

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

FORM 10-Q

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

For the quarterly period ended June 30, 2016

OR

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

For the transition period from _____ to _____

Commission file number: 001-07964



NOBLE ENERGY, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

1001 Noble Energy Way

Houston, Texas

(Address of principal executive offices)

73-0785597

(I.R.S. employer identification number)

77070

(Zip Code)

(281) 872-3100

(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark 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 No

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

Accelerated filer

Non-accelerated filer

Smaller reporting company

(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 Exchange Act).

Yes No

As of June 30, 2016, there were 429,671,813 shares of the registrant's common stock,
par value \$0.01 per share, outstanding.

Table of Contents

| | |
|---|---------------------------|
| Part I. Financial Information | 3 |
| Item 1. Financial Statements | 3 |
| Consolidated Statements of Operations | 3 |
| Consolidated Statements of Comprehensive Loss | 4 |
| Consolidated Balance Sheets | 5 |
| Consolidated Statements of Cash Flows | 6 |
| Consolidated Statements of Shareholders' Equity | 7 |
| Notes to Consolidated Financial Statements | 8 |
| Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations | 25 |
| Item 3. Quantitative and Qualitative Disclosures About Market Risk | 46 |
| Item 4. Controls and Procedures | 47 |
| Part II. Other Information | 48 |
| Item 1. Legal Proceedings | 48 |
| Item 1A. Risk Factors | 48 |
| Item 2. Unregistered Sales of Equity Securities and Use of Proceeds | 48 |
| Item 3. Defaults Upon Senior Securities | 49 |
| Item 4. Mine Safety Disclosures | 49 |
| Item 5. Other Information | 49 |
| Item 6. Exhibits | 49 |
| Signatures | 50 |
| Index to Exhibits | 51 |

Part I. Financial Information
Item 1. Financial Statements
Noble Energy, Inc.
Consolidated Statements of Operations
(millions, except per share amounts)
(unaudited)

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|--|--------------------------------|-----------------|------------------------------|-----------------|
| | 2016 | 2015 | 2016 | 2015 |
| Revenues | | | | |
| Oil, Gas and NGL Sales | \$ 823 | \$ 732 | \$ 1,528 | \$ 1,481 |
| Income from Equity Method Investees | 24 | 6 | 43 | 24 |
| Total | 847 | 738 | 1,571 | 1,505 |
| Costs and Expenses | | | | |
| Production Expense | 274 | 218 | 546 | 469 |
| Exploration Expense | 89 | 41 | 252 | 106 |
| Depreciation, Depletion and Amortization | 622 | 451 | 1,239 | 905 |
| General and Administrative | 107 | 104 | 198 | 198 |
| Other Operating Expense, Net | 17 | 85 | 20 | 121 |
| Total | 1,109 | 899 | 2,255 | 1,799 |
| Operating Loss | (262) | (161) | (684) | (294) |
| Other Expense (Income) | | | | |
| Loss (Gain) on Commodity Derivative Instruments | 151 | 87 | 107 | (63) |
| Interest, Net of Amount Capitalized | 78 | 54 | 157 | 112 |
| Other Non-Operating Expense (Income), Net | 7 | (9) | 3 | (9) |
| Total | 236 | 132 | 267 | 40 |
| Loss Before Income Taxes | (498) | (293) | (951) | (334) |
| Income Tax Benefit | (183) | (184) | (349) | (203) |
| Net Loss | \$ (315) | \$ (109) | \$ (602) | \$ (131) |
| Loss Per Share, Basic | | | | |
| | \$ (0.73) | \$ (0.28) | \$ (1.40) | \$ (0.35) |
| Loss Per Share, Diluted | | | | |
| | \$ (0.73) | \$ (0.28) | \$ (1.40) | \$ (0.35) |
| Weighted Average Number of Shares Outstanding | | | | |
| Basic | 430 | 387 | 429 | 378 |
| Diluted | 430 | 387 | 429 | 378 |

The accompanying notes are an integral part of these financial statements.

Noble Energy, Inc.
Consolidated Statements of Comprehensive Loss
(millions)
(unaudited)

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|--|--------------------------------|----------------|------------------------------|-----------------|
| | 2016 | 2015 | 2016 | 2015 |
| Net Loss | \$ (315) | \$ (109) | \$ (602) | \$ (131) |
| Other Items of Comprehensive Loss | | | | |
| Net Change in Mutual Fund Investment | — | — | — | (11) |
| Less Tax Expense | — | — | — | 3 |
| Net Change in Pension and Other | 1 | 24 | 1 | 25 |
| Less Tax Benefit | — | (10) | — | (10) |
| Comprehensive Loss | \$ (314) | \$ (95) | \$ (601) | \$ (124) |

The accompanying notes are an integral part of these financial statements.

