as the Huckabay Ridge facility. We have pledged all of our interest in these facilities as collateral security for the loan to our subsidiary, Microgy Holdings, from the Gulf Coast Industrial Development Authority of Texas relating to the \$60 million tax-exempt bond financing we completed in November 2006. While the loan is not recourse to Environmental Power, Environmental Power is required to provide at least 20% of the construction costs of these facilities, as well as to cover any cost overruns in construction, which represents a substantial investment of corporate resources. If Microgy Holdings were to default on this loan, we would lose

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some or all of our investment in the Texas facilities, which would have a material adverse effect on our business, financial condition and results of operations.

### ***Microgy faces competition in the renewable energy market as well as for the resources necessary to operate its facilities.***

Microgy plans to generate revenue from the development and ownership of facilities that market renewable, green energy in addition to providing pollution control features to the agricultural and food industry markets. Microgy's green competitors include other energy producers using biomass combustion, biomass anaerobic digestion, geothermal, solar, wind, new hydro and other renewable sources. These companies represent a significant class of competitors because they will compete with Microgy for sale of marketable renewable energy credits and participation in various renewable portfolios and other programs.

Microgy also faces many forms of competition with respect to the resources required to operate its facilities. Such competition includes other providers of pollution control, including environmental engineers, providers of pollution control systems, private companies, public companies, associations, cooperatives, government programs, such as AgStar, foreign companies, and educational pilot programs. Furthermore, there are many companies that offer anaerobic digester systems. We believe that at least 60 companies offer complete systems or components to these systems in the U.S. market. A number of competitors have more mature businesses and have successfully installed anaerobic digester systems in the United States. Microgy may be forced to compete with any of these competitors for access to equipment, construction supplies, skilled labor for the construction and operation of its facilities and the supplies of manure and substrate required to operate its facilities. In addition, Microgy may also have to compete for access to substances that make desirable substrates with other users of these substances, such as recyclers of waste grease and producers of biodiesel and other biofuels. The effect of such competition could be reflected in higher costs associated with obtaining access to these resources, as well as an insufficient supply of these resources for the profitable operation of Microgy's facilities. If Microgy cannot obtain and maintain these supplies, or cannot obtain or maintain them at reasonable costs, the profitability of Microgy's business will be adversely affected.

### ***Microgy is a small company, and the entrance of large companies into the alternative fuels and renewable energy business will likely harm its business.***

Competition in the traditional energy business from electric utilities and other energy companies is well established, with many substantial entities having multi-billion dollar, multi-national operations. Competition in the alternative fuels and renewable energy business is expanding with the growth of the industry and the advent of many new technologies. Larger companies, due to their better capitalization, will be better positioned than Microgy to develop new technologies and to install existing or more advanced renewable energy facilities, which could harm Microgy's business.

### ***Because the market for renewable energy is unproven, it is possible that we may expend large sums of money to bring Microgy's offerings to market and that the revenue that Microgy derives from these offerings may be insufficient to fund our operations.***

Microgy's business approach to the renewable energy may not produce results as anticipated, be profitable or be readily accepted by the marketplace. We cannot estimate whether the gas produced by facilities based on Microgy's technology will materialize at anticipated prices, or whether satisfactory profit margins will be achieved. If such pricing levels are not achieved or sustained, or if Microgy's technologies and business approach to Microgy's markets do not achieve or sustain broad acceptance, our business, operating results and financial condition will be materially and negatively impacted.

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***Because we have not filed patents to protect Microgy's intellectual property, we might not be able to prevent others from using Microgy's technology; conversely, others who have filed for patent or other protection might be able to prevent Microgy from using its technology.***

Neither Microgy nor, we believe, Microgy's licensor has filed any patent applications on the intellectual property which forms the basis of Microgy's technology. Should Microgy or its licensor decide to file patent applications, we cannot assure you that any patent applications relating to Microgy's existing or future products or technologies will result in patents being issued, that any issued patents will afford adequate protection to Microgy, or that such patents will not be challenged, invalidated, infringed or circumvented. Furthermore, we cannot assure you that others have not developed, or will not develop, similar technologies that will compete with Microgy's without infringing upon Microgy's intellectual property rights or those of its licensor.

Third parties, including potential competitors, may already have filed patent applications relating to the subject matter of Microgy's current or future technology. In the event that any such patents are issued to such parties, such patents may preclude Microgy or its licensor from obtaining patent protection for its technologies, products or processes. In addition, such patents may hinder or prevent Microgy from commercializing its technology and could require Microgy to enter into licenses with such parties. We cannot assure you that any required licenses would be available to us on acceptable terms, or at all.

Microgy relies heavily on confidentiality agreements and licensing agreements to maintain the proprietary nature of its technology. To compete effectively, Microgy may have to defend the rights to its intellectual property from time to time. Such defense costs may be significant and have a negative impact on our financial condition. In addition, we may lack the financial resources to adequately defend Microgy's intellectual property.

