NRG ENERGY, INC.
Form 10-K
February 27, 2013

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
Form 10-K

x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the Fiscal Year ended December 31, 2012.

o TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the Transition period from to .

Commission file No. 001-15891

NRG Energy, Inc.
(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	41-1724239 (I.R.S. Employer Identification No.)
211 Carnegie Center Princeton, New Jersey (Address of principal executive offices)	08540 (Zip Code)

(609) 524-4500
(Registrant's telephone number, including area code)

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

Title of Each Class	Name of Exchange on Which Registered
Common Stock, par value $0.01	New York Stock Exchange

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

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

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

Indicate by check mark whether the registrant (1) has filed all reports 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 x No o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes x No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of the 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. o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer x Accelerated filer o Non-accelerated filer o Smaller reporting company o

(Do not check if a smaller reporting company)

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

As of the last business day of the most recently completed second fiscal quarter, the aggregate market value of the common stock of the registrant held by non-affiliates was approximately $5,522,415,032 based on the closing sale price of $17.36 as reported on the New York Stock Exchange.

Indicate the number of shares outstanding of each of the registrant's classes of common stock as of the latest practicable date.

Class	Outstanding at February 21, 2013
Common Stock, par value $0.01 per share	323,165,879

Documents Incorporated by Reference:

Portions of the Registrant's definitive Proxy Statement relating to its 2013 Annual Meeting of Stockholders are incorporated by reference into Part III of this Annual Report on Form 10-K

TABLE OF CONTENTS

Glossary of Terms

When the following terms and abbreviations appear in the text of this report, they have the meanings indicated below:

2012 Form 10-K	NRG's Annual Report on Form 10-K for the year ended December 31, 2012
316(b) Rule	Regulations promulgated by the EPA to implement a section of the Clean Water Act regulating cooling water intake structures
AB32	Assembly Bill 32 — California Global Warming Solutions Act of 2006
ARO	Asset Retirement Obligation
ASC	The FASB Accounting Standards Codification, which the FASB established as the source of authoritative U.S. GAAP
ASU	Accounting Standards Updates – updates to the ASC
AZNMSN	Arizona, New Mexico and Southern Nevada
Baseload	Units expected to satisfy minimum baseload requirements of the system and produce electricity at an essentially constant rate and run continuously
BACT	Best Available Control Technology
BRA	Base Residual Auction
BTU	British Thermal Unit
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
CAISO	California Independent System Operator
Capital Allocation Program	NRG's plan of allocating capital between debt reduction, reinvestment in the business, share repurchases and shareholder dividends
CCUS	Carbon capture, utilization and storage project
CDWR	California Department of Water Resources
C&I	Commercial, industrial and governmental/institutional
CFTC	U.S. Commodity Futures Trading Commission
CO_2	Carbon dioxide
CPS	CPS Energy
CS	Credit Suisse Group
CSAPR	Cross-State Air Pollution Rule
CSRA	Credit Sleeve Reimbursement Agreement with Merrill Lynch in connection with acquisition of Reliant Energy, as hereinafter defined
CWA	Clean Water Act
Distributed Solar	Solar power projects, typically less than 20 MW in size, that primarily sell power produced to customers for usage on site, or are interconnected to sell power into the local distribution grid
DNREC	Delaware Department of Natural Resources and Environmental Control
DSU	Deferred Stock Unit
EIS	Environmental Impact Statement
Energy Plus	Energy Plus Holdings LLC
EPA	United States Environmental Protection Agency
EPC	Engineering, Procurement and Construction
EPE	El Paso Electric Company
ERCOT	Electric Reliability Council of Texas, the Independent System Operator and the regional reliability coordinator of the various electricity systems within Texas
ESPP	Employee Stock Purchase Plan
EWG	Exempt Wholesale Generator
Exchange Act	The Securities Exchange Act of 1934, as amended

FASB Financial Accounting Standards Board

3

FCM	Forward Capacity Market
FERC	Federal Energy Regulatory Commission
FFB	Federal Financing Bank
FPA	Federal Power Act
FRCC	Florida Reliability Coordinating Council
Fresh Start	Reporting requirements as defined by ASC-852, Reorganizations
GenOn Americas Generation	GenOn Americas Generation, LLC
GenOn Americas Generation Senior Notes	GenOn Americas Generation's $850 million outstanding unsecured senior notes consisting of $450 million of 8.5% senior notes due 2021 and $400 million of 9.125% senior notes due 2031
GenOn	GenOn Energy, Inc.
GenOn Mid-Atlantic	GenOn Mid-Atlantic, LLC and, except where the context indicates otherwise, its subsidiaries, which include the coal generation units at two generating facilities under operating leases
GenOn Senior Notes	GenOn's $2.5 billion outstanding unsecured senior notes consisting of $575 million of 7.625% senior notes due 2014, $725 million of 7.875% senior notes due 2017, $675 million of 9.5% senior notes due 2018, and $550 million of 9.875% senior notes due 2020
GenOn Holdings	GenOn Energy Holdings, Inc.
GHG	Greenhouse Gases
Green Mountain Energy	Green Mountain Energy Company
GWh	Gigawatt hour
HAPs	Hazardous air pollutants
Heat Rate	A measure of thermal efficiency computed by dividing the total BTU content of the fuel burned by the resulting kWh's generated. Heat rates can be expressed as either gross or net heat rates, depending whether the electricity output measured is gross or net generation and is generally expressed as BTU per net kWh
Intermediate	Units expected to satisfy system requirements that are greater than baseload and less than peaking
ISO	Independent System Operator, also referred to as Regional Transmission Organizations, or RTO
ISO-NE	ISO New England Inc.
kWh	Kilowatt-hours
LFRM	Locational Forward Reserve Market
LIBOR	London Inter-Bank Offered Rate
LTIPs	Collectively, the NRG Long-Term Incentive Plan and the NRG GenOn Long-Term Incentive Plan
Marsh Landing	GenOn Marsh Landing, LLC
Mass	Residential and small business
MATS	Mercury and Air Toxics Standards promulgated by the EPA
MDE	Maryland Department of the Environment
Merger	The merger completed on December 14, 2012 by NRG and GenOn pursuant to the Merger Agreement
Merger Agreement	The agreement by and among NRG, GenOn Energy, Inc. and Plus Merger Corporation, dated as of July 20, 2012
Merit Order	A term used for the ranking of power stations in order of ascending marginal cost
MISO	Midwest Independent Transmission System Operator, Inc.
MMBtu	Million British Thermal Units
MOPR	Minimum Offer Price Rule

MSU	Market Stock Unit
MW	Megawatts
MWh	Saleable megawatt hours net of internal/parasitic load megawatt-hours
MWt	Megawatts Thermal Equivalent

NAAQS	National Ambient Air Quality Standards
NERC	North American Electric Reliability Corporation
Net Capacity Factor	The net amount of electricity that a generating unit produces over a period of time divided by the net amount of electricity it could have produced if it had run at full power over that time period. The net amount of electricity produced is the total amount of electricity generated minus the amount of electricity used during generation
Net Exposure	Counterparty credit exposure to NRG, net of collateral
Net Generation	The net amount of electricity produced, expressed in kWhs or MWhs, that is the total amount of electricity generated (gross) minus the amount of electricity used during generation.
NINA	Nuclear Innovation North America LLC
NJDEP	New Jersey Department of Environmental Protection
NO_x	Nitrogen oxide
NOL	Net Operating Loss
NPNS	Normal Purchase Normal Sale
NQSO	Non-Qualified Stock Option
NRC	U.S. Nuclear Regulatory Commission
NRG GenOn LTIP	NRG 2010 Stock Plan for GenOn Employees (formerly the GenOn Energy, Inc. 2010 Omnibus Incentive Plan, which was assumed by NRG in connection with the Merger)
NRG LTIP	NRG Long-Term Incentive Plan
NSPS	New Source Performance Standards
NSR	New Source Review
NYDEC	New York State Department of Environmental Conservation
NYISO	New York Independent System Operator
NYSPSC	New York State Public Service Commission
OCI	Other comprehensive income
Peaking	Units expected to satisfy demand requirements during the periods of greatest or peak load on the system
PG&E	Pacific Gas & Electric
Phase II 316(b) Rule	Certain regulations promulgated by the EPA to implement a section of the Clean Water Act regulating cooling water intake structures
PJM	PJM Interconnection, LLC
PJM market	The wholesale and retail electric market operated by PJM primarily in all or parts of Delaware, the District of Columbia, Illinois, Maryland, New Jersey, Ohio, Pennsylvania, Virginia and West Virginia
$PM_{2.5}$	Particulate matter particles with a diameter of 2.5 micrometers or less
PPA	Power Purchase Agreement
PSD	Prevention of Significant Deterioration
PU	Performance Unit
PUCT	Public Utility Commission of Texas
PUHCA of 2005	Public Utility Holding Company Act of 2005
PURPA	Public Utility Regulatory Policies Act of 1978
QF	Qualifying Facility under PURPA
QSE	Qualified Scheduling Entities
RCRA	Resource Conservation and Recovery Act of 1976
Reliant Energy	NRG's retail business in Texas purchased on May 1, 2009
Repowering	Technologies utilized to replace, rebuild, or redevelop major portions of an existing electrical generating facility, not only to achieve a substantial emissions reduction, but also to increase facility capacity, and improve system efficiency

REP	Retail Electric Provider
RERH	RERH Holding, LLC and its subsidiaries

Retail Business	Retail energy companies, collectively, Reliant Energy, Green Mountain Energy and Energy Plus, which are wholly owned subsidiaries of NRG
Revolving Credit Facility	The Company's $2.3 billion revolving credit facility due 2016, a component of the Senior Credit Facility
RGGI	Regional Greenhouse Gas Initiative
RMR	Reliability Must-Run
RPM	Reliability Pricing Model
RSU	Restricted Stock Unit
Schkopau	Kraftwerk Schkopau Betriebsgesellschaft mbH
SEC	United States Securities and Exchange Commission
Securities Act	The Securities Act of 1933, as amended
Senior Credit Facility	NRG's senior secured facility, comprised of the $1.6 billion Term Loan Facility and the $2.3 billion Revolving Credit Facility
SIFMA	Securities Industry and Financial Markets Association
Senior Notes	The Company's $5.9 billion outstanding unsecured senior notes consisting of, $1.2 billion of 7.625% senior notes due 2018, $700 million of 8.5% senior notes due 2019, $800 million of 7.625% senior notes due 2019, $1.1 billion of 8.25% senior notes due 2020, $1.1 billion of 7.875% senior notes due 2021, and $990 million of 6.625% senior notes due 2023
SERC	Southeastern Electric Reliability Council/Entergy
SO_2	Sulfur dioxide
STP	South Texas Project — nuclear generating facility located near Bay City, Texas in which NRG owns a 44% Interest
STPNOC	South Texas Project Nuclear Operating Company
TANE	Toshiba America Nuclear Energy Corporation
TANE Facility	NINA's $500 million credit facility with TANE
TEPCO	The Tokyo Electric Power Company of Japan, Inc.
Term Loan Facility	The Company's $1.6 billion term loan facility due 2018, a component of the Senior Credit Facility
Texas Genco	Texas Genco LLC, now referred to as the Company's Texas Region
Tonnes	Metric tonnes, which are units of mass or weight in the metric system each equal to 2,205lbs and are the global measurement for GHG
TSR	Total Shareholder Return
TWh	Terawatt hour
U.S.	United States of America
U.S. DOE	United States Department of Energy
U.S. GAAP	Accounting principles generally accepted in the United States
Utility Scale Solar	Solar power projects, typically 20 MW or greater in size, that are interconnected into the transmission or distribution grid to sell power at a wholesale level
VaR	Value at Risk
VIE	Variable Interest Entity
WCP	WCP (Generation) Holdings, Inc.
WECC	Western Electricity Coordinating Council

PART I

Item 1 — Business

General

NRG Energy, Inc., or NRG or the Company, is a competitive power and energy company that aspires to be a leader in the way the industry and consumers think about, use, produce and deliver energy and energy services in major competitive power markets in the United States. At its core, NRG is a wholesale power generator engaged in the ownership and operation of power generation facilities; the trading of energy, capacity and related products; and the transacting in and trading of fuel and transportation services. Second, while leveraging its core wholesale power business, NRG is a retail energy company engaged in the supply of energy, services, and innovative, sustainable products to retail customers in competitive markets through multiple channels and brands like Reliant Energy, Green Mountain Energy, and Energy Plus (collectively, the Retail Business). Finally, NRG is a clean energy leader and is focused on the deployment and commercialization of potentially disruptive technologies, like electric vehicles, Distributed Solar and smart meter technology, which have the potential to change the nature of the power supply industry.

Wholesale Power Generation

NRG's generation facilities are primarily located in the United States and comprise generation facilities across the merit order. The sale of capacity and power from baseload and intermediate generation facilities accounts for a majority of the Company's generation revenues. In addition, NRG's generation portfolio provides the Company with opportunities to capture additional revenues by selling power during periods of peak demand, offering capacity or similar products, and providing ancillary services to support system reliability.

Retail

NRG's Retail Business arranges for the transmission and delivery of energy-related products to customers, bills customers, collects payments for products sold, and maintains call centers to provide customer service. The Retail Business sells products that range from system power to bundled products, which combine system power with protection products, energy efficiency and renewable energy solutions, or other value added products and services, including customer rewards offered through exclusive loyalty and affinity program partnerships. Based on metered locations, as of December 31, 2012, NRG's Retail Business served approximately 2.2 million residential, small business, commercial and industrial customers.

Alternative Energy

NRG's investment in, and development of, new technologies is focused on identifying significant commercial opportunities and creating a comparative advantage for the Company. The Company's development and investment initiatives are primarily focused in the areas of Distributed Solar, solar thermal and solar photovoltaic, and also include other low-or no-GHG emitting energy generating sources, such as the fueling infrastructure for electric vehicle, or EV, ecosystems.

The map below shows the locations of NRG's U.S. power generation facilities as of December 31, 2012, (excluding Distributed Solar), both operating and under construction, as well as the states where NRG operates its Retail Business:

The following table summarizes NRG's global generation portfolio as of December 31, 2012, by operating segment, which includes 89 fossil fuel plants, four Utility Scale Solar facilities and four wind farms, as well as Distributed Solar facilities. Also included are three natural gas plants, three Utility Scale Solar facilities and additional Distributed Solar facilities currently under construction, and two Utility Scale Solar facilities partially in-service. All Utility Scale Solar and Distributed Solar facilities are described in megawatts on an alternating current, or AC, basis. MW figures provided represent nominal summer net megawatt capacity of power generated as adjusted for the Company's ownership position excluding capacity from inactive/mothballed units:

	Fossil Fuel, Nuclear, and Renewable (In MW)								
Generation Type	Texas	East	South Central	West	Other (Thermal)	Alter-native Energy	Total Domestic	Other (Inter-national)	Total Global
Natural gas	5,510	7,655	3,820	7,520	105	—	24,610	—	24,610
Coal	4,195	7,585	1,495	—	15	—	13,290	605	13,895
Oil	—	6,030	—	—	—	—	6,030	—	6,030
Nuclear	1,175	—	—	—	—	—	1,175	—	1,175
Wind	—	—	—	—	—	450	450	—	450
Utility Scale Solar	—	—	—	—	—	345	345	—	345
Distributed Solar	—	—	—	—	—	40	40	—	40
Total generation capacity	10,880	21,270	5,315	7,520	120	835	45,940	605	46,545
Under Construction									
Natural gas	—	—	—	1,270	—	75	1,345	—	1,345
Utility Scale Solar	—	—	—	—	—	430	430	—	430
Distributed Solar	—	—	—	—	—	5	5	—	5
Total under construction	—	—	—	1,270	—	510	1,780	—	1,780

In addition, the Company's thermal assets provide steam and chilled water capacity of approximately 1,098 MWt through its district energy business.

GenOn Acquisition

On December 14, 2012, NRG completed the previously announced Merger with GenOn in accordance with the Merger Agreement, with GenOn continuing as a wholly-owned subsidiary of NRG. The Company issued, as consideration for the Merger, 0.1216 shares of NRG common stock for each outstanding share of GenOn, including restricted stock units outstanding, on the acquisition date, totaling 93.9 million shares of NRG common stock, and approximately $1 million in cash for fractional shares. The Merger was accounted for as an acquisition, and NRG was deemed to have acquired GenOn for accounting purposes. Specifically, consolidated financial statements and financial and operational results of NRG include the results of the combined entities from December 15, 2012, unless indicated otherwise.

GenOn, a generator of wholesale electricity, has baseload, intermediate and peaking power generation facilities using coal, natural gas and oil, totaling approximately 21,440 MW. The acquisition is expected to enhance stockholder value by, among other things, enabling the combined company to capitalize on the following strategic advantages and opportunities:

- Diversification and Scale - The combined company, which retains the name NRG Energy, Inc., is the largest competitive power generation company in the United States with approximately 45,940 MW of fossil fuel, nuclear, solar and wind capacity across the merit order in major competitive energy markets across the United States, supporting nearly 40 million homes.
- Synergies - Expected synergies of the combined company include cost and operational efficiency synergies, interest savings through significant deleveraging, reduced liquidity and collateral requirements, and a greater operational scale, which will enhance the combined company's ability to revitalize its generation fleet and optimize portfolio

value.

NRG's Business Strategy

The Company's business is focused on: (i) excellence in safety and operating performance of its existing assets; (ii) serving the energy needs of end-use residential, commercial and industrial customers in competitive markets through multiple brands and channels with a variety of retail energy products and services differentiated by innovative features, premium service, sustainability, and loyalty/affinity programs; (iii) optimal hedging of coal and nuclear generation and retail load operations, while retaining optionality on the Company's intermediate and peaking facilities; (iv) repowering of power generation assets at premium sites; (v) investment in, and deployment of, alternative energy technologies both in its wholesale and, particularly, in and around its Retail Business and its customers; (vi) pursuing selective acquisitions, joint ventures, divestitures and investments; and (vii) engaging in a proactive capital allocation plan focused on achieving the regular return of and on stockholder capital within the dictates of prudent balance sheet management.

The Company believes that the American energy industry is going to be increasingly impacted by the long-term societal trend towards sustainability which is both generational and irreversible. Moreover, the information technology-driven revolution which has enabled greater and easier personal choice in other sectors of the consumer economy will do the same in the American energy sector over the years to come. As a result, energy consumers will have increasing personal control over whom they buy their energy from, how that energy is generated and used and what environmental impact these individual choices will have. The Company's initiatives in this area of future growth are focused on: (i) renewables, with a concentration in solar development; (ii) electric vehicle ecosystems; (iii) customer-facing energy products and services, including smart energy services that give consumers individual energy insights, choices and convenience, a variety of renewable and energy efficiency products, and numerous loyalty and affinity options and tailored product and service bundles sold through unique retail sales channels; and (iv) construction of other forms of on-site clean power generation. The Company's advances in each of these areas are driven by select acquisitions, joint ventures, and investments that are more fully described in Item 1, Business - New and On-going Company Initiatives and Development Projects.

In summary, NRG's business strategy is intended to maximize stockholder value through the production and sale of safe, reliable and affordable power to its customers in the markets served by the Company, while aggressively positioning the Company to meet the market's increasing demand for sustainable and low carbon energy solutions. This strategy is designed to enhance the Company's core business of competitive power generation and mitigate the risk of declining power prices. The Company expects to become a leading provider of sustainable energy solutions that promotes national energy security, while utilizing the Company's Retail Business to complement and advance both initiatives.

Competition

NRG competes in wholesale power generation, deregulated retail energy services and in the development of renewable and conventional energy resources. The Retail Business competes with national and international companies that operate in multiple geographic areas, as well as numerous companies that are regional or local in nature, and other competitors, typically incumbent retail electric providers, which have the advantage of long-standing relationships with customers.

Wholesale Power Generation

Wholesale power generation is a capital-intensive, commodity-driven business with numerous industry participants. NRG competes on the basis of the location of its plants and ownership of portfolios of plants in various regions, which increases the stability and reliability of its energy revenues. Wholesale power generation is a regional business that is currently highly fragmented and diverse in terms of industry structure. As such, there is a wide variation in terms of the capabilities, resources, nature and identity of the companies NRG competes with depending on the market. Competitors include regulated utilities, other independent power producers, and power marketers or trading companies, including those owned by financial institutions, municipalities and cooperatives.

Retail

The restructured electricity markets across the nation provide an intensely competitive landscape for energy providers to sell products and services to all customer segments (residential, small and mid-market businesses, governments and other public institutions). The markets in which the Company competes include, but are not limited to the following

states: Connecticut, Delaware, Illinois, Maryland, Massachusetts, New Jersey, New York, Pennsylvania, Ohio, Oregon and Texas, as well as the District of Columbia. The ERCOT market in Texas is NRG's primary market and constitutes both the largest number of customers and a substantial concentration of the Company's retail gross profits. Retail customers make purchase decisions based on a variety of factors, including price, customer service, brand image, product choices, bundles or value-added features. Customers purchase products through a variety of sales channels including direct sales force, call centers, websites, brokers and brick-and-mortar stores.

Development

NRG continuously evaluates opportunities for development of new generation, on both a merchant and contracted basis. Merchant development opportunities are more limited due to the economic risks involved in volatile power markets. As such, the majority of NRG's development is in response to Requests For Proposals, or RFPs, for new conventional or renewable generation and/or generating capacity backed by contracts with credit-worthy counterparties. Many RFPs are solicited by regulated utilities or electric system operators, often to comply with mandated renewable portfolio standards or to achieve an improved reserve margin, which is a measure of a market's available electric power capacity over and above the electric power capacity needed to meet normal peak demand levels. NRG competes against other power plant developers and manufacturers of solar panel assemblies. The number and type of competitors vary based on the location, generation type, project size and counterparty specified in the RFP. Bids are awarded based on price, location of existing generation, prior experience developing generation resources similar to that specified in the RFP, and creditworthiness.

Competitive Strengths

Conventional Wholesale Power Generation

NRG has one of the largest and most diversified power generation portfolios in the United States, with approximately 45,105 MW of fossil fuel and nuclear generation capacity in 345 active generating units at 88 plants as of December 31, 2012. In addition, the Company has one combined cycle and two peaking natural gas plants under construction totaling 1,345 MW. The Company's power generation assets are diversified by fuel-type, dispatch level and region, which helps mitigate the risks associated with fuel price volatility and market demand cycles.

NRG's U.S. baseload and intermediate facilities provide the Company with a significant source of cash flow, while its peaking facilities provide NRG with opportunities to capture upside potential that can arise from time to time during periods of high demand, which typically drives higher energy prices.

Many of NRG's generation assets are located within densely populated areas that tend to have more robust wholesale pricing as a result of relatively favorable local supply-demand balance. NRG now has generation assets located in or near Houston, New York City, Washington D.C., Baltimore, New Jersey, southwestern Connecticut, Pittsburgh, Cleveland, and the Los Angeles, San Diego, and San Francisco metropolitan areas. These facilities are often ideally situated for repowering or the addition of new capacity, because their location and existing infrastructure give them significant advantages over undeveloped sites.