Noble Energy, Inc.
Consolidated Balance Sheets
(millions)
(unaudited)

| | June 30, 2016 | December 31, 2015 |
|---|------------------|----------------------|
| ASSETS | | |
| Current Assets | | |
| Cash and Cash Equivalents | \$ 1,300 | \$ 1,028 |
| Accounts Receivable, Net | 476 | 450 |
| Commodity Derivative Assets | 229 | 582 |
| Other Current Assets | 184 | 216 |
| Total Current Assets | 2,189 | 2,276 |
| Property, Plant and Equipment | | |
| Oil and Gas Properties (Successful Efforts Method of Accounting) | 30,713 | 31,220 |
| Property, Plant and Equipment, Other | 877 | 858 |
| Total Property, Plant and Equipment, Gross | 31,590 | 32,078 |
| Accumulated Depreciation, Depletion and Amortization | (11,856) | (10,778) |
| Total Property, Plant and Equipment, Net | 19,734 | 21,300 |
| Other Noncurrent Assets | 593 | 620 |
| Total Assets | \$ 22,516 | \$ 24,196 |
| LIABILITIES AND SHAREHOLDERS' EQUITY | | |
| Current Liabilities | | |
| Accounts Payable - Trade | \$ 780 | \$ 1,128 |
| Other Current Liabilities | 595 | 677 |
| Total Current Liabilities | 1,375 | 1,805 |
| Long-Term Debt | 7,868 | 7,976 |
| Deferred Income Taxes | 2,387 | 2,826 |
| Other Noncurrent Liabilities | 1,173 | 1,219 |
| Total Liabilities | 12,803 | 13,826 |
| Commitments and Contingencies | | |
| Shareholders' Equity | | |
| Preferred Stock - Par Value \$1.00 per share; 4 Million Shares Authorized; None Issued | — | — |
| Common Stock - Par Value \$0.01 per share; 1 Billion Shares Authorized; 471 Million and 470 Million Shares Issued, respectively | 5 | 5 |
| Additional Paid in Capital | 6,398 | 6,360 |
| Accumulated Other Comprehensive Loss | (32) | (33) |
| Treasury Stock, at Cost; 38 Million Shares | (696) | (688) |
| Retained Earnings | 4,038 | 4,726 |
| Total Shareholders' Equity | 9,713 | 10,370 |
| Total Liabilities and Shareholders' Equity | \$ 22,516 | \$ 24,196 |

The accompanying notes are an integral part of these financial statements.

Noble Energy, Inc.
Consolidated Statements of Cash Flows
(millions)
(unaudited)

| | Six Months Ended June 30, | |
|---|------------------------------|-----------------|
| | 2016 | 2015 |
| Cash Flows From Operating Activities | | |
| Net Loss | \$ (602) | \$ (131) |
| Adjustments to Reconcile Net Loss to Net Cash Provided by Operating Activities | | |
| Depreciation, Depletion and Amortization | 1,239 | 905 |
| Asset Impairments | — | 43 |
| Dry Hole Cost | 114 | 19 |
| Gain on Extinguishment of Debt | (80) | — |
| Finalization of Purchase Price Allocation for Rosetta Merger | (25) | — |
| Loss on Asset Due to Terminated Contract | 47 | — |
| Deferred Income Tax Benefit | (414) | (312) |
| (Income) Loss from Equity Method Investees, Net of Dividends | (9) | 4 |
| Loss (Gain) on Commodity Derivative Instruments | 107 | (63) |
| Net Cash Received in Settlement of Commodity Derivative Instruments | 322 | 397 |
| Loss on Divestitures | 23 | — |
| Stock Based Compensation | 40 | 38 |
| Non-cash Pension Termination Expense | — | 21 |
| Other Adjustments for Noncash Items Included in Income | 59 | 11 |
| Changes in Operating Assets and Liabilities | | |
| (Increase) Decrease in Accounts Receivable | (6) | 304 |
| Decrease in Accounts Payable | (232) | (167) |
| Decrease in Current Income Taxes Payable | (51) | (63) |
| Other Current Assets and Liabilities, Net | (51) | (45) |
| Other Operating Assets and Liabilities, Net | (41) | 5 |
| Net Cash Provided by Operating Activities | 440 | 966 |
| Cash Flows From Investing Activities | | |
| Additions to Property, Plant and Equipment | (812) | (1,898) |
| Additions to Equity Method Investments | (6) | (65) |
| Proceeds from Divestitures and Other | 767 | 151 |
| Net Cash Used in Investing Activities | (51) | (1,812) |
| Cash Flows From Financing Activities | | |
| Dividends Paid, Common Stock | (86) | (134) |
| Proceeds from Issuance of Shares of Common Stock to Public, Net of Offering Costs | — | 1,112 |
| Proceeds from Term Loan Facility | 1,400 | — |
| Repayment of Senior Notes | (1,383) | — |
| Repayment of Capital Lease Obligation | (27) | (29) |
| Other | (21) | (8) |
| Net Cash (Used in) Provided by Financing Activities | (117) | 941 |
| Increase in Cash and Cash Equivalents | 272 | 95 |
| Cash and Cash Equivalents at Beginning of Period | 1,028 | 1,183 |
| Cash and Cash Equivalents at End of Period | \$ 1,300 | \$ 1,278 |

The accompanying notes are an integral part of these financial statements.

Noble Energy, Inc.
Consolidated Statements of Shareholders' Equity
(millions)
(unaudited)

| | Common Stock | Additional Paid in Capital | Accumulated Other Comprehensive Loss | Treasury Stock at Cost | Retained Earnings | Total Shareholders' Equity |
|---|-----------------|----------------------------------|--|------------------------------|----------------------|----------------------------------|
| December 31, 2015 | \$ 5 | \$ 6,360 | \$ (33) | \$ (688) | \$ 4,726 | \$ 10,370 |
| Net Loss | — | — | — | — | (602) | (602) |
| Stock-based Compensation | — | 36 | — | — | — | 36 |
| Dividends (20 cents per share) | — | — | — | — | (86) | (86) |
| Other | — | 2 | 1 | (8) | — | (5) |
| June 30, 2016 | \$ 5 | \$ 6,398 | \$ (32) | \$ (696) | \$ 4,038 | \$ 9,713 |
| December 31, 2014 | \$ 4 | \$ 3,624 | \$ (90) | \$ (671) | \$ 7,458 | \$ 10,325 |
| Net Loss | — | — | — | — | (131) | (131) |
| Stock-based Compensation | — | 38 | — | — | — | 38 |
| Dividends (36 cents per share) | — | — | — | — | (134) | (134) |
| Issuance of Shares of Common Stock to Public, Net of Offering Costs | — | 1,112 | — | — | — | 1,112 |
| Other | — | 4 | 7 | (12) | — | (1) |
| June 30, 2015 | \$ 4 | \$ 4,778 | \$ (83) | \$ (683) | \$ 7,193 | \$ 11,209 |

The accompanying notes are an integral part of these financial statements.

Noble Energy, Inc.
Notes to Consolidated Financial Statements

Note 1. Organization and Nature of Operations

Noble Energy, Inc. (Noble Energy, we or us) is a leading independent energy company engaged in worldwide crude oil and natural gas exploration and production. Our core operating areas are onshore US (DJ Basin, Marcellus Shale, Eagle Ford Shale, and Permian Basin), and offshore in deepwater Gulf of Mexico, Eastern Mediterranean and West Africa.

Note 2. Basis of Presentation

Presentation The accompanying unaudited consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the US (US GAAP) for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and notes required by US GAAP for complete financial statements. The accompanying consolidated financial statements at June 30, 2016 and December 31, 2015 and for the three and six months ended June 30, 2016 and 2015 contain all normally recurring adjustments considered necessary for a fair presentation of our financial position, results of operations, cash flows and shareholders' equity for such periods. Certain prior-period amounts have been reclassified to conform to the current-period presentation. Operating results for the three and six months ended June 30, 2016 are not necessarily indicative of the results that may be expected for the year ending December 31, 2016.

These consolidated financial statements should be read in conjunction with the consolidated financial statements and accompanying notes included in our Annual Report on Form 10-K for the year ended December 31, 2015.

Consolidation Our consolidated accounts include our accounts and the accounts of our wholly-owned subsidiaries. In addition, we use the equity method of accounting for investments in entities that we do not control, but over which we exert significant influence. All significant intercompany balances and transactions have been eliminated upon consolidation.

Estimates The preparation of consolidated financial statements in conformity with US GAAP requires us to make a number of estimates and assumptions relating to the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ significantly from those estimates. Management evaluates estimates and assumptions on an ongoing basis using historical experience and other factors, including the current economic and commodity price environment.

Issuance of Phantom Units On February 1, 2016, we issued cash-settled awards to certain employees under the Noble Energy, Inc. 1992 Stock Option and Restricted Stock Plan in lieu of a portion of restricted stock and stock options. We issued approximately one million awards (so called phantom units, the nomenclature used in accounting literature), a portion of which are subject to the achievement of specific performance goals. These phantom units, once vested, are settled in cash. The phantom units represent a hypothetical interest in the Company. The phantom unit value is the lesser of the fair market value of a share of common stock of the Company as of the vesting date or up to four times the fair market value of a share of common stock of the Company as of the grant date, which was \$31.65. The Company recognizes the value of our cash-settled awards utilizing the liability method as defined under Accounting Standards Codification Topic 718, *Compensation - Stock Compensation*. The fair value of liability awards is remeasured at each reporting date, based on the fair market value of a share of common stock of the Company as of the reporting date, through the settlement date with the change in fair value recognized as compensation expense over that period. As of June 30, 2016, the fair value remeasurement had a de minimis impact on our consolidated statement of operations and balance sheet. [See Note 7. Fair Value Measurements and Disclosures.](#)

Recently Issued Accounting Standards In February 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update No. 2016-02 (ASU 2016-02): *Leases*. The guidance requires lessees to recognize assets and liabilities on the balance sheet for the rights and obligations created by leases with terms of more than 12 months. This ASU also requires disclosures designed to give financial statement users information on the amount, timing, and uncertainty of cash flows arising from leases. The standard will be effective for annual and interim periods beginning after December 15, 2018, with earlier application permitted. We are currently evaluating the provisions of this guidance to determine the effects it will have on our consolidated financial statements and related disclosures. In the normal course of business, we enter into capital and operating lease agreements to support our exploration and development operations and lease assets such as drilling rigs, platforms, storage facilities, field services and well equipment, pipeline capacity, office space and other assets. We believe the adoption and implementation of this ASU will likely have a material impact on our balance sheet resulting from an increase in both assets and liabilities relating to our leasing activities.

In March 2016, the FASB issued Accounting Standards Update No. 2016-09 (ASU 2016-09): *Compensation - Stock Compensation*, to reduce complexity and enhance several aspects of accounting and disclosure for share-based payment transactions, including the accounting for income taxes, award forfeitures, and statutory tax withholding requirements, as well

Noble Energy, Inc.
Notes to Consolidated Financial Statements

as classification in the statement of cash flows. The ASU will be effective for annual and interim periods beginning after December 15, 2016, with earlier application permitted. Certain aspects of this guidance will require retrospective application while other aspects are to be applied prospectively. We are currently evaluating the effect that the guidance will have on our consolidated financial statements and related disclosures.

In June 2016, the FASB issued Accounting Standards Update No. 2016-13 (ASU 2016-13): *Financial Instruments - Credit Losses*, which replaces the incurred loss impairment methodology in current US GAAP with a methodology that reflects expected credit losses. The update is intended to provide financial statement users with more useful information about expected credit losses. The amended guidance is effective for fiscal years beginning after December 15, 2019, with early adoption permitted. We are currently evaluating the effect, if any, that the guidance will have on our consolidated financial statements and related disclosures.

In July 2015, the FASB issued Accounting Standards Update No. 2015-11 (ASU 2015-11): *Simplifying the Measurement of Inventory*, effective for annual and interim periods beginning after December 15, 2016. ASU 2015-11 changes the inventory measurement principle for entities using the first-in, first out (FIFO) or average cost methods. For entities utilizing one of these methods, the inventory measurement principle will change from lower of cost or market to the lower of cost and net realizable value. We follow the average cost method and do not believe adoption of ASU 2015-11 will have a material impact on our financial position and results of operations.

In May 2014, the FASB issued Accounting Standards Update No. 2014-09 (ASU 2014-09), which creates Topic 606, *Revenue from Contracts with Customers*. In summary, the core principle of Topic 606 is that an entity recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Additionally, ASU 2014-09 requires enhanced financial statement disclosures over revenue recognition as part of the new accounting guidance. The standard will be effective for annual reporting periods beginning after December 15, 2017, including interim reporting periods within that reporting period. In March 2016, the FASB released certain implementation guidance through ASU 2016-08 to clarify principal versus agent considerations. We are continuing to evaluate the provisions of ASU 2014-09 and have not yet determined the full impact it may have on our financial position and results of operations. At a minimum, we expect we will be required to change from the entitlements method used for certain domestic natural gas sales to the sales method of accounting. We believe the impact of utilizing the sales method of accounting for our current domestic natural gas sales agreements will be de minimus.

In March 2016, the FASB issued Accounting Standards Update No. 2016-07 (ASU 2016-07): *Investments - Equity Method and Joint Ventures*, to eliminate retroactive application of equity method accounting when an investment becomes qualified for equity method accounting as a result of an increase in the level of ownership interest or degree of influence. The ASU will be effective for annual and interim periods beginning after December 15, 2016, with earlier application permitted. We do not believe adoption of this guidance will have a material impact on our consolidated financial statements and related disclosures as all current investments are accounted for under the equity method of accounting.

In February 2015, the FASB issued Accounting Standards Update No. 2015-02 (ASU 2015-02): *Consolidation - Amendments to the Consolidation Analysis*, which changes the guidance as to whether an entity is a variable interest entity (VIE) or a voting interest entity and how related parties are considered in the VIE model. As of March 31, 2016, we have adopted the provisions of ASU 2015-02, which did not impact our consolidated financial statements.

Noble Energy, Inc.
Notes to Consolidated Financial Statements

Statements of Operations Information Other statements of operations information is as follows:

| <i>(millions)</i> | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|--------------------------------|---------------|------------------------------|---------------|
| | 2016 | 2015 | 2016 | 2015 |
| Production Expense | | | | |
| Lease Operating Expense | \$ 119 | \$ 129 | \$ 281 | \$ 286 |
| Production and Ad Valorem Taxes | 40 | 28 | 43 | 61 |
| Transportation and Gathering Expense ⁽¹⁾ | 115 | 61 | 222 | 122 |
| Total | \$ 274 | \$ 218 | \$ 546 | \$ 469 |
| Other Operating (Income) Expense, Net | | | | |
| Loss on Asset Due to Terminated Contract ⁽²⁾ | \$ 5 | \$ — | \$ 47 | \$ — |
| Marketing and Processing Expense, Net ⁽³⁾ | 15 | 12 | 37 | 22 |
| Loss (Gain) on Divestitures | 23 | (1) | 23 | — |
| Corporate Restructuring Expense | — | 18 | 1 | 18 |
| Purchase Price Allocation Adjustment ⁽⁴⁾ | (25) | — | (25) | — |
| Gain on Extinguishment of Debt ⁽⁵⁾ | — | — | (80) | — |
| Asset Impairments | — | 15 | — | 43 |
| Pension Plan Expense | — | 21 | — | 21 |
| Stacked Drilling Rig Expense | 3 | 7 | 5 | 7 |
| Other, Net | (4) | 13 | 12 | 10 |
| Total | \$ 17 | \$ 85 | \$ 20 | \$ 121 |
| Other Non-Operating Expense (Income), Net | | | | |
| Deferred Compensation Expense (Income) ⁽⁶⁾ | \$ 5 | \$ (7) | \$ 5 | \$ (5) |
| Other Expense (Income), Net | 2 | (2) | (2) | (4) |
| Total | \$ 7 | \$ (9) | \$ 3 | \$ (9) |

⁽¹⁾ Certain of our revenue received from purchasers was historically presented with deductions for transportation, gathering, fractionation or processing costs. Beginning in 2016, we have changed our presentation of revenue to no longer include these expenses as deductions from revenue. These costs are now included within production expense and prior year amounts of \$10 million and \$19 million for the three and six months ended June 30, 2015 have been reclassified to conform to the current presentation.

⁽²⁾ Amount relates to the termination of a rig contract offshore Falkland Islands as a result of a supplier's non-performance. [See Note 8. Capitalized Exploratory Well Costs and Undeveloped Leasehold](#) and [Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations - Executive Overview - Exploration Program Update](#).

⁽³⁾ For the three months and six months ended June 30, 2016, amount includes \$7 million and \$23 million, respectively, of expense due to unutilized firm transportation and shortfalls in delivering or transporting minimum volumes under certain commitments.

For the three months and six months ended June 30, 2015, amount includes \$5 million and \$9 million, respectively, of expense due to unutilized firm transportation and shortfalls in delivering or transporting minimum volumes under certain commitments.

⁽⁴⁾ Amount relates to an adjustment recorded to the purchase price allocation related to the Rosetta Merger. [See Note 3. Rosetta Merger](#).

⁽⁵⁾ Amount relates to the tendering of senior notes assumed in the Rosetta Merger. [See Note 6. Debt](#).

⁽⁶⁾ Amounts represent decreases (increases) in the fair value of shares of our common stock held in a rabbi trust.

Noble Energy, Inc.
Notes to Consolidated Financial Statements

Balance Sheet Information Other balance sheet information is as follows:

| <i>(millions)</i> | June 30, 2016 | December 31, 2015 |
|--|------------------|----------------------|
| Accounts Receivable, Net | | |
| Commodity Sales | \$ 338 | \$ 298 |
| Joint Interest Billings | 19 | 20 |
| Proceeds Receivable ⁽¹⁾ | 40 | — |
| Severance Tax Refund ⁽²⁾ | 28 | — |
| Other | 75 | 151 |
| Allowance for Doubtful Accounts | (24) | (19) |
| Total | \$ 476 | \$ 450 |
| Other Current Assets | | |
| Inventories, Materials and Supplies | \$ 93 | \$ 92 |
| Inventories, Crude Oil | 25 | 23 |
| Assets Held for Sale ⁽³⁾ | 18 | 67 |
| Prepaid Expenses and Other Current Assets | 48 | 34 |
| Total | \$ 184 | \$ 216 |
| Other Noncurrent Assets | | |
| Investments in Unconsolidated Subsidiaries | \$ 467 | \$ 453 |
| Mutual Fund Investments | 79 | 90 |
| Commodity Derivative Assets | — | 10 |
| Other Assets | 47 | 67 |
| Total | \$ 593 | \$ 620 |
| Other Current Liabilities | | |
| Production and Ad Valorem Taxes | \$ 142 | \$ 166 |
| Commodity Derivative Liabilities | 35 | — |
| Income Taxes Payable | 35 | 86 |
| Asset Retirement Obligations | 128 | 128 |
| Interest Payable | 75 | 83 |
| Current Portion of Capital Lease Obligations | 56 | 53 |
| Other | 124 | 161 |
| Total | \$ 595 | \$ 677 |
| Other Noncurrent Liabilities | | |
| Deferred Compensation Liabilities | \$ 225 | \$ 217 |
| Asset Retirement Obligations | 855 | 861 |
| Production and Ad Valorem Taxes | 21 | 68 |
| Commodity Derivative Liabilities | 31 | — |
| Other | 41 | 73 |
| Total | \$ 1,173 | \$ 1,219 |

⁽¹⁾ Amount relates to proceeds to be received from our farm-out of 35% interest in Block 12 offshore Cyprus. [See Note 4. Divestitures.](#)

⁽²⁾ Amount relates to the accrual of a \$28 million onshore US severance tax receivable.

⁽³⁾ Assets held for sale at June 30, 2016 include certain producing and undeveloped crude oil and natural gas interests in the DJ Basin, while assets held for sale at December 31, 2015 include the Karish and Tanin natural gas discoveries, offshore Israel. [See Note 4. Divestitures.](#)

Note 3. Rosetta Merger

On July 20, 2015, Noble Energy completed the merger of Rosetta Resources Inc. (Rosetta) into a subsidiary of Noble Energy (Rosetta Merger). The results of Rosetta's operations since the merger date are included in our consolidated statements of operations. The merger was effected through the issuance of approximately 41 million shares of Noble Energy common stock in exchange for all outstanding shares of Rosetta common stock using a ratio of 0.542 of a share of Noble Energy common stock for each share of Rosetta common stock and the assumption of Rosetta's liabilities, including approximately \$2 billion fair value of outstanding debt. The merger added two new onshore US shale positions to our portfolio including approximately 50,000 net acres in the Eagle Ford Shale and 54,000 net acres in the Permian Basin (45,000 acres in the Delaware Basin and 9,000 acres in the Midland Basin). In connection with the Rosetta Merger, we incurred merger-related costs in 2015 of approximately \$81 million, including (i) \$66 million of severance, consulting, investment, advisory, legal and other merger-

Noble Energy, Inc.
Notes to Consolidated Financial Statements

related fees, and (ii) \$15 million of noncash share-based compensation expense, all of which were expensed and were included in Other Operating (Income) Expense, Net.

Allocation of Purchase Price The merger has been accounted for as a business combination, using the acquisition method. The following table represents the final allocation of the total purchase price of Rosetta to the assets acquired and the liabilities assumed based on the fair value at the merger date, with any excess of the purchase price over the estimated fair value of the identifiable net assets acquired recorded as goodwill.

The following table sets forth our final purchase price allocation:

| | (in millions, except stock price) |
|--|-----------------------------------|
| Shares of Noble Energy common stock issued to Rosetta shareholders | 41 |
| Noble Energy common stock price on July 20, 2015 | \$ 36.97 |
| Fair value of common stock issued | \$ 1,518 |
| Plus: Fair value of Rosetta's restricted stock awards and performance awards assumed | 10 |
| Plus: Rosetta stock options assumed | 1 |
| Total purchase price | 1,529 |
| Plus: Liabilities assumed by Noble Energy | |
| Accounts Payable | 100 |
| Current Liabilities | 37 |
| Long-Term Debt | 1,992 |
| Other Long Term Liabilities | 23 |
| Asset Retirement Obligation | 27 |
| Total purchase price plus liabilities assumed | \$ 3,708 |
| Fair Value of Rosetta Assets | |
| Cash and Equivalents | \$ 61 |
| Other Current Assets | 76 |
| Derivative Instruments | 209 |
| Oil and Gas Properties | |
| Proved Reserves | 1,613 |
| Undeveloped Leaseholds | 1,355 |
| Gathering & Processing Assets | 207 |
| Asset Retirement Obligation | 27 |
| Other Property Plant and Equipment | 5 |
| Long Term Deferred Tax Asset | 17 |
| Goodwill ⁽¹⁾ | 138 |
| Total Asset Value | \$ 3,708 |

⁽¹⁾ As of December 31, 2015, our preliminary purchase price allocation reflected goodwill of \$163 million based on the fair value of assets acquired and liabilities assumed at the Rosetta Merger date. In conducting our goodwill impairment test as of December 31, 2015, we determined that our goodwill balance was no longer recoverable and fully impaired it, resulting in a goodwill impairment charge in fourth quarter 2015. In second quarter 2016, we finalized the purchase price allocation and recorded a \$25 million gain to Other Operating Expense, Net driven by adjustments made based on the filing of the final Rosetta federal income tax return for the period ending on the Rosetta Merger date.

The fair value measurements of derivative instruments assumed were determined based on published forward commodity price curves as of the date of the merger and represent Level 2 inputs. Derivative instruments in an asset position include a measure of counterparty nonperformance risk, and the fair values of commodity derivative instruments in a liability position include a measure of our own nonperformance risk, each based on the current published credit default swap rates. The fair value measurements of long-term debt were estimated based on published market prices and represent Level 1 inputs.

The fair value measurements of crude oil and natural gas properties and asset retirement obligations are based on inputs that are not observable in the market and therefore represent Level 3 inputs. The fair values of crude oil and natural gas properties and asset retirement obligations were measured using valuation techniques that convert future cash flows to a single discounted amount. Significant inputs to the valuation of crude oil and natural gas properties included estimates of: (i) recoverable reserves; (ii) production rates; (iii) future operating and development costs; (iv) future commodity prices; and (v) a market-based weighted average cost of capital. These inputs required significant judgments and estimates by management at the time of the valuation and were the most sensitive and subject to change.

Noble Energy, Inc.
Notes to Consolidated Financial Statements

The results of operations attributable to Rosetta are included in our consolidated statements of operations beginning on July 21, 2015. Revenues of \$127 million and \$214 million and pre-tax net income of \$17 million and pre-tax net loss of \$14 million were generated from Rosetta assets during the three and six months ended June 30, 2016, respectively.

Proforma Financial Information The following pro forma condensed combined financial information was derived from the historical financial statements of Noble Energy and Rosetta and gives effect to the merger as if it had occurred on January 1, 2015. The below information reflects pro forma adjustments based on available information and certain assumptions that we believe are reasonable, including (i) adjustments to conform Rosetta's historical policy of accounting for its crude oil and natural gas properties from the full cost method to the successful efforts method of accounting, (ii) depletion of Rosetta's fair-valued proved crude oil and natural gas properties, and (iii) the estimated tax impacts of the pro forma adjustments. The pro forma results of operations do not include any cost savings or other synergies that may result from the Rosetta Merger or any estimated costs that have been or will be incurred by us to integrate the Rosetta assets. The pro forma condensed combined financial information has been included for comparative purposes and is not necessarily indicative of the results that might have actually occurred had the Rosetta Merger taken place on January 1, 2015; furthermore, the financial information is not intended to be a projection of future results.

| <i>(in millions, except per share amounts)</i> | Three Months Ended June 30, | | Six Months Ended June 30, | |
|--|--------------------------------|-----------|------------------------------|-----------|
| | 2016 ⁽¹⁾ | 2015 | 2016 ⁽¹⁾ | 2015 |
| Revenues | \$ 847 | \$ 881 | \$ 1,571 | \$ 1,773 |
| Net Loss | \$ (315) | \$ (125) | \$ (602) | \$ (145) |
| Loss per share | | | | |
| Basic | \$ (0.73) | \$ (0.29) | \$ (1.40) | \$ (0.35) |
| Diluted | \$ (0.73) | \$ (0.29) | \$ (1.40) | \$ (0.35) |

⁽¹⁾ No pro forma adjustments were made for the period as the acquisition is included in the Company's historical results.

Note 4. Divestitures

Onshore US Properties

During the first six months of 2016, we entered into certain onshore transactions for which we:

- closed the divestiture of our Bowdoin property in northern Montana generating proceeds of \$43 million and recognized a \$23 million loss on sale of assets;
- sold other certain onshore US crude oil and natural gas properties, generating net proceeds of \$20 million. Proceeds were primarily applied to the DJ Basin depletable field, with no recognition of gain or loss;
- entered into a purchase and sale agreement for the divestiture of certain producing and undeveloped crude oil and natural gas interests covering approximately 33,100 producing and undeveloped net acres in the DJ Basin for \$505 million, subject to customary closing adjustments. We received proceeds of \$486 million and expect to receive the remaining consideration, subject to post-close adjustments, around year-end 2016. Proceeds were primarily applied to the DJ Basin depletable field, with no recognition of gain or loss; and
- executed an acreage exchange agreement to receive approximately 11,700 net acres within our Wells Ranch development area in exchange for approximately 13,500 net acres primarily from our Bronco area, located southwest of Wells Ranch. No gain or loss was recognized for the transaction.

During the first six months of 2015, we sold certain onshore US crude oil and natural gas properties, generating net proceeds of \$151 million. Proceeds were primarily applied to the DJ Basin depletable field, with no recognition of gain or loss, other than a de minimus gain in second quarter 2015.

Cyprus Project (Offshore Cyprus) During fourth quarter 2015, we entered into a farm-out agreement with a partner for a 35% interest in Block 12, which includes the Aphrodite natural gas discovery, for \$171 million. In first quarter 2016, we received proceeds of \$131 million related to the farm-out agreement and expect to receive the remaining consideration of \$40 million, subject to post-close adjustments, in 2017. The proceeds were applied to the Cyprus project asset with no gain or loss recognized.

Noble Energy, Inc.
Notes to Consolidated Financial Statements

Offshore Israel Assets In November 2015, we executed an agreement to divest our 47% interest in the Alon A and Alon C offshore Israel licenses, which include the Karish and Tanin fields, for a total transaction value of \$73 million. These assets were held for sale as of December 31, 2015, and the transaction closed in January 2016.

Subsequent Event On July 4, 2016, we signed a definitive agreement to divest a 3% working interest in the Tamar field, offshore Israel, for \$369 million, subject to customary closing adjustments. Under the terms of the agreement, the purchaser has the option to elect, before closing, to purchase an additional 1% working interest at the same valuation. The divestiture is expected to close in the third quarter of 2016, with an effective date of January 1, 2016.

Note 5. Derivative Instruments and Hedging Activities

Objective and Strategies for Using Derivative Instruments We are exposed to fluctuations in crude oil, natural gas and natural gas liquids pricing. In order to mitigate the effect of commodity price volatility and enhance the predictability of cash flows relating to the marketing of our global crude oil and domestic natural gas, we enter into crude oil and natural gas price hedging arrangements.

While these instruments mitigate the cash flow risk of future decreases in commodity prices, they may also curtail benefits from future increases in commodity prices. [See Note 7. Fair Value Measurements and Disclosures](#) for a discussion of methods and assumptions used to estimate the fair values of our derivative instruments.

Unsettled Commodity Derivative Instruments As of June 30, 2016, the following crude oil derivative contracts were outstanding:

| Settlement Period | Type of Contract | Index | Bbls Per Day | Swaps | | Collars | | |
|---------------------|----------------------------|----------------|--------------|------------------------------|----------------------------------|------------------------------|--------------------------------|----------|
| | | | | Weighted Average Fixed Price | Weighted Average Short Put Price | Weighted Average Floor Price | Weighted Average Ceiling Price | |
| 2016 | Call Option ⁽¹⁾ | NYMEX WTI | 5,000 | \$ — | \$ — | \$ — | \$ — | \$ 54.16 |
| 2016 | Swaps | NYMEX WTI | 16,000 | 67.69 | — | — | — | — |
| 2016 | Swaps ⁽²⁾ | ⁽³⁾ | 6,000 | 90.28 | — | — | — | — |
| 2016 | Two-Way Collars | NYMEX WTI | 10,000 | — | — | 40.50 | 53.42 | — |
| 2016 | Three-Way Collars | NYMEX WTI | 8,000 | — | 54.50 | 65.63 | 79.03 | — |
| 2016 | Swaps | Dated Brent | 9,000 | 97.96 | — | — | — | — |
| 2016 | Three-Way Collars | Dated Brent | 8,000 | — | 72.50 | 86.25 | 101.79 | — |
| 1H17 ⁽⁴⁾ | Swaps | NYMEX WTI | 6,000 | 55.08 | — | — | — | — |
| 1H17 ⁽⁴⁾ | Two-Way Collars | NYMEX WTI | 2,000 | — | — | 40.00 | 50.44 | — |
| 1H17 ⁽⁴⁾ | Swaps | Dated Brent | 3,000 | 62.80 | — | — | — | — |
| 2H17 ⁽⁴⁾ | Call Option ⁽¹⁾ | NYMEX WTI | 3,000 | — | — | — | 60.12 | — |
| 2H17 ⁽⁴⁾ | Swaptions ⁽⁵⁾ | Dated Brent | 3,000 | — | — | — | 62.80 | — |
| 2H17 ⁽⁴⁾ | Swaptions ⁽⁵⁾ | NYMEX WTI | 3,000 | — | — | — | 50.05 | — |
| 2017 | Two-Way Collars | NYMEX WTI | 7,000 | — | — | 40.00 | 53.29 | — |
| 2017 | Call Option ⁽¹⁾ | NYMEX WTI | 3,000 | — | — | — | 57.00 | — |
| 2017 | Swaptions ⁽⁵⁾ | NYMEX WTI | 4,000 | — | — | — | 47.34 | — |
| 2017 | Three-Way Collars | NYMEX WTI | 15,000 | — | 36.33 | 46.33 | 60.68 | — |
| 2017 | Three-Way Collars | Dated Brent | 2,000 | — | 35.00 | 45.00 | 66.33 | — |
| 2018 | Three-Way Collars | Dated Brent | 3,000 | — | 40.00 | 50.00 | 70.41 | — |

⁽¹⁾ We have entered into crude oil derivative enhanced swaps with strike prices that are above the market value as of trade commencement. To effect the enhanced swap structure, we sold call options to the applicable counterparty to receive the above market terms.

⁽²⁾ Includes derivative instruments assumed by our subsidiary, NBL Texas, LLC, in connection with the Rosetta Merger.

⁽³⁾ The indices for these derivative instruments are NYMEX WTI and Argus LLS.

⁽⁴⁾ We have entered into crude oil swap contracts for portions of 2016 and 2017 resulting in the difference in hedge volumes for the full year.

⁽⁵⁾ We have entered into certain derivative contracts (swaptions), which give counterparties the option to extend with similar terms for an additional 6-month or 12-month period.

Noble Energy, Inc.
Notes to Consolidated Financial Statements

As of June 30, 2016, the following natural gas derivative contracts were outstanding:

| Settlement Period | Type of Contract | Index | MMBtu Per Day | Swaps | | Collars | |
|-------------------|--------------------------------|----------------|---------------|------------------------------|----------------------------------|------------------------------|--------------------------------|
| | | | | Weighted Average Fixed Price | Weighted Average Short Put Price | Weighted Average Floor Price | Weighted Average Ceiling Price |
| 2016 | Swaps | NYMEX HH | 70,000 | 3.24 | — | — | — |
| 2016 | Two-Way Collars | NYMEX HH | 30,000 | — | — | 3.00 | 3.50 |
| 2016 | Three-Way Collars | NYMEX HH | 90,000 | — | 2.83 | 3.42 | 3.90 |
| 2016 | Swaps ⁽¹⁾ | ⁽²⁾ | 30,000 | 4.04 | — | — | — |
| 2016 | Two-Way Collars ⁽¹⁾ | ⁽²⁾ | 30,000 | — | — | 3.50 | 5.60 |
| 1H17 | Swaps | NYMEX HH | 30,000 | 2.92 | — | — | — |
| 2H17 | Swaptions ⁽³⁾ | NYMEX HH | 30,000 | — | — | — | 2.92 |
| 2017 | Swaptions ⁽³⁾ | NYMEX HH | 60,000 | — | — | — | 3.14 |
| 2017 | Three-Way Collars | NYMEX HH | 100,000 | — | 2.50 | 2.87 | 3.48 |
| 2017 | Two-Way Collars | NYMEX HH | 20,000 | — | — | 2.75 | 3.02 |
| 2018 | Three-Way Collars | NYMEX HH | 70,000 | — | 2.50 | 2.80 | 3.76 |

⁽¹⁾ Includes derivative instruments assumed by our subsidiary, NBL Texas, LLC, in connection with the Rosetta Merger.

⁽²⁾ The index for these derivative instruments is Houston Ship Channel.

⁽³⁾ We have entered into certain natural gas derivative contracts (swaptions), which give counterparties the option to extend with similar terms for an additional 6-month or 12-month period.

Fair Value Amounts and Loss (Gain) on Commodity Derivative Instruments The fair values of commodity derivative instruments in our consolidated balance sheets were as follows:

| Fair Value of Derivative Instruments | | | | | | | | |
|---|------------------------|-------------------|------------------------|---------------|----------------------------------|--------------|------------------------|-------------|
| Asset Derivative Instruments | | | | | Liability Derivative Instruments | | | |
| June 30, 2016 | | December 31, 2015 | | | June 30, 2016 | | December 31, 2015 | |
| <i>(millions)</i> | Balance Sheet Location | Fair Value | Balance Sheet Location | Fair Value | Balance Sheet Location | Fair Value | Balance Sheet Location | Fair Value |
| Commodity Derivative Instruments | Current Assets | \$ 229 | Current Assets | \$ 582 | Current Liabilities | \$ 35 | Current Liabilities | \$ — |
| | Noncurrent Assets | — | Noncurrent Assets | 10 | Noncurrent Liabilities | 31 | Noncurrent Liabilities | — |
| Total | | \$ 229 | | \$ 592 | | \$ 66 | | \$ — |

Noble Energy, Inc.
Notes to Consolidated Financial Statements

The effect of commodity derivative instruments on our consolidated statements of operations was as follows:

| <i>(millions)</i> | Three Months Ended June 30, | | Six Months Ended June 30, | |
|--|--------------------------------|--------------|------------------------------|----------------|
| | 2016 | 2015 | 2016 | 2015 |
| Cash Received in Settlement of Commodity Derivative Instruments | | | | |
| Crude Oil | \$ (120) | \$ (157) | \$ (276) | \$ (342) |
| Natural Gas | (24) | (30) | (46) | (55) |
| Total Cash Received in Settlement of Commodity Derivative Instruments | (144) | (187) | (322) | (397) |
| Non-cash Portion of Loss on Commodity Derivative Instