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Filed Pursuant to Rule 424(b)(3)
Registration File No. 333-212096

PROSPECTUS SUPPLEMENT
(To Prospectus dated June 17, 2016)



13,068,169 Shares
Class C Common Stock

NRG Yield, Inc.

This prospectus supplement supplements the prospectus dated June 17, 2016, of NRG Yield, Inc., which is part of a registration statement on Form S-3 (File No. 333-212096) (the "Prospectus") filed with the Securities and Exchange Commission relating to the public offering and sale of our Class C common stock, par value \$0.01 per share (the "Class C common stock"), by the selling stockholders as described therein. This prospectus supplement should be read in conjunction with the Prospectus, as supplemented to date, and this prospectus supplement is qualified by reference to the Prospectus, as supplemented to date, except to the extent that the information provided by this prospectus supplement supersedes the information contained in the Prospectus.

This prospectus supplement is provided solely to update the selling stockholder table included in the Prospectus with respect to the principal amount of our 3.25% Convertible Senior Notes due 2020 (the "3.25% Convertible Notes") beneficially owned by LGT Select Convertibles as well as the number of shares of our Class C common stock issuable to LGT Select Convertibles upon conversion of our 3.25% Convertible Notes or otherwise issuable to LGT Select Convertibles on account of the 3.25% Convertible Notes.

This prospectus supplement is not complete without, and may not be delivered or utilized except in connection with, the Prospectus dated June 17, 2016, with respect to the securities described above, including any amendments or supplements thereto.

Investing in shares of our Class C common stock involves risks. You should carefully consider the risk factors beginning on page 7 of the Prospectus and set forth in the documents incorporated by reference therein before making any decision to invest in shares of our Class C common stock.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus supplement. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is June 24, 2016.

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement is being filed to amend, supplement and correct the information that appears under the caption "Selling Stockholders" in the Prospectus. Capitalized terms that are not defined in this prospectus supplement are defined in the Prospectus.

SELLING STOCKHOLDERS

We originally issued the 3.25% Convertible Notes in a transaction exempt from the registration requirements of the Securities Act. Selling stockholders, including their transferees, pledgees or donees or their successors (all of whom may be selling stockholders), may from time to time offer and sell pursuant to this prospectus any or all of the Class C common stock into which the 3.25% Convertible Notes are convertible or otherwise issuable on account of the notes. When we refer to the "selling stockholders" in this prospectus, we mean those persons listed in the table below, as well as their transferees, pledgees or donees or their successors.

The table below sets forth the name of each selling stockholder, the number of shares of our Class C common stock issued or issuable upon conversion of the 3.25% Convertible Notes or otherwise issuable to the selling stockholder on account of the 3.25% Convertible Notes that may be offered pursuant to this prospectus. Unless set forth below, none of the selling stockholders has had within the past three years any material relationship with us or any of our predecessors or affiliates. The information is based on information provided by or on behalf of the selling stockholders to us in a selling stockholder questionnaire and is as of the date specified by the selling stockholders in such questionnaires. The selling stockholders may offer all, some or none of the Class C common stock into which the 3.25% Convertible Notes are convertible, if and when converted, as well as any other shares of our common stock issuable on account of the 3.25% Convertible Notes to the selling stockholders. We have assumed for purposes of the table below that the selling stockholders will sell all of their Class C common stock issuable upon conversion or otherwise on account of the notes pursuant to this prospectus and that any other shares of Class C common stock beneficially owned by the selling stockholders will continue to be beneficially owned by them. In addition, the selling stockholders identified below may have sold, transferred or otherwise disposed of all or a portion of their 3.25% Convertible Notes since the date on which they provided the information regarding their 3.25% Convertible Notes in transactions exempt from the registration requirements of the Securities Act.

Selling Stockholder(1)	Principal Amount of Notes	Percentage of Notes Outstanding	Shares of Class C Common Stock Owned Prior to the Offering(2)	Shares of Class C Common Stock Offered	Shares of Class C Common Stock Owned After Completion of this Offering	Percentage of Class C Common Stock Owned After Completion of this Offering(3)
4 Ever Life Insurance Company	\$ 460,000	*	20,909	20,909	—	—
ACCC Insurance Company	\$ 50,000	*	2,272	2,272	—	—
AQR Absolute Return Master Account, L.P.	\$ 500,000	*	22,727	22,727	—	—
AQR Delta Master Account, L.P.	\$ 9,500,000	3.3%	431,817	431,817	—	—
AQR Delta Sapphire Fund, L.P.	\$ 875,000	*	39,772	39,772	—	—
AQR Delta XN Master Account, L.P.	\$ 4,675,000	1.6%	212,499	212,499	—	—
AQR Funds—AQR Multi-Strategy Alternative Fund	\$ 4,575,000	1.6%	207,954	207,954	—	—
AQR Multi-Strategy Fund VI, L.P.	\$ 1,250,000	*	56,818	56,818	—	—
Arrowgrass Master Fund Ltd.	\$12,285,000	4.3%	558,408	558,408	—	—
Calamos Dynamic Convertible and Income Fund	\$ 3,400,000	1.2%	154,545	154,545	—	—
Catholic Mutual Relief Society of America	\$ 250,000	*	11,363	11,363	—	—
Catholic Mutual Relief Society Retirement Plan and Trust	\$ 200,000	*	9,090	9,090	—	—

Selling Stockholder(1)	Principal Amount of Notes	Percentage of Notes Outstanding	Shares of Class C Common Stock Owned Prior to the Offering(2)	Shares of Class C Common Stock Offered	Shares of Class C Common Stock Owned After Completion of this Offering	Percentage of Class C Common Stock Owned After Completion of this Offering(3)
Catholic Relief Insurance Company of America	\$ 90,000	*	4,090	4,090	—	—
Century National Insurance Company	\$ 899,000	*	40,863	40,863	—	—
CNH CA Master Account, L.P.	\$ 400,000	*	18,181	18,181	—	—
Deseret Healthcare Employee Benefits Trust	\$ 20,000	*	909	909	—	—
Deseret Mutual Employee Pension Trust	\$ 500,000	*	22,727	22,727	—	—
Deseret Mutual Retiree Medical and Life Plan Trust	\$ 45,000	*	2,045	2,045	—	—
Eastern Alliance Insurance Company	\$ 120,000	*	5,454	5,454	—	—
Federated Rural Electric Insurance Exchange	\$ 260,000	*	11,818	11,818	—	—
Florida Peninsula Insurance Company	\$ 210,000	*	9,545	9,545	—	—
Germantown Insurance Company	\$ 50,000	*	2,272	2,272	—	—
Grange Mutual Casualty Company	\$ 1,290,000	*	58,636	58,636	—	—
Guarantee Trust Life Insurance Company	\$ 50,000	*	2,272	2,272	—	—
Guaranty Income Life Insurance Company	\$ 70,000	*	3,181	3,181	—	—
HBK Master Fund L.P.	\$60,950,000	21.2%	2,783,904	2,770,451	13,453	*
Integrity Mutual Insurance Company	\$ 60,000	*	2,727	2,727	—	—
LGT Select Convertibles	\$ 1,000,000	*	45,454	45,454	—	—
MAG Mutual Insurance Company	\$ 160,000	*	7,272	7,272	—	—
Michigan Professional Insurance Exchange	\$ 135,000	*	6,136	6,136	—	—
MMIC Insurance Inc.	\$ 130,000	*	5,909	5,909	—	—
PA Underground Storage Tank Indemnification Fund	\$ 35,000	*	1,590	1,590	—	—
Philadelphia Contributionship Insurance Company	\$ 35,000	*	1,590	1,590	—	—
PLIC Convertible Wilton Re BERM	\$ 160,000	*	7,272	7,272	—	—
PLIC Convertible Wilton Re US	\$ 220,000	*	9,999	9,999	—	—
PLICNY Convertible Wilton Re NY	\$ 135,000	*	6,136	6,136	—	—
Premera Blue Cross	\$ 3,595,000	1.3%	163,408	163,408	—	—
Principal Funds, Inc.—Global Multi-Strategy Fund	\$ 225,000	*	10,227	10,227	—	—
Protective Insurance Company	\$ 145,000	*	6,590	6,590	—	—
Quincy Mutual Fire Insurance Company	\$ 155,000	*	7,045	7,045	—	—
San Francisco Employees' Retirement System	\$ 340,000	*	15,454	15,454	—	—

Selling Stockholder(1)	Principal Amount of Notes	Percentage of Notes Outstanding	Shares of Class C Common Stock Owned Prior to the Offering(2)	Shares of Class C Common Stock Offered	Shares of Class C Common Stock Owned After Completion of this Offering	Percentage of Class C Common Stock Owned After Completion of this Offering(3)
State National Insurance Company TBA	\$ 10,000	*	454	454	—	—
Sunrise Partners Limited Partnership	\$ 9,960,000	3.5%	473,527	452,726	20,801	*
UMIA Insurance Inc.	\$ 75,000	*	3,409	3,409	—	—
Virginia Retirement System	\$ 3,345,000	1.2%	152,045	152,045	—	—
Wisconsin Mutual Insurance Company	\$ 90,000	*	4,090	4,090	—	—

* Less than 1%.

- (1) Information regarding the selling stockholders may change from time to time. Any such changed information will be set forth in supplements to this prospectus if required.
- (2) Assumes for each \$1,000 in principal amount of notes a maximum of 45.4545 shares of Class C common stock could be received upon conversion or otherwise on account of the notes. The conversion rate is subject to adjustment as described in the indenture. As a result, the number of shares of common stock issuable upon conversion of the notes may increase or decrease in the future. Excludes fractional shares. Holders will receive a cash adjustment for any fractional share amount resulting from the conversion of the notes.
- (3) Based on an estimate of 62,784,250 shares of Class C common stock outstanding as of June 17, 2016. In calculating this amount for each holder, we treated as outstanding the number of shares of Class C common stock issuable on account of all of that holder's notes, but we did not assume conversion of any other holder's notes.

Information concerning the selling stockholders may change from time to time and any changed information will be set forth in supplements to this prospectus if and when necessary. Similarly, holders of 3.25% Convertible Notes not identified in this prospectus as selling stockholders may be identified, and corresponding information regarding an offer of Class C common stock by them included, in supplements to this prospectus if and when necessary.

In addition, the conversion price, and therefore, the number of shares of common stock issuable upon conversion of the notes, is subject to adjustment in certain circumstances. Accordingly, the aggregate principal amount of notes and the number of shares of common stock into which the notes are convertible may increase or decrease. The conversion rate for the 3.25% Convertible Notes initially equals 36.3636 shares of common stock per \$1,000 in principal amount of 3.25% Convertible Notes. The conversion rate is subject to adjustment upon the occurrence of certain specified events but will not be adjusted for accrued and unpaid interest. The indenture governing the 3.25% Convertible Notes provides, among other things, that the conversion rate will be adjusted:

- if we issue solely shares of our common stock as a dividend or distribution on all or substantially all of the shares of our common stock, or if we effect a share split or share combination of our common stock;
- if we issue to all or substantially all holders of our common stock certain rights, options or warrants;
- for distributions by us of shares of our capital stock, evidences of our indebtedness, other assets or property of ours or rights, options or warrants to acquire our capital stock or other securities

to all or substantially all holders of our common stock which are not otherwise adjusted for pursuant to the other adjustment provisions of the indenture;

- with respect to certain "spin off" transactions;
- for cash dividends or distributions by us to all or substantially all holders of the outstanding common stock (other than a regular quarterly cash dividend that does not exceed the a specified threshold); or
- if we or any of our subsidiaries makes a payment in respect of a tender offer or exchange offer for our common stock (other than distributions paid exclusively in cash or an odd lot tender offer), to the extent that the per share consideration paid exceeds a specified amount.

In addition, upon the occurrence of a make-whole fundamental change (as defined in the indenture), we will, in certain circumstances, increase the conversion rate by a number of additional shares for a holder that elects to convert its 3.25% Convertible Notes in connection with such make-whole fundamental change. A "make-whole fundamental change" includes:

- if a "person" or "group" within the meaning of Section 13(d) of the Securities Exchange Act of 1934, as amended, (the "Exchange Act"), other than NRG Energy, Inc. or any of its subsidiaries, has become the direct or indirect "beneficial owner," as defined in Rule 13d-3 under the Exchange Act, of our common equity representing more than 50% of the voting power of all classes of our common equity; and
- if our stockholders approve any plan or proposal for the liquidation or dissolution of us (other than certain reclassifications, recapitalizations or other changes in our common stock, share exchanges, consolidations, mergers or similar events and sales, leases or other transfers in one transaction or a series of transactions of all or substantially all of the consolidated assets of us and our subsidiaries, taken as a whole).

Notwithstanding the foregoing, in no event will the conversion rate be increased in excess of 45.4545 shares per \$1,000 principal amount of 3.25% Convertible Notes as a result of a "make-whole fundamental change."

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[ABOUT THIS PROSPECTUS SUPPLEMENT](#)
[SELLING STOCKHOLDERS](#)