Following the GenOn acquisition, NRG increased its U.S. operating segments generation portfolio by 14,850 MW for the East, 5,390 MW for the West, and 1,200 MW for South Central. The combined company has greater diversity, scale and scope in energy generation and delivery, particularly given the complementary geographic footprints of the combined generating assets, and will have increased diversity from a fuel, geography and revenue (significant increase in capacity revenues) perspective and will be strategically positioned with a significant presence across key regions. In 2012, the combined fleet generated approximately 94 terawatt-hours of electricity.

Retail

Through its Retail Business, in 2012, NRG delivered over 59 TWhs and had approximately 2.2 million customers as of December 31, 2012, making it one of the largest retail energy providers in the United States. NRG's Retail Business offers a broad range of services and value propositions that enable it to attract, retain, and increase the value of the Company's residential, small business and commercial customer relationships. With the largest market share in ERCOT based on volume sales, Reliant Energy is recognized by its exemplary customer service as well as its innovative technology product offerings and home energy services. As one of the nation's leading retail providers of clean energy, Green Mountain Energy is widely recognized as a pioneer in the competitive retail energy market and provides customers an environmentally friendly alternative for their energy supply requirements. Acquired in 2011, Energy Plus primarily enrolls and retains electricity and natural gas customers through exclusive marketing arrangements with leading loyalty program providers and affinity group associations. Through the Retail Business, NRG is able to provide its customers a broad range of energy services and products, including system power, smart energy services, energy efficiency services, protection products, distributed generation, solar and wind products, carbon management and specialty services. The breadth and scope of the Retail Business also creates opportunities for delivering value enhancing energy solutions to customers on a national level. In addition, the GenOn acquisition

enables an expanded wholesale-retail model. In an industry that is subject to commodity price volatility, NRG expects that an expanded core generation fleet will enable the combined company to duplicate in multiple markets, principally in the East, the successful integrated wholesale-retail business model that NRG currently operates in the Texas region.

Solar and Other Alternative Energy Technologies

NRG is one of the largest solar power developers in the United States, having demonstrated the ability to develop, construct and finance a full range of solar energy solutions for utilities, schools, municipalities, commercial and residential market segments. The Company has 1,270 MW of renewable generation capacity, of which 835 MW is operational and 435 MW is under construction as of December 31, 2012, comprised of ownership interests in four wind farms, nine Utility Scale Solar facilities, and numerous Distributed Solar facilities. Through its relationships with solar equipment providers, NRG is able to deploy diverse solar technologies in both the utility and distributed generating scale projects that create value for the Company while meeting the clean renewable energy requirements of its customers. In addition, NRG is responding to the growing consumer demand for cleaner transportation solutions by building the first privately funded EV charging infrastructure network in select major metropolitan areas.

Reliability of future cash flows and portfolio diversification

NRG has hedged a portion of its coal and nuclear capacity with decreasing hedge levels through 2016. As a result of the GenOn acquisition, the majority of the acquired generation is mainly concentrated in markets with forward capacity payments that extend three years into the future. These capacity revenues not only enhance the reliability of future cash flows but are not correlated to natural gas prices. NRG also has cooperative load contract obligations in the South Central region expiring over various dates through 2025, which largely hedge the Company's generation in this region. In addition, as of December 31, 2012, the Company had purchased fuel forward under fixed price contracts, with contractually-specified price escalators, for approximately 42% of its expected coal requirement from 2013 to 2017, excluding inventory. The Company has the capacity and intent to enter into additional hedges when market conditions are favorable.

The Company also has the advantage of being able to supply its Retail Business with its own generation, which can reduce the need to sell and buy power from other financial institutions and intermediaries, resulting in lower transaction costs and credit exposures. This combination of generation and retail allows for a reduction in actual and contingent collateral, through offsetting transactions and by reducing the need to hedge the retail power supply through third parties.

The generation and retail combination also provides stability in cash flows, as changes in commodity prices generally have offsetting impacts between the two businesses. The offsetting nature of generation and retail, in relation to changes in market prices, is an integral part of NRG's goal of providing a reliable source of future cash flow for the Company.

When developing renewable and new, conventional power generation facilities, NRG typically secures long-term PPAs, which insulate the Company from commodity market volatility and provide future cash flow stability. These PPAs are typically contracted with high credit quality local utilities and have durations up to 25 years. Such projects include all of the Company's major Utility Scale Solar projects, in operation and under construction, as well as the 550 MW El Segundo Energy Center, or ESEC, and the 720 MW Marsh Landing project which are both currently under construction.

Commercial Operations Overview

NRG seeks to maximize profitability and manage cash flow volatility through the marketing, trading and sale of energy, capacity and ancillary services into spot, intermediate and long-term markets and through the active management and trading of emissions allowances, fuel supplies and transportation-related services. The Company's principal objectives are the realization of the full market value of its asset base, including the capture of its extrinsic value, the management and mitigation of commodity market risk and the reduction of cash flow volatility over time. NRG enters into power sales and hedging arrangements via a wide range of products and contracts, including PPAs, fuel supply contracts, capacity auctions, natural gas derivative instruments and other financial instruments. In addition, because changes in power prices in the markets where NRG operates are generally correlated to changes in natural gas prices, NRG uses hedging strategies which may include power and natural gas forward sales contracts to manage the commodity price risk primarily associated with the Company's coal and nuclear generation assets. The objective of these hedging strategies is to stabilize the cash flow generated by NRG's portfolio of assets.

Coal and Nuclear Operations

The following table summarizes NRG's U.S. Coal and Nuclear capacity and the corresponding revenues and average natural gas prices and positions resulting from Coal and Nuclear hedge agreements extending beyond December 31, 2013, and through 2017:

	2013	2014	2015	2016	2017	Annual Average for 2013-2017
	(Dollars in millions unless otherwise stated)					
Net Coal and Nuclear Capacity (MW) [a]	14,368	14,155	11,843	11,282	11,282	12,586
Forecasted Coal and Nuclear Capacity (MW) [b]	8,369	8,771	7,735	7,544	7,611	8,006
Total Coal and Nuclear Sales (MW) [c]	8,810	5,335	2,569	2,101	1,558	4,074
Percentage Coal and Nuclear Capacity Sold Forward [d]	105 %	61 %	33 %	28 %	20 %	51 %
Total Forward Hedged Revenues [e]	$3,851	$2,332	$1,012	$818	$647	
Weighted Average Hedged Price ($ per MWh) [e]	$49.90	$49.91	$44.97	$44.31	$47.38	
Average Equivalent Natural Gas Price ($ per MMBtu)	$4.79	$5.09	$4.81	$4.87	$5.32	
Gas Price Sensitivity Up $0.50/MMBtu on Coal and Nuclear Units	$66	$211	$293	$290	$311	
Gas Price Sensitivity Down $0.50/MMBtu on Coal and Nuclear Units	$—	$(164)	$(243)	$(229)	$(256)	
Heat Rate Sensitivity Up 1 MMBtu/MWh on Coal and Nuclear Units	$70	$224	$282	$308	$333	
Heat Rate Sensitivity Down 1 MMBtu/MWh on Coal and Nuclear Units	$(27)	$(181)	$(235)	$(265)	$(289)	

(a) Net Coal and Nuclear capacity represents nominal summer net MW capacity of power generated as adjusted for the Company's ownership position excluding capacity from inactive/mothballed units, see Item 2 - Properties for units scheduled to be deactivated.

(b) Forecasted generation dispatch output (MWh) based on forward price curves as of December 31, 2012, which is then divided by number of hours in a given year to arrive at MW capacity. The dispatch takes into account planned and unplanned outage assumptions.

(c) Includes amounts under power sales contracts and natural gas hedges. The forward natural gas quantities are reflected in equivalent MWh based on forward market implied heat rate as of December 31, 2012, and then combined with power sales to arrive at equivalent MWh hedged which is then divided by number of hours in given year to arrive at MW hedged. The Coal and Nuclear Sales include swaps and delta of options sold which is subject to change. For detailed information on the Company's hedging methodology through use of derivative instruments, see discussion in Item 15 - Note 5, Accounting for Derivative Instruments and Hedging Activities, to the Consolidated Financial Statements. Includes inter-segment sales from the Company's wholesale power generation business to the Retail Business.

(d) Percentage hedged is based on total Coal and Nuclear sales as described in (c) above divided by the forecasted Coal and Nuclear capacity.

(e) Represents all U.S. Coal and Nuclear sales, including energy revenue and demand charges, excluding revenues derived from capacity auctions. For purpose of consistency, rail rates for South Central were held constant.

Retail Operations

In 2012, the Company's Retail Business sold electricity to residential, commercial and industrial consumers at either fixed, indexed or variable prices. Residential and smaller commercial consumers typically contract for terms ranging from one month to two years while industrial contracts are often between one year and five years in length. In 2012,

the Company's Retail Business sold approximately 59 TWhs of electricity. In any given year, TWh sold can be affected by weather, economic conditions and competition. The wholesale supply is typically purchased as the load is contracted in order to secure profit margin. The wholesale supply is purchased from a combination of NRG's wholesale portfolio and other third parties, depending on the existing hedge position for the NRG wholesale portfolio at the time. The ability to choose supply from the market or the Company's portfolio allows for an optimal combination to support and stabilize retail margins.

Capacity and Other Contracted Revenue Sources

NRG revenues and cash flows benefit from capacity/demand payments and other contracted revenue sources, originating from market clearing capacity prices, Resource Adequacy contracts, tolling arrangements, PPAs and other long-term contractual arrangements:

- East — The Company's largest sources of capacity revenues are capacity auctions in PJM, ISO-NE, and NYISO. These revenues increased greatly with the addition of the GenOn fleet. The region's share of the GenConn plants in Connecticut also earns fixed payments under long-term financial contracts with a utility counterparty.
- South Central — NRG earns demand payments from its long-term full-requirements load contracts with ten Louisiana distribution cooperatives. Of the ten contracts, nine expire in 2025 and account for 75% of the cooperative customer contract load, with the remaining contract currently set to expire in 2014. This remaining counterparty, with a 550 MW load service contract, accounting for 25% of the cooperative total, has elected not to extend its contract when it expires in 2014. Demand payments from the current long term contracts are tied to summer peak demand and provide a mechanism for recovering a portion of costs associated with new or changed environmental laws or regulations.
- West — Many of the region's sites, including natural gas projects currently under construction, are under long-term tolling agreements. The remaining sites have short-term tolling agreements or Resource Adequacy contracts.
- Thermal — Output from the Company's thermal assets is generally sold under long-term contracts or through regulated public utility tariffs. The contracts or tariffs contain capacity or demand elements, mechanisms for fuel recovery and/or the recovery of operating expenses. The PJM generation assets participate in the PJM capacity markets.
- Texas — The region's sources of capacity and contracted revenues are through bilateral contracts with load serving entities.
- International — Generation output from the Company's share of the Gladstone facility in Australia is sold under long-term contracts, which include capacity payments as well as the reimbursement of certain fixed and variable costs.
- Alternative Energy — Output from solar energy assets is generally sold through long-term PPAs and renewable incentive agreements.

Fuel Supply and Transportation

NRG's fuel requirements consist of nuclear fuel and various forms of fossil fuel including coal, natural gas and oil. The prices of fossil fuels are highly volatile. The Company obtains its fossil fuels from multiple suppliers and transportation sources. Although availability is generally not an issue, localized shortages, transportation availability, delays arising from extreme weather conditions and supplier financial stability issues can and do occur. The preceding factors related to the sources and availability of raw materials are fairly uniform across the Company's business segments and fuel products used.

Coal — The Company is adequately hedged, using forward coal supply agreements for its domestic coal consumption for 2013. NRG actively manages its coal requirements based on forecasted generation, market volatility and its inventory on site. As of December 31, 2012, NRG had purchased forward contracts to provide fuel for approximately 42% of the combined Company's expected requirements from 2013 through 2017, excluding inventory. Excluding purchases by GenOn pre-acquisition, the Company purchased approximately 29 million tons of coal in 2012, of which 98% was Powder River Basin coal and lignite, and the remaining from the Appalachian basin. Going forward, NRG expects the burn, based on forecasted generation, market volatility and its inventory on site, related to a full year of the acquired GenOn coal assets to approximate an additional 9.7 million tons of Appalachian coal. For fuel transport, NRG has entered into various rail, barge, truck transportation and rail car lease agreements with varying tenures that provide for substantially all of the Company's transportation requirement of Powder River Basin coal for the next two years and for most of the Company's transportation requirements of Appalachian coal for the next year.

The following table shows the percentage of the Company's coal requirements from 2013 through 2017 that have been purchased forward as of December 31, 2012:

	Percentage of Company's Requirement [(a)(b)]	
2013	83	%
2014	39	%
2015	42	%
2016	25	%
2017	24	%

(a) The hedge percentages reflect the current plan for the Jewett mine, which supplies lignite for NRG's Limestone facility. NRG has the contractual ability to change volumes and may do so in the future.

(b) Does not include coal inventory.

Natural Gas — NRG operates a fleet of mid-merit and peaking natural gas plants across all its U.S. wholesale regions. Fuel needs are managed on a spot basis, especially for peaking assets, as the Company does not believe it is prudent to forward purchase natural gas for units, the dispatch of which is highly unpredictable. The Company contracts for natural gas storage services as well as natural gas transportation services to deliver natural gas when needed.

Nuclear Fuel — STP's owners satisfy their fuel supply requirements by: (i) acquiring uranium concentrates and contracting for conversion of the uranium concentrates into uranium hexafluoride; (ii) contracting for enrichment of uranium hexafluoride; and (iii) contracting for fabrication of nuclear fuel assemblies. Through its proportionate participation in STPNOC, which is the NRC-licensed operator of STP and responsible for all aspects of fuel procurement, NRG is party to a number of long-term forward purchase contracts with many of the world's largest suppliers covering STP requirements for uranium and conversion services for the next five years, and with substantial portions of STP's requirements procured thereafter. Similarly, NRG is party to long-term contracts to procure STP's requirements for enrichment services and fuel fabrication for the life of the operating license.

Seasonality and Price Volatility

Annual and quarterly operating results of the Company's wholesale power generation segments can be significantly affected by weather and energy commodity price volatility. Significant other events, such as the demand for natural gas, interruptions in fuel supply infrastructure and relative levels of hydroelectric capacity can increase seasonal fuel and power price volatility. NRG derives a majority of its annual revenues in the months of May through October, when demand for electricity is generally at its highest in the Company's core domestic markets. Further, power price volatility is generally higher in the summer months, traditionally NRG's most important season. The Company's second most important season is the winter months of December through March when volatility and price spikes in underlying delivered fuel prices have tended to drive seasonal electricity prices. The preceding factors related to seasonality and price volatility are fairly uniform across the Company's wholesale generation business segments.

The sale of electric power to retail customers is also a seasonal business with the demand for power generally peaking during the summer months. As a result, net working capital requirements for the Company's retail operations generally increase during summer months along with the higher revenues, and then decline during off-peak months. Weather may impact operating results and extreme weather conditions could materially affect results of operations. The rates charged to retail customers may be impacted by fluctuations in total power prices and market dynamics like the price of natural gas, transmission constraints, competitor actions, and changes in market heat rates.

Regional Segment Review

Revenues

The following table contains a summary of NRG's operating revenues by segment for the years ended December 31, 2012, 2011, and 2010, as discussed in Item 15 — Note 17, Segment Reporting, to the Consolidated Financial Statements. Refer to that footnote for additional financial information about NRG's business segments and geographic areas, including a profit measure and total assets. In addition, refer to Item 2 — Properties, for information about facilities in each of NRG's business segments.

	Year Ended December 31, 2012						
	Energy Revenues	Capacity Revenues	Retail Revenues	Mark-to-Market Activities	Contract Amor-tization	Other Revenues[a]	Total Operating Revenues[b]
	(In millions)						
Retail	$—	$—	$5,893	$(5)	$ (116)	$—	$ 5,772
Texas	2,406	81	—	(441)	—	28	2,074
East	533	314	—	(12)	—	19	854
South Central	527	240	—	30	20	(10)	807
West	121	124	—	10	—	4	259
Other Conventional Generation	39	41	—	—	(1)	241	320
Alternative Energy	150	—	—	—	—	3	153
Corporate and Eliminations [c]	(1,662)	(38)	(5)	(32)	—	(80)	(1,817)
Total	$2,114	$762	$5,888	$(450)	$ (97)	$ 205	$ 8,422

(a) Primarily consists of revenues generated by the Thermal business, operation and maintenance revenues and unrealized trading activities.

(b) Total operating revenues includes GenOn revenues of $73 million for the period from December 15, 2012 to December 31, 2012.

(c) Energy revenues include inter-segment sales primarily between Texas and East, and the Retail Business.

	Year Ended December 31, 2011						
	Energy Revenues	Capacity Revenues	Retail Revenues[d]	Mark-to-Market Activities	Contract Amor-tization	Other Revenues[e]	Total Operating Revenues
	(In millions)						
Retail	$—	$—	$ 5,812	$8	$ (178)	$—	$5,642
Texas	2,545	28	—	173	—	86	2,832
East	579	291	—	28	—	26	924
South Central	548	243	—	(12)	20	18	817
West	31	118	—	(4)	—	4	149
Other Conventional Generation	58	70	—	—	(1)	196	323
Alternative Energy	43	—	—	—	—	1	44
Corporate and Eliminations [f]	(1,735)	(14)	(5)	132	—	(30)	(1,652)
Total	$2,069	$736	$ 5,807	$325	$ (159)	$ 301	$9,079

(d) Retail revenues include Energy Plus revenues of $63 million for the period from October 1, 2011, to December 31, 2011.

(e) Primarily consists of revenues generated by the Thermal business, operation and maintenance revenues and unrealized trading activities.

(f) Energy revenues include inter-segment sales primarily between Texas and East, and the Retail Business.

	Year Ended December 31, 2010						
	Energy Revenues	Capacity Revenues	Retail Revenues[g]	Mark-to-Market Activities	Contract Amor-tization	Other Revenues[h]	Total Operating Revenues

	(In millions)						
Retail	$—	$—	$ 5,279	$(1)	$ (223)	$ —	$5,055
Texas	2,840	25	—	57	7	111	3,040
East	726	396	—	(144)	—	47	1,025
South Central	387	235	—	(45)	21	10	608
West	25	113	—	(4)	—	4	138
Other Conventional Generation	46	71	—	(2)	—	186	301
Alternative Energy	39	—	—	—	—	2	41
Corporate and Eliminations[i]	(1,209)	(16)	(2)	(60)	—	(72)	(1,359)
Total	$2,854	$824	$ 5,277	$(199)	$ (195)	$ 288	$8,849

(g) Retail revenues include Green Mountain Energy revenues of $69 million for the period from November 5, 2010 through December 31, 2010.

(h) Primarily consists of revenues generated by the Thermal business, operation and maintenance revenues and unrealized trading activities.

(i) Energy revenues include inter-segment sales primarily between Texas and both Reliant Energy and Green Mountain Energy.

Operational Statistics

The following are industry statistics for the Company's fossil and nuclear plants, as defined by the NERC and are more fully described below:

Annual Equivalent Availability Factor, or EAF — Measures the percentage of maximum generation available over time as the fraction of net maximum generation that could be provided over a defined period of time after all types of outages and deratings, including seasonal deratings, are taken into account.

Net Heat Rate — The net heat rate represents the total amount of fuel in BTU required to generate one net kWh provided.

Net Capacity Factor — The net amount of electricity that a generating unit produces over a period of time divided by the net amount of electricity it could have produced if it had run at full power over that time period. The net amount of electricity produced is the total amount of electricity generated minus the amount of electricity used during generation.

The tables below present these performance metrics for the Company's U.S. power generation portfolio, including leased facilities and those accounted for through equity method investments, for the years ended December 31, 2012, and 2011:

	Year Ended December 31, 2012						
			Fossil and Nuclear Plants				
	Net Owned Capacity (MW)[a]	Net Generation (MWh)[b]	Annual Equivalent Availability Factor		Average Net Heat Rate BTU/kWh	Net Capacity Factor	
	(In thousands of MWh)						
Texas	10,880	37,695	83.2	%	10,200	40.7	%
East	21,270	6,630	86.8		11,200	8.8	
South Central	5,315	15,927	90.2		9,400	42.4	
West	7,520	2,146	91.7		12,000	11.9	
Alternative Energy	835	1,988					

	Year Ended December 31, 2011						
			Fossil and Nuclear Plants				
	Net Owned Capacity (MW)	Net Generation (MWh)	Annual Equivalent Availability Factor		Average Net Heat Rate BTU/kWh	Net Capacity Factor	
	(In thousands of MWh)						
Texas	10,295	45,165	88.2	%	10,300	46.7	%
East [c]	6,915	7,376	87.2		11,100	11.1	
South Central	4,125	16,000	89.9		9,700	43.9	
West	2,130	1,052	88.5		12,400	5.6	
Alternative Energy	545	1,262					

(a) Net Capacity Owned includes GenOn assets, which were acquired on December 14, 2012. These include 14,850 MW in East, 1,200 MW in South Central, and 5,390 MW in West.

(b) Net Generation includes GenOn generation for the period from December 15, 2012 through December 31, 2012.

(c) Factor data and heat rate do not include the Keystone and Conemaugh facilities.

The generation performance by region for the three years ended December 31, 2012, 2011, and 2010, is shown below:

	Net Generation		
	2012 [a]	2011	2010
	(In thousands of MWh)		
Texas			
Coal	24,825	30,256	29,633
Gas	4,709	5,949	4,794
Nuclear [b]	8,161	8,960	9,295
Total Texas	37,695	45,165	43,722
East			
Coal	4,514	5,551	7,905
Oil	228	83	114
Gas	1,888	1,742	1,347
Total East	6,630	7,376	9,366
South Central			
Coal	8,923	10,865	10,778
Gas [c]	7,004	5,135	390
Total South Central	15,927	16,000	11,168
West			
Gas	2,146	1,052	869
Total West	2,146	1,052	869
Alternative Energy			
Solar	740	79	52
Wind	1,248	1,183	978
Total Alternative Energy	1,988	1,262	1,030

(a) Includes GenOn generation for the period from December 15, 2012 through December 31, 2012.
(b) MWh information reflects the Company's undivided interest in total MWh generated by STP.
(c) Includes Cottonwood since November 15, 2010 (acquisition date).

Market Framework

Organized Energy Markets in CAISO, ERCOT, ISO-NE, MISO, NYISO and PJM

The majority of NRG's fleet operates in one of the organized energy markets, known as RTOs or ISOs. Each organized market administers day-ahead and real-time centralized bid-based energy and ancillary services markets pursuant to tariffs approved by the FERC, or in the case of ERCOT, market rules approved by the PUCT. These tariffs and rules dictate how the energy markets operate, how market participants make bilateral sales with one another, and how entities with market-based rates are compensated. Established prices reflect the value of energy at the specific location and time it is delivered, which is known as the Locational Marginal Price or LMP. Each market is subject to market mitigation measures designed to limit the exercise of locational market power. These market structures facilitate NRG's sale of power and capacity products at market-based rates.

Other than ERCOT, each of the ISOs also operates a capacity or resource adequacy market that provides an opportunity for generating and demand response resources to earn revenues to offset their fixed costs that are not recovered in the energy and ancillary services markets. The ISOs are also responsible for transmission planning and operations.

Texas

NRG's Texas wholesale power generation business is in the physical control area of the ERCOT market. The ERCOT market is one of the nation's largest and historically fastest growing power markets. For 2012, hourly demand ranged from a low of approximately 22,400 MW to a high of over 66,500 MW with installed generation capacity of approximately 84,500 MW (approximately 23,500 MW from coal, lignite and nuclear plants, 46,000 MW from gas, and 15,000 MW from wind, hydro, solar, biomass and behind-the-meter generation). The ERCOT market has limited interconnections to other markets in the United States. In addition, NRG's Retail Business activities in Texas are

subject to standards and regulations adopted by the PUCT and ERCOT including the requirement for retailers to be certified by the PUCT in order to contract with end-users to sell electricity. In Texas, a majority of the load is in the ERCOT market and is served by competitive retail suppliers. Certain areas of the state are served by municipal utilities and electric cooperatives.

Regulators and stakeholders in ERCOT are currently debating how to address projected shortfalls in planning reserve margins that may occur in 2013 and beyond. A number of market rule changes have been implemented to provide pricing more reflective of higher energy value when operating reserves are scarce or constrained. The primary stated goal of these market rule changes is to improve forward market pricing signals and provide incentives for resource investment. Among the changes already implemented are: energy offer floors for certain ancillary service deployments, an increase to the system-wide energy and ancillary service offer caps (currently at $4,500 per MWh but increasing to $5,000 in June 2013, $7,000 in June 2014, and to $9,000 in June 2015), an increase to the annual peaker net margin threshold to $262,500 from $175,000, an increase to the low system-wide energy offer cap to $2,000 (up from $500), and higher energy pricing for ISO unit commitments for capacity. Other proposals under review include additional administrative pricing adjustments during operational shortages, mitigation of price dampening from minimum energy from on-line resources, and formalizing emergency supply procurement by the ISO in a manner that would not suppress competitive pricing.

East

NRG's generation assets located in the East region of the United States are within the control areas of the NYISO, ISO-NE, and PJM, and one plant is in Osceola, Florida, which is outside of the organized eastern markets. Each of the market regions in the East region provides for robust competition in the day-ahead and real-time energy and ancillary services markets. Additionally, each allows capacity resources to compete for fixed cost recovery in a capacity auction.

The East region achieves a significant portion of its revenues from capacity markets in ISO-NE, NYISO and PJM. PJM and ISO-NE employ a three-year forward capacity auction construct, while NYISO employs a month-ahead capacity auction construct. Capacity market prices are sensitive to design parameters, as well as additions of new capacity. In late 2012, both PJM and ISO-NE requested FERC approval to implement new buyer-side mitigation measures which will ensure that new capacity additions are appropriately priced in the relevant markets. The NYISO also strengthened its buyer-side market power rules in 2012. Additionally, NYISO is scheduled to begin its triennial adjustment of its capacity market parameters in 2013, which could have a major impact on future capacity prices.

NRG's Retail Business is active in a number of areas in the East region that have introduced retail competition, which allows NRG to competitively provide retail power, natural gas and other value-enhancing services to customers. Each retail choice state is responsible for its own retail competition laws and regulations, and the specific operational, licensing, and compliance requirements vary on a state-by-state basis. The Company's Retail Business holds licenses in many of the states allowing for retail choice in C&I and/or Mass markets. In the East markets, incumbent utilities currently provide default service and as a result typically serve a majority of residential customers. Primary factors in the success of retail competition include how the state provides and prices default service. However, as customers become more informed about the many benefits of retail choice and states continue to implement retail policies to further improve market dynamics, retail choice is expected to grow. The Retail Business continues to expand in the competitive choice states and offers a range of value propositions to consumers to meet individual and business preferences.

The East Region also includes the Osceola plant that is outside the organized eastern markets. It is located in FRCC and is currently under a tolling arrangement that expires in 2014.

South Central

NRG's South Central region operates primarily in the SERC-Entergy region, in which power sales and purchases are consummated bilaterally between individual counterparties, and also in the MISO. In the SERC-Entergy region, transacting counterparties are required to procure transmission service from the relevant transmission owners at their FERC-approved tariff rates. In this market structure, NRG also provides balancing authority services through its operation of four balancing authorities, in addition to wholesale power that allows NRG to provide full requirement services to load-serving entities, including cooperatives and municipalities, thus making NRG a competitive alternative to the integrated utilities operating in the region.

West

The Company operates a fleet of natural gas fired facilities located entirely within the CAISO footprint. The CAISO operates day-ahead and real-time locational markets for energy and ancillary services, while managing congestion

primarily through nodal prices. The CAISO system facilitates NRG's sale of power and capacity products at market-based rates, or bilaterally pursuant to tolling arrangements with California's load serving entities, or LSEs. The CPUC also determines specific capacity requirements for specified local areas utilizing inputs from the CAISO. Both CAISO and CPUC rules require LSEs to contract with sufficient generation resources in order to maintain minimum levels of generation within defined local delivery areas. Additionally, the CAISO has independent authority to contract with needed resources under certain circumstances.

The increase in renewable resources in California is expected to drive a growing need for generation resources with increased operating flexibility, in addition to the established need for dispatchable generation within transmission-constrained areas of the transmission system, such as the San Diego, Greater San Francisco Bay Area, Big Creek/Ventura, and Los Angeles local reliability areas in which the Company currently operates natural gas-fired generation. The projected retirement of older flexible gas-fired coastal generating units that utilize once-through cooling is also a significant driver of long-term prices in California. Implementing market mechanisms to procure the needed flexibility, and allocating the costs associated with this flexibility, are key CAISO initiatives. Another key CAISO-CPUC initiative in 2013 will be the consideration of a multi-year forward Resource Adequacy capacity procurement mechanism. Most of NRG's CAISO natural gas-fired assets are in transmission-constrained local reliability areas, and may benefit from local capacity requirements. The Company's Marsh Landing and El Segundo Energy Center developments, which are currently under construction and the subject of long-term tolling agreements, are examples of the type of flexible natural gas-fired generation resources that the CAISO has identified as necessary to maintain system reliability. Longer term, NRG's California portfolio's locational advantage may be impacted by new transmission, which may affect load pocket procurement requirements, and by the state's goal for additional distributed generation, which may also be located within these constrained local areas.

Solar

The Company also operates a fast-growing fleet of Utility Scale Solar and Distributed Solar generating assets within the CAISO, as well as balancing authorities in Arizona and New Mexico. Each of these states has implemented their own renewable portfolio standard requiring LSEs to provide a given percentage of their production from renewable resources, such as 33% of generation by 2020 in California. As a result, a number of LSEs have entered into long-term PPAs with the Company's Utility Scale Solar generating facilities. The Company currently has PPAs for over 1,100 MW of solar generation assets, over 750 MWs of which are located in California. In California and Arizona investor-owned utilities are nearing their procurement requirement, resulting in a trend towards smaller sized Utility Scale projects and a shift of contracting to municipalities and other public power entities. Distributed Solar opportunities remain strong as declining project costs allow pricing, without subsidies, to continue to approach parity with utility rates. As success in the Distributed Solar segment of the market builds, the states' public utility commissions are expected to reevaluate policies created to encourage the growth of this market segment, including the role of net energy metering (in California) and tariff subsidies (as evidenced by the end of commercial and industrial customer incentives in Arizona).

New and On-going Company Initiatives and Development Projects

Renewable Development and Acquisitions

As part of its core strategy, NRG intends to continue to invest in the development and acquisition of renewable energy projects, primarily solar. NRG's renewable strategy is intended to capitalize on first mover advantage in a high growth segment of NRG's business, the Company's existing presence in regions with attractive renewable resources and the prevalence, in the Company's core markets, of state-mandated renewable portfolio standards. This section briefly describes the Company's development efforts with respect to solar renewable technology.

Solar

NRG has acquired and is developing a number of solar projects utilizing photovoltaic, or PV, as well as solar thermal technologies. The following table is a brief summary of the Company's major Utility Scale Solar projects, as of December 31, 2012, that are or were under construction during the fourth quarter.

NRG Owned Projects	Location	PPA	MW [(a)]	Expected COD	Status
Ivanpah [(b)]	Ivanpah, CA	20 - 25 year	392	2013	Under Construction
Agua Caliente [(c)]	Yuma County, AZ	25 year	290	2012 - 2014	Partially In-Service
CVSR [(d)]	San Luis Obispo, CA	25 year	250	2012 - 2013	Partially In-Service
Alpine	Lancaster, CA	20 year	66	2013	Under Construction
Borrego	Borrego Springs, CA	25 year	26	2013	Under Construction
Avra Valley	Pima County, AZ	20 year	25	2012	In-Service

(a) Represents total project size.

(b) NRG owns a 50.1% stake in the Ivanpah solar project.

(c) NRG owns a 51% stake in the 290 MW Agua Caliente project which includes 253 MW that reached commercial operations from January through December of 2012.

(d) CVSR has 127 MW in operation as of December 31, 2012 as commercial operations on Phase 1 of 22 MW was achieved in September and Phases 2 and 4 totaling 105 MW achieved commercial operations in December 2012.

Below is a summary of recent developments related to solar projects:

Ivanpah — The first unit of the Ivanpah project is expected to be completed and producing power in July of 2013. The second and third units are expected to be completed in the third and fourth quarters of 2013. Power generated from Ivanpah will be sold to Southern California Edison and PG&E under multiple 20 to 25 year PPAs.

Agua Caliente — On January 18, 2012, the Company completed the sale of a 49% interest in NRG Solar AC Holdings LLC, the indirect owner of Agua Caliente, to MidAmerican Energy Holdings Company. Operations are scheduled to commence in phases through the first quarter of 2014, with 253 MW having achieved commercial operations from January through December of 2012. On April 12, 2012, the Company received permission from the U.S. DOE to accelerate the block completion schedule. The impact of this decision has allowed the Company to bring blocks on-line sooner and shortens the commercial operations date of the entire project by three months to March 2014. The acceleration has resulted in greater earnings earlier than originally anticipated, along with acceleration of payments under the EPC agreement which has been funded with earlier draw downs under the Agua Caliente Financing Agreement, as discussed in Item 15 — Note 11, Debt and Capital Leases to the Consolidated Financial Statements, as well as equity support by the partners. Power generated from Agua Caliente is being sold to PG&E under a 25 year PPA. While full commercial operations of the entire project will be achieved in early 2014, the maximum capacity deliverable under the PPA of 290 MWs is expected to be on-line by the third quarter of 2013.

CVSR — NRG owns 100% of the 250 MW CVSR project in eastern San Luis Obispo County, California. During the second quarter of 2012, the Company met the conditions necessary to permit loan disbursements under the CVSR Financing Agreement, as discussed in Item 15 — Note 11, Debt and Capital Leases, to the Consolidated Financial Statements. Operations commenced on the first 22 MW phase in September 2012 and 105 MWs for Phases 2 and 4 in December 2012, with the final phase expected during the fourth quarter of 2013. Power generated from CVSR is sold to PG&E under a 25 year PPA.

Alpine — Alpine, located in Lancaster, CA, is a 66 MW photovoltaic facility utilizing First Solar thin film solar modules. The project, which reached commercial operations in January 2013, obtained financing during the first

quarter of 2012, as discussed in Item 15 —Note 11, Debt and Capital Leases, to the Consolidated Financial Statements. Power generated from Alpine will be sold to PG&E under a 20 year PPA.

Borrego — Borrego, located in Borrego Springs, CA, is a 26 MW facility utilizing SunPower's Oasis photovoltaic power block with single axis tracking. The project reached commercial operations in February 2013. Power generated from Borrego is sold to San Diego Gas and Electric under a 25 year PPA.

Avra Valley — Avra Valley, located in Pima County, AZ, is a 25 MW facility utilizing First Solar thin film solar modules with a single axis tracking system. The project, which achieved commercial operations in December 2012, obtained financing during the third quarter of 2012, as discussed in Item 15 — Note 11, Debt and Capital Leases, to the Consolidated Financial Statements. Power generated from Avra Valley is sold to Tucson Electric Power Company under a 20 year PPA.

Distributed Solar — The MetLife Stadium project, in East Rutherford, NJ, was completed during the third quarter 2012. NRG's installation of solar power generating systems at Gillette Stadium, in Foxboro, MA, achieved commercial operations in December 2012 while the system at Lincoln Financial Field, in Philadelphia, PA, achieved commercial operation in February 2013. Also achieving commercial operations in the fourth quarter of 2012 is a portfolio of 18 sites in southern California totaling 9 MWs, of which 51% is owned by NRG. All of the Company's Distributed Solar projects in operation or under construction are supported by long-term PPAs.

Conventional Power Development

Projects Under Construction

The Company's El Segundo Energy Center LLC, or ESEC, is continuing construction at its El Segundo Power Generating Station, a 550 MW fast start, gas turbine combined cycle generating facility in El Segundo, California. The facility is being constructed pursuant to a 10 year, 550 MW PPA with Southern California Edison. The Company expects a commercial operation date of August 1, 2013.

Through the GenOn acquisition, the Company is continuing construction of the Marsh Landing project, a 720 MW natural gas-fired peaking facility adjacent to the Company's Contra Costa generating facility near Antioch, California. The facility is being constructed pursuant to a 10 year PPA with PG&E. The Company expects a commercial operation date in mid 2013.

Retail Growth Initiatives

The Company's Retail Business continues to expand in both Texas and the East through its innovative partnerships, channels, product lines and value propositions. During 2012, NRG grew customer count by 51,000 in Texas and by 91,000 in the East markets. In addition, NRG launched sales to businesses, manufacturing facilities, government entities and institutions in Ohio and New York. NRG's Retail Business is currently operating in 11 states including Texas, Connecticut, Delaware, Illinois, Maryland, Massachusetts, New Jersey, New York, Ohio, Oregon and Pennsylvania, as well as the District of Columbia.

NRG also continues to expand its innovative solutions, with over 720,000 customers using one of eSense™ smart energy solutions giving customers energy insights, choices and convenience solutions. Additionally, NRG's Retail Business continues to expand the Home Solutions℠ product line with almost 340,000 customers utilizing home services products including protection products such as surge protection, in home power line protection, HVAC maintenance and energy efficiency products such as air filter delivery and solar panel leasing, and with expansion into certain home warranty products.

Services Growth Initiatives

On December 14, 2012, the Company assumed operations and management responsibilities for the Homer City Generating station, a 1,884 MW three-unit-coal-fueled plant near Pittsburgh, PA. This is an important milestone for NRG as, for the first time, the Company expanded its O&M services to a facility owned 100% by a third party.

The Company is also continuing to develop its backup energy generation capabilities to provide services to a broad array of customers around the country.

Electric Vehicle Infrastructure Development

NRG, through its subsidiary eVgo, continues its build out and operation of the Houston and Dallas/Fort Worth Metroplex, or DFW, EV ecosystems, and the Company's progress to date has positioned it to be the first company to equip an entire major market with the privately funded infrastructure needed for successful EV adoption and integration. As of December 31, 2012, eVgo had 17 public fast charging Freedom Station sites operational in Houston and 20 in DFW. These two ecosystems are the largest privately-funded comprehensive direct current fast-charging networks in the nation. In addition, eVgo had 6 sites in the newly entered Washington, DC/Baltimore market under construction or in permitting. eVgo offers consumers a subscription-based plan that provides for all charging requirements for EVs at a competitive monthly fee.

Additionally, eVgo has entered into an agreement with the CPUC to build at least 200 public fast charging Freedom Station sites and wiring and associated work to prepare 10,000 commercial and multi-family parking spaces for electric vehicle charging in California. The agreement is part of a legal settlement, as discussed in detail in Item 15 — Note 21, Commitments and Contingencies, to the Consolidated Financial Statements, and was approved by the FERC on November 5, 2012.

W.A. Parish Peaking Unit and Commercial Scale Carbon Capture, Utilization and Storage System

On May 3, 2012, NRG entered into a financing arrangement in the form of a $54 million tax-exempt bond financing, as discussed in Item 15 — Note 11, Debt and Capital Leases, to the Consolidated Financial Statements. The proceeds of the bonds are being used for the construction of a peaking unit at the W.A. Parish plant and one or more components of a commercial scale CCUS. The CCUS is sponsored in part by a grant from the U.S. DOE. On August 14, 2012, NRG, through its wholly owned subsidiary, Petra Nova Power I LLC, entered into an EPC agreement for the construction of the 75 MW turbine as a peaking unit (later to be retrofitted for use as a cogeneration facility to provide steam and power to operate the CCUS), commenced construction in the fourth quarter of 2012, and anticipates a commercial operations date during the second quarter of 2013.

Construction of the CCUS is intended to allow NRG, through its wholly owned subsidiary Petra Nova LLC, or Petra Nova, to utilize the captured CO_2 in enhanced oil recovery operations in oil fields on the Texas Gulf Coast. In December of 2012, the final air permit was issued by the Texas Commission on Environmental Quality for the full carbon capture system. The final Environmental Impact Statement is approved and the Record of Decision is expected to be issued by the U.S. DOE in March of 2013.

Regulatory Matters

As operators of power plants and participants in wholesale and retail energy markets, certain NRG entities are subject to regulation by various federal and state government agencies. These include the CFTC, FERC, NRC, and PUCT, as well as other public utility commissions in certain states where NRG's generating, thermal, or distributed generation assets are located. In addition, NRG is subject to the market rules, procedures and protocols of the various ISO markets in which it participates. Likewise, certain NRG entities participating in the retail markets are subject to rules and regulations established by the states in which NRG entities are licensed to sell retail. NRG must also comply with the mandatory reliability requirements imposed by NERC and the regional reliability entities in the regions where the Company operates.

Federal Regulation

CFTC

The CFTC, among other things, has regulatory oversight authority over the trading of physical commodities, futures and other derivatives under the Commodity Exchange Act, or CEA. The Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, increased the CFTC's regulatory authority on matters related to futures and over-the-counter derivatives trading, including, but not limited to: trading practices, trade clearance, transaction reporting and record keeping, position limits, and market participant capital and margin requirements. The Company has reached the conclusion that it is neither a swap dealer nor a major swap participant and has taken and will continue to take measures to otherwise comply with the Dodd-Frank Act.

The Company expects that, in 2013 and thereafter, the CFTC will further clarify the scope of the Dodd-Frank Act and publish additional rules concerning central clearing requirements, position limits, margin requirements, the definition of a “swap” and other issues that will affect the Company's futures and over-the-counter derivatives trading. Because

there are many details that remain to be addressed through CFTC rulemaking proceedings, at this time NRG cannot fully measure the impact of the Dodd-Frank Act on the Company, its operations or collateral requirements.

FERC

The FERC, among other things, regulates the transmission and the wholesale sale by public utilities of electricity in interstate commerce under the authority of the FPA. Under existing regulations, the FERC determines whether an entity owning a generation facility is an EWG as defined in the PUHCA of 2005. The FERC also determines whether a generation facility meets the ownership and technical criteria of a QF under PURPA. The transmission of electric energy occurring wholly within ERCOT is not subject to the FERC's rate jurisdiction under Sections 203 or 205 of the FPA. Each of NRG's non-ERCOT U.S. generating facilities either qualifies as a QF, or the subsidiary owning the facility qualifies as an EWG.

Public utilities are required to obtain the FERC's acceptance, pursuant to Section 205 of the FPA, of their rate schedules for the wholesale sale of electricity. All of NRG's non-QF generating and power marketing entities located outside of ERCOT make sales of electricity pursuant to market-based rates, as opposed to traditional cost-of-service regulated rates.

State Regulation

In Texas, NRG's operations within the ERCOT footprint are not subject to rate regulation by the FERC, as they are deemed to operate solely within the ERCOT market and not in interstate commerce. These operations are subject to regulation by the PUCT, as well as to regulation by the NRC with respect to the Company's ownership interest in STP.

In New York, the Company's generation subsidiaries are electric corporations subject to "lightened" regulation by the NYSPSC. As such, the NYSPSC exercises its jurisdictional authority over certain non-rate aspects of the facilities, including safety, retirements, and the issuance of debt secured by recourse to the Company's generation assets located in New York. The Company currently has blanket authorization from the NYSPSC for the issuance of $15 billion of debt. Additionally, the NYSPSC has provided GenOn Bowline with a separate debt authorization of $1.488 billion.

In California, the Company's generation subsidiaries are subject to regulation by the CPUC with regard to certain non-rate aspects of the facilities, including health and safety, outage reporting and other aspects of the facilities' operations.

Nuclear Operations

As a holder of an ownership interest in STP, NRG is an NRC licensee and is subject to NRC regulation. The NRC license gives the Company the right to only possess an interest in STP but not to operate it. As a possession-only licensee, i.e., non-operating co-owner, the NRC's regulation of NRG is primarily focused on the Company's ability to meet its financial and decommissioning funding assurance obligations. In connection with the NRC license, the Company and its subsidiaries have a support agreement to provide up to $120 million to support operations at STP.

Decommissioning Trusts — Upon expiration of the operation licenses for the two generating units at STP, currently scheduled for 2027 and 2028, the co-owners of STP are required under federal law to decontaminate and decommission the STP facility. Under NRC regulations, a power reactor licensee generally must pre-fund the full amount of its estimated NRC decommissioning obligations unless it is a rate-regulated utility, or a state or municipal entity that sets its own rates, or has the benefit of a state-mandated non-bypassable charge available to periodically fund the decommissioning trust such that the trust, plus allowable earnings, will equal the estimated decommissioning obligations by the time the decommissioning is expected to begin.

NRG, through its 44% ownership interest, is the beneficiary of decommissioning trusts that have been established to provide funding for decontamination and decommissioning of STP. CenterPoint Energy Houston Electric, LLC, or CenterPoint, and American Electric Power, or AEP, collect, through rates or other authorized charges to their electric utility customers, amounts designated for funding NRG's portion of the decommissioning of the facility. See also Item 15 — Note 6, Nuclear Decommissioning Trust Fund, to the Consolidated Financial Statements for additional discussion.

In the event that the funds from the trusts are ultimately determined to be inadequate to decommission the STP facilities, the original owners of the Company's STP interests, CenterPoint and AEP, each will be required to collect, through their PUCT-authorized non-bypassable rates or other charges to customers, additional amounts required to fund NRG's obligations relating to the decommissioning of the facility. Following the completion of the decommissioning, if surplus funds remain in the decommissioning trusts, those excesses will be refunded to the respective rate payers of CenterPoint or AEP, or their successors.

24

Regional Regulatory Developments

NRG is affected by rule/tariff changes that occur in the ISO regions. For further discussion on regulatory developments see Item 15 — Note 22, Regulatory Matters, to the Consolidated Financial Statements.

East Region

PJM — On April 12, 2011, FERC issued an order addressing a complaint filed by PJM Power Providers Group seeking to require PJM to address the potential adverse impacts of out-of-market generation on the PJM Reliability Pricing Model, or RPM, capacity market, as well as PJM's subsequent submission seeking revisions to the capacity market design, in particular the MOPR. In its order, FERC generally strengthened the MOPR and the protections against market price distortion from out-of-market generation. On November 17, 2011, FERC largely denied rehearing its April 12, 2011, order. Several parties have appealed FERC's decision to federal court, and those appeals have been consolidated in the Third Circuit Court of Appeals. The outcome of this proceeding could affect the Company's ability to meet its obligations under New Jersey's Long-Term Capacity Agreement Pilot Program, as well as drive future capacity prices.

On December 7, 2012, PJM filed comprehensive revisions to its MOPR rules at FERC. These changes would take effect for the 2013 BRA and would subject new generating resources supported by state-sponsored long-term contracts to stringent new mitigation rules. These rules include mitigating the bids offered by resources into the RPM auction to the PJM-determined net cost of new entry, and to continue mitigating such resources until they cleared three BRAs. Other resources, including those bid into the auction by select public power entities or not otherwise backed by state-sponsored contracts would be exempt from mitigation. On February 5, 2013, FERC issued a deficiency notice to PJM requiring PJM to submit more information by March 7, 2013.

PJM Cost of New Entry Settlement — On December 1, 2011, PJM filed to change the Cost of New Entry figure that is used to establish the PJM RPM demand curve, and which therefore has a direct effect on RPM price formation. On January 30, 2012 and again on April 11, 2012, FERC set different portions of the proposed gross Cost of New Entry amount for hearing and settlement judge procedures. On November 21, 2012, many parties agreed to a settlement of all outstanding issues. FERC approved the settlement on January 31, 2013.

New England

Forward Capacity Market — On January 19, 2012, the FERC issued an order largely denying rehearing of its prior decision addressing proposed amendments submitted by ISO New England Inc. to its FCM design, as well as two pending complaints. On March 16, 2012, the Company and other generators with interests in New England appealed the FERC's decision to the D.C. Circuit Court of Appeals. Briefing is currently underway.

New York

New Financial Reporting Rules in New York — On January 17, 2013, the NYSPSC issued an order addressing its policy of applying “lightened” regulation to wholesale generators. The order subjects wholesale generators, which would include NRG entities operating in New York, to financial reporting rules, including a requirement for generators to make an annual submission of “receipts and expenditures” to the NYSPSC in the form provided by the SEC in its final rule.

NYPSC Merger Conditions — On December 14, 2012, the NYPSC approved the merger between NRG and GenOn, subject to certain conditions. One condition is that NRG would be required to offer to sell the Bowline generating facility, located in West Haverstraw, NY, through an RFP process to a qualified bidder if it wishes to retire the Bowline facility. A second condition requires NRG to economically justify the proposed retirement or mothball of any of its facilities located in the Rest-of-State capacity zone. If NRG is unable to economically justify the mothball or retirement, then it would be required to offer to sell the affected facility through an RFP process to a qualified bidder. A third condition specifies that if the NYISO creates a Hudson Valley Capacity Zone, that NRG's In-City facilities plus Bowline would become subject to comparable conditions and the Company's Rest-of-State facilities would no longer be subject to the conditions. Finally, the NYPSC order states that all conditions terminate if NRG sells the Bowline facility.

Dunkirk Power LLC Reliability Service — On March 14, 2012, Dunkirk Power LLC, or Dunkirk Power, filed a notice with the New York Department of Public Service, or DPS, of its intent to mothball the Dunkirk Station no later than September 10, 2012. The effects of the mothball on electric system reliability were reviewed by Niagara Mohawk Power Corporation, d/b/a National Grid, or NG. As a result of those studies, NG determined that the mothball of the Dunkirk Station would have a negative impact on the reliability of the New York transmission system and that portions of the Dunkirk Station may be retained for reliability purposes via a non-market compensation arrangement. On July 12, 2012, Dunkirk Power filed a RMR agreement with the FERC. On July 20, 2012, NG and Dunkirk Power agreed on the material terms for a bilateral reliability support services, or RSS, agreement and submitted those terms to the NYPSC for rate recovery in NG's rates. On August 16, 2012, the NYPSC approved terms and on August 27, 2012, Dunkirk Power and NG entered into the RSS agreement that began on September 1, 2012. NG issued a request for proposals with respect to its reliability need in the Dunkirk area for the two years beginning June 1, 2014. Dunkirk Power submitted a proposal and is awaiting the results.

New York City Mitigation Order — On June 21, 2012, the FERC issued the first of two anticipated orders on the NYISO's implementation of mitigation rules designed to prevent the exercise of buyer-side market power in the In-City capacity market. The order related primarily to the appropriate modeling assumptions that the NYISO should use in determining whether new entrants are subject to mitigation and, if so, what offer floor should apply to their capacity market bids. The FERC directed the NYISO to conduct its mitigation determinations using modeling parameters comparable to those used in the demand-curve reset process. The FERC also agreed with NRG and other generators that the NYISO needs to make its mitigation determination process more transparent and ordered appropriate changes. Finally, the FERC directed the NYISO Independent Market Monitor to provide a report on the effectiveness of the capacity market buyer-side market power mitigation program.

In the second anticipated order issued on September 10, 2012, the FERC found that the NYISO had not properly applied its mitigation rules to two proposed in-city generation facilities totaling over 1,000 MW (owned respectively by Astoria Energy II LLC and Bayonne Energy Center, LLC - neither of which are affiliated with the Company) and required the NYISO to redo its exemption determinations for these proposed facilities based largely on the modeling procedures presented by the Company and the other in-city generators. The NYISO completed its determinations in time for the December, 2012 spot capacity auction. Both orders remain subject to rehearing.

Texas Region

ERCOT System-Wide Offer Caps - At its June 26, 2012 meeting, the PUCT approved an amendment to raise the ERCOT system-wide energy and ancillary service offer cap from $3,000 to $4,500 per MWh beginning August 1, 2012. At its October 25, 2012 meeting, the PUCT approved further increases of the system-wide offer cap effective June 1, 2013 to $5,000, escalating to $7,000 on June 1, 2014, and to $9,000 on June 1, 2015. In addition, the PUCT increased the low system offer cap to the higher of $2,000 or 50 times Houston Ship Channel gas price index, triggered when ERCOT calculates a $300,000 per MW presumed net revenue recovery in a calendar year for a gas peaking unit (Peaker Net Margin), the low cap remaining in effect for the remainder of the calendar year. In future years, the Peaker Net Margin will be established as three times the cost of new entry. The ERCOT ISO is expected to shift the Power Balance Penalty Curve, or PBPC, to match these offer cap levels. An increase in the cap on electricity prices could have a material impact on NRG's retail and wholesale operations. This is expected to be overall positive to NRG as it will potentially result in increased wholesale revenues.

Over the past several months, ERCOT has implemented a number of measures intended to ensure that real-time energy prices accurately reflect supply scarcity conditions. Specific changes include requiring that energy from reliability services (such as responsive reserves and reliability unit commitments) be offered at the system-wide offer cap, implementing floor prices during the deployment of non-spinning reserve services, and shifting 500 MWs of non-spinning reserves to responsive reserves procurement by the ISO.

On June 1, 2012, the Brattle Group issued an ERCOT sponsored report on resource adequacy. The Brattle Report provides an analysis of the current ERCOT market performance and makes numerous market design recommendations designed to incent investment in additional resources in ERCOT. The report also includes five market design options for consideration to help ensure resource adequacy. The options range from maintaining the existing energy-only market design to a forward capacity market. The PUCT has initiated a new proceeding to

evaluate the Brattle Group's recommendations and indicated its intention to determine whether the current reserve margin “target” should be made a market requirement. If the reserve margin is ultimately determined to be a requirement, the PUCT will provide direction to ERCOT regarding the market measures the ISO must implement to ensure the reserve margin requirement is consistently achieved. Such measures, in keeping with the Brattle Report recommended options, would be intended to improve investment incentives for new resources in the wholesale market. The PUCT is expected to make these decisions in the second half of 2013.

On January 7, 2013, the NERC sent a letter to ERCOT expressing concern about ERCOT's declining reserve margin and projected capacity shortfall, which NERC has determined to be a high reliability risk for the ERCOT region, and asking ERCOT to provide a report to NERC by April 30, 2013 outlining the measures it is taking to increase reserve margins and ensure reliability and to present ERCOT's plans to the NERC Board at its May 9, 2013 meeting.

ERCOT Voluntary Mitigation Plan — On June 18, 2012, NRG submitted a Voluntary Mitigation Plan, or VMP, which had been agreed to by PUCT Staff, and the ERCOT Independent Market Monitor. The VMP establishes a safe harbor for energy offers from NRG's units in ERCOT's real-time market. The VMP was approved by the PUCT on July 13, 2012.

Nuclear Regulatory Commission Task Force Report — On July 12, 2011, the NRC Near-Term Task Force, or the Task Force, issued its report, which reviewed nuclear processes and regulations in light of the accident at the Fukushima Daiichi Nuclear Power Station in Japan. The Task Force concluded that U.S. nuclear plants are operating safely and did not identify changes to the existing nuclear licensing process nor recommend fundamental changes to spent nuclear fuel storage. The Task Force report made recommendations in three key areas: the NRC's regulatory framework, specific plant design requirements, and emergency preparedness and actions. STPNOC expects the report to be the first step in a longer-term review that the NRC will conduct, along with seeking broad stakeholder input. STPNOC continues to apply lessons learned and work with regulators and industry organizations on appropriate assessments and actions.

On January 13, 2012, the NRC issued six draft “information request letters,” seeking industry comment on additional recommendations made by the Near-Term Task Force. Topics for comment include how to improve the robustness of existing emergency preparedness plans, whether to mandate on-site availability of emergency response materials, and guidance on how to identify sites vulnerable to flooding, seismic events, or other natural external hazards (such as hurricanes and tornadoes). The NRC has requested feedback from nuclear utilities on its proposed measures. Until further actions are taken by the NRC, the Company cannot predict the impact of the recommendations in the NRC Task Force report, and could be required to make additional investments at STP Units 1 & 2.

South Central Region

On December 1, 2012, MISO assumed the role of independent coordinator of transmission for Entergy. Additionally, Entergy has obtained conditional regulatory approvals to transfer functional control of its transmission assets to MISO, with a target date for joining of December 2013. The Company's South Central region is dependent upon Entergy's transmission system to conduct its business, and thus would necessarily move with Entergy into MISO. To date, the Company has publicly supported the transition of Entergy into MISO, based largely on the Company's positive experience with proven Day 2 Markets, such as MISO. The Company has been an active participant in the stakeholder processes surrounding Entergy's integration into MISO, including the discussions involving MISO's allocation of financial transmission rights upon integration, and is working to mitigate any potential negative economic impacts of the MISO integration.

Environmental Matters

NRG is subject to a wide range of federal, state and local environmental laws in the development, ownership, construction and operation of projects in the United States and Australia. These laws generally require that governmental permits and approvals be obtained before construction and maintained during operation of power plants. Environmental laws have become increasingly stringent and NRG expects this trend to continue. The electric generation industry will face new requirements to address air emissions, climate change, ash (and other wastes), water use, water discharges, and threatened and endangered species. In general, future laws are expected to require adding emission controls or other environmental controls or impose restrictions on the Company's operations. Complying with environmental requirements involves significant capital and operating expenses. NRG decides to invest capital for environmental controls based on relative certainty of the requirements, an evaluation of compliance options, and the expected economic returns on capital.

Climate Change — NRG emits GHGs in the process of generating electricity. The following graphs illustrate the reduction in CO_2, which makes up greater than 99% of the Company's GHG emissions, from 2000 to the present. GenOn's CO_2 emissions for 2011 and 2012 are shown separately (in the graph below) and starting with 2013 historical emissions for the combined company will be presented. NRG anticipates reductions in its future emissions profile as the Company implements its strategy to add more renewable sources like wind and solar, modernize the fleet through repowering, improve generation efficiencies, explore methods to capture CO_2, and seek ways to offset GHGs.

In April 2012, the EPA proposed a rule under the NSPS section of the CAA, to limit the CO_2 emissions from certain new fossil-fuel-fired electric generating units. The proposed limit is 1,000 pounds of CO_2 per MWh, about the emission rate of a combined cycle gas turbine and cannot be achieved by coal-fired units without carbon capture and storage technology. The proposed rule does not apply to simple cycle combustion turbines or modified existing units. The proposed standard is in effect until the final rule is published. The Company expects the EPA to issue another rule that will require states to develop CO_2 standards that would apply to existing fossil-fueled generating facilities.

The impact from legislation or federal, regional or state regulation of GHGs on the Company's financial performance will depend on a number of factors, including the regulatory design, level of GHG reductions, the applicability of offsets, and the extent to which NRG would be entitled to receive CO_2 emissions credits without having to purchase them in an auction or on the open market. Thereafter, under any such legislation or regulation, the impact on NRG would depend on the Company's level of success in developing and deploying low and no carbon technologies.

Federal Environmental Initiatives

Environmental Regulatory Landscape — A number of regulations with the potential to affect the Company and it's facilities are in development or under review by the EPA: NSPS for GHGs, NAAQS revisions and implementation, coal combustion byproducts regulation, effluent guidelines and once-through cooling regulations. While most of these regulations have been considered for some time, the outcomes and any resulting impact on NRG cannot be fully predicted until the rules are finalized (and any resulting legal challenges resolved).

Air

The CAA and the resulting regulations (as well as similar state and local requirements) have the potential to impact air emissions, operating practices and pollution control equipment at power plants. Under the CAA, the EPA sets NAAQS for certain pollutants including SO_2, ozone, and $PM_{2.5}$. Most of the Company's facilities are located in or near areas that are classified by the EPA as not achieving certain NAAQS (non-attainment areas). The relevant NAAQS have become more stringent and NRG expects that trend to continue. The Company expects increased regulation at both the federal and state levels of its air emissions and maintains a comprehensive compliance strategy to address these continuing and new requirements. Complying with increasingly stringent NAAQS may require the installation of additional emissions control equipment at some NRG facilities. Significant air regulatory programs to which the Company is subject are described below.

Mercury Air Toxic Standards — In February 2012, EPA promulgated standards to control emissions of HAPs from coal and oil-fired electric generating units. The MATS rule establishes limits for mercury, non-mercury metals, certain organics and acid gases, which limits must be met beginning in April 2015. NRG expects to meet these standards with the addition of controls, continued use of PRB coal in Louisiana, New York and Texas, and the retirement of some coal-fired units. NRG does not anticipate any plant impairments or capital expenditures beyond the current environmental capital expenditures schedule and planned retirements of Avon Lake, Niles, Portland, New Castle, and Titus to comply with MATS.

Cross-State Air Pollution Rule — In 2005, EPA promulgated CAIR which established SO_2 and NO_x cap-and-trade programs applicable directly to states and indirectly to generating facilities in the eastern United States. In July 2008, the D.C. Circuit in State of North Carolina v. Environmental Protection Agency issued an opinion that would have vacated CAIR. In December 2008 the D.C. Circuit issued a second opinion that simply remanded the case to the EPA without vacating CAIR.

In August 2011, EPA finalized CSAPR, which was intended to replace CAIR starting in 2012. It was designed to address interstate SO_2 and NO_x emissions from certain power plants in the eastern half of the United States. In September 2011, GenOn and others asked the D.C. Circuit to stay and vacate CSAPR because, among other reasons, the rule circumvents the state implementation plan process expressly provided for in the CAA, affords affected parties no time to install compliance equipment before the compliance period starts and includes numerous material changes from the proposed rule, which deprived parties of an opportunity to provide comments. In December 2011, the court ordered the EPA to stay implementation of CSAPR and to keep CAIR in place until the court ruled on the legal deficiencies alleged with respect to CSAPR. In August 2012, the D.C. Circuit issued an opinion vacating CSAPR and keeping CAIR in place. In October 2012, the EPA filed a petition asking the D.C. Circuit to rehear the case en banc, which was denied in January 2013.

Byproducts, Wastes, Hazardous Materials and Contamination

In June 2010, the EPA proposed two alternatives for regulating byproducts of coal combustion (e.g., ash and gypsum) under the RCRA. Under the first proposal, these byproducts would be regulated as solid wastes. Under the second proposal, these byproducts would be regulated as “special wastes” in a manner similar to the regulation of hazardous waste with an exception for certain types of beneficial use of these byproducts. The second alternative would impose

significantly more stringent requirements on and increase materially the cost of disposal of coal combustion byproducts.

Domestic Site Remediation Matters

Under certain federal, state and local environmental laws and regulations, a current or previous owner or operator of any facility, including an electric generating facility, may be required to investigate and remediate releases or threatened releases of hazardous or toxic substances or petroleum products at the facility. NRG may also be responsible for property damage, personal injury and investigation and remediation costs incurred by a party in connection with hazardous material releases or threatened releases. These laws, including the Comprehensive Environmental Response, Compensation and Liability Act of 1980 as amended by the Superfund Amendments and Reauthorization Act of 1986, or SARA, impose liability without regard to whether the owner knew of or caused the presence of the hazardous substances, and the courts have interpreted liability under such laws to be strict (without fault) and joint and several. Cleanup obligations can often be triggered during the closure or decommissioning of a facility, in addition to spills or other occurrences during its operations. Further discussions of affected NRG sites can be found in Item 15 — Note 23, Environmental Matters, to the Consolidated Financial Statements.

Nuclear Waste — The federal government's program to construct a nuclear waste repository at Yucca Mountain, Nevada was discontinued in 2010. In order to meet the federal government's obligations to safely manage spent nuclear fuel, or SNF, and high-level radioactive waste, or HLW, under the U.S. Nuclear Waste Policy Act of 1982, or the Act, the U.S. DOE established a blue ribbon commission to explore alternatives. Also consistent with the Act, owners of nuclear plants, including the owners of STP, entered into contracts setting out the obligations of the owners and the U.S. DOE, including the fees to be paid by the owners for the U.S. DOE's services. Since 1998, the U.S. DOE has been in default on its obligations to begin removing SNF and HLW from reactors, necessitating each site to take steps to construct interim spent fuel storage installations.

On February 5, 2013, STPNOC entered into a settlement agreement with the U.S. DOE for payment of damages relating to the U.S. DOE's failure to accept SNF and HLW under the Act through December 31, 2013. There are no facilities for the reprocessing or permanent disposal of SNF currently in operation in the United States, nor has the NRC licensed any such facilities. STPNOC currently stores all SNF generated by its nuclear generating facilities in on-site storage pools. Since STPNOC's SNF storage pools generally do not have sufficient storage capacity for the life of the units, STPNOC is evaluating alternatives with respect to on-site storage of SNF and expects to pursue dry cask storage. STPNOC plans to continue to assert claims against the U.S. DOE for damages relating to the U.S. DOE's failure to accept SNF and HLW.

Under the federal Low-Level Radioactive Waste Policy Act of 1980, as amended, the state of Texas is required to provide, either on its own or jointly with other states in a compact, for the disposal of all low-level radioactive waste generated within the state. STP's warehouse capacity is adequate for on-site storage until a site in Andrews County, Texas becomes fully operational.

Water

Clean Water Act — The Company is required under the CWA to comply with intake and discharge requirements, requirements for technological controls and operating practices. As with air quality regulations, federal and state water regulations are expected to impose additional and more stringent requirements or limitations in the future. This includes regulatory requirements governing cooling water intake structures, which are subject to regulation under section 316(b) of the CWA (the 316(b) regulations). In April 2011, the EPA proposed a 316(b) rule that would apply to virtually all existing facilities, including power plants that use cooling water intake structures to withdraw water from waters of the United States. That proposal would impose national standards for reducing mortality from impingement and entrainment of organisms. The final rule may differ from the proposal as a result of the public comment process. States such as California and New York moved ahead with their own more stringent requirements for once-through cooled units, which may satisfy the requirements of the expected revised 316(b) Rule. NRG expects to comply with the applicable requirements with a mix of intake and operational modifications.

Regional Environmental Initiatives

East

On February 7, 2013, RGGI, Inc. released a proposed model rule that if promulgated by the nine member states would dramatically reduce the CO_2 cap from 165 million tons to 91 million tons in 2014 with a 2.5% reduction each year from 2015 to 2020. The Company is evaluating the effect on our units located in Connecticut, Delaware, Maryland, Massachusetts and New York.

On July 20, 2011, the NYDEC announced the State's final policy on cooling water intake structures, confirming the Company's planned capital expenditure for cooling water intakes in that state. The Company expects to comply with these requirements with a mix of intake modifications already included in the planned environmental capital expenditures and operational changes.

In April 2009, the NJDEP finalized a regulation requiring a two-phased reduction in NO_x emission from combustion turbines. The Company's planned capital expenditures include installation of controls at Sayreville and Gilbert by the 2014 compliance date.

The Maryland Healthy Air Act was enacted in 2006 and required staged reductions of SO_2, NO_x and mercury emissions from certain large coal fired facilities with a final reduction for SO_2 and mercury in 2013. The balance of the Maryland coal units control investment took place in 2012 and the Maryland coal units are capable of complying with limits that took effect in 2013.

The MDE sued GenOn for alleged violations of water pollution laws at three fly ash disposal sites in Maryland: Faulkner (2008/2011), Brandywine (2010), and Westland (2012). The plants have since discontinued use of the Faulkner disposal site and opened a new, state of the art carbon burnout facility at its Morgantown plant that allows greater beneficial use (as a cement substitute of the flyash). A detailed discussion on the legal proceedings can be found in Item 3 — Legal Proceedings, Maryland Fly Ash Facilities.

South Central

On February 11, 2009, the U.S. DOJ acting at the request of the EPA commenced a lawsuit against Louisiana Generating, LLC in federal district court in the Middle District of Louisiana alleging violations of the CAA at the Big Cajun II power plant. This is the same matter for which NOVs were issued to LaGen on February 15, 2005, and on December 8, 2006. On November 20, 2012, the U.S. DOJ lodged a Consent Decree to resolve the complaint. Further discussion can be found in Item 3 — Legal Proceedings, United States of America v. Louisiana Generating, LLC.

West

The California Air Resources Board adopted the state's GHG cap-and-trade program under Assembly Bill 32, or AB32, on October 20, 2011. Participation by the electric generation sector began in 2013. The Company does not expect implementation of the GHG cap-and-trade program in California to have a significant adverse financial impact on the Company for a variety of reasons, including the fact that the portion of NRG's California portfolio that is merchant consists mainly of natural gas-fired facilities and the market price of power when dispatched is expected to have embedded in it the market price of allowances. The contracted portion of most of NRG's portfolio included pass-through language with respect to the obligation to purchase allowances. New NRG renewable projects in California markets will support AB32 requirements for the increased use of renewable energy.

The California statewide policy to mitigate once-through cooling was effective as of October 1, 2010. NRG's affected plants submitted alternative plans to meet equivalent mitigation criteria which are reflected in the current schedule of environmental capital expenditures. Specified compliance dates for NRG's power plants are: El Segundo- December 31, 2015; Contra Costa, Encina and Pittsburg - December 31, 2017; and Mandalay and Ormond Beach - December 31, 2020.

Environmental Capital Expenditures

Based on current rules, technology and plans, as well as preliminary plans based on proposed rules, NRG estimates that environmental capital expenditures from 2013 through 2017 required to comply with environmental laws will be approximately $630 million, consisting of $398 million for legacy NRG facilities and $232 million for GenOn facilities. These costs are primarily associated with controls to satisfy MATS at Big Cajun II, W.A. Parish, Limestone, and Conemaugh and NO_x controls at Sayreville and Gilbert. The decrease from NRG's previous estimate is a result of changes in technology related to MATS compliance at Big Cajun II- Unit 3, and shifts in compliance schedules.

Testing and engineering to finalize cost estimates related to further changes on the Big Cajun II MATS compliance plan and the recent Consent Decree lodged in United States of America v. Louisiana Generating, LLC are underway, but costs are not expected to exceed the current plan. NRG continues to explore cost effective compliance alternatives to reduce costs.

NRG's current contracts with the Company's rural electric cooperative customers in the South Central region allow for recovery of a portion of the environmental capital costs incurred as the result of complying with any change in environmental law. Cost recoveries begin once the environmental equipment becomes operational and include a capital return. The actual recoveries will depend, among other things, on the timing of the completion of the capital projects and the remaining duration of the contracts.

Employees

As of December 31, 2012, NRG had 8,792 employees, approximately 35% of whom were covered by U.S. bargaining agreements. During 2012, the Company did not experience any labor stoppages or labor disputes at any of its facilities.

Available Information

NRG's annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to section 13(a) or 15(d) of the Exchange Act are available free of charge through the Company's website, www.nrgenergy.com, as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. The Company also routinely posts press releases, presentations, webcasts, and other information regarding the Company on the Company's website.

Item 1A — Risk Factors Related to NRG Energy, Inc.

The Merger may not achieve its anticipated results, and NRG may be unable to integrate the operations of GenOn in the manner expected.

NRG and GenOn entered into the Merger Agreement with the expectation that the Merger will result in various benefits, including, among other things, cost savings and operating efficiencies. Achieving the anticipated benefits of the Merger depends on whether the businesses of NRG and GenOn can be integrated in an efficient and effective manner. The integration process could take longer than anticipated and could result in the loss of valuable employees, the disruption of NRG's businesses, processes and systems or inconsistencies in standards, controls, procedures, practices, policies and compensation arrangements, any of which could adversely affect the Company's ability to achieve the anticipated benefits of the Merger. NRG may have difficulty addressing possible differences in corporate cultures and management philosophies. Failure to achieve these anticipated benefits could result in increased costs or decreases in the amount of expected revenues and could adversely affect NRG's future business, financial condition, operating results and prospects.

Many of NRG's power generation facilities operate, wholly or partially, without long-term power sale agreements.

Many of NRG's facilities operate as "merchant" facilities without long-term power sales agreements for some or all of their generating capacity and output, and therefore are exposed to market fluctuations. Without the benefit of long-term power sales agreements for these assets, NRG cannot be sure that it will be able to sell any or all of the power generated by these facilities at commercially attractive rates or that these facilities will be able to operate profitably. This could lead to future impairments of the Company's property, plant and equipment or to the closing of certain of its facilities, resulting in economic losses and liabilities, which could have a material adverse effect on the Company's results of operations, financial condition or cash flows.

NRG's financial performance may be impacted by changing natural gas prices, significant and unpredictable price fluctuations in the wholesale power markets and other market factors that are beyond the Company's control.

A significant percentage of the Company's domestic revenues are derived from baseload power plants that are fueled by coal. In many of the competitive markets where NRG operates, the price of power typically is set by natural gas-fired power plants that generally have higher variable costs than NRG's coal-fired power plants. This allows the Company's coal generation assets to earn attractive operating margins compared to plants fueled by natural gas.

A decrease in natural gas prices could result in a corresponding decrease in the market price of power that could significantly reduce the operating margins of the Company's baseload generation assets and materially and adversely impact its financial performance. At low enough natural gas prices, gas plants become more economical than coal generation. In such a price environment, the Company's coal units cycle more often or even shut down until prices or load increases enough to justify running them again.

In addition, because changes in power prices in the markets where NRG operates are generally correlated with changes in natural gas prices, NRG's hedging portfolio includes natural gas derivative instruments to hedge power prices for its coal and nuclear generation. If this correlation between power prices and natural gas prices is not maintained and a change in gas prices is not proportionately offset by a change in power prices, the Company's natural gas hedges may not fully cover this differential. This could have a material adverse impact on the Company's cash flow and financial position.

Market prices for power, capacity and ancillary services tend to fluctuate substantially. Unlike most other commodities, electric power can only be stored on a very limited basis and generally must be produced concurrently with its use. As a result, power prices are subject to significant volatility from supply and demand imbalances, especially in the day-ahead and spot markets. Long- and short-term power prices may also fluctuate substantially due to other factors outside of the Company's control, including:

- changes in generation capacity in the Company's markets, including the addition of new supplies of power from existing competitors or new market entrants as a result of the development of new generation plants, expansion of existing plants or additional transmission capacity;
- electric supply disruptions, including plant outages and transmission disruptions;
- changes in power transmission infrastructure;
- fuel transportation capacity constraints;
- weather conditions;
- changes in the demand for power or in patterns of power usage, including the potential development of demand-side management tools and practices;
- development of new fuels and new technologies for the production of power;
- development of new technologies for the production of natural gas;
- regulations and actions of the ISOs; and
- federal and state power market and environmental regulation and legislation.

These factors have caused the Company's operating results to fluctuate in the past and will continue to cause them to do so in the future.

NRG's costs, results of operations, financial condition and cash flows could be adversely impacted by disruption of its fuel supplies.

NRG relies on coal, oil and natural gas to fuel a majority of its power generation facilities. Delivery of these fuels to the facilities is dependent upon the continuing financial viability of contractual counterparties as well as upon the infrastructure (including rail lines, rail cars, barge facilities, roadways, riverways and natural gas pipelines) available to serve each generation facility. As a result, the Company is subject to the risks of disruptions or curtailments in the production of power at its generation facilities if a counterparty fails to perform or if there is a disruption in the fuel delivery infrastructure.

NRG has sold forward a substantial portion of its coal and nuclear power in order to lock in long-term prices that it deemed to be favorable at the time it entered into the forward sale contracts. In order to hedge its obligations under these forward power sales contracts, the Company has entered into long-term and short-term contracts for the purchase and delivery of fuel. Many of the forward power sales contracts do not allow the Company to pass through changes in fuel costs or discharge the power sale obligations in the case of a disruption in fuel supply due to force majeure events or the default of a fuel supplier or transporter. Disruptions in the Company's fuel supplies may therefore require it to find alternative fuel sources at higher costs, to find other sources of power to deliver to counterparties at a higher cost, or to pay damages to counterparties for failure to deliver power as contracted. Any such event could have a material adverse effect on the Company's financial performance.

NRG also buys significant quantities of fuel on a short-term or spot market basis. Prices for all of the Company's fuels fluctuate, sometimes rising or falling significantly over a relatively short period of time. The price NRG can obtain for the sale of energy may not rise at the same rate, or may not rise at all, to match a rise in fuel or delivery costs. This may have a material adverse effect on the Company's financial performance. Changes in market prices for natural gas, coal and oil may result from the following:

- weather conditions;
- seasonality;
- demand for energy commodities and general economic conditions;
- disruption or other constraints or inefficiencies of electricity, gas or coal transmission or transportation;
- additional generating capacity;
- availability and levels of storage and inventory for fuel stocks;
- natural gas, crude oil, refined products and coal production levels;

- changes in market liquidity;
- federal, state and foreign governmental regulation and legislation; and
- the creditworthiness and liquidity and willingness of fuel suppliers/transporters to do business with the Company.

NRG's plant operating characteristics and equipment, particularly at its coal-fired plants, often dictate the specific fuel quality to be combusted. The availability and price of specific fuel qualities may vary due to supplier financial or operational disruptions, transportation disruptions and force majeure. At times, coal of specific quality may not be available at any price, or the Company may not be able to transport such coal to its facilities on a timely basis. In this case, the Company may not be able to run the coal facility even if it would be profitable. Operating a coal facility with different quality coal can lead to emission or operating problems. If the Company had sold forward the power from such a coal facility, it could be required to supply or purchase power from alternate sources, perhaps at a loss. This could have a material adverse impact on the financial results of specific plants and on the Company's results of operations.

There may be periods when NRG will not be able to meet its commitments under forward sale obligations at a reasonable cost or at all.

A substantial portion of the output from NRG's coal and nuclear facilities has been sold forward under fixed price power sales contracts through 2014, and the Company also sells forward the output from its intermediate and peaking facilities when it deems it commercially advantageous to do so. Because the obligations under most of these agreements are not contingent on a unit being available to generate power, NRG is generally required to deliver power to the buyer, even in the event of a plant outage, fuel supply disruption or a reduction in the available capacity of the unit. To the extent that the Company does not have sufficient lower cost capacity to meet its commitments under its forward sale obligations, the Company would be required to supply replacement power either by running its other, higher cost power plants or by obtaining power from third-party sources at market prices that could substantially exceed the contract price. If NRG fails to deliver the contracted power, it would be required to pay the difference between the market price at the delivery point and the contract price, and the amount of such payments could be substantial.

In the South Central region, NRG has long-term contracts with rural cooperatives that require it to serve all of the cooperatives' requirements at prices that generally reflect the costs of coal-fired generation. During limited peak demand periods, the load requirements of these contract customers exceed the capacity of NRG's coal-fired Big Cajun II plant. During such peak demand periods, NRG employs its intermediate and/or peaking facilities. Depending upon the then-current gas commodity pricing, NRG's financial returns from its South Central region could be negatively impacted for a limited period if the cost of its intermediate and/or peaking power is at higher prices than can be recovered under the Company's contracts.

NRG's trading operations and the use of hedging agreements could result in financial losses that negatively impact its results of operations.

The Company typically enters into hedging agreements, including contracts to purchase or sell commodities at future dates and at fixed prices, in order to manage the commodity price risks inherent in its power generation operations. These activities, although intended to mitigate price volatility, expose the Company to other risks. When the Company sells power forward, it gives up the opportunity to sell power at higher prices in the future, which not only may result in lost opportunity costs but also may require the Company to post significant amounts of cash collateral or other credit support to its counterparties. The Company also relies on counterparty performance under its hedging agreements and is exposed to the credit quality of its counterparties under those agreements. Further, if the values of the financial contracts change in a manner that the Company does not anticipate, or if a counterparty fails to perform under a contract, it could harm the Company's business, operating results or financial position.

NRG does not typically hedge the entire exposure of its operations against commodity price volatility. To the extent it does not hedge against commodity price volatility, the Company's results of operations and financial position may be improved or diminished based upon movement in commodity prices.

NRG may engage in trading activities, including the trading of power, fuel and emissions allowances that are not directly related to the operation of the Company's generation facilities or the management of related risks. These trading activities take place in volatile markets and some of these trades could be characterized as speculative. The Company would expect to settle these trades financially rather than through the production of power or the delivery of fuel. This trading activity may expose the Company to the risk of significant financial losses which could have a material adverse effect on its business and financial condition.

NRG may not have sufficient liquidity to hedge market risks effectively.

The Company is exposed to market risks through its power marketing business, which involves the sale of energy, capacity and related products and the purchase and sale of fuel, transmission services and emission allowances. These market risks include, among other risks, volatility arising from location and timing differences that may be associated with buying and transporting fuel, converting fuel into energy and delivering the energy to a buyer.

NRG undertakes these marketing activities through agreements with various counterparties. Many of the Company's agreements with counterparties include provisions that require the Company to provide guarantees, offset of netting arrangements, letters of credit, a first lien on assets and/or cash collateral to protect the counterparties against the risk of the Company's default or insolvency. The amount of such credit support that must be provided typically is based on the difference between the price of the commodity in a given contract and the market price of the commodity. Significant movements in market prices can result in the Company being required to provide cash collateral and letters of credit in very large amounts. The effectiveness of the Company's strategy may be dependent on the amount of collateral available to enter into or maintain these contracts, and liquidity requirements may be greater than the Company anticipates or will be able to meet. Without a sufficient amount of working capital to post as collateral in support of performance guarantees or as a cash margin, the Company may not be able to manage price volatility effectively or to implement its strategy. An increase in the amount of letters of credit or cash collateral required to be provided to the Company's counterparties may negatively affect the Company's liquidity and financial condition. Further, if any of NRG's facilities experience unplanned outages, the Company may be required to procure replacement power at spot market prices in order to fulfill contractual commitments. Without adequate liquidity to meet margin and collateral requirements, the Company may be exposed to significant losses, may miss significant opportunities, and may have increased exposure to the volatility of spot markets.

The accounting for NRG's hedging activities may increase the volatility in the Company's quarterly and annual financial results.

NRG engages in commodity-related marketing and price-risk management activities in order to financially hedge its exposure to market risk with respect to electricity sales from its generation assets, fuel utilized by those assets and emission allowances.

NRG generally attempts to balance its fixed-price physical and financial purchases and sales commitments in terms of contract volumes and the timing of performance and delivery obligations through the use of financial and physical derivative contracts. These derivatives are accounted for in accordance with the Financial Accounting Standards Board, or FASB, ASC 815, Derivatives and Hedging, or ASC 815, which requires the Company to record all derivatives on the balance sheet at fair value with changes in the fair value resulting from fluctuations in the underlying commodity prices immediately recognized in earnings, unless the derivative qualifies for cash flow hedge accounting treatment. Whether a derivative qualifies for cash flow hedge accounting treatment depends upon it meeting specific criteria used to determine if the cash flow hedge is and will remain appropriate for the term of the derivative. All economic hedges may not necessarily qualify for cash flow hedge accounting treatment. As a result, the Company's quarterly and annual results are subject to significant fluctuations caused by changes in market prices.

Competition in wholesale power markets may have a material adverse effect on NRG's results of operations, cash flows and the market value of its assets.

NRG has numerous competitors in all aspects of its business, and additional competitors may enter the industry. Because many of the Company's facilities are old, newer plants owned by the Company's competitors are often more efficient than NRG's aging plants, which may put some of these plants at a competitive disadvantage to the extent the Company's competitors are able to consume the same or less fuel as the Company's plants consume. Over time, the Company's plants may be squeezed out of their markets, or may be unable to compete with these more efficient plants. In NRG's power marketing and commercial operations, it competes on the basis of its relative skills, financial position and access to capital with other providers of electric energy in the procurement of fuel and transportation services, and the sale of capacity, energy and related products. In order to compete successfully, the Company seeks to aggregate fuel supplies at competitive prices from different sources and locations and to efficiently utilize transportation services from third-party pipelines, railways and other fuel transporters and transmission services from electric utilities. Other companies with which NRG competes with may have greater liquidity, greater access to credit and other financial resources, lower cost structures, more effective risk management policies and procedures, greater ability to incur losses, longer-standing relationships with customers, greater potential for profitability from ancillary services or greater flexibility in the timing of their sale of generation capacity and ancillary services than NRG does.

NRG's competitors may be able to respond more quickly to new laws or regulations or emerging technologies, or to devote greater resources to the construction, expansion or refurbishment of their power generation facilities than NRG

can. In addition, current and potential competitors may make strategic acquisitions or establish cooperative relationships among themselves or with third parties. Accordingly, it is possible that new competitors or alliances among current and new competitors may emerge and rapidly gain significant market share. There can be no assurance that NRG will be able to compete successfully against current and future competitors, and any failure to do so would have a material adverse effect on the Company's business, financial condition, results of operations and cash flow.

Operation of power generation facilities involves significant risks and hazards customary to the power industry that could have a material adverse effect on NRG's revenues and results of operations. NRG may not have adequate insurance to cover these risks and hazards.

The ongoing operation of NRG's facilities involves risks that include the breakdown or failure of equipment or processes, performance below expected levels of output or efficiency and the inability to transport the Company's product to its customers in an efficient manner due to a lack of transmission capacity. Unplanned outages of generating units, including extensions of scheduled outages due to mechanical failures or other problems occur from time to time and are an inherent risk of the Company's business. Unplanned outages typically increase the Company's operation and maintenance expenses and may reduce the Company's revenues as a result of selling fewer MWh or require NRG to incur significant costs as a result of running one of its higher cost units or obtaining replacement power from third parties in the open market to satisfy the Company's forward power sales obligations. NRG's inability to operate the Company's plants efficiently, manage capital expenditures and costs, and generate earnings and cash flow from the Company's asset-based businesses could have a material adverse effect on the Company's results of operations, financial condition or cash flows. While NRG maintains insurance, obtains warranties from vendors and obligates contractors to meet certain performance levels, the proceeds of such insurance, warranties or performance guarantees may not be adequate to cover the Company's lost revenues, increased expenses or liquidated damages payments should the Company experience equipment breakdown or non-performance by contractors or vendors.

Power generation involves hazardous activities, including acquiring, transporting and unloading fuel, operating large pieces of rotating equipment and delivering electricity to transmission and distribution systems. In addition to natural risks such as earthquake, flood, lightning, hurricane and wind, other hazards, such as fire, explosion, structural collapse and machinery failure are inherent risks in the Company's operations. These and other hazards can cause significant personal injury or loss of life, severe damage to and destruction of property, plant and equipment, contamination of, or damage to, the environment and suspension of operations. The occurrence of any one of these events may result in NRG being named as a defendant in lawsuits asserting claims for substantial damages, including for environmental cleanup costs, personal injury and property damage and fines and/or penalties. NRG maintains an amount of insurance protection that it considers adequate, but the Company cannot provide any assurance that its insurance will be sufficient or effective under all circumstances and against all hazards or liabilities to which it may be subject. A successful claim for which the Company is not fully insured could hurt its financial results and materially harm NRG's financial condition. Further, due to rising insurance costs and changes in the insurance markets, NRG cannot provide any assurance that its insurance coverage will continue to be available at all or at rates or on terms similar to those presently available. Any losses not covered by insurance could have a material adverse effect on the Company's financial condition, results of operations or cash flows.

Maintenance, expansion and refurbishment of power generation facilities involve significant risks that could result in unplanned power outages or reduced output and could have a material adverse effect on NRG's results of operations, cash flow and financial condition.

Many of NRG's facilities are old and require periodic upgrading and improvement. Any unexpected failure, including failure associated with breakdowns, forced outages or any unanticipated capital expenditures could result in reduced profitability.

NRG cannot be certain of the level of capital expenditures that will be required due to changing environmental and safety laws and regulations (including changes in the interpretation or enforcement thereof), needed facility repairs and unexpected events (such as natural disasters or terrorist attacks). The unexpected requirement of large capital expenditures could have a material adverse effect on the Company's liquidity and financial condition.

If NRG makes any major modifications to its power generation facilities, the Company may be required to install the best available control technology or to achieve the lowest achievable emission rates as such terms are defined under the new source review provisions of the federal Clean Air Act. Any such modifications would likely result in substantial additional capital expenditures.

The Company may incur additional costs or delays in the development, construction and operation of new plants, improvements to existing plants, or the implementation of environmental control equipment at existing plants and may not be able to recover their investment or complete the project.

The Company is developing or constructing new generation facilities, improving its existing facilities; and adding environmental controls to its existing facilities. The development, construction, expansion, modification and refurbishment of power generation facilities involve many additional risks, including:

- the inability to receive U.S. DOE loan guarantees, funding or cash grants;
- delays in obtaining necessary permits and licenses;
- the inability to sell down interests in a project or develop successful partnering relationships;
- environmental remediation of soil or groundwater at contaminated sites;
- interruptions to dispatch at the Company's facilities;
- supply interruptions;
- work stoppages;
- labor disputes;
- weather interferences;
- unforeseen engineering, environmental and geological problems;
- unanticipated cost overruns;
- exchange rate risks; and
- failure of contracting parties to perform under contracts, including EPC contractors.

Any of these risks could cause NRG's financial returns on new investments to be lower than expected, or could cause the Company to operate below expected capacity or availability levels, which could result in lost revenues, increased expenses, higher maintenance costs and penalties. Insurance is maintained to protect against these risks, warranties are generally obtained for limited periods relating to the construction of each project and its equipment in varying degrees, and contractors and equipment suppliers are obligated to meet certain performance levels. The insurance, warranties or performance guarantees, however, may not be adequate to cover increased expenses. As a result, a project may cost more than projected and may be unable to fund principal and interest payments under its construction financing obligations, if any. A default under such a financing obligation could result in losing the Company's interest in a power generation facility.

Furthermore, where the Company has partnering relationships with a third party, the Company is subject to the viability and performance of the third party. The Company's inability to find a replacement contracting party, particularly an EPC contractor, where the original contracting party has failed to perform, could result in the abandonment of the development and/or construction of such project, while the Company could remain obligated on other agreements associated with the project, including PPAs.

If the Company is unable to complete the development or construction of a facility or environmental control, or decides to delay, downsize, or cancel such project, it may not be able to recover its investment in that facility or environmental control. Furthermore, if construction projects are not completed according to specification, the Company may incur liabilities and suffer reduced plant efficiency, higher operating costs and reduced net income.

NRG and its subsidiaries have guaranteed the performance of third parties, which may result in substantial costs in the event of non-performance.

NRG and its subsidiaries have issued certain guarantees of the performance of others, which obligate NRG and its subsidiaries to perform in the event that the third parties do not perform. In the event of non-performance by the third parties, NRG could incur substantial cost to fulfill their obligations under these guarantees. Such performance guarantees could have a material impact on the operating results, financial condition, or cash flows of the Company.

The Company's development programs are subject to financing and public policy risks that could adversely impact NRG's financial performance or result in the abandonment of such development projects.

While NRG currently intends to develop and finance the more capital intensive projects on a non-recourse or limited recourse basis through separate project financed entities, and intends to seek additional investments in most of these projects from third parties, NRG anticipates that it will need to make significant equity investments in these projects. NRG may also decide to develop and finance some of the projects, such as smaller gas-fired and renewable projects, using corporate financial resources rather than non-recourse debt, which could subject NRG to significant capital expenditure requirements and to risks inherent in the development and construction of new generation facilities. In addition to providing some or all of the equity required to develop and build the proposed projects, NRG's ability to finance these projects on a non-recourse basis is contingent upon a number of factors, including the terms of the EPC contracts, construction costs, PPAs and fuel procurement contracts, capital markets conditions, the availability of tax credits and other government incentives for certain new technologies. To the extent NRG is not able to obtain non-recourse financing for any project or should the credit rating agencies attribute a material amount of the project finance debt to NRG's credit, the financing of the development projects could have a negative impact on the credit ratings of NRG.

NRG may also choose to undertake the repowering, refurbishment or upgrade of current facilities based on the Company's assessment that such activity will provide adequate financial returns. Such projects often require several years of development and capital expenditures before commencement of commercial operations, and key assumptions underpinning a decision to make such an investment may prove incorrect, including assumptions regarding construction costs, timing, available financing and future fuel and power prices.

Furthermore, the viability of the Company's renewable development projects are largely contingent on public policy mechanisms including production and investment tax credits, cash grants, loan guarantees, accelerated depreciation tax benefits, renewable portfolio standards, or RPS, and carbon trading plans. These mechanisms have been implemented at the state and federal levels to support the development of renewable generation, demand-side and smart grid, and other clean infrastructure technologies. The availability and continuation of public policy support mechanisms will drive a significant part of the economics and viability of the Company's development program and expansion into clean energy investments.

Supplier and/or customer concentration at certain of NRG's facilities may expose the Company to significant financial credit or performance risks.

NRG often relies on a single contracted supplier or a small number of suppliers for the provision of fuel, transportation of fuel and other services required for the operation of certain of its facilities. If these suppliers cannot perform, the Company utilizes the marketplace to provide these services. There can be no assurance that the marketplace can provide these services as, when and where required.

At times, NRG relies on a single customer or a few customers to purchase all or a significant portion of a facility's output, in some cases under long-term agreements that account for a substantial percentage of the anticipated revenue from a given facility. The Company has also hedged a portion of its exposure to power price fluctuations through forward fixed price power sales and natural gas price swap agreements. Counterparties to these agreements may breach or may be unable to perform their obligations. NRG may not be able to enter into replacement agreements on terms as favorable as its existing agreements, or at all. If the Company was unable to enter into replacement PPA's, the Company would sell its plants' power at market prices. If the Company is unable to enter into replacement fuel or fuel transportation purchase agreements, NRG would seek to purchase the Company's fuel requirements at market prices, exposing the Company to market price volatility and the risk that fuel and transportation may not be available during certain periods at any price.

The failure of any supplier or customer to fulfill its contractual obligations to NRG could have a material adverse effect on the Company's financial results. Consequently, the financial performance of the Company's facilities is dependent on the credit quality of, and continued performance by, suppliers and customers.

NRG relies on power transmission facilities that it does not own or control and that are subject to transmission constraints within a number of the Company's core regions. If these facilities fail to provide NRG with adequate transmission capacity, the Company may be restricted in its ability to deliver wholesale electric power to its customers and the Company may either incur additional costs or forego revenues. Conversely, improvements to certain transmission systems could also reduce revenues.

NRG depends on transmission facilities owned and operated by others to deliver the wholesale power it sells from the Company's power generation plants to its customers. If transmission is disrupted, or if the transmission capacity infrastructure is inadequate, NRG's ability to sell and deliver wholesale power may be adversely impacted. If a region's power transmission infrastructure is inadequate, the Company's recovery of wholesale costs and profits may be limited. If restrictive transmission price regulation is imposed, the transmission companies may not have sufficient incentive to invest in expansion of transmission infrastructure. The Company cannot also predict whether transmission facilities will be expanded in specific markets to accommodate competitive access to those markets.

In addition, in certain of the markets in which NRG operates, energy transmission congestion may occur and the Company may be deemed responsible for congestion costs if it schedules delivery of power between congestion zones during times when congestion occurs between the zones. If NRG were liable for such congestion costs, the Company's financial results could be adversely affected.

The Company has a significant amount of generation located in load pockets, making that generation valuable, particularly with respect to maintaining the reliability of the transmission grid. Expansion of transmission systems to reduce or eliminate these load pockets could negatively impact the value or profitability of the Company's existing facilities in these areas.

Because NRG owns less than a majority of some of its project investments, the Company cannot exercise complete control over their operations.

NRG has limited control over the operation of some project investments and joint ventures because the Company's investments are in projects where it beneficially owns less than a majority of the ownership interests. NRG seeks to exert a degree of influence with respect to the management and operation of projects in which it owns less than a majority of the ownership interests by negotiating to obtain positions on management committees or to receive certain limited governance rights, such as rights to veto significant actions. However, the Company may not always succeed in such negotiations. NRG may be dependent on its co-venturers to operate such projects. The Company's co-venturers may not have the level of experience, technical expertise, human resources management and other attributes necessary to operate these projects optimally. The approval of co-venturers also may be required for NRG to receive distributions of funds from projects or to transfer the Company's interest in projects.

Future acquisition activities may have adverse effects.

NRG may seek to acquire additional companies or assets in the Company's industry or which complement the Company's industry. The acquisition of companies and assets is subject to substantial risks, including the failure to identify material problems during due diligence, the risk of over-paying for assets, the ability to retain customers and the inability to arrange financing for an acquisition as may be required or desired. Further, the integration and consolidation of acquisitions requires substantial human, financial and other resources and, ultimately, the Company's acquisitions may not be successfully integrated. There can be no assurances that any future acquisitions will perform as expected or that the returns from such acquisitions will support the indebtedness incurred to acquire them or the capital expenditures needed to develop them.

NRG's business is subject to substantial governmental regulation and may be adversely affected by legislative or regulatory changes, as well as liability under, or any future inability to comply with, existing or future regulations or requirements.

NRG's business is subject to extensive foreign, and U.S. federal, state and local laws and regulation. Compliance with the requirements under these various regulatory regimes may cause the Company to incur significant additional costs, and failure to comply with such requirements could result in the shutdown of the non-complying facility, the imposition of liens, fines, and/or civil or criminal liability.

Public utilities under the FPA are required to obtain FERC acceptance of their rate schedules for wholesale sales of electricity. Except for ERCOT generating facilities and power marketers, all of NRG's non-qualifying facility generating companies and power marketing affiliates in the U.S. make sales of electricity in interstate commerce and are public utilities for purposes of the FPA. The FERC has granted each of NRG's generating and power marketing companies that make sales of electricity outside of ERCOT the authority to sell electricity at market-based rates. The FERC's orders that grant NRG's generating and power marketing companies market-based rate authority reserve the right to revoke or revise that authority if the FERC subsequently determines that NRG can exercise market power in transmission or generation, create barriers to entry, or engage in abusive affiliate transactions. In addition, NRG's market-based sales are subject to certain market behavior rules, and if any of NRG's generating and power marketing companies were deemed to have violated one of those rules, they are subject to potential disgorgement of profits associated with the violation and/or suspension or revocation of their market-based rate authority. If NRG's generating and power marketing companies were to lose their market-based rate authority, such companies would be required to obtain the FERC's acceptance of a cost-of-service rate schedule and could become subject to the accounting, record-keeping, and reporting requirements that are imposed on utilities with cost-based rate schedules. This could have an adverse effect on the rates NRG charges for power from its facilities.

NRG is also affected by legislative and regulatory changes, as well as changes to market design, market rules, tariffs, cost allocations, and bidding rules that occur in the existing ISOs. The ISOs that oversee most of the wholesale power markets impose, and in the future may continue to impose, mitigation, including price limitations, offer caps, and other mechanisms to address some of the volatility and the potential exercise of market power in these markets. These types of price limitations and other regulatory mechanisms may have an adverse effect on the profitability of NRG's generation facilities that sell energy and capacity into the wholesale power markets.

The regulatory environment has undergone significant changes in the last several years due to state and federal policies affecting wholesale and retail competition and the creation of incentives for the addition of large amounts of new renewable generation and, in some cases, transmission. These changes are ongoing and the Company cannot predict the future design of the wholesale power markets or the ultimate effect that the changing regulatory environment will have on NRG's business. In addition, in some of these markets, interested parties have proposed material market design changes, including the elimination of a single clearing price mechanism, as well as proposals to re-regulate the markets or require divestiture by generating companies to reduce their market share. Other proposals to re-regulate may be made and legislative or other attention to the electric power market restructuring process may delay or reverse the deregulation process. If competitive restructuring of the electric power markets is reversed, discontinued, or delayed, the Company's business prospects and financial results could be negatively impacted.

NRG cannot predict at this time the outcome of the ongoing efforts by the CFTC to implement the Dodd-Frank Act and to increase the regulation of over-the-counter derivatives including those related to energy commodities. The CFTC efforts are seeking, among other things, increased clearing of such derivatives through clearing organizations and the increased standardization of contracts, products, and collateral requirements. Such changes could negatively impact NRG's ability to hedge its portfolio in an efficient, cost-effective manner by, among other things, limiting NRG's ability to utilize liens as collateral and decreasing liquidity in the forward commodity markets. The Company expects that in 2013 the CFTC will clarify the scope of the Dodd-Frank Act and issue final rules concerning margin requirements for transactions and other issues that will affect the Company's over-the-counter derivatives trading.

NRG's ownership interest in a nuclear power facility subjects the Company to regulations, costs and liabilities uniquely associated with these types of facilities.

Under the Atomic Energy Act of 1954, as amended, or AEA, operation of STP, of which NRG indirectly owns a 44.0% interest, is subject to regulation by the NRC. Such regulation includes licensing, inspection, enforcement, testing, evaluation and modification of all aspects of nuclear reactor power plant design and operation, environmental and safety performance, technical and financial qualifications, decommissioning funding assurance and transfer and foreign ownership restrictions. NRG's 44% share of the output of STP represents approximately 1,175 MW of generation capacity.

There are unique risks to owning and operating a nuclear power facility. These include liabilities related to the handling, treatment, storage, disposal, transport, release and use of radioactive materials, particularly with respect to spent nuclear fuel, and uncertainties regarding the ultimate, and potential exposure to, technical and financial risks associated with modifying or decommissioning a nuclear facility. The NRC could require the shutdown of the plant for safety reasons or refuse to permit restart of the unit after unplanned or planned outages. New or amended NRC safety and regulatory requirements may give rise to additional operation and maintenance costs and capital expenditures. STP may be obligated to continue storing spent nuclear fuel if the U.S. DOE continues to fail to meet its contractual obligations to STP made pursuant to the U.S. Nuclear Waste Policy Act of 1982 to accept and dispose of STP's spent nuclear fuel. See also Item 1 — Environmental Matters — U.S. Federal Environmental Initiatives — Nuclear Waste for further discussion. Costs associated with these risks could be substantial and have a material adverse effect on NRG's results of operations, financial condition or cash flow. In addition, to the extent that all or a part of STP is required by the NRC to permanently or temporarily shut down or modify its operations, or is otherwise subject to a forced outage, NRG may incur additional costs to the extent it is obligated to provide power from more expensive alternative sources — either NRG's own plants, third party generators or the ERCOT — to cover the Company's then existing forward sale obligations. Such shutdown or modification could also lead to substantial costs related to the storage and disposal of radioactive materials and spent nuclear fuel.

While STP maintains property and liability insurance for losses related to nuclear operations, there may be limitations on the amounts and types of insurance commercially available. An accident at STP or another nuclear facility could have a material adverse effect on NRG's financial condition, its operational results, or liquidity as losses may exceed the insurance coverage available and/or may result in the obligation to pay retrospective premium obligations.

NRG is subject to environmental laws that impose extensive and increasingly stringent requirements on the Company's ongoing operations, as well as potentially substantial liabilities arising out of environmental contamination. These environmental requirements and liabilities could adversely impact NRG's results of operations, financial condition and cash flows.

NRG's business is subject to the environmental laws of Australian and U.S., federal, state and local authorities. The Company must comply with numerous environmental laws and obtain numerous governmental permits and approvals to build and operate the Company's plants. Should NRG fail to comply with any environmental requirements that apply to its operations, the Company could be subject to administrative, civil and/or criminal liability and fines, and regulatory agencies could take other actions seeking to curtail the Company's operations. In addition, when new requirements take effect or when existing environmental requirements are revised, reinterpreted or subject to changing enforcement policies, NRG's business, results of operations, financial condition and cash flows could be adversely affected.

Environmental laws and regulations have generally become more stringent over time, and the Company expects this trend to continue. Regulations currently under revision by the EPA, including the 316(b) rule to mitigate impact by once-through cooling, could result in more stringent standards or reduced compliance flexibility. While the NRG fleet employs advanced controls, new regulations to address the ever more stringent NAAQS, limit GHG emissions, or restrict ash handling at coal-fired power plants could also further affect plant operations.

Policies at the national, regional and state levels to regulate GHG emissions, as well as climate change, could adversely impact NRG's results of operations, financial condition and cash flows.

NRG's GHG emissions for 2012 can be found in Item 1, Business - Environmental Matters. The impact of further legislation or regulation of GHGs on the Company's financial performance will depend on a number of factors, including the level of GHG standards, the extent to which mitigation is required, the applicability of offsets, and the extent to which NRG would be entitled to receive CO_2 emissions credits without having to purchase them in an auction or on the open market.

The Company operates generating units in Connecticut, Delaware, Maryland, Massachusetts, and New York that are subject to RGGI, which is a regional cap and trade system. In February 2013, RGGI, Inc. released a model rule that if adopted by the member states would reduce the number of allowances available and potentially increase the price of each allowance. The impact on future power prices could adversely impact NRG's results of operations, financial condition and cash flows.

The California CO_2 cap and trade program for electric generating units greater than 25 MW commenced in 2013. The impact on the Company depends on the cost of the allowances and the ability to pass these costs through to customers. GHG emissions from power plants are regulated under various section of the CAA. In 2012, EPA proposed stringent standards for GHG emissions from certain new fossil-fueled electric generating units (simple-cycle CTs are not covered). The proposed standard is in effect until the rule is finalized. The Company expects EPA to issue another rule that will require states to develop CO2 standards that would apply to existing fossil-fueled generating facilities at some future date. This rule could adversely impact NRG's results of operations, financial condition and cash flows.

Hazards customary to the power production industry include the potential for unusual weather conditions, which could affect fuel pricing and availability, the Company's route to market or access to customers, i.e., transmission and distribution lines, or critical plant assets. To the extent that climate change contributes to the frequency or intensity of weather related events, NRG's operations and planning process could be impacted.

NRG's business, financial condition and results of operations could be adversely impacted by strikes or work stoppages by its unionized employees or inability to replace employees as they retire.

As of December 31, 2012, approximately 51% of NRG's employees at its U.S. generation plants were covered by collective bargaining agreements. In the event that the Company's union employees strike, participate in a work stoppage or slowdown or engage in other forms of labor strife or disruption, NRG would be responsible for procuring replacement labor or the Company could experience reduced power generation or outages. NRG's ability to procure such labor is uncertain. Strikes, work stoppages or the inability to negotiate future collective bargaining agreements on favorable terms could have a material adverse effect on the Company's business, financial condition, results of operations and cash flow. In addition, a number of the Company's employees at NRG's plants are close to retirement. The Company's inability to replace those workers could create potential knowledge and expertise gaps as those workers retire.

Changes in technology may impair the value of NRG's power plants.

Research and development activities are ongoing to provide alternative and more efficient technologies to produce power, including "clean" coal and coal gasification, wind, photovoltaic (solar) cells, energy storage, and improvements in traditional technologies and equipment, such as more efficient gas turbines. Advances in these or other technologies could reduce the costs of power production to a level below what the Company has currently forecasted, which could adversely affect its cash flow, results of operations or competitive position.

Risks that are beyond NRG's control, including but not limited to acts of terrorism or related acts of war, natural disaster, hostile cyber intrusions or other catastrophic events could have a material adverse effect on NRG's financial condition, results of operations and cash flows.

NRG's generation facilities and the facilities of third parties on which they rely may be targets of terrorist activities, as well as events occurring in response to or in connection with them, that could cause environmental repercussions and/or result in full or partial disruption of the facilities ability to generate, transmit, transport or distribute electricity or natural gas. Strategic targets, such as energy-related facilities, may be at greater risk of future terrorist activities than other domestic targets. Hostile cyber intrusions, including those targeting information systems as well as electronic control systems used at the generating plants and for the distribution systems, could severely disrupt business operations and result in loss of service to customers, as well as significant expense to repair security breaches or system damage. Any such environmental repercussions or disruption could result in a significant decrease in revenues or significant reconstruction or remediation costs, beyond what could be recovered through insurance policies which could have a material adverse effect on the Company's financial condition, results of operations and cash flow.

NRG's level of indebtedness could adversely affect its ability to raise additional capital to fund its operations, or return capital to stockholders. It could also expose it to the risk of increased interest rates and limit its ability to react to changes in the economy or its industry.

NRG's substantial debt could have negative consequences, including:

- increasing NRG's vulnerability to general economic and industry conditions;
- requiring a substantial portion of NRG's cash flow from operations to be dedicated to the payment of principal and interest on its indebtedness, therefore reducing NRG's ability to pay dividends to holders of its preferred or common stock or to use its cash flow to fund its operations, capital expenditures and future business opportunities;
- limiting NRG's ability to enter into long-term power sales or fuel purchases which require credit support;
- exposing NRG to the risk of increased interest rates because certain of its borrowings, including borrowings under its senior secured credit facility are at variable rates of interest;
- limiting NRG's ability to obtain additional financing for working capital including collateral postings, capital expenditures, debt service requirements, acquisitions and general corporate or other purposes; and
-

limiting NRG's ability to adjust to changing market conditions and placing it at a competitive disadvantage compared to its competitors who have less debt.

The indentures for NRG's notes and senior secured credit facility contain financial and other restrictive covenants that may limit the Company's ability to return capital to stockholders or otherwise engage in activities that may be in its long-term best interests. NRG's failure to comply with those covenants could result in an event of default which, if not cured or waived, could result in the acceleration of all of the Company's indebtedness.

In addition, NRG's ability to arrange financing, either at the corporate level or at a non-recourse project-level subsidiary, and the costs of such capital, are dependent on numerous factors, including:

- general economic and capital market conditions;
- credit availability from banks and other financial institutions;
- investor confidence in NRG, its partners and the regional wholesale power markets;
- NRG's financial performance and the financial performance of its subsidiaries;
- NRG's level of indebtedness and compliance with covenants in debt agreements;
- maintenance of acceptable credit ratings;
- cash flow; and
- provisions of tax and securities laws that may impact raising capital.

NRG may not be successful in obtaining additional capital for these or other reasons. The failure to obtain additional capital from time to time may have a material adverse effect on its business and operations.

Goodwill and/or other intangible assets not subject to amortization that NRG has recorded in connection with its acquisitions are subject to mandatory annual impairment evaluations and as a result, the Company could be required to write off some or all of this goodwill and other intangible assets, which may adversely affect the Company's financial condition and results of operations.

In accordance with ASC 350, Intangibles — Goodwill and Other, or ASC 350, goodwill is not amortized but is reviewed annually or more frequently for impairment and other intangibles are also reviewed at least annually or more frequently, if certain conditions exist, and may be amortized. Any reduction in or impairment of the value of goodwill or other intangible assets will result in a charge against earnings which could materially adversely affect NRG's reported results of operations and financial position in future periods.

A valuation allowance may be required for NRG's deferred tax assets.

A valuation allowance may need to be recorded against deferred tax assets that the Company estimates are more likely than not to be unrealizable, based on available evidence at the time the estimate is made. A valuation allowance related to deferred tax assets can be affected by changes to tax laws, statutory tax rates and future taxable income levels. In the event that the Company determines that it would not be able to realize all or a portion of its net deferred tax assets in the future, the Company would reduce such amounts through a charge to income tax expense in the period in which that determination was made, which could have a material adverse impact on the Company's financial condition and results of operations.

Volatile power supply costs and demand for power could adversely affect the financial performance of NRG's Retail Business.

Although NRG is the primary provider of the Retail Business supply requirements, the Retail Business purchases a significant portion of its supply requirements from third parties. As a result, financial performance depends on its ability to obtain adequate supplies of electric generation from third parties at prices below the prices it charges its customers. Consequently, the Company's earnings and cash flows could be adversely affected in any period in which the Retail Business power supply costs rise at a greater rate than the rates it charges to customers. The price of power supply purchases associated with the Retail Business's energy commitments can be different than that reflected in the rates charged to customers due to, among other factors:

- varying supply procurement contracts used and the timing of entering into related contracts;
- subsequent changes in the overall price of natural gas;
- daily, monthly or seasonal fluctuations in the price of natural gas relative to the 12-month forward prices;
- transmission constraints and the Company's ability to move power to its customers; and
-

changes in market heat rate (i.e., the relationship between power and natural gas prices).

The Company's earnings and cash flows could also be adversely affected in any period in which the demand for power significantly varies from the forecasted supply, which could occur due to, among other factors, weather events, competition and economic conditions.

Significant events beyond the Company's control, such as hurricanes and other weather-related problems or acts of terrorism, could cause a loss of load and customers and thus have a material adverse effect on the Company's Retail Business.

The uncertainty associated with events beyond the Company's control, such as significant weather events and the risk of future terrorist activity, could cause a loss of load and customers and may affect the Company's results of operations and financial condition in unpredictable ways. In addition, significant weather events or terrorist actions could damage or shut down the power transmission and distribution facilities upon which the Retail Business is dependent. Power supply may be sold at a loss if these events cause a significant loss of retail customer load.

The Company's Retail Business may lose a significant number of retail customers due to competitive marketing activity by other retail electricity providers which could adversely affect the financial performance of NRG's Retail Business.

The Retail Business faces competition for customers. Competitors may offer lower prices and other incentives, which may attract customers away from the Retail Business. In some retail electricity markets, the principal competitor may be the incumbent retail electricity provider. The incumbent retail electricity provider has the advantage of long-standing relationships with its customers, including well-known brand recognition. Furthermore, the Retail Business may face competition from a number of other energy service providers, other energy industry participants, or nationally branded providers of consumer products and services who may develop businesses that will compete with NRG and its Retail Business.

The Company's Retail Business is subject to the risk that sensitive customer data may be compromised, which could result in an adverse impact to its reputation and/or the results of operations of the Retail Business.

The Retail Business requires access to sensitive customer data in the ordinary course of business. Examples of sensitive customer data are names, addresses, account information, historical electricity usage, expected patterns of use, payment history, credit bureau data, credit and debit card account numbers, drivers license numbers, social security numbers and bank account information. The Retail Business may need to provide sensitive customer data to vendors and service providers who require access to this information in order to provide services, such as call center operations, to the Retail Business. If a significant breach occurred, the reputation of NRG and the Retail Business may be adversely affected, customer confidence may be diminished, or NRG and the Retail Business may be subject to legal claims, any of which may contribute to the loss of customers and have a negative impact on the business and/or results of operations.

CAUTIONARY STATEMENT REGARDING FORWARD LOOKING INFORMATION

This Annual Report on Form 10-K of NRG Energy, Inc., or NRG or the Company, includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or Exchange Act. The words "believes," "projects," "anticipates," "plans," "expects," "intends," "estimates" and similar expressions are intended to identify forward-looking statements. These forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause NRG's actual results, performance and achievements, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. These factors, risks and uncertainties include the factors described under Item 1A — Risk Factors Related to NRG Energy, Inc. and the following:

- General economic conditions, changes in the wholesale power markets and fluctuations in the cost of fuel;
- Volatile power supply costs and demand for power;
- Hazards customary to the power production industry and power generation operations such as fuel and electricity price volatility, unusual weather conditions, catastrophic weather-related or other damage to facilities, unscheduled generation outages, maintenance or repairs, unanticipated changes to fuel supply costs or availability due to higher demand, shortages, transportation problems or other developments, environmental incidents, or electric transmission or gas pipeline system constraints and the possibility that NRG may not have adequate insurance to cover losses as a result of such hazards;
- The effectiveness of NRG's risk management policies and procedures, and the ability of NRG's counterparties to satisfy their financial commitments;
- Counterparties' collateral demands and other factors affecting NRG's liquidity position and financial condition;
- NRG's ability to operate its businesses efficiently, manage capital expenditures and costs tightly, and generate earnings and cash flows from its asset-based businesses in relation to its debt and other obligations;
- NRG's ability to enter into contracts to sell power and procure fuel on acceptable terms and prices;
- The liquidity and competitiveness of wholesale markets for energy commodities;
- Government regulation, including compliance with regulatory requirements and changes in market rules, rates, tariffs and environmental laws and increased regulation of carbon dioxide and other greenhouse gas emissions;
- Price mitigation strategies and other market structures employed by ISOs or RTOs that result in a failure to adequately compensate NRG's generation units for all of its costs;
- NRG's ability to borrow additional funds and access capital markets, as well as NRG's substantial indebtedness and the possibility that NRG may incur additional indebtedness going forward;
- NRG's ability to receive Federal loan guarantees or cash grants to support development projects;
- Operating and financial restrictions placed on NRG and its subsidiaries that are contained in the indentures governing NRG's outstanding notes, in NRG's Senior Credit Facility, and in debt and other agreements of certain of NRG subsidiaries and project affiliates generally;
- NRG's ability to implement its strategy of developing and building new power generation facilities, including new solar projects;
- NRG's ability to implement its econrg strategy of finding ways to address environmental challenges while taking advantage of business opportunities;
- NRG's ability to implement its FORNRG strategy to increase cash from operations through operational and commercial initiatives, corporate efficiencies, asset strategy, and a range of other programs throughout the company to reduce costs or generate revenues;
- NRG's ability to achieve its strategy of regularly returning capital to stockholders;
- NRG's ability to maintain retail market share;
- NRG's ability to successfully evaluate investments in new business and growth initiatives;
- NRG's ability to successfully integrate and manage any acquired businesses;
- NRG's ability to develop and maintain successful partnering relationships; and
- NRG's ability to integrate the businesses and realize cost savings related to the merger with GenOn Energy, Inc.

Forward-looking statements speak only as of the date they were made, and NRG Energy, Inc. undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. The foregoing review of factors that could cause NRG's actual results to differ materially from those contemplated in any forward-looking statements included in this Annual Report on Form 10-K should not be construed as exhaustive.

Item 1B — Unresolved Staff Comments
None.

Item 2 — Properties

Listed below are descriptions of NRG's interests in facilities, operations and/or projects owned or leased as of December 31, 2012. The MW figures provided represent nominal summer net megawatt capacity of power generated as adjusted for the Company's ownership position excluding capacity from inactive/mothballed units as of December 31, 2012. The following table summarizes NRG's power production and cogeneration facilities by region:

Name and Location of Facility	Power Market	% Owned[a][b]	Net Generation Capacity (MW) [c]	Primary Fuel-type
Texas Region:				
Cedar Bayou, Baytown, TX	ERCOT	100.0	1,495	Natural Gas
Cedar Bayou 4, Baytown, TX	ERCOT	50.0	260	Natural Gas
Greens Bayou, Houston, TX	ERCOT	100.0	660	Natural Gas
Limestone, Jewett, TX	ERCOT	100.0	1,690	Coal
San Jacinto, LaPorte, TX	ERCOT	100.0	160	Natural Gas
South Texas Project, Bay City, TX [d]	ERCOT	44.0	1,175	Nuclear
S. R. Bertron, Deer Park, TX [e]	ERCOT	100.0	765	Natural Gas
T. H. Wharton, Houston, TX	ERCOT	100.0	1,025	Natural Gas
W. A. Parish, Thompsons, TX	ERCOT	100.0	2,505	Coal
W. A. Parish, Thompsons, TX	ERCOT	100.0	1,145	Natural Gas
	Total Texas Region:		10,880	
East Region:				
Arthur Kill, Staten Island, NY	NYISO	100.0	860	Natural Gas
Astoria Gas Turbines, Queens, NY	NYISO	100.0	475	Natural Gas
Aurora, IL	PJM	100.0	880	Natural Gas
Avon Lake, OH [f]	PJM	100.0	730	Coal
Avon Lake, OH	PJM	100.0	20	Oil
Blossburg, PA	PJM	100.0	20	Natural Gas
Bowline, West Haverstraw, NY	NYISO	100.0	755	Natural Gas
Brunot Island, Pittsburg, PA	PJM	100.0	260	Natural Gas
Canal, Sandwich, MA	ISO-NE	100.0	1,110	Oil
Chalk Point, Aquasco, MD	PJM	100.0	665	Coal
Chalk Point, Aquasco, MD	PJM	100.0	1,690	Natural Gas
Cheswick, Springdale, PA	PJM	100.0	565	Coal
Conemaugh, New Florence, PA	PJM	20.2 [a]	340	Coal
Conemaugh, New Florence, PA	PJM	20.2 [a]	5	Oil
Connecticut Jet Power, CT (four sites)	ISO-NE	100.0	140	Oil
Devon, Milford, CT	ISO-NE	100.0	135	Oil
Dickerson, MD	PJM	100.0 [b]	535	Coal
Dickerson, MD	PJM	100.0 [b]	310	Natural Gas
Dunkirk, NY	NYISO	100.0	150	Coal
GenConn Devon, Milford, CT	ISO-NE	50.0	95	Oil
GenConn Middletown, CT	ISO-NE	50.0	95	Oil
Gilbert, Milford, NJ [f]	PJM	100.0	535	Natural Gas
Glen Gardner, NJ [f]	PJM	100.0	160	Natural Gas
Hamilton, East Berlin, PA	PJM	100.0	20	Oil
Hunterstown CCGT, Gettysburg, PA	PJM	100.0	810	Natural Gas
Hunterstown, CTS, Gettysburg, PA	PJM	100.0	60	Natural Gas
Huntley, Tonawanda, NY	NYISO	100.0	380	Coal

Indian River, Millsboro, DE [g]	PJM	100.0	550	Coal

Indian River, Millsboro, DE	PJM	100.0		15	Oil
Kendall, Cambridge, MA	ISO-NE	100.0		260	Natural Gas
Keystone, Shelocta, PA	PJM	20.4	(a)	345	Coal
Keystone, Shelocta, PA	PJM	20.4	(a)	5	Oil
Martha's Vineyard, MA	ISO-NE	100.0		15	Oil
Middletown, CT	ISO-NE	100.0		770	Oil
Montville, Uncasville, CT	ISO-NE	100.0		495	Oil
Morgantown, Newburg, MD	PJM	100.0	(b)	1,230	Coal
Morgantown, Newburg, MD	PJM	100.0	(b)	250	Oil
Mountain, Mount Holly Springs, PA	PJM	100.0		40	Oil
New Castle, West Pittsburgh, PA (f)	PJM	100.0		325	Coal
New Castle, West Pittsburgh, PA (f)	PJM	100.0		5	Oil
Niles, OH	PJM	100.0		25	Oil
Norwalk Harbor, So. Norwalk, CT	ISO-NE	100.0		340	Oil
Orrtana, PA	PJM	100.0		20	Oil
Oswego, NY	NYISO	100.0		1,630	Oil
Osceola, Holopaw, FL	FRCC	100.0		460	Natural Gas
Portland, Mouth Bethel, PA (f)	PJM	100.0		400	Coal
Portland, Mouth Bethel, PA	PJM	100.0		170	Oil
Sayreville, NJ	PJM	100.0		225	Natural Gas
Seward, New Florence, PA	PJM	100.0		525	Coal
Shawnee, East Stroudsburg, PA	PJM	100.0		20	Oil
Shawville, PA (h)	PJM	100.0	(b)	600	Coal
Shawville, PA	PJM	100.0	(b)	5	Oil
Titus, Birdsboro, PA (f)	PJM	100.0		245	Coal
Titus, Birdsboro, PA	PJM	100.0		30	Oil
Tolna, Stewardstown, PA	PJM	100.0		40	Oil
Vienna, MD	PJM	100.0		165	Oil
Warren, PA	PJM	100.0		55	Natural Gas
Werner, South Amboy, NJ (f)	PJM	100.0		210	Oil
	Total East Region:			21,270	
South Central Region:					
Bayou Cove, Jennings, LA	SERC-Entergy	100.0		300	Natural Gas
Big Cajun I, Jarreau, LA	SERC-Entergy	100.0		430	Natural Gas
Big Cajun II, New Roads, LA	SERC-Entergy	85.8	(i)	1,495	Coal
Choctaw, French Camp, MS	SERC-Entergy	100.0		800	Natural Gas
Cottonwood, Deweyville, TX	SERC-Entergy	100.0		1,265	Natural Gas
Rockford, IL	PJM	100.0		450	Natural Gas
Sabine Cogen, Orange, TX	SERC-Entergy	50.0		55	Natural Gas
Shelby County, Neoga, IL	MISO	100.0		345	Natural Gas
Sterlington, LA	SERC-Entergy	100.0		175	Natural Gas
	Total South Central Region:			5,315	
West Region:					
Contra Costa, Antioch, CA (f)	CAISO	100.0		675	Natural Gas
Coolwater, Dagget, CA	CAISO	100.0		635	Natural Gas
El Segundo Power, CA (j)	CAISO	100.0		670	Natural Gas
Ellwood, Goleta, CA	CAISO	100.0		55	Natural Gas
Encina, Carlsbad, CA	CAISO	100.0		965	Natural Gas
Etiwanda, Rancho Cucamonga, CA	CAISO	100.0		640	Natural Gas

Long Beach, CA	CAISO	100.0	260	Natural Gas

48

Mandalay, Oxnard, CA	CAISO	100.0	560	Natural Gas
Ormond Beach, Oxnard, CA	CAISO	100.0	1,515	Natural Gas
Pittsburg, CA	CAISO	100.0	1,310	Natural Gas
Saguaro Power Co., Henderson, NV	WECC	50.0	45	Natural Gas
San Diego Combustion Turbines, CA (three sites) [k]	CAISO	100.0	190	Natural Gas
	Total West Region:		7,520	
Alternative Energy:				
Agua Caliente, Dateland, AZ	CAISO/WECC	51.0	130	Solar
Avenal, CA	CAISO	50.0	25	Solar
Avra Valley, Pima County, AZ	WECC	100.0	25	Solar
Blythe, CA	CAISO	100.0	20	Solar
California Valley Solar Ranch, San Luis Obispo County, CA	CAISO/WECC	100.0	125	Solar
Distributed Solar, AZ	AZNMSN/WECC	100.0	40	Solar
Roadrunner, Santa Teresa, NM	EPE	100.0	20	Solar
Elbow Creek Wind Farm, Howard County, TX	ERCOT	100.0	125	Wind
Langford Wind Farm, Christoval, TX	ERCOT	100.0	150	Wind
Sherbino Wind Farm, Pecos County, TX	ERCOT	50.0	75	Wind
South Trent Wind Farm, Sweetwater, TX	ERCOT	100.0	100	Wind
	Total Alternative Energy:		835	
Other Conventional Generation:				
Paxton Creek Cogeneration, Harrisburg, PA	PJM	100.0	10	Natural Gas
Dover Cogeneration, DE	PJM	100.0	15	Coal
Dover Cogeneration, DE	PJM	100.0	90	Natural Gas
Princeton Hospital, NJ [l]	PJM	100.0	5	Natural Gas
Gladstone Power Station, Queensland, Australia	Enertrade/Boyne Smelter	37.5	605	Coal
	Total Other:		725	
Total NRG Generation Capacity:			46,545	

(a) NRG has 16.5% and 16.7% leased interests in the Conemaugh and Keystone facilities, respectively, as well as 3.7% ownership interests in each facility. NRG operates the Conemaugh and Keystone facilities.

(b) NRG leases 100% interests in the Dickerson and Morgantown coal generation units through facility lease agreements expiring in 2029 and 2034, respectively. NRG owns 310 MW and 250 MW of peaking capacity at the Dickerson and Morgantown generating facilities, respectively. NRG also leases a 100% interest in Shawville through a facility lease agreement expiring in 2026. NRG operates the Dickerson, Morgantown and Shawville facilities.

(c) Actual capacity can vary depending on factors including weather conditions, operational conditions, and other factors. Additionally, ERCOT requires periodic demonstration of capability, and the capacity may vary individually and in the aggregate from time to time.

(d) Generation capacity figure consists of the Company's 44% individual interest in the two units at STP.

(e) The four S. R. Bertron steam units and blackstart unit are currently mothballed according to ERCOT protocols, but all operated in 2012.

(f) NRG expects to deactivate net generation capacity at the following facilities acquired through the GenOn Merger:

Facility	Expected Deactivation Date	Net Generation Capacity (MW)
Avon Lake	April 2015	730
Contra Costa	May 2013	675

Gilbert	May 2015	190
Glen Gardner	May 2015	160
New Castle	April 2015	330
Portland	January 2015	400
Titus	April 2015	245
Werner	May 2015	210

(g) NRG will deactivate the Indian River 150 MW Unit 3 by December 31, 2013.

(h) NRG expects to place the coal-fired units at the Shawville generating facility (600 MW) in long-term protective layup in April 2015.

(i) Units 1 and 2 owned 100.0%, Unit 3 owned 58.0%.

(j) NRG is required to deactivate the 335 MW unit 3 within 90 days from the date of first fire of the second unit at the El Segundo Energy Center which is under construction. This deactivation is currently estimated to occur by the end of the second quarter in 2013.

(k) NRG operates these units, located on property owned by San Diego Gas & Electric, under a license agreement. The initial term of the license is set to end on December 31, 2013.

(l) The output of Princeton Hospital is primarily dedicated to serving the hospital. Excess power is sold to the local utility under its state-jurisdictional tariff.

Thermal Facilities

The Company's thermal businesses in Pittsburgh, Harrisburg and San Francisco are regulated by their respective state's Public Utility Commission. The other thermal businesses are subject to contract terms with their customers. The following table summarizes NRG's thermal steam and chilled water facilities as of December 31, 2012:

Name and Location of Facility	% Owned	Thermal Energy Purchaser	Megawatt Thermal Equivalent Capacity (MWt)	Generating Capacity
NRG Energy Center Minneapolis, MN	100.0	Approx. 100 steam and 50 chilled water customers	334 141	Steam: 1,140 MMBtu/hr. Chilled Water: 40,200 tons
NRG Energy Center San Francisco, CA	100.0	Approx 175 steam customers	133	Steam: 454 MMBtu/hr.
NRG Energy Center Harrisburg, PA	100.0	Approx 140 steam and 3 chilled water customers	129 8	Steam: 440 MMBtu/hr. Chilled water: 2,400 tons
NRG Energy Center Phoenix, AZ	100.0 0%[a]	Approx 30 chilled water customers	106 28	Chilled water: 30,100 tons Chilled water: 8,000 tons
NRG Energy Center Pittsburgh, PA	100.0	Approx 25 steam and 25 chilled water customers	87 46	Steam: 296 MMBtu/hr. Chilled water: 12,920 tons
NRG Energy Center San Diego, CA	100.0	Approx 20 chilled water customers	26	Chilled water: 7,425 tons
NRG Energy Center Dover, DE	100.0	Kraft Foods Inc. and Procter & Gamble Company	22	Steam: 75 MMBtu/hr.
NRG Energy Center Princeton, NJ	100.0	Princeton HealthCare System	21 17	Steam: 72 MMBtu/hr. Chilled Water: 4,700 tons
		Total Generating Capacity (MWt)	1,098	

(a) Capacity available under right-to-use provision of the Chilled Water Service Agreement.

Other Properties

NRG owns 45 MW of Distributed Solar facilities, 40 MW of which is operational, at various locations throughout the United States, concentrated primarily in the West Region.

In addition, NRG owns several real properties and facilities relating to its generation assets, other vacant real property unrelated to the Company's generation assets, interests in construction projects, and properties not used for operational purposes. NRG believes it has satisfactory title to its plants and facilities in accordance with standards generally accepted in the electric power industry, subject to exceptions that, in the Company's opinion, would not have a material adverse effect on the use or value of its portfolio.

NRG leases its financial and commercial corporate headquarters offices at 211 Carnegie Center, Princeton, New Jersey, its operational headquarters in Houston, TX, its Retail Business offices and call centers, and various other office space.

Item 3 — Legal Proceedings

Public Utilities Commission of the State of California v. Long-Term Sellers of Long-Term Contracts to the California Department of Water Resources, FERC Docket No. EL02-60 et al. — This matter concerns, among other contracts and other defendants, the CDWR and its wholesale power contract with subsidiaries of WCP (Generation) Holdings, Inc., or WCP. The case originated with a February 2002 complaint filed by the State of California alleging that many parties, including WCP subsidiaries, overcharged the State of California. For WCP, the alleged overcharges totaled approximately $940 million for 2001 and 2002. The complaint demanded that the FERC abrogate the CDWR contract and sought refunds associated with revenues collected under the contract. In 2003, the FERC rejected this complaint, denied rehearing, and the case was appealed to the U.S. Court of Appeals for the Ninth Circuit where oral argument was held on December 8, 2004.

On December 19, 2006, the Ninth Circuit decided that in the FERC's review of the contracts at issue, the FERC could not rely on the Mobile-Sierra standard presumption of just and reasonable rates, where such contracts were not reviewed by the FERC with full knowledge of the then existing market conditions. WCP and others sought review by the U.S. Supreme Court. WCP's appeal was not selected, but instead held by the Supreme Court. In the appeal that was selected by the Supreme Court, on June 26, 2008, the Supreme Court ruled: (i) that the Mobile-Sierra public interest standard of review applied to contracts made under a seller's market-based rate authority; (ii) that the public interest “bar” required to set aside a contract remains a very high one to overcome; and (iii) that the Mobile-Sierra presumption of contract reasonableness applies when a contract is formed during a period of market dysfunction unless (a) such market conditions were caused by the illegal actions of one of the parties or (b) the contract negotiations were tainted by fraud or duress.

This matter was extensively litigated and on March 22, 2012, NRG reached an agreement in principle with the CPUC to settle and resolve this matter, including all related claims, on behalf of NRG and on behalf of Dynegy. The agreement in principle was announced by the Company on March 23, 2012, as well as by the CPUC and by the California Governor's Office. The documented agreement was executed and submitted to the FERC on April 27, 2012 for its approval. The settlement agreement contains three material elements to be fulfilled over a four to six year period, depending upon several factors. First, the settlement agreement includes a $20 million cash payment due 30 days after the FERC approval. Second, it includes the construction and operation of a fee-based charging network, to be owned and operated by NRG subsidiary, eVgo, which will consist of at least 200 publicly available fast-charging electric vehicle stations installed at locations across California. Last, it calls for the wiring and associated work required to improve at least 10,000 individual parking spaces to allow for the charging of electric vehicles in at least 1,000 multi-family complexes, worksites, and public interest locations such as community colleges, public universities, and public or non-profit hospitals. Although these improved newly wired parking spaces will continue to be owned by the local property owner, eVgo will have an 18-month exclusive right to obtain customers from these locations starting from the date of each completed installation. The expected $20 million cash payment was accrued and expensed in the statement of operations for the three months ended March 31, 2012. In addition, the Company expects to spend approximately $100 million over the next four to six year period, during which the Company will fulfill the other elements of the settlement, and will capitalize a substantial majority of the costs as property, plant and equipment, representing the costs to construct the charging network and the wiring, which will be productive assets. The Company will expense the costs to operate the assets as incurred. On May 24, 2012, ECOtality, Inc. filed a lawsuit against the CPUC challenging the settlement, which was effectively dismissed on October 12, 2012. The settlement agreement was approved by the FERC on November 2, 2012. Final settlement payment of $20 million was made on January 16, 2013. Given that there was no challenge to the FERC order approving the settlement in the statutory period, the order became final and non-appealable.

United States of America v. Louisiana Generating, LLC., U.S.D.C Middle District of Louisiana, Civil Action No. 09-100-RET-CN (filed February 11, 2009) — On February 11, 2009, the U.S. Department of Justice, or U.S. DOJ, acting at the request of the EPA sued Louisiana Generating, LLC, or LaGen, in federal district court in the Middle District of Louisiana alleging violations of the CAA at the Big Cajun II power plant. This is the same matter for which Notices of Violation, or NOVs, were issued to LaGen on February 15, 2005, and on December 8, 2006. Specifically, it is alleged that in the late 1990s, several years prior to NRG's acquisition of the Big Cajun II power plant from the

Cajun Electric bankruptcy and several years prior to the NRG bankruptcy, modifications were made to Big Cajun II Units 1 and 2 by the prior owners without appropriate or adequate permits and without installing and employing BACT to control emissions of nitrogen oxides and/or sulfur dioxides. The relief sought in the complaint included a request for an injunction to: (i) preclude the operation of Units 1 and 2 except in accordance with the CAA; (ii) order the installation of BACT on Units 1 and 2 for each pollutant subject to regulation under the CAA; (iii) obtain all necessary permits for Units 1 and 2; (iv) order the surrender of emission allowances or credits; (v) conduct audits to determine if any additional modifications have been made which would require compliance with the CAA's Prevention of Significant Deterioration program; (vi) award to the U.S. DOJ its costs in prosecuting this litigation; and (vii) assess civil penalties of up to $27,500 per day for each CAA violation found to have occurred between January 31, 1997, and March 15, 2004, up to $32,500 for each CAA violation found to have occurred between March 15, 2004, and January 12, 2009, and up to $37,500 for each CAA violation found to have occurred after January 12, 2009.

On January 20, 2012, the court scheduled a liability-phase trial for October 15, 2012, and a remedy-phase trial set to occur at a later date to be determined in the event of an adverse decision in a liability-phase trial. On October 17, 2012, prior to the start of the liability-phase trial which had been temporarily adjourned, the parties notified the court that they had reached an agreement on terms of a settlement. The terms of the agreement generally require LaGen to install certain emission control technologies, as well as pay a civil penalty of $3.5 million and complete mitigation projects of $10.5 million within five years of entry of the Consent Decree. On November 20, 2012, the U.S. DOJ lodged the Consent Decree with the court. On January 14, 2013, the court entered the parties' joint request for a continuance until April 22, 2013, so the Consent Decree could be published for public comment. No objections to the Decree were received during the public comment period. Further discussion on this matter can be found in Item 15 — Note 23, Environmental Matters - South Central Region.

Louisiana Generating, LLC and NRG Energy, Inc. v. Illinois Union Insurance Company, U.S.D.C. Middle District of Louisiana, Civil Action No. 10-516-JJB-SCR (filed August 9, 2010) — In a related matter, soon after the filing of the above referenced U.S. DOJ lawsuit, LaGen sought insurance coverage from its insurance carrier, Illinois Union Insurance Company, or ILU. ILU denied coverage and thereafter LaGen filed a lawsuit (which was consolidated with a prior suit filed by ILU) seeking a declaration that ILU must provide coverage to LaGen for the defense costs incurred in defending the U.S. DOJ lawsuit. LaGen and ILU both filed motions for summary judgment and on January 30, 2012, the court issued an order granting LaGen's motion finding that ILU has a duty to defend LaGen. The trial court certified the summary judgment for immediate interlocutory appeal, and on May 25, 2012, ILU filed a petition with the U.S. Circuit Court of Appeals for the Fifth Circuit seeking to appeal the trial court's summary judgment ruling. The Fifth Circuit granted the petition on September 4, 2012. ILU filed a related notice of appeal on June 14, 2012, which also seeks review of the trial court's summary judgment ruling. The Company filed a motion to consolidate the two appeals which the court granted on October 24, 2012. The appellate argument before the Fifth Circuit is scheduled for March 6, 2013.

Big Cajun II Alleged Opacity Violations — On September 7, 2012, LaGen received a Consolidated Compliance Order & Notice of Potential Penalty, or CCO&NPP, from the LDEQ with the potential for penalties in excess of $100,000. The CCO&NPP alleges there were opacity exceedance events from the Big Cajun II Power Plant on certain dates during the years 2007-2012. On October 8, 2012, LaGen filed a Request for Administrative Adjudicatory hearing and is cooperating with the LDEQ and responding in good faith to the CCO&NPP.

Global Warming — In February 2008, the Native Village of Kivalina and the City of Kivalina, Alaska filed a suit in the United States District Court for the Northern District of California against GenOn and 23 other electric generating and oil and gas companies. The lawsuit sought damages of up to $400 million for the cost of relocating the village allegedly because of global warming caused by the greenhouse gas emissions of the defendants. In late 2009, the District Court ordered that the case be dismissed and the plaintiffs appealed. In September 2012, the United States Court of Appeals for the Ninth Circuit dismissed plaintiffs' appeal. In October 2012, the plaintiffs petitioned for en banc rehearing of the case; which petition was denied in November 2012. In February 2013, plaintiffs filed a petition with the U. S. Supreme Court seeking review of the decision from the U.S. Court of Appeals. The Company believes claims such as this lack legal merit.

Actions Pursued by MC Asset Recovery — Under the plan of reorganization that was approved in conjunction with Mirant Corporation's emergence from bankruptcy protection on January 3, 2006, or the Plan, the rights to certain actions filed by GenOn Energy Holdings and some of its subsidiaries against third parties were transferred to MC Asset Recovery, a wholly owned subsidiary of GenOn Energy Holdings. MC Asset Recovery is now governed by a manager who is independent of GenOn. Under the Plan, any cash recoveries obtained by MC Asset Recovery from the actions transferred to it, net of fees and costs incurred in prosecuting the actions, are to be paid to the unsecured creditors of GenOn Energy Holdings in the Chapter 11 proceedings and the holders of the equity interests in GenOn Energy Holdings immediately prior to the effective date of the Plan except where such a recovery results in an allowed claim in the bankruptcy proceedings, as described below. MC Asset Recovery is a disregarded entity for income tax purposes, and NRG, GenOn and GenOn Energy Holdings are responsible for income taxes related to its operations. The Plan provides that GenOn Energy Holdings may not reduce payments to be made to unsecured

creditors and former holders of equity interests from recoveries obtained by MC Asset Recovery for the taxes owed by GenOn Energy Holdings, if any, on any net recoveries up to $175 million. If the aggregate recoveries exceed $175 million net of costs, then GenOn Energy Holdings may reduce the payments by the amount of any taxes it will owe or NOLs it may utilize with respect to taxable income resulting from the amount in excess of $175 million.

One of the two remaining actions transferred to MC Asset Recovery seeks to recover damages from Commerzbank AG and various other banks (the Commerzbank Defendants) for alleged fraudulent transfers that occurred prior to the filing of GenOn Energy Holdings' bankruptcy proceedings. In its amended complaint, MC Asset Recovery alleges that the Commerzbank Defendants in 2002 and 2003 received payments totaling approximately €153 million directly or indirectly from GenOn Energy Holdings under a guarantee provided by GenOn Energy Holdings in 2001 of certain equipment purchase obligations. MC Asset Recovery alleges that at the time GenOn Energy Holdings provided the guarantee and made the payments to the Commerzbank Defendants, GenOn Energy Holdings was insolvent and did not receive fair value for those transactions. In December 2010, the United States District Court for the Northern District of Texas dismissed MC Asset Recovery's complaint against the Commerzbank Defendants. In January 2011, MC Asset Recovery appealed the United States District Court's dismissal of its complaint against the Commerzbank Defendants to the United States Court of Appeals for the Fifth Circuit. In March 2012, the United States Court of Appeals for the Fifth Circuit reversed the United States District Court's dismissal and reinstated MC Asset Recovery's amended complaint against the Commerzbank Defendants. If MC Asset Recovery succeeds in obtaining any recoveries on these avoidance claims, the Commerzbank Defendants have asserted that they will seek to file claims in GenOn Energy Holdings' bankruptcy proceedings for the amount of those recoveries. GenOn Energy Holdings would vigorously contest the allowance of any such claims on the ground that, among other things, the recovery of such amounts by MC Asset Recovery does not reinstate any enforceable pre-petition obligation that could give rise to a claim. If such a claim were to be allowed by the Bankruptcy Court as a result of a recovery by MC Asset Recovery, then the Plan provides that the Commerzbank Defendants are entitled to the same distributions as previously made under the Plan to holders of similar allowed claims. Holders of previously allowed claims similar in nature to the claims that the Commerzbank Defendants would seek to assert have received 43.87 shares of GenOn Energy Holdings common stock for each $1,000 of claim allowed by the Bankruptcy Court. If the Commerzbank Defendants were to receive an allowed claim as a result of a recovery by MC Asset Recovery on its claims against them, the order entered by the Bankruptcy Court in December 2005, confirming the Plan provides that GenOn Energy Holdings would retain from the net amount recovered by MC Asset Recovery an amount equal to the dollar amount of the resulting allowed claim rather than distribute such amount to the unsecured creditors and former equity holders as described above.

Pending Natural Gas Litigation — GenOn is party to five lawsuits, several of which are class action lawsuits, in state and federal courts in Kansas, Missouri, Nevada and Wisconsin. These lawsuits were filed in the aftermath of the California energy crisis in 2000 and 2001 and the resulting FERC investigations and relate to alleged conduct to increase natural gas prices in violation of antitrust and similar laws. The lawsuits seek treble or punitive damages, restitution and/or expenses. The lawsuits also name a number of unaffiliated energy companies as parties. In July 2011, the judge in the United States District Court for the District of Nevada handling four of the five cases granted the defendants' motion for summary judgment dismissing all claims against GenOn in those cases. The plaintiffs have appealed to the United States Court of Appeals for the Ninth Circuit. In September 2012, the State of Nevada Supreme Court handling one of the five cases affirmed dismissal by the Eighth Judicial District Court for Clark County, Nevada of all plaintiffs' claims against GenOn. In February 2013, the plaintiffs filed a petition for certiorari to the United States Supreme Court. GenOn has agreed to indemnify CenterPoint against certain losses relating to these lawsuits.

New Source Review Matters — The EPA and various states are investigating compliance of coal-fueled electric generating facilities with the pre-construction permitting requirements of the CAA known as “new source review.” Since 2000, the EPA has made information requests concerning several of the Company's plants. The Company continues to correspond with the EPA regarding some of these requests. The EPA agreed to share information relating to its investigations with state environmental agencies. In 2005 and 2006, the Company received an NOV from the EPA alleging that past work at Big Cajun II violated regulations regarding new source review. In January 2009, the EPA issued an NOV alleging that past work at the Shawville, Portland and Keystone generating facilities violated regulations regarding new source review. In June 2011, the EPA issued an NOV alleging that past work at the Niles and Avon Lake generating facilities violated regulations regarding new source review.

In December 2007, the NJDEP sued GenOn in the United States District Court for the Eastern District of Pennsylvania, alleging that new source review violations occurred at the Portland generating facility. The suit seeks installation of BACT for each pollutant, to enjoin GenOn from operating the generating facility if it is not in

compliance with the CAA and civil penalties. The suit also names past owners of the plant as defendants. In March 2009, the Connecticut Department of Environmental Protection became an intervening party to the suit. The Company believes that the work listed by the EPA and the work subject to the NJDEP suit were conducted in compliance with applicable regulations. However, any final finding that GenOn violated the new source review requirements could result in fines and penalties. This case is currently scheduled for a liability trial on April 22, 2013.

In addition, the NJDEP filed two administrative petitions with the EPA in 2010 alleging that the Portland generating facility's emissions were significantly contributing to nonattainment and/or interfering with the maintenance of certain NAAQS in New Jersey. In November 2011, the EPA published a final rule in response to one of the petitions that will require the two coal-fired units to reduce the maximum allowable SO2 emissions by about 60% starting in January 2013 and by about 80% starting in January 2015. In January 2012, the Company challenged the rule in the United States Court of Appeals for the Third Circuit. In 2013 and 2014, the Company has several compliance options that include using lower sulfur coals (although this may at times reduce how much the Company is able to generate) or running just one unit at a time. Starting in January 2015, these units will be subject to more stringent rate limits, which will require either material capital expenditures and higher operating costs or the retirement of these two units. The Company plans to deactivate these units in January 2015.

Cheswick Class Action Complaint — In April 2012, a putative class action lawsuit was filed in the Court of Common Pleas of Allegheny County, Pennsylvania alleging that emissions from the Cheswick generating facility have damaged the property of neighboring residents. The Company disputes these allegations. Plaintiffs have brought nuisance, negligence, trespass and strict liability claims seeking both damages and injunctive relief. Plaintiffs seek to certify a class that consists of people who own property or live within one mile of the Company's plant. In July 2012, the Company removed the lawsuit to the United States District Court for the Western District of Pennsylvania. In October 2012, the court granted the Company's motion to dismiss, which Plaintiffs have appealed to the U.S. Court of Appeals for the Third Circuit.

Cheswick Monarch Mine NOV — In 2008, the PADEP issued an NOV related to the Monarch mine located near the Cheswick generating facility. It has not been mined for many years. The Company uses it for disposal of low-volume wastewater from the Cheswick generating facility and for disposal of leachate collected from ash disposal facilities. The NOV addresses the alleged requirement to maintain a minimum pumping volume from the mine. The PADEP indicated it may assess a civil penalty in excess of $100,000. The Company contests the allegations in the NOV and has not agreed to such penalty. The Company is currently planning capital expenditures in connection with wastewater from Cheswick and leachate from ash disposal facilities.

Ormond Beach Alleged Federal Clean Water Act Violations — In October 2012, the Wishtoyo Foundation, a California-based cultural and environmental advocacy organization, through its Ventura Coastkeeper Program, filed suit in the United States District Court for the Central District of California regarding alleged violations of the Clean Water Act associated with discharges of stormwater from the Ormond Beach generating facility. The Wishtoyo Foundation alleges that elevated concentrations of pollutants in stormwater discharged from the Ormond Beach generating facility are affecting adjacent aquatic resources in violation of (a) the Statewide General Industrial Stormwater permit (a general National Pollution Discharge Elimination System permit issued by the California State Water Resources Control Board that authorizes stormwater discharges from industrial facilities in California) and (b) the state's Porter-Cologne Water Quality Control Act. The Wishtoyo Foundation further alleges that the Company has not implemented effective stormwater control and treatment measures and that the Company has not complied with the sampling and reporting requirements of the General Industrial Stormwater permit. The Company disputes these allegations.

Maryland Fly Ash Facilities — The Company has three fly ash facilities in Maryland: Faulkner, Westland and Brandywine. Fly ash from the Morgantown and Chalk Point generating facilities is disposed of at Brandywine. Fly ash from the Dickerson generating facility is disposed of at Westland. Fly ash is no longer disposed at the Faulkner facility. As described below, the MDE has sued GenOn MidAtlantic regarding Faulkner, Brandywine and Westland. The MDE also had threatened not to renew the water discharge permits for all three facilities.

Faulkner Litigation — In May 2008, the MDE sued GenOn MidAtlantic in the Circuit Court for Charles County, Maryland alleging violations of Maryland's water pollution laws at Faulkner. The MDE contended that the operation of Faulkner had resulted in the discharge of pollutants that exceeded Maryland's water quality criteria and without the appropriate NPDES permit. The MDE also alleged that GenOn MidAtlantic failed to perform certain sampling and reporting required under an applicable NPDES permit. The MDE complaint requested that the court (a) prohibit continuation of the alleged unpermitted discharges, (b) require GenOn MidAtlantic to cease from further disposal of any coal combustion byproducts at Faulkner and close and cap the existing disposal cells and (c) assess civil penalties.

In July 2008, GenOn MidAtlantic filed a motion to dismiss the complaint, arguing that the discharges are permitted by a December 2000 Consent Order. In January 2011, the MDE dismissed without prejudice its complaint and informed GenOn MidAtlantic that it intended to file a similar lawsuit in federal court. In May 2011, the MDE filed a complaint in the United States District Court for the District of Maryland alleging violations at Faulkner of the Clean Water Act and Maryland's Water Pollution Control Law. The MDE contends that (a) certain water discharges are not authorized by the existing permit and (b) operation of the Faulkner facility has resulted in discharges of pollutants that violate water quality criteria. The complaint asks the court to, among other things, (a) enjoin further disposal of coal ash; (b) enjoin discharges that are not authorized by the existing permit; (c) require numerous technical studies; (d) impose civil penalties and (e) award MDE attorneys' fees. The Company disputes the allegations.

Brandywine Litigation — In April 2010, the MDE filed a complaint against GenOn MidAtlantic in the United States District Court for the District of Maryland asserting violations at Brandywine of the Clean Water Act and Maryland's Water Pollution Control Law. The MDE contends that the operation of Brandywine has resulted in discharges of pollutants that violate Maryland's water quality criteria. The complaint requests that the court, among other things, (a) enjoin further disposal of coal combustion waste at Brandywine, (b) require the existing open disposal cells to be closed and capped within one year, (c) impose civil penalties and (d) award MDE attorneys' fees. The Company disputes the allegations. In September 2010, four environmental advocacy groups became intervening parties in the proceeding.

Westland Litigation — In January 2011, the MDE informed the Company that it intended to sue the Company for alleged violations at Westland of Maryland's water pollution laws, which suit was filed in United States District Court for the District of Maryland in December 2012.

Permit Renewals — In March 2011, the MDE tentatively determined to deny GenOn MidAtlantic's application for the renewal of the water discharge permit for Brandywine, which could result in a significant increase in operating expenses for the Chalk Point and Morgantown generating facilities. The MDE also had indicated that it was planning to deny the applications for the renewal of the water discharge permits for Faulkner and Westland. Denial of the renewal of the water discharge permit for the latter facility could result in a significant increase in operating expenses for the Dickerson generating facility.

Settlement — In June 2011, the MDE agreed to stay the litigation related to Faulkner and Brandywine, not to pursue its tentative denial of the Brandywine water discharge permit and not to act on renewal applications for Faulkner or Westland while settlement discussions occurred. As a condition to obtaining the stay, GenOn MidAtlantic agreed in principle to pay a civil penalty of $1.9 million if the matters were settled. In 2012, GenOn MidAtlantic agreed to pay an additional $0.6 million (for agreed prospective penalties while the settlement is implemented) if a comprehensive settlement is reached. The Company believes it is adequately reserved for such settlement. GenOn MidAtlantic also developed a technical solution, which includes installing synthetic caps on the closed cells of each of the three ash facilities, for which $47 million has been reserved. GenOn MidAtlantic has concluded settlement discussions with the MDE and signed a consent decree that when entered by the court will resolve these issues. In January 2013, the intervenors in the Brandywine case opposed entry of the consent decree. At this time, the Company cannot reasonably estimate the upper range of its obligation for remediating the sites because the Company has not: (a) finished assessing each site including identifying the full impacts to both ground and surface water and the impacts to the surrounding habitat; (b) finalized with the MDE the standards to which it must remediate; and (c) identified the technologies required, if any, to meet the yet to be determined remediation standards at each site nor the timing of the design and installation of such technologies.

Brandywine Storm Damage and Ash Recovery — As a result of Hurricane Irene and Tropical Storm Lee in August and September 2011, an estimated 8,800 cubic yards of coal fly ash stored in one of the cells at the Brandywine ash disposal site flowed onto 18 acres of private property adjacent to the site. The Company has removed the released ash from the private property and completed the remaining clean-up activities. The Company believes it has recorded an adequate reserve in connection with claims associated with the costs to remove and clean up the ash.

Brandywine Filling of Wetlands — While expanding and installing a liner at the Brandywine ash disposal site, GenOn MidAtlantic inadvertently filled wetlands without having all of the requisite permits. The MDE also has alleged that GenOn MidAtlantic violated the notice requirements of the Company's sediment and erosion control plan. In July 2012, the MDE filed a complaint in the Circuit Court for Prince George's County, Maryland for civil penalties and injunctive relief in connection with the storm damage and the filling of the wetlands. GenOn MidAtlantic settled these matters by paying a fine of $300,000 in December 2012.

Energy Plus Holdings, LLC Purported Class Actions — Energy Plus is a defendant in six purported class action lawsuits, two in New York, two in New Jersey, and and two in Pennsylvania. The plaintiffs in those lawsuits generally allege that Energy Plus misrepresents that its rates are competitive in the market; fails to disclose that its rates are substantially higher than those in the market and that Energy Plus has engaged in deceptive practices in its marketing of energy services. Plaintiffs generally seek that these matters be certified as class actions, with treble damages, interest, costs, attorneys' fees, and any other relief that the court deems just and proper. In addition, on July 26, 2012,

the Connecticut Attorney General and Office of Consumer Counsel filed a petition with the Connecticut Public Utilities Regulatory Authority seeking to investigate Energy Plus' marketing practices. On August 7, 2012, Energy Plus Holdings LLC and Energy Plus Natural Gas LLC received a subpoena from the State of New York Office of Attorney General which generally seeks information and business records related to Energy Plus' sales, marketing and business practices. While the Company believes that these allegations are without merit, it is cooperating with the attorneys general and is exploring an amicable resolution of all matters. The Company does not currently anticipate any potential resolution to be material in nature and believes it is adequately reserved for any estimated losses.

Purported Class Actions related to July 22, 2012 Announcement of NRG/GenOn Merger Agreement — NRG Energy, Inc. has been named as a defendant in eight purported class actions pending in Texas and Delaware, related to its announcement of its agreement to acquire all outstanding shares of GenOn. These cases have been consolidated into one state court case in each of Delaware and Texas and a federal court case in Texas. The plaintiffs generally allege breach of fiduciary duties, as well as conspiracy, aiding and abetting breaches of fiduciary duties. Plaintiffs are generally seeking to: be certified as a class; enjoin the merger; direct the defendant to exercise their fiduciary duties; rescind the acquisition and be awarded attorneys' fees costs and other relief that the court deems appropriate. Plaintiffs have demanded that there be additional disclosures regarding the merger terms. On October 24, 2012, the parties to the Delaware state court case executed a Memorandum of Understanding to resolve the Delaware purported class action lawsuit.

Notice of Intent to File Citizens Suit - Chalk Point, Dickerson and Morgantown — On January 25, 2013, Food & Water Watch, the Patuxent Riverkeeper and the Potomac Riverkeeper, or the Citizens Group, sent NRG a letter alleging that the Chalk Point, Dickerson and Morgantown generating facilities were violating the terms of the three National Pollution Discharge Elimination System Permits by discharging nitrogen and phosphorous into the waters of the United States in excess of the limits in each permit. The Citizens Group threatens to bring a lawsuit if the Company does not bring itself into compliance within 60 days of the letter. The Citizens Group intends to seek civil penalties and injunctive relief against the Company if they file a lawsuit.

Additional Litigation — In addition to the foregoing, NRG is party to other litigation or legal proceedings. The Company believes that it has valid defenses to the legal proceedings and investigations described above and intends to defend them vigorously. However, litigation is inherently subject to many uncertainties. There can be no assurance that additional litigation will not be filed against the Company or its subsidiaries in the future asserting similar or different legal theories and seeking similar or different types of damages and relief. Unless specified above, the Company is unable to predict the outcome these legal proceedings and investigations may have or reasonably estimate the scope or amount of any associated costs and potential liabilities. An unfavorable outcome in one or more of these proceedings could have a material impact on the Company's consolidated financial position, results of operations or cash flows. The Company also has indemnity rights for some of these proceedings to reimburse the Company for certain legal expenses and to offset certain amounts deemed to be owed in the event of an unfavorable litigation outcome.

Item 4 — Mine Safety Disclosures

Not applicable

PART II

Item 5 — Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Market Information and Holders

NRG's authorized capital stock consists of 500,000,000 shares of NRG common stock and 10,000,000 shares of preferred stock. A total of 22,000,000 shares of the Company's common stock are available for issuance under the NRG LTIP. A total of 5,558,390 shares of NRG common stock were authorized for issuance under the NRG GenOn LTIP. For more information about the NRG LTIP and the NRG GenOn LTIP, refer to Item 15 —Note 19, Stock-Based Compensation. NRG has also filed with the Secretary of State of Delaware a Certificate of Designation for the 3.625% Convertible Perpetual Preferred Stock.

NRG's common stock is listed on the New York Stock Exchange and has been assigned the symbol: NRG. The high and low sales prices, as well as the closing price for the Company's common stock on a per share basis for 2012 and 2011 are set forth below:

Common Stock Price	Fourth Quarter 2012	Third Quarter 2012	Second Quarter 2012	First Quarter 2012	Fourth Quarter 2011	Third Quarter 2011	Second Quarter 2011	First Quarter 2011
High	$23.78	$22.92	$17.49	$18.46	$22.61	$25.66	$25.54	$21.95
Low	19.15	16.66	14.29	15.53	17.47	19.98	21.05	19.09
Closing	22.99	21.39	17.36	15.67	18.12	21.21	24.58	21.54
Dividends Per Common Share	$0.09	$0.09	$—	$—	$—	$—	$—	$—

NRG had 322,606,898 shares outstanding as of December 31, 2012. As of February 21, 2013, there were 323,165,879 shares outstanding, and there were 31,630 common stockholders of record.

Dividends

On February 15, 2013, NRG paid a quarterly dividend on the Company's common stock of $0.09 per share.

Repurchase of equity securities

NRG did not repurchase equity securities in the year ended December 31, 2012.

Stock Performance Graph

The performance graph below compares NRG's cumulative total stockholder return on the Company's common stock for the period December 31, 2007, through December 31, 2012, with the cumulative total return of the Standard & Poor's 500 Composite Stock Price Index, or S&P 500, and the Philadelphia Utility Sector Index, or UTY. NRG's common stock trades on the New York Stock Exchange under the symbol "NRG".

The performance graph shown below is being furnished and compares each period assuming that $100 was invested on December 31, 2007 in each of the common stock of NRG, the stocks included in the S&P 500 and the stocks included in the UTY, and that all dividends were reinvested.

Comparison of Cumulative Total Return

	Dec-2007	Dec-2008	Dec-2009	Dec-2010	Dec-2011	Dec-2012
NRG Energy, Inc.	$100.00	$53.83	$54.48	$45.09	$41.81	$53.51
S&P 500	100.00	63.00	79.68	91.68	93.61	108.59
UTY	$100.00	$72.76	$80.07	$84.63	$100.94	$100.37

Item 6 — Selected Financial Data

The following table presents NRG's historical selected financial data. The data included in the following table has been recast to reflect the assets, liabilities and results of operations of certain projects that have met the criteria for treatment as discontinued operations in 2008.

This historical data should be read in conjunction with the Consolidated Financial Statements and the related notes thereto in Item 15 and Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations.

	Year Ended December 31,				
	2012	2011	2010	2009	2008
	(In millions except ratios and per share data)				
Statement of income data:					
Total operating revenues	$8,422	$9,079	$8,849	$8,952	$6,885
Total operating costs and expenses, and other expenses	8,170	9,725	8,119	7,283	5,119
Income from continuing operations, net	579	197	476	941	1,053
Income from discontinued operations, net	—	—	—	—	172
Net income attributable to NRG Energy, Inc.	$559	$197	$477	$942	$1,225
Common share data:					
Basic shares outstanding — average	232	240	252	246	235
Diluted shares outstanding — average	234	241	254	271	275
Shares outstanding — end of year	323	228	247		