NRG ENERGY, INC.
Form 10-K
February 28, 2014

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, 2013.

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 $7,506,455,756 based on the closing sale price of $26.70 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 26, 2014
Common Stock, par value $0.01 per share	325,217,179

Documents Incorporated by Reference:

Portions of the Registrant's definitive Proxy Statement relating to its 2014 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	2
PART I	6
Item 1 — Business	7
Item 1A — Risk Factors Related to NRG Energy, Inc.	37
Item 1B — Unresolved Staff Comments	51
Item 2 — Properties	52
Item 3 — Legal Proceedings	56
Item 4 — Mine Safety Disclosures	56
PART II	57
Item 5 — Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	57
Item 6 — Selected Financial Data	59
Item 7 — Management's Discussion and Analysis of Financial Condition and Results of Operations	60
Item 7A — Quantitative and Qualitative Disclosures About Market Risk	100
Item 8 — Financial Statements and Supplementary Data	103
Item 9 — Changes in and Disagreements With Accountants on Accounting and Financial Disclosure	104
Item 9A — Controls and Procedures	104
Item 9B — Other Information	104
PART III	105
Item 10 — Directors, Executive Officers and Corporate Governance	105
Item 11 — Executive Compensation	108
Item 12 — Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	109
Item 13 — Certain Relationships and Related Transactions, and Director Independence	109
Item 14 — Principal Accounting Fees and Services	109
PART IV	110
Item 15 — Exhibits, Financial Statement Schedules	110
EXHIBIT INDEX	213

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
ARO	Asset Retirement Obligation
ARRA	American Recovery and Reinvestment Act
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
BACT	Best Available Control Technology
Baseload	Units expected to satisfy minimum baseload requirements of the system and produce electricity at an essentially constant rate and run continuously
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, investment in acquisition opportunities, share repurchases and shareholder dividends
CCS-EOR	Carbon Capture and Sequestration with Enhanced Oil Recovery 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
CPUC	California Public Utilities Commission
CSAPR	Cross-State Air Pollution Rule
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
EME	Edison Mission Energy
Energy Plus Holdings	Energy Plus Holdings LLC
EPA	United States Environmental Protection Agency
EPC	Engineering, Procurement and Construction
ERCOT	Electric Reliability Council of Texas, the Independent System Operator and the regional reliability coordinator of the various electricity systems within Texas
ESEC	El Segundo Energy Center LLC
ESPP	Employee Stock Purchase Plan
EWG	Exempt Wholesale Generator
Exchange Act	The Securities Exchange Act of 1934, as amended
FASB	Financial Accounting Standards Board
FCM	Forward Capacity Market
FERC	Federal Energy Regulatory Commission
FFB	Federal Financing Bank
FPA	Federal Power Act

3

FRCC	Florida Reliability Coordinating Council
Fresh Start	Reporting requirements as defined by ASC-852, Reorganizations
GenOn	GenOn Energy, Inc.
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 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 $2.0 billion outstanding unsecured senior notes consisting of $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 ($575 million of 7.625% senior notes due 2014 were redeemed in June of 2013)
GenOn Holdings	GenOn Energy Holdings, Inc.
GHG	Greenhouse Gases
Green Mountain Energy	Green Mountain Energy Company
GWh	Gigawatt hour
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
High Desert	TA - High Desert, LLC
High Desert Facility	High Desert's $82 million non-recourse project level financing facility under the Note Purchase and Private Shelf Agreement
ISO	Independent System Operator, also referred to as Regional Transmission Organizations, or RTO
ISO-NE	ISO New England Inc.
Kansas South	NRG Solar Kansas South LLC
kWh	Kilowatt-hours
LIBOR	London Inter-Bank Offered Rate
LTIPs	Collectively, the NRG Long-Term Incentive Plan and the NRG GenOn Long-Term Incentive Plan
Marsh Landing	NRG Marsh Landing, LLC (formerly known as GenOn Marsh Landing, LLC)
Mass	Residential and small business
MATS	Mercury and Air Toxics Standards promulgated by the EPA
MD PSC	Maryland Public Service Commission
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	Midcontinent Independent 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
NOV	Notice of Violation
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
NRG Yield	Reporting segment including the following projects: Alpine, Avenal, Avra Valley, AZ DG Solar, Blythe, Borrego, CVSR, GenConn, Marsh Landing, PFMG DG Solar, Roadrunner, South Trent and Thermal.
NRG Yield, Inc.	NRG Yield, Inc., the owner of 34.5% of NRG Yield LLC with a controlling interest, and issuer of publicly held shares of Class A common stock
NRG Yield LLC	NRG Yield LLC, which owns, through its wholly owned subsidiary, NRG Yield Operating LLC, all of the assets contributed to NRG Yield LLC in connection with the initial public offering of Class A common stock of NRG Yield, Inc.
NSPS	New Source Performance Standards
NSR	New Source Review
NYISO	New York Independent System Operator
NYSPSC	New York State Public Service Commission
OCI	Other comprehensive income
PADEP	Pennsylvania Department of Environmental Protection
Peaking	Units expected to satisfy demand requirements during the periods of greatest or peak load on the system
PG&E	Pacific Gas & Electric
PJM	PJM Interconnection, LLC
PPA	Power Purchase Agreement
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
RCRA	Resource Conservation and Recovery Act of 1976
Reliant Energy	Reliant Energy Retail Services, LLC
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
Retail Business	

	NRG's retail energy brands, including Reliant, Green Mountain, Energy Plus and NRG Residential Solutions
Revolving Credit Facility	The Company's $2.5 billion revolving credit facility due 2018, a component of the Senior Credit Facility

RGGI	Regional Greenhouse Gas Initiative
RMR	Reliability Must-Run
RPS	Renewable Portfolio Standards
RSS	Reliability Support Service
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 Term Loan Facility and the 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 Electric Generating Station Units 1 & 2 — nuclear generating facility located near Bay City, Texas in which NRG owns a 44% interest
STPNOC	South Texas Project Nuclear Operating Company
TEPCO	The Tokyo Electric Power Company of Japan, Inc.
Term Loan Facility	The Company's $2.0 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 residential, industrial and commercial consumers think about, use, produce and deliver energy and energy services in major competitive power markets in the United States. NRG engages in the ownership and operation of power generation facilities; the trading of energy, capacity and related products; the transacting in and trading of fuel and transportation services and the direct sale of energy, services, and innovative, sustainable products to retail customers. The Company sells retail electric products and services under the name “NRG” and various brands owned by NRG. Finally, NRG aspires to be a clean energy leader and is focused on the deployment and commercialization of potentially transformative technologies, like electric vehicles, Distributed Solar and smart meter/home automation technology that collectively have the potential to fundamentally change the nature of the power industry, including a substantial change in the role of the national electric transmission grid and distribution system.

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

The Retail Business provides energy and related services to residential, commercial and institutional customers primarily located in Texas and selected Northeast markets. Products and services range from system power to home services, to bundled products which combine system power with protection products, energy efficiency and renewable energy solutions. Based on metered locations, as of December 31, 2013, NRG's Retail Business served approximately 2.3 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 focused on Distributed Solar, solar thermal, solar photovoltaic and wind 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, 2013, (excluding Distributed Solar), both operating and under construction, as well as the states where NRG operates its Retail Business:

Effective June 2013, the Company's segment structure and its allocation of corporate expenses were updated to reflect how management currently makes financial decisions and allocates resources. The Company has recast data from prior periods to reflect this change in reportable segments to conform to the current year presentation. The Company's businesses are primarily segregated based on the Retail Business, conventional power generation, alternative energy businesses, NRG Yield, and corporate activities. Within NRG's conventional power generation, there are distinct components with separate operating results and management structures for the following geographical regions: Texas, East, South Central, West and Other, which includes international businesses and maintenance services. The Company's alternative energy segment includes solar and wind assets (excluding those in the NRG Yield segment), electric vehicle services and the carbon capture business. NRG Yield includes certain of the Company's contracted generation assets including three natural gas or dual-fired facilities, eight utility-scale solar and wind generation facilities, two portfolios of distributed solar facilities and thermal infrastructure assets.

The following table summarizes NRG's global generation portfolio as of December 31, 2013, by operating segment, which includes 88 fossil fuel and nuclear plants, eleven Utility Scale Solar facilities and four wind farms, as well as Distributed Solar facilities. Also included are one Utility Scale Solar facility and additional Distributed Solar facilities currently under construction. All Utility Scale Solar and Distributed Solar facilities are described in megawatts on an alternating current basis. MW figures provided represent nominal summer net megawatt capacity of power generated as adjusted for the Company's owned or lease interest excluding capacity from inactive/mothballed units:

	Fossil Fuel, Nuclear, and Renewable (In MW)								
Generation Type	Texas	East	South Central	West	Alternative Energy	NRG Yield	Total Domestic	Other (Inter-national)	Total Global
Natural gas	5,917	7,651	3,817	6,779	—	843	25,007	—	25,007
Coal	4,193	6,879	1,496	—	—	—	12,568	605	13,173
Oil[(a)]	—	5,531	—	—	—	190	5,721	—	5,721
Nuclear	1,176	—	—	—	—	—	1,176	—	1,176
Wind	—	—	—	—	347	101	448	—	448
Utility Scale Solar	—	—	—	—	836	303	1,139	—	1,139
Distributed Solar	—	—	—	—	37	10	47	—	47
Total generation capacity	11,286	20,061	5,313	6,779	1,220	1,447	46,106	605	46,711
Capacity attributable to noncontrolling interest	—	—	—	—	(331)	(499)	(830)	—	(830)
Total net generation capacity	11,286	20,061	5,313	6,779	889	948	45,276	605	45,881
Under Construction									
Utility Scale Solar	—	—	—	—	26	—	26	—	26
Distributed Solar	—	—	—	—	6	—	6	—	6
Total under construction	—	—	—	—	32	—	32	—	32

(a) The NRG Yield operating segment consists of two dual-fuel (natural gas and oil) simple-cycle generation facilities. In addition, the Company's thermal assets provide steam and chilled water capacity of approximately 1,374 MWt through its district energy business, 28 MWt of which is available under the right-to-use provision of the Chilled Water Service Agreement at NRG Energy Center Phoenix, AZ.

Initial Public Offering of NRG Yield, Inc.

The Company formed NRG Yield, Inc. primarily to own and operate a portfolio of contracted generation assets and thermal infrastructure assets that have historically been owned and/or operated by NRG and its subsidiaries. On July 22, 2013, NRG Yield, Inc. closed its initial public offering of 22,511,250 shares of Class A common stock at a price of $22 per share. Net proceeds to NRG Yield, Inc. from the sale of the Class A common stock were approximately $468 million, net of underwriting discounts and commissions of $27 million. The Company retained 42,738,250 shares of Class B common stock of NRG Yield, Inc. As a result, the Company owns a controlling interest in NRG Yield, Inc. and will consolidate this entity for financial reporting purposes. In addition, the Company retained a 65.5% interest in NRG Yield LLC. The initial public offering represented the sale of a 34.5% interest in NRG Yield LLC. NRG Yield LLC's initial assets consisted of three natural gas or dual-fired facilities, eight utility-scale solar and wind generation facilities, two portfolios of distributed solar facilities that collectively represent 1,324 net MW, and thermal infrastructure assets with an aggregate steam and chilled water capacity of 1,098 net MWt and electric generation capacity of 123 net MW. On December 31, 2013, NRG Yield LLC acquired Energy Systems, as described in Item 15 — Note 3, Business Acquisitions and Dispositions. The following table represents the structure of NRG Yield, Inc. after the initial public offering:

GenOn Acquisition

On December 14, 2012, NRG completed the 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.

NRG's Business Strategy

The Company's business is focused on: (i) excellence in 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 generation assets and retail load operations; (iv) repowering of power generation assets at premium sites; (v) investing in, and deploying, 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. Underlying each aspect of the Company’s business is the Company’s commitment to safety for its employees, customers and partners.

In addition, the Company, through its subsidiary, NRG Yield, Inc., is focused on enhancing value for its stockholders through: (i) providing a more competitive source of equity capital that would accelerate NRG's long-term growth and acquisition strategy and optimize NRG's capital structure; and (ii) highlighting the reduced market exposure associated with the contracted conventional and renewable generation and thermal infrastructure assets embedded with NRG's merchant portfolio.

The Company believes that the U.S. energy industry is going to be increasingly impacted by the long-term societal trend towards sustainability, which is both generational and irreversible. Moreover, it further believes 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 U.S. energy sector over the years to come. Finally, NRG believes that the aging transmission and distribution infrastructure of the national grid is becoming increasingly inadequate in the face of the more extreme weather demands of the 21st century. As a result, energy consumers are expected to have increasing personal control over whom they buy their energy from, how that energy is generated and used (including their ability to self-generate from their own primarily sustainable energy resources) and what environmental impact individual choices will have. The Company's initiatives in this area of future growth are focused on: (i) renewables, with a concentration in solar and wind 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 and in Management's Discussion and Analysis of Financial Condition and Results of Operations, New and On-going Company Initiatives and Development Projects, in this Form 10-K.

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 individualized for the benefit of the end use energy consumer. 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 is a leading provider of sustainable energy solutions that promote both consumer welfare and national energy security.

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 identities 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 deregulated electricity markets across the nation provide an intensely competitive landscape for energy providers to sell products and services to all customer segments (residential, small business, commercial and industrial businesses, governments and other public institutions). The retail 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 biggest retail market.

Retail customers make purchase decisions based on a variety of factors, including price, customer service, brand, 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, at present, are more limited due to the volatile power markets and the prevailing low price of natural gas prompted by the shale gas revolution over the past several years. As such, the majority of NRG's current developments are 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 many factors including 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 44,472 MW of fossil fuel and nuclear generation capacity at 87 plants as of December 31, 2013. 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 during periods of high demand, which typically drive 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., 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.

Retail

Through its Retail Business, in 2013, NRG delivered approximately 60 TWhs and had approximately 2.3 million customers as of December 31, 2013, making it the largest retailer in Texas and one of the largest retail energy providers in the United States. NRG's multi-brand 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 and industrial customer relationships. With the largest market share in ERCOT based on volume sales, Reliant Energy, an NRG Company, is recognized for its exemplary customer service as well as its innovative smart energy and technology product offerings and home energy services. Green Mountain Energy is widely recognized as a pioneer in competitive retail energy markets and provides customers an environmentally friendly alternative for their energy supply requirements. Energy Plus, which is increasingly selling under the NRG brand name, has exclusive marketing arrangements with leading loyalty program providers and affinity group associations. Finally, NRG is selling renewables, home services, portable power and customized energy solutions to customers in the Company's chosen markets. Through the multi-brand Retail Business, NRG is able to provide its customers a broad range of energy services and products, including system power, smart energy services and energy efficiency services, electric vehicle 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 an industry that is subject to commodity price volatility, NRG expects that an expanded core generation fleet will enable the combined company to replicate 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 and owner-operators 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 1,666 MW of renewable generation capacity, of which 1,634 MW is operational and 32 MW is under construction as of December 31, 2013, comprised of ownership interests in four wind farms, eleven Utility Scale Solar facilities, and numerous Distributed Solar facilities. Through its relationships with solar equipment providers, NRG can 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 Electric Vehicle, or EV, charging infrastructure network in select major metropolitan areas.

Sponsor of NRG Yield

The Company’s establishment of, and majority interest in, NRG Yield, Inc. provides it with a more competitive and efficient vehicle to invest in, develop and pursue the acquisition of contracted power infrastructure assets such as conventional and renewable generation assets as well as thermal infrastructure assets. Because the Company believes NRG Yield, Inc. will provide it with a lower cost of capital, NRG believes that it will directly benefit from NRG Yield, Inc.’s growth through its controlling interest in NRG Yield, Inc. and by providing NRG Yield, Inc. a platform of growth through the completion of future sales of assets pursuant to the Right of First Offer Agreement. The proceeds of such sales are expected to provide the Company with capital to expand its Capital Allocation Program. As of December 31, 2013, NRG Yield, Inc.’s stock price had increased 81.9% from its initial public offering price of $22 per share on July 17, 2013.

Reliability of future cash flows and portfolio diversification

NRG has hedged a portion of its coal and nuclear capacity with decreasing hedge levels through 2018. As a result of the GenOn acquisition, the majority of the Company's generation is in markets with forward capacity markets 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, 2013, the Company had purchased fuel forward under fixed price contracts, with contractually-specified price escalators, for approximately 61% of its expected coal requirement from 2014 to 2018,

excluding inventory. The Company intends 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 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 new renewable and 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 720 MW Marsh Landing Generating Station and the 550 MW El Segundo Energy Center.

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 that 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 2018 for the Company's Texas and South Central regions:

Texas and South Central	2014	2015	2016	2017	2018	Annual Average for 2014-2018
	(Dollars in millions unless otherwise stated)					
Net Coal and Nuclear Capacity (MW) [a]	6,865	6,290	6,290	6,290	6,290	6,405
Forecasted Coal and Nuclear Capacity (MW) [b]	5,691	4,951	4,789	4,640	4,501	4,914
Total Coal and Nuclear Sales (MW) [c]	5,354	2,828	1,300	1,080	888	2,290
Percentage Coal and Nuclear Capacity Sold Forward [d]	94 %	57 %	27 %	23 %	20 %	47 %
Total Forward Hedged Revenues [e]	$1,952	$1,083	$531	$461	$411	
Weighted Average Hedged Price ($ per MWh) [e]	$41.62	$43.71	$46.68	$48.60	$52.87	
Average Equivalent Natural Gas Price ($ per MMBtu)	$4.35	$4.53	$5.02	$5.36	$5.97	
Gas Price Sensitivity Up $0.50/MMBtu on Coal and Nuclear Units	$16	$124	$190	$196	$198	
Gas Price Sensitivity Down $0.50/MMBtu on Coal and Nuclear Units	$(15)	$(110)	$(169)	$(168)	$(170)	
Heat Rate Sensitivity Up 1 MMBtu/MWh on Coal and Nuclear Units	$48	$94	$129	$160	$168	
Heat Rate Sensitivity Down 1 MMBtu/MWh on Coal and Nuclear Units	$(36)	$(73)	$(104)	$(132)	$(135)	

(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, 2013, 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, 2013, 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 U.S. Coal and Nuclear sales, including energy revenue and demand charges. For purpose of consistency, rail rates for South Central were held constant.

The following table summarizes NRG's U.S. Coal capacity and the corresponding revenues and average natural gas prices and positions resulting from Coal hedge agreements extending beyond December 31, 2013, and through 2018 for the East region:

East	2014	2015	2016	2017	2018	Annual Average for 2014-2018
	(Dollars in millions unless otherwise stated)					
Net Coal Capacity (MW) [a]	6,787	6,255	5,433	4,992	4,992	5,692
Forecasted Coal Capacity (MW) [b]	3,215	2,276	1,766	1,682	1,718	2,132
Total Coal Sales (MW) [c]	2,607	948	482	371	—	881
Percentage Coal Capacity Sold Forward [d]	81%	42%	27%	22%	—%	41%
Total Forward Hedged Revenues [e]	$1,339	$478	$258	$167	$—	
Weighted Average Hedged Price ($ per MWh) [e]	$58.65	$57.60	$61.08	$51.21	$—	
Average Equivalent Natural Gas Price ($ per MMBtu)	$5.58	$5.22	$5.36	$4.53	$—	
Gas Price Sensitivity Up $0.50/MMBtu on Coal Units	$97	$112	$94	$101	$117	
Gas Price Sensitivity Down $0.50/MMBtu on Coal Units	$(47)	$(66)	$(56)	$(58)	$(75)	
Heat Rate Sensitivity Up 1 MMBtu/MWh on Coal Units	$84	$122	$96	$99	$102	
Heat Rate Sensitivity Down 1 MMBtu/MWh on Coal Units	$(40)	$(83)	$(68)	$(67)	$(68)	