***If Microgy's relationship with the licensor of its technology was terminated for any reason or such licensor ceased doing business, our Microgy business would be negatively impacted.***

Microgy licenses its anaerobic digester technology from Danish Biogas Technology, A.S., referred to as DBT, a Danish company. The license agreement grants to Microgy a perpetual, exclusive license to develop facilities based on this technology in North America. Pursuant to the license agreement, Microgy is required to pay a one-time licensing fee per facility and engineering and design fees to DBT in connection with the development of facilities. Microgy relies upon DBT for technical advice and engineering assistance. Therefore, if DBT were to cease doing business, our Microgy business may be negatively impacted.

***Because all of the cash flow we receive from Buzzard is currently dedicated to the repayment of loan obligations, we are entirely dependent upon the capital we raise and Microgy's cash flow to fund the continuing development of Microgy.***

We do not expect to receive cash from the operations of Buzzard, because such cash, if any, will be used to repay interest and principal on our loan from an affiliate of ArcLight Energy Partners Fund I, L.P., referred to as ArcLight. As a result, if we are not able to raise additional capital to fund Microgy's operations and our corporate expenses until Microgy's operations begin to generate positive cash flow, we will not be able to continue to fund Microgy's operations at their current levels, and our business will be materially and adversely affected.

***Microgy's facilities are likely to be subject to numerous governmental regulations.***

We expect that Microgy's facilities are likely to be subject to various local, state and federal government regulations, including regulations covering air and water quality, solid waste disposal and related pollution issues. These regulations are mandated by the United States Environmental Protection Agency, or EPA, and state and local governments and are usually implemented through a permitting process, with ongoing compliance requirements thereafter. In addition, our activities will fall under a number of health and safety regulations and laws and regulations relating to farming and zoning. Compliance with these regulations and permitting requirements could delay the development of facilities and could be costly and harm our financial condition.

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*As producers of carbon dioxide, Microgy s facilities may become subject to regulations or taxes based on carbon emissions.*

Microgy s facilities produce and emit into the atmosphere carbon dioxide as a result of the anaerobic digestion process that they employ. While such facilities capture a significantly greater amount of carbon, in the form of methane, than they produce in the form of carbon dioxide, Microgy s facilities may still be subject to future federal or state legislation or regulation, or the implementation of international treaties, which seek to limit or impose a cost on carbon emissions. If any such legislation, regulations or treaties were implemented, Microgy s may be required to expend resources to capture the carbon dioxide it produces, pay a tax on its carbon emissions, purchase carbon emissions credits or take similar actions. Any of the foregoing could harm the profitability of Microgy s facilities.

### **Risks Relating to Buzzard**

*Cash distributions resulting from the Scrubgrass operations have been dedicated to the repayment of the ArcLight loan.*

We will not receive any distributions from Buzzard until the loan from ArcLight is repaid. Thereafter, we will receive the next \$1,400,000 of distributions, after which we will share distributions equally with ArcLight through December 31, 2012. As a result, we cannot rely on cash flows from Buzzard to fund our other operations.

*Certain projections provided by the operator of the Scrubgrass facility indicate a shortfall in revenues available to make certain rental payments which become due commencing in June 2006; as a result, Buzzard may default on its lease obligations*

The operator of the Scrubgrass facility has projected that Buzzard may have a shortfall in revenues available to make certain rental payments which become due commencing in June 2006. Buzzard, the operator and ArcLight have begun exploratory discussions regarding mutually acceptable options. Possible options include the restructuring of the lease agreement relating to the Scrubgrass facility and other agreements to which Buzzard is party. In the meantime, Buzzard and SGL have entered into a forbearance agreement which runs through July 1, 2007. Should these projections prove accurate, and if Buzzard is not able to reach an agreement with the relevant parties on a restructuring of the Scrubgrass lease, the missed payments would constitute an event of default by Buzzard under the lease which could result in the termination of the lease, unless the missed payments are otherwise cured or excused.

*If our subsidiary EPC Corporation defaults on its obligations under the loan agreement with ArcLight, we may lose ownership of EPC Corporation and, thereby, the leasehold interest in the Scrubgrass facility.*

EPC Corporation s loan from ArcLight is secured by a pledge of all of the outstanding stock of EPC Corporation, which in turns holds Buzzard Power Corporation as its sole asset, the entity that maintains the Scrubgrass facility. If EPC Corporation were to default on its obligations under the agreement with ArcLight, ArcLight would have the right to foreclose on this pledge and take ownership of EPC Corporation. As a result, we would lose our interest in the Scrubgrass facility. The events of default under the agreements with ArcLight are narrowly defined. The most significant default is related to non-payment. EPC Corporation is only required to make payments when there is a distribution from Scrubgrass. Nevertheless, if EPC Corporation does not make any payments in a 24-month period, a default under the agreements with ArcLight would be triggered.

*We do not control the management of the Scrubgrass facility, our primary revenue-generating asset.*

Buzzard has a management services agreement with Cogentrix, formerly PG&E National Energy Group, to manage the Scrubgrass facility and a 15-year operation and maintenance agreement with PG&E Operating

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Services to operate the facility. These agreements contain provisions that limit Buzzard's participation in the management and operation of the Scrubgrass facility. Because Buzzard does not exercise control over the operation or management of the Scrubgrass facility, decisions may be made, notwithstanding our opposition, which may have an adverse effect on our business.

### ***Buzzard's current power generation revenue is derived from only one customer***

The Scrubgrass facility power generation revenue is earned under a long-term power purchase agreement for all output with one customer, Pennsylvania Electric Company, or Penelec, a subsidiary of FirstEnergy Corporation. This concentration of Buzzard's revenue with this customer will continue for the foreseeable future. If this customer goes out of business or defaults on its payments to Buzzard, its operating results will be adversely affected. Furthermore, the Scrubgrass facility operates as a qualifying facility, or QF, under the Public Utility Regulatory Policy Act of 1975, or PURPA. The loss of QF status could trigger defaults in the project's power sales agreement, or PSA, with Penelec. Therefore, Buzzard would most likely have to sell power at prevailing market rates that are much lower than the rate outlined in the PSA.

### ***A large increase in interest rates may adversely affect Buzzard's and EPC Corporation's operating results.***

Our Buzzard and EPC Corporation subsidiaries are leveraged with variable rate and fixed rate debt obligations. Additionally, Buzzard has lease expenses that are based on the principal, interest and fees of the debt obligations of the lessor of the Scrubgrass facility, most of which carries variable rate interest. Over 90% of the debt obligations and lease obligations with respect to Buzzard and EPC Corporation have variable interest rates. Therefore, significant increases in market interest rates will adversely affect operating results since Buzzard is required to pay the Scrubgrass lessor's debt obligations as a base lease expense. For example, as of December 31, 2006, a one percent increase in the London Interbank Offering Rate, referred to as LIBOR, and our quoted bond rates would result in a \$1,202,320 increase in Buzzard's lease expense.

### ***Poor quality fuel and other materials may expose us to environmental liability and reduce Buzzard's operating results.***

Buzzard obtains waste coal for its Scrubgrass facility primarily from coal mining companies on a long-term basis because waste coal is plentiful and generally creates environmental hazards, such as acid drainage, when not disposed of properly. The waste coal is burned in the Scrubgrass facility using a circulating fluidized bed combustion system. During the circulating fluidized bed combustion process, the waste coal is treated with other substances such as limestone. Depending on the quality of the waste coal and the limestone, the facility operator may need to add additional waste coal or other substances to create the appropriate balance of substances in order to produce the best fuel or sorbent consistency for power generation and compliance with air quality standards. Therefore, the cost of generating power is directly impacted by the quality of the waste coal, which supplies the Scrubgrass power generation facility. Certain conditions, such as poor weather, can create situations where the facility operator has less control over the quality of the waste coal. Poor fuel quality may impact Buzzard's future operating results.

### ***If Buzzard violates performance guarantees granted to Penelec, Buzzard will be required to provide Penelec with an incentive payment.***

Buzzard's agreement for the sale of power to Penelec contains a provision that requires the Scrubgrass facility to provide Penelec with a minimum output of 85% of capacity based on a rolling 3-year average. If Buzzard does not comply with this performance guarantee, it will be required to compensate Penelec with an incentive payment. The payment of an incentive payment would have an adverse effect on Buzzard's operating results.

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### ***Buzzard s power producing activities could be subject to costly regulations and tariffs.***

Buzzard s Scrubgrass facility produces power for sale to the local electrical grid. The sale of this power may come under the regulations of the Pennsylvania Public Utilities Commission and the Federal Energy Regulatory Commission or FERC, although such sales are currently exempt. These commissions set the price tariffs under which energy can be sold or purchased, they regulate the sale of some generation assets and they set the design standards for the interconnection of power producing equipment with the electrical power grid. Any facility that sells electricity to the grid may come under regulation by these commissions, which may impair or delay Buzzard s ability to sell the energy generated. Substantial delays may materially affect Buzzard s financial condition.

Furthermore, there are from time to time various legislative proposals that would amend or comprehensively restructure PURPA and the electric utility industry. Most recently, these proposals resulted in the enactment of the Energy Policy Act of 2005, which eliminates the PURPA obligation of electric utilities to enter into new contracts with qualifying facilities, or QFs. While the Energy Policy Act does not affect existing contracts, if PURPA is amended again or repealed in the future, the statutory requirement that electric utilities purchase electricity at full-avoided cost from QFs could be repealed or modified. While we expect that existing contracts would continue be honored, the repeal or modification of these statutory purchase requirements under PURPA in the future could, among other things, increase pressure from electric utilities to renegotiate existing contracts. Should there be changes in statutory purchase requirements under PURPA, and should these changes result in amendments to the current power purchase agreement with Penelec for the Scrubgrass facility that reduce the contract rates, Buzzard s operating results could be negatively impacted.

### **Risks Relating to Both Microgy and Buzzard**

#### ***Our operating results are difficult to predict in advance and may fluctuate significantly, which may result in a substantial decline in our stock price.***

Our operating results are difficult to predict in advance and may fluctuate significantly, and a failure to meet the expectations of analysts or our stockholders would likely result in a substantial decline in our stock price.

Factors that are likely to cause our results to fluctuate include the following:

the amount and timing of our operating expenses and capital expenditures;

the success or failure of the facilities currently underway;

our ability to specify, develop and complete facilities, and to introduce and market the energy created by such facilities and bring them to volume production in a timely manner;

the rate of adoption and acceptance of new industry standards in our target markets; and

other unforeseen activities or issues.

If our operating results fluctuate greatly, our business may be materially adversely affected and our stock price will likely decline.

#### ***Our facilities may be subject to numerous governmental regulations.***

We expect that our facilities will be subject to various government regulations, including regulations covering air and water quality, solid waste disposal and related pollution issues. These regulations are mandated by the United States Environmental Protection Agency, or EPA, and various state and local governments and are usually implemented through a permitting process, with ongoing compliance requirements thereafter. In addition, our activities will fall under a number of health and safety regulations and laws and regulations relating to farms and zoning. Compliance with these regulations and permitting requirements could delay the development of facilities, increase the construction and

operating costs of our facilities and harm our financial condition.

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### **Risks Relating to Our Capital Stock**

*We have numerous outstanding shares of restricted common stock, as well as options, warrants and shares of preferred stock exercisable or convertible into a substantial number of shares of our common stock; the resale of outstanding restricted shares, as well as the exercise or conversion of these securities and the resale of the underlying shares, may adversely affect the price of our common stock.*

The resale by our stockholders of shares of our restricted common stock or securities exercisable for or convertible into shares of our common stock could cause the market price of our common stock to decline.

A significant portion of our outstanding shares of common stock had been restricted from immediate resale, but are now available for sale in the market pursuant to Rule 144 under the Securities Act of 1933. As of December 31, 2006, we had approximately 2,134,067 shares of restricted common stock outstanding, all of which shares are eligible for resale without volume and manner of sale restrictions in accordance with Rule 144(k).

Furthermore, we currently have on file with the Securities and Exchange Commission an effective registration statement that permits the resale by certain of our stockholders of up to 1,677,688 shares of our restricted common stock, of which 1,066,928 shares are currently issued and outstanding and 610,760 shares are subject to outstanding warrants that are currently exercisable at a price of \$6.60 per share. We also currently have on file with the Securities and Exchange Commission an effective registration statement that permits the resale of up to 100,000 shares of our common stock subject to warrants exercisable at a price of \$6.33 per share by the holders of such warrants. In addition, in connection with our sale of shares of our series A preferred stock and common stock warrants on November 9, 2006, we filed a registration statement to permit the resale of up to 4,387,360 shares of common stock issuable upon conversion of such shares of series A preferred stock and exercise of such warrants. The shares of series A preferred stock are convertible at a conversion price of \$5.271 per share, and the common stock warrants are exercisable at a price of \$5.522 per share as to 1,406,205 of the warrants, and \$5.271 per share as to 168,745 of the warrants.

As of December 31, 2006, we had outstanding options to acquire up to approximately 3,027,107 shares of our common stock at prices ranging from \$1.40 to \$10.50 per share. The shares of common stock issuable upon exercise of these options will be freely transferable without restriction, except to the extent that they are held by our affiliates. Any shares held by our affiliates may only be sold in compliance with the volume limitations of Rule 144. These volume limitations restrict the number of shares that may be sold by an affiliate in any three-month period to the greater of 1% of the number of shares then outstanding, which equals approximately 96,500 shares as of December 31, 2006, or the average weekly trading volume of our common stock during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale.

In addition, pursuant to our business development agreement with Cargill, Incorporated, we may issue warrants to Cargill from time to time to acquire up to an aggregate of 4.99% of our outstanding common stock on a fully diluted basis, at an exercise price equal to 75% of the closing price of our common stock on the date on which such warrants are issued.

As a result of the resale of outstanding shares of our common stock, including restricted shares and shares issuable upon exercise or conversion of the foregoing securities, the price of our common stock may be adversely affected.

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### ***The issuance of preferred stock may adversely affect the price of our common stock.***

We are authorized to issue up to 2,000,000 shares of preferred stock, of which 281,241 shares have been designated as series A 9% cumulative convertible preferred stock, referred to as the series A preferred stock, and which are currently issued and outstanding. The preferred stock not already designated and issued may be issued in series from time to time with such designations, rights, preferences and limitations as our board of directors may determine by resolution without stockholder approval. While the terms of the series A preferred stock do not currently allow for the issuance of preferred stock having dividend and liquidation preferences greater than or senior to the series A preferred stock, any future issuances of preferred stock may enjoy dividend and liquidation preferences over our common stock, thereby diminishing the value of our common stock.

### ***Our management and directors, as well as the holders of our series A preferred stock, are able to exercise significant control over our management and affairs.***

As of December 31, 2006, management and current directors, including Richard E. Kessel, Joseph E. Cresci, Kamlesh R. Tejwani, Robert I. Weisberg, John R. Cooper, August Schumacher, Jr., Lon Hatamiya, Steven Kessner, Dennis Haines and John F. O'Neill, beneficially owned approximately 21.8% of our outstanding common stock. In addition, the three holders of our series A preferred stock, two of which are affiliated with each other, control approximately 22.6% of the total number of votes currently entitled to be cast at any meeting of our stockholders. While there are no voting agreements among them, such persons, as a group, may be able to exercise some level of control over the outcome of matters submitted for stockholder action, including the election of members to our board of directors and the approval of significant change in control transactions. This may have the effect of delaying or preventing a change in control of our company and, therefore, your opportunity to sell your shares in such a transaction. Furthermore, the holders of our series A preferred stock have special approval rights with respect to certain changes to our certificate of incorporation and certain other corporate actions.

### ***The lack of a developed trading market may make it difficult for you to sell shares of our common stock.***

While our common stock is currently listed for trading on the American Stock Exchange, trading activity in our common stock has fluctuated and has at times been limited. For example, for the one-month period from September 1, 2006 to September 30, 2006, our daily trading volume ranged from a low of 9,000 shares to a high of 94,400 shares, and averaged 41,185 shares. We cannot guarantee that a consistently active trading market will develop in the future. As a result, a holder of our common stock may find it difficult to dispose of our common stock.

### ***The market price for our common stock may be volatile.***

The market price for our common stock could be subject to significant fluctuations in response to variations in quarterly operating results, announcements of technological innovations or new facilities and products by us or our competitors, or our failure to achieve operating results consistent with any securities analysts' projections of our performance. For example, for the six-month period from April 1, 2006 to September 30, 2006 the closing price of our common stock ranged from a low of \$3.75 to a high of \$8.98, and for the one-month period from September 1, 2006 to September 30, 2006 the closing price ranged from \$3.75 to \$5.03. In addition, the stock market has experienced extreme price and volume fluctuations and volatility that have particularly affected the market price of many emerging growth and development stage companies. Such fluctuations and volatility have often been unrelated or disproportionate to the operating performance of such companies. As a result of fluctuations related or unrelated to our performance, the value of our common stock may be materially adversely affected.

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*We will require and are actively seeking significant additional financing, which may result in our issuing a significant number of shares of our common stock or preferred stock, which in turn may dilute the value of your shares.*

We have historically needed to raise capital to fund our operating losses. We expect to continue to incur operation losses into at least 2008. Although we recently completed a tax-exempt bond financing in Texas to finance a portion of the construction costs of our Texas facilities, as well as a \$15 million private placement of our series A preferred stock and common stock warrants, we will require and will continue to seek corporate and project financing to fund our ongoing operations and growth plans as well as and the cost of any development we may decide to pursue for our facilities. We cannot assure you that such capital will be available in sufficient amounts or on terms acceptable to us, if at all. Any such financing could be in the form of debt or equity instruments or a combination of debt and equity instruments. To the extent any such financing involves equity convertible debt, we may issue a significant number of shares of our common stock or preferred stock, which will dilute your investment in our common stock, and we may issue such shares at prices that may be lower than the price you paid for our common stock. In addition, if we issue shares of preferred stock, such preferred stock may have rights and preferences that are superior to those of our common stock. Indeed, the shares of series A preferred stock issued in our November 2006 private placement have rights and preferences that are superior to those of our common stock. Because we are authorized to issue shares of additional series of preferred stock, as designated by our board of directors, subject to certain limitations included in the terms of our series A preferred stock, we may issue more shares of preferred stock in the future.

Issuances of common stock or securities convertible into common stock in the future could dilute existing stockholders and adversely affect the market price of our common stock. We have the authority to issue up to 21,400,000 shares of common stock, of which 9,652,025 are issued and outstanding and 5,334,247 have been reserved for issuance upon the exercise of options and warrants outstanding as of December 31, 2006. An additional 2,812,410 shares have been reserved for issuance in connection with the conversion of shares of our series A preferred stock issued in our November 2006 private placement. We may also issue warrants to purchase up to 5% of our common stock, on a fully diluted basis, to Cargill, Incorporated pursuant to the terms of our business development agreement. We also have the authority to issue preferred stock as previously described, debt securities convertible into common stock, and options and warrants to purchase shares of our common stock. We may issue shares of common stock or securities convertible into common stock at values below our market price up to a maximum of 19.9% of our outstanding common stock without stockholder approval, which values may be substantially below the price paid for our common stock by our stockholders. We also do not need stockholder approval to issue an unlimited number of shares of common stock or securities convertible into common stock (provided sufficient shares of common stock are authorized and unreserved) at or above our market price pursuant to certain American Stock Exchange requirements. Any such issuances could be at values below the price paid for our common stock by our stockholders.

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*Our outstanding series A preferred stock has rights and preferences superior to that of our common stock, may impair our ability to raise additional financing, may harm our financial condition if we are required to redeem it and could have the effect of discouraging an acquisition or reducing the amount of proceeds available to common stockholders upon such an acquisition.*

Our shares of series A preferred stock have rights and preferences which are superior to those of our common stock, including:

an accruing dividend of 9% on the stated value of each outstanding share of series A preferred stock, payable before the payment of any dividends on our common stock;

a preference upon liquidation, dissolution or winding up of Environmental Power equal to two times the stated value of each share of preferred stock, plus any accrued but unpaid dividends;

the right to consent to certain changes to our certificate of incorporation and bylaws, and certain other significant corporate actions; and

the right to a payment equal to 150% of the stated value of each outstanding share of Series A Preferred Stock upon certain change-in-control events.

Our series A preferred stock may also have a material adverse effect on our financial condition and results of operations. We have agreed not to issue securities senior to or on a par with the series A preferred stock and to limit our ability to incur additional indebtedness while such preferred stock is outstanding, which could materially and adversely affect our ability to raise funds necessary to continue our business. In addition, the series A preferred stock provides for various triggering events, such as our common stock not being listed for trading on the American Stock Exchange, Nasdaq Global Market or New York Stock Exchange, the failure to deliver shares of our common stock upon conversion and specified change of control transactions. Several other triggering events are described in the certificate of designations, preferences and rights of the series A preferred stock. If one of these triggering events occurs, we may be required to redeem all or part of the outstanding shares of series A preferred stock at 120% of their stated value (150% in the case of certain change in control transactions), including payment of accrued dividends and penalties. Some of the triggering events include matters over which we may have some, little, or no control. Any such redemption could leave us with little or no working capital for our business. Furthermore, by virtue of their voting power and other rights and preferences, the outstanding series A preferred stock could have the effect of blocking or discouraging certain acquisitions of the company or reducing the proceeds available to common stockholders as a result of any such acquisitions.

*We do not intend to pay cash dividends on our common stock.*

We have not paid cash dividends on our common stock since 2001, and we do not expect to pay cash dividends on our common stock at any time in the foreseeable future. The future payment of dividends directly depends upon the future earnings, capital requirements, financial requirements and other factors that our board of directors will consider, and is subject to the prior payment of all accrued but unpaid dividends on our series A preferred stock. Furthermore, the terms of our series A preferred stock prohibit the payment of dividends on our common stock while any shares of our series A preferred stock are outstanding. Because we do not anticipate paying cash dividends on our common stock, the return on investment on our common stock will depend solely on an increase, if any, in the market value of our common stock.

### **Item 1B. Unresolved Staff Comments**

Not applicable.

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### **Item 2. Properties**

Buzzard leases the Scrubgrass facility, which is an approximately 83 megawatt waste coal-fired electric generating facility located on approximately 600 acres in Venango County, Pennsylvania. The principal terms of the lease are described in Item 1 of this report under the heading Buzzard .

We lease 2,818 square feet of office space for our corporate headquarters in Portsmouth, New Hampshire under a five-year lease that commenced on March 1, 2002 with monthly payments of \$5,520. This Lease has been extended through June 30,2007 at a cost of \$5,649 per month. On March 25, 2005, we entered into a two-year lease for an additional 1,860 square feet of office space in the same building providing for monthly payments of \$3,580. We are currently a tenant-at-will for the additional office space in Portsmouth at a cost of \$3,851 per month.

Microgy leases office space at 1600 Jackson Street, Golden, Colorado. The lease term runs until August 2011 and has monthly payments of \$9,495.

Microgy Holdings wholly owned subsidiary, MST Estates LLC, owns approximately seventy-two acres of land in Erath County, Texas, which is the site on which the Huckabay Ridge project is located.

Microgy Holdings wholly owned subsidiary, Rio Leche Estates L.L.C., owns approximately ninety-two acres of land in Dublin, Texas, which is the site on which the planned Rio Leche facility is expected to be located.

Microgy Holdings wholly owned subsidiary, Mission Biogas, L.L.C., is party to a lease with an affiliate of Mission Dairy which provides for the location of a planned RNG facility on an approximately 30 acre parcel of land adjacent to Mission Dairy, with the exact location and dimensions of the parcel and the necessary easements to be determined based upon the mutual agreement of the parties, taking into account the design of the proposed Mission facility and access to public roads and natural gas pipelines. The lease has a term of 40 years and provides for an annual lease payment of \$1,000.

Microgy Holdings wholly owned subsidiary, Hereford Biogas, L.L.C., is party to a lease with Cnossen Dairy which provides for the location of a planned RNG facility on an approximately 30 acre parcel of land adjacent to Cnossen Dairy. The lease has a term of 40 years and provides for an annual lease payment of \$1,000.

Microgy leases approximately two acres of land in Atwater, California for a nominal rent from Gallo Farms. The lease has a term of approximately 20 years and requires annual payments of \$1,000. Microgy is currently seeking permitting for the Gallo-Columbard project, which Microgy intends to construct on the land that is subject to this lease.

### **Item 3. Legal Proceedings**

We are not currently a party to any material legal proceedings.

### **Item 4. Submission of Matters to a Vote of Security Holders**

No matters were submitted to a vote of our security holders, through solicitation of proxies or otherwise, during the last quarter of the year ended December 31, 2006.

**Table of Contents****EXECUTIVE OFFICERS OF THE REGISTRANT**

Our executive officers, their ages and their positions as of February 28, 2007 are set forth below:

<b>Name</b>	<b>Age</b>	<b>Position</b>
Richard E. Kessel	57	President and Chief Executive Officer
John F. O'Neill	50	Chief Financial Officer and Treasurer
Dennis Haines	54	Vice President and General Counsel

**Richard Kessel** has been our Chief Executive Officer since July 2006. From October 2003 to July 2006, Mr. Kessel was President and Chief Executive Officer of Bedford Partners, a consulting firm assisting private equity firms in acquiring energy, water, waste and other service related enterprises. From July 1, 2002 to September 30, 2003, Mr. Kessel served as the President and Chief Executive Officer for North America, and a Senior Vice President of, Suez Environment, an international company focused on water, wastewater and waste services. The North American operations overseen by Mr. Kessel were comprised of five companies with over 9,200 employees, \$1.3 billion in annual revenues and \$1.5 billion in assets. Mr. Kessel served as President and Chief Executive Officer of Trigen Energy Corporation, an energy services company with \$1 billion in assets, \$533 million in annual revenue and 34 operating facilities in 22 states, from April 1, 2000 to June 30, 2002, after serving as its Executive Vice President and Chief Operating Officer from December 1993 to March 31, 2000. Previously, Mr. Kessel was President and Chief Executive Officer of United Thermal Corporation (acquired by Trigen), which owned and operated the district energy systems in Baltimore, Boston, Philadelphia and St. Louis, and Chief Operating Officer of Sithe Energies, Inc., a developer of independent power projects in the United States and global markets. Mr. Kessel holds a B.S. in electrical engineering from Manhattan College, completed the course work for a masters in finance from New York University's Stern School of Business and received an advanced management degree from the Wharton School of Business Executive Program.

**John F. O'Neill** has been our Chief Financial Officer and Treasurer since July 1, 2005. From September 2002 to February 2004, Mr. O'Neill was Vice President, Finance, Chief Financial Officer and Treasurer of Constellation NewEnergy, a leading competitive supplier of electricity, natural gas and energy-related services to over 7,000 commercial and industrial customers throughout North America. From February 2000 until September 2002, Mr. O'Neill first served as Chief Financial Officer of the East Region of AES NewEnergy and subsequently Vice President of Finance/Chief Financial Officer of AES NewEnergy. From 1997 to October 1999 and from March 2004 through June 2005, Mr. O'Neill was a principal of EGB Consulting, Inc., a consulting firm providing advice on mergers, acquisitions, business sales, turnaround management and recapitalizations, where he served as an outsourced chief financial officer for several clients, including serving in this capacity for National Energy Choice, an energy aggregation company of which Mr. O'Neill later became a partner. Mr. O'Neill was a certified public accountant with KPMG Peat Marwick LLP (now KMPG LLP) from 1983 to 1996, attaining the position of Senior Manager. Mr. O'Neill holds a B.S. in Accounting from Bentley College.

**Dennis Haines** has been our Vice President and General Counsel since October 2006. For the last several years, Mr. Haines took on various assignments with Suez, a worldwide energy and environmental services provider, including serving as General Counsel at Suez subsidiary, Teris L.L.C. from July 2005 to August 2006. From January 2003 to February 2005, Mr. Haines provided legal support to various other Suez units, including operations in Nova Scotia and the United Kingdom. From January 2001 to December 2002, Mr. Haines served as General Counsel at Trigen Energy Corporation, White Plains, NY, part of Suez Energy International. Mr. Haines was also General Counsel at Zurn Industries, Inc., Erie, PA, an NYSE-traded company which, through Zurn/NEPCO, specialized in the design and construction of power-generation facilities worldwide. Mr. Haines is a graduate of the University of Pittsburgh (J.D., 1977, and B.A., 1974), and a member of the New York, California, and Pennsylvania Bars.

**Table of Contents****PART II****Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities  
Market Price of and Dividends on Environmental Power's Common Stock and Related Stockholder Matters**

Our common stock trades on the American Stock Exchange under the symbol EPG. As of December 31, 2006 there were approximately 190 record holders and over 1,500 beneficial holders of our common stock.

The following table shows the quarterly high and low sales prices during 2005 and 2006 as reported on the American Stock Exchange.

	High	Low
<b>Fiscal Year Ended December 31, 2005</b>		
First Quarter	\$ 7.09	\$ 4.60
Second Quarter	\$ 5.80	\$ 4.20
Third Quarter	\$ 7.99	\$ 5.48
Fourth Quarter	\$ 7.99	\$ 6.31
<b>Fiscal Year Ended December 31, 2006</b>		
First Quarter	\$ 10.70	\$ 6.72
Second Quarter	\$ 9.03	\$ 4.90
Third Quarter	\$ 7.45	\$ 3.54
Fourth Quarter	\$ 8.94	\$ 4.35

Our board of directors has not declared any dividends on our common stock since the last quarter of 2000. Due to the anticipated continued expansion of our business, our board of directors has determined that available cash should be used for operating and investing activities for the foreseeable future, except to the extent of cash dividends required to be paid on outstanding shares of our Series A 9% cumulative convertible preferred stock, referred to as the Series A preferred stock. In addition, the terms of our Series A preferred stock prohibit the payment of dividends on our common stock while any shares of our Series A preferred stock remain outstanding or any accrued dividends on the Series A preferred stock remain unpaid.

**Calculation of Aggregate Market Value of Non-Affiliate Shares**

For purposes of calculating the aggregate market value of shares of our common stock held by non-affiliates as set forth on the cover page of this Annual Report on Form 10-K, we have assumed that all outstanding shares are held by non-affiliates, except for shares held by each of our executive officers, directors and 5% or greater stockholders. However, this assumption should not be deemed to constitute an admission that all executive officers, directors and 5% or greater stockholders are, in fact, affiliates of our company, or that there are not other persons who may be deemed to be affiliates of our company. Further information concerning shareholdings of our officers, directors and principal stockholders is included or incorporated by reference in Part III, Item 12 of this Annual Report on Form 10-K.

**Recent Sales of Unregistered Securities; Uses of Proceeds From Registered Securities**

Not applicable.

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**COMPARATIVE STOCK PERFORMANCE GRAPH**

The following graph compares the cumulative stockholder return on our Common Stock with the return on the American Stock Exchange Market Value Index, and the SIC Code 4911 (Electric Services) Index, for the five year period ended December 31, 2006. The comparison assumes the investment of \$100.00 on December 31, 2002 in each of our common stock, the American Stock Exchange Market Value Index and the SIC Code 4911 (Electric Services) Index and assumes the reinvestment of dividends.

The graph below and related information shall not be deemed soliciting material or filed with the Securities and Exchange Commission or otherwise subject to the liabilities of Section 18 of the Exchange Act, nor shall such information be deemed incorporated by reference into any filing under the Securities Act or the Exchange Act, except to the extent we specifically request that such information be treated as soliciting material or specifically incorporate such information by reference into a document filed under the Securities Act or the Exchange Act.

**Table of Contents****Item 6. Selected Financial Data**

This section presents our historical consolidated financial data. You should read carefully the following selected consolidated financial data together with our consolidated financial statements and the related notes included in this report, and the Management's Discussion and Analysis of Financial Condition and Results of Operations section of this report. The selected consolidated financial data in this section are not intended to replace our consolidated financial statements.

We derived the statements of operations data for the years ended December 31, 2006, 2005 and 2004 and the balance sheet data as of December 31, 2006 and 2005 from our audited consolidated financial statements, which are included at the end of this report. We derived the statements of operations data for the years ended December 31, 2003 and 2002 and the balance sheet data as of December 31, 2004, 2003 and 2002 from our audited consolidated financial statements not included in this report. Historical results are not necessarily indicative of future results. You should read the notes to our consolidated financial statements for an explanation of the method used to determine the number of shares used in computing basic and diluted net loss per share. Dollar amounts are shown in thousands, except for per share data.

	Year Ended December 31				
	2006	2005	2004	2003	2002
<b>Results of Operations Data:</b>					
Revenues	\$ 53,878	\$ 55,800	\$ 59,790	\$ 53,365	\$ 54,984
Costs and expenses:					
Operating expenses	\$ 29,464	\$ 28,872	\$ 28,625	\$ 25,124	\$ 24,140
Lease expenses	22,091	20,830	22,066	22,382	25,291
Cost of goods sold	2,099	6,116	3,736	0	
General and administrative expenses	13,588	11,055	8,531	6,357	5,655
Depreciation and amortization	500	487	472	495	545
	\$ 67,742	\$ 67,360	\$ 63,430	\$ 54,358	\$ 55,631
Operating (loss) income	\$ (13,864)	\$ (11,560)	\$ (3,640)	\$ (993)	\$ (647)
Other income (expense):					
Interest income	\$ 568	\$ 315	\$ 45	\$ 31	\$ 48
Interest expense	(701)	(499)	(755)	(352)	(142)
Amortization of deferred gain	308	308	308	308	308
Other income		33		2	
Sale of NOx emission credits					