

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

SCHEDULE 13G

UNDER THE SECURITIES EXCHANGE ACT OF 1934  
(AMENDMENT NO. 1)\*

NRG ENERGY, INC.

-----  
(Name of Issuer)

Common Stock, \$0.01 Par Value Per Share

-----  
(Title of Class of Securities)

629377508

-----  
(CUSIP Number)

December 31, 2004

-----  
(Date of Event which Requires Filing  
of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)  
 Rule 13d-1(c)  
 Rule 13d-1(d)

\*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

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CUSIP No. 629377508

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-----  
1 NAME OF REPORTING PERSON  
I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

S.A.C. Capital Advisors, LLC

-----  
2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP\*

(a) | |

(b) |X|

-----  
3 SEC USE ONLY

-----  
4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

-----  
NUMBER OF 5 SOLE VOTING POWER  
SHARES  
BENEFICIALLY 0  
OWNED  
BY  
EACH  
REPORTING  
PERSON  
WITH

-----  
6 SHARED VOTING POWER  
5,718,615\* (see Item 4)

-----  
7 SOLE DISPOSITIVE POWER  
0

-----  
8 SHARED DISPOSITIVE POWER  
5,718,615\* (see Item 4)

-----  
9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
5,718,615\* (see Item 4)

-----  
10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES  
|\_ |

-----  
11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)  
6.5% (see Item 4)

-----  
12 TYPE OF REPORTING PERSON\*  
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\*SEE INSTRUCTION BEFORE FILLING OUT

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-----  
1 NAME OF REPORTING PERSON  
I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
S.A.C. Capital Management, LLC

-----  
2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP\*  
(a) | |  
(b) |X|

-----  
3 SEC USE ONLY

-----  
4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

-----  
NUMBER OF 5 SOLE VOTING POWER  
SHARES  
BENEFICIALLY 0  
OWNED  
BY

EACH  
REPORTING  
PERSON  
WITH

-----  
6 SHARED VOTING POWER

5,718,615\* (see Item 4)  
-----

7 SOLE DISPOSITIVE POWER

0  
-----

8 SHARED DISPOSITIVE POWER

5,718,615\* (see Item 4)  
-----

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

5,718,615\* (see Item 4)  
-----

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES  
|\_ |

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

6.5% (see Item 4)  
-----

12 TYPE OF REPORTING PERSON\*

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\*SEE INSTRUCTION BEFORE FILLING OUT

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1 NAME OF REPORTING PERSON  
I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

S.A.C. Capital Associates, LLC  
-----

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP\*

(a) | |

(b) |X|  
-----

3 SEC USE ONLY  
-----

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Anguilla, British West Indies  
-----

NUMBER OF  
SHARES  
BENEFICIALLY  
OWNED  
BY  
EACH  
REPORTING  
PERSON  
WITH

5 SOLE VOTING POWER

0  
-----

6 SHARED VOTING POWER

5,309,575 (see Item 4)

-----  
7 SOLE DISPOSITIVE POWER

0  
-----

8 SHARED DISPOSITIVE POWER

5,309,575 (see Item 4)  
-----

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

5,309,575 (see Item 4)  
-----

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

6.1% (see Item 4)  
-----

12 TYPE OF REPORTING PERSON\*

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\*SEE INSTRUCTION BEFORE FILLING OUT

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1 NAME OF REPORTING PERSON

I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

S.A.C. Arbitrage Fund, LLC  
-----

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP\*

(a)

(b)   
-----

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Anguilla, British West Indies  
-----

NUMBER OF  
SHARES  
BENEFICIALLY  
OWNED  
BY  
EACH  
REPORTING  
PERSON  
WITH

5 SOLE VOTING POWER

0  
-----

6 SHARED VOTING POWER

389,640\* (see Item 4)  
-----

7 SOLE DISPOSITIVE POWER

0  
-----

8 SHARED DISPOSITIVE POWER

389,640\* (see Item 4)

-----  
9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

389,640\* (see Item 4)

-----  
10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

-----  
11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

Less than 1% (see Item 4)

-----  
12 TYPE OF REPORTING PERSON\*

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\*SEE INSTRUCTION BEFORE FILLING OUT

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-----  
1 NAME OF REPORTING PERSON

I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

S.A.C. MultiQuant Fund, LLC

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2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP\*

(a)

(b)

-----  
3 SEC USE ONLY

-----  
4 CITIZENSHIP OR PLACE OF ORGANIZATION

Anguilla, British West Indies

-----  
NUMBER OF  
SHARES  
BENEFICIALLY  
OWNED  
BY  
EACH  
REPORTING  
PERSON  
WITH

5 SOLE VOTING POWER

0

-----  
6 SHARED VOTING POWER

19,400 (see Item 4)

-----  
7 SOLE DISPOSITIVE POWER

0

-----  
8 SHARED DISPOSITIVE POWER

19,400 (see Item 4)

-----  
9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

19,400 (see Item 4)

-----  
10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

-----  
11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

Less than 1% (see Item 4)

-----  
12 TYPE OF REPORTING PERSON\*

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\*SEE INSTRUCTION BEFORE FILLING OUT

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1 NAME OF REPORTING PERSON  
I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Sigma Capital Management, LLC  
-----

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP\*

(a) | |

(b) |X|  
-----

3 SEC USE ONLY

-----  
4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware  
-----

NUMBER OF 5 SOLE VOTING POWER  
SHARES  
BENEFICIALLY 0  
OWNED  
BY  
EACH  
REPORTING  
PERSON  
WITH  
-----

6 SHARED VOTING POWER  
150,000 (see Item 4)  
-----

7 SOLE DISPOSITIVE POWER  
0  
-----

8 SHARED DISPOSITIVE POWER  
150,000 (see Item 4)  
-----

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

150,000 (see Item 4)  
-----

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES  
|\_ |  
-----

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

Less than 1% (see Item 4)  
-----

12 TYPE OF REPORTING PERSON\*  
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\*SEE INSTRUCTION BEFORE FILLING OUT

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1 NAME OF REPORTING PERSON  
I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Sigma Capital Associates, LLC

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP\*

(a) | |

(b) |X|

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Anguilla, British West Indies

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH  
5 SOLE VOTING POWER  
0

6 SHARED VOTING POWER

150,000 (see Item 4)

7 SOLE DISPOSITIVE POWER

0

8 SHARED DISPOSITIVE POWER

150,000 (see Item 4)

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

150,000 (see Item 4)

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

|\_ |

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

Less than 1% (see Item 4)

12 TYPE OF REPORTING PERSON\*

00

\*SEE INSTRUCTION BEFORE FILLING OUT

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-----  
1 NAME OF REPORTING PERSON  
I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Steven A. Cohen  
-----

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP\*

(a) | |  
(b) |X|  
-----

3 SEC USE ONLY  
-----

4 CITIZENSHIP OR PLACE OF ORGANIZATION

United States  
-----

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH  
5 SOLE VOTING POWER  
0  
-----

6 SHARED VOTING POWER  
5,868,615\* (see Item 4)  
-----

7 SOLE DISPOSITIVE POWER  
0  
-----

8 SHARED DISPOSITIVE POWER  
5,868,615\* (see Item 4)  
-----

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
5,868,615\* (see Item 4)  
-----

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES  
|\_ |  
-----

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)  
6.7% (see Item 4)  
-----

12 TYPE OF REPORTING PERSON\*  
IN  
-----

\*SEE INSTRUCTION BEFORE FILLING OUT

ITEM 1(A) NAME OF ISSUER:  
NRG Energy, Inc.



ITEM 1(B) ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES:

211 Carnegie Center  
Princeton, New Jersey 08540

ITEMS 2(A) NAME OF PERSON FILING:

This statement is filed by: (i) S.A.C. Capital Advisors, LLC, ("SAC Capital Advisors") with respect to shares of common stock, \$.01 par value per share ("Shares") beneficially owned by S.A.C. Capital Associates, LLC ("SAC Capital Associates"), S.A.C. Arbitrage Fund, LLC ("SAC Arbitrage") and S.A.C. MultiQuant Fund, LLC ("SAC MultiQuant"); (ii) S.A.C. Capital Management, LLC, ("SAC Capital Management") with respect to Shares beneficially owned by SAC Capital Associates, SAC Arbitrage and SAC MultiQuant; (iii) SAC Capital Associates with respect to Shares beneficially owned by it; (iv) SAC Arbitrage with respect to Shares beneficially owned by it; (v) SAC MultiQuant with respect to Shares beneficially owned by it; and (vi) Sigma Capital Management, LLC ("Sigma Capital Management") with respect to Shares beneficially owned by Sigma Capital Associates, LLC ("Sigma Capital Associates"); (vii) Sigma Capital Associates with respect to Shares beneficially owned by it; and (viii) Steven A. Cohen with respect to Shares beneficially owned by SAC Capital Advisors, SAC Capital Management, SAC Capital Associates, SAC Arbitrage, SAC MultiQuant, Sigma Capital Management and Sigma Capital Associates.

ITEM 2(B) ADDRESS OF PRINCIPAL BUSINESS OFFICE:

The address of the principal business office of (i) SAC Capital Advisors and Mr. Cohen is 72 Cummings Point Road, Stamford, Connecticut 06902, (ii) SAC Capital Management and Sigma Capital Management is 540 Madison Avenue, New York, New York 10022, and (iii) SAC Capital Associates, SAC MultiQuant, SAC Arbitrage and Sigma Capital Associates is P.O. Box 58, Victoria House, The Valley, Anguilla, British West Indies..

ITEM 2(C) CITIZENSHIP:

SAC Capital Advisors, SAC Capital Management and Sigma Capital Management are Delaware limited liability companies. SAC Capital Associates, SAC MultiQuant, SAC Arbitrage and Sigma Capital Associates are Anguillan limited liability companies. Mr. Cohen is a United States citizen.

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ITEM 2(D) TITLE OF CLASS OF SECURITIES:

Common Stock, par value \$0.01 per share

ITEM 2(E) CUSIP NUMBER:

629377508

ITEM 3 Not Applicable

ITEM 4 OWNERSHIP:

The percentages used herein are calculated based upon the Shares issued and outstanding as of December 3, 2004, as reported on the Issuer's annual report on Form 10-K/A filed with the Securities and Exchange Commission by the Issuer for the fiscal year ended December 31, 2003 and taking into account the repurchase by the Issuer of 13 million Shares in a transaction reported on the Issuer's Form 8-K filed on December 21, 2004 filed with the Securities and Exchange Commission by the Issuer.

As of the close of business on December 31, 2004:

1. S.A.C. Capital Advisors, LLC
  - (a) Amount beneficially owned: 5,718,615\*
  - (b) Percent of class: 6.5%
  - (c) (i) Sole power to vote or direct the vote: -0-
  - (ii) Shared power to vote or direct the vote: 5,718,615\*
  - (iii) Sole power to dispose or direct the disposition: -0-
  - (iv) Shared power to dispose or direct the disposition: 5,718,615\*
2. S.A.C. Capital Management, LLC
  - (a) Amount beneficially owned: 5,718,615\*
  - (b) Percent of class: 6.5%
  - (c) (i) Sole power to vote or direct the vote: -0-
  - (ii) Shared power to vote or direct the vote: 5,718,615\*
  - (iii) Sole power to dispose or direct the disposition: -0-
  - (iv) Shared power to dispose or direct the disposition: 5,718,615\*

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3. S.A.C. Capital Associates, LLC
  - (a) Amount beneficially owned: 5,309,575
  - (b) Percent of class: 6.1%
  - (c) (i) Sole power to vote or direct the vote: -0-
  - (ii) Shared power to vote or direct the vote: 5,309,575
  - (iii) Sole power to dispose or direct the disposition: -0-
  - (iv) Shared power to dispose or direct the disposition: 5,309,575
4. S.A.C. Arbitrage Fund, LLC
  - (a) Amount beneficially owned: 389,640\*
  - (b) Percent of class: Less than 1%
  - (c) (i) Sole power to vote or direct the vote: -0-
  - (ii) Shared power to vote or direct the vote: 389,640\*
  - (iii) Sole power to dispose or direct the disposition: -0-
  - (iv) Shared power to dispose or direct the disposition: 389,640\*
5. S.A.C. MultiQuant Fund, LLC
  - (a) Amount beneficially owned: 19,400
  - (b) Percent of class: Less than 1%
  - (c) (i) Sole power to vote or direct the vote: -0-
  - (ii) Shared power to vote or direct the vote: 19,400
  - (iii) Sole power to dispose or direct the disposition: -0-
  - (iv) Shared power to dispose or direct the disposition: 19,400
6. Sigma Capital Management, LLC
  - (a) Amount beneficially owned: 150,000
  - (b) Percent of class: Less than 1%
  - (c) (i) Sole power to vote or direct the vote: -0-
  - (ii) Shared power to vote or direct the vote: 150,000
  - (iii) Sole power to dispose or direct the disposition: -0-
  - (iv) Shared power to dispose or direct the disposition: 150,000
7. Sigma Capital Associates, LLC
  - (a) Amount beneficially owned: 150,000
  - (b) Percent of class: Less than 1%
  - (c) (i) Sole power to vote or direct the vote: -0-
  - (ii) Shared power to vote or direct the vote: 150,000
  - (iii) Sole power to dispose or direct the disposition: -0-
  - (iv) Shared power to dispose or direct the disposition: 150,000

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8. Steven A. Cohen
  - (a) Amount beneficially owned: 5,868,615\*
  - (b) Percent of class: 6.7%
  - (c) (i) Sole power to vote or direct the vote: -0-
  - (ii) Shared power to vote or direct the vote: 5,868,615\*
  - (iii) Sole power to dispose or direct the disposition: -0-
  - (iv) Shared power to dispose or direct the disposition: 5,868,615\*

\* The number of shares reported herein includes 200,000 shares issuable upon conversion of 8000 shares of the Issuer's 4% Convertible Perpetual Preferred Stock.

SAC Capital Advisors, SAC Capital Management, Sigma Capital Management and Mr. Cohen own directly no Shares. Pursuant to investment agreements, each of SAC Capital Advisors and SAC Capital Management share all investment and voting power with respect to the securities held by SAC Capital Associates, SAC Arbitrage and SAC MultiQuant. Pursuant to an investment management agreement, Sigma Capital Management maintains investment and voting power with respect to the securities held by Sigma Capital Associates. Mr. Cohen controls each of SAC Capital Advisors, SAC Capital Management, Sigma Capital Management. By reason of the provisions of Rule 13d-3 of the Securities Exchange Act of 1934, as amended, each of (i) SAC Capital Advisors, SAC Capital Management and Mr. Cohen may be deemed to own beneficially 5,718,615 Shares (constituting approximately 6.5% of the Shares outstanding) and (ii) Sigma Capital Management and Mr. Cohen may be deemed to own beneficially 150,000 Shares (constituting approximately less than 1% of the Shares outstanding). Each of SAC Capital Advisors, SAC Capital Management, Sigma Capital Management and Mr. Cohen disclaim beneficial ownership of any of the securities covered by this statement.

ITEM 5 OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS:

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following. |\_|

ITEM 6 OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON:

Not Applicable

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ITEM 7 IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY:

Not Applicable

ITEM 8 IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP:

Not Applicable

ITEM 9 NOTICE OF DISSOLUTION OF GROUP:

Not Applicable

ITEM 10 CERTIFICATION:

By signing below the signatory certifies that, to the best of his knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

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SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: February 14, 2005

S.A.C. CAPITAL ADVISORS, LLC

By: /s/ Peter Nussbaum  
-----

Name: Peter Nussbaum  
Title: Authorized Person

S.A.C. CAPITAL MANAGEMENT, LLC

By: /s/ Peter Nussbaum  
-----

Name: Peter Nussbaum  
Title: Authorized Person

S.A.C. CAPITAL ASSOCIATES, LLC

By: /s/ Peter Nussbaum  
-----

Name: Peter Nussbaum  
Title: Authorized Person

S.A.C. ARBITRAGE FUND, LLC

By: /s/ Peter Nussbaum  
-----

Name: Peter Nussbaum  
Title: Authorized Person

S.A.C. MULTIQUANT FUND, LLC

By: /s/ Peter Nussbaum  
-----

Name: Peter Nussbaum  
Title: Authorized Person

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SIGMA CAPITAL MANAGEMENT, LLC

By: /s/ Peter Nussbaum  
-----

Name: Peter Nussbaum  
Title: Authorized Person

SIGMA CAPITAL ASSOCIATES, LLC

By: /s/ Peter Nussbaum  
-----

Name: Peter Nussbaum  
Title: Authorized Person

STEVEN A. COHEN

By: /s/ Peter Nussbaum  
-----

Name: Peter Nussbaum

Title: Authorized Person

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December 27, 2004

BY ELECTRONIC FILING

Securities and Exchange Commission  
Filing Desk  
450 Fifth Street, N.W.  
Washington, D.C. 20549

Re: Schedule 13G filed with respect to NRG Energy, Inc.

Dear Sirs:

On behalf of S.A.C. Capital Advisors, LLC, S.A.C. Capital Management, LLC, S.A.C. Capital Associates, LLC, S.A.C. Arbitrage Fund, LLC, S.A.C. MultiQuant Fund, LLC and Steven A. Cohen, attached for filing pursuant to the Securities Exchange Act of 1934, and Rule 13d-1 promulgated thereunder, is a copy of Schedule 13G relating to the Common Stock, par value \$.01 per share, of NRG Energy, Inc..

By copy of this letter, a conforming paper copy of the attached Schedule 13G is being sent by certified mail to NRG Energy, Inc. at its principal executive office.

Please direct any questions to the undersigned at (212) 728-8797.

Very truly yours,

Joseph D. Rose

Enclosure