(a) Net Coal 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, 2013, 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, 2013, 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 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 sales as described in (c) above divided by the forecasted Coal capacity.

(e) Represents U.S. Coal sales, including energy revenue and demand charges, excluding revenues derived from capacity auctions.

Retail Operations

In 2013, 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 2013, the Company's Retail Business sold approximately 60 TWhs of electricity. In any given year, the quantity of 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.
- 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 the costs associated with new or changed environmental laws or regulations. MISO has a Resource Adequacy Construct and an annual auction, known as the Planning Resource Auction, or PRA. In April, MISO will conduct the PRA for Planning Year 2014-2015 that will begin on June 1, 2014. The South Central assets situated in the MISO market may participate in this auction. In certain circumstances, capacity from this region may be sold into the PJM market.
- West — The region's newer generation is contracted under long-term tolling agreements. Certain other sites have short-term tolling agreements or Resource Adequacy contracts.
- Texas — The region's sources of capacity and contracted revenues are through bilateral contracts with load serving entities.
- Other Conventional — 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.
- NRG Yield — NRG Yield's share of renewable and conventional energy plants is generally sold through long-term PPAs and tolling agreements. Its share of the GenConn plants in Connecticut also earns fixed payments under long-term financial contracts with a utility counterparty and output from NRG Yield's share of 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. Two of the PJM generation assets participate in the PJM capacity markets.

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 believes it is adequately hedged, using forward coal supply agreements for its domestic coal consumption for 2014. NRG actively manages its coal requirements based on forecasted generation, market volatility and its inventory on site. As of December 31, 2013, NRG had purchased forward contracts to provide fuel for approximately 61% of the Company's expected requirements from 2014 through 2018, excluding inventory. NRG purchased approximately 32 million tons of coal in 2013, of which 74% was Powder River Basin coal and lignite, and 26% was Waste and 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 2014 through 2018 that have been purchased forward as of December 31, 2013:

	Percentage of Company's Requirement [a][b]	
2014	97	%
2015	68	%
2016	48	%
2017	47	%
2018	27	%

(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's 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, 2013, 2012, and 2011, as discussed in Item 15 — Note 18, 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, 2013						
	Energy Revenues	Capacity Revenues	Retail Revenues	Mark-to-Market Activities	Contract Amor-tization	Other Revenues[a]	Total Operating Revenues
	(In millions)						
Retail	$—	$—	$6,297	$(5)	$ (51)	$ —	$6,241
Texas	2,190	103	—	(217)	2	28	2,106
East	2,400	1,099	—	(366)	—	76	3,209
South Central	566	245	—	45	19	(1)	874
West	155	314	—	2	—	4	475
Other Conventional Generation	—	5	—	—	—	148	153
Alternative Energy	209	3	—	(1)	—	22	233
NRG Yield	86	91	—	—	(1)	137	313
Corporate and Eliminations [b]	(2,076)	(60)	(5)	(36)	—	(132)	(2,309)
Total	$3,530	$1,800	$6,292	$(578)	$ (31)	$ 282	$11,295

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

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

	Year Ended December 31, 2012						
	Energy Revenues	Capacity Revenues	Retail Revenues	Mark-to-Market Activities	Contract Amor-tization	Other Revenues[c]	Total Operating Revenues[d]
	(In millions)						
Retail	$—	$—	$5,893	$(5)	$ (116)	$ —	$ 5,772
Texas	2,406	81	—	(441)	—	28	2,074
East	533	314	—	(12)	—	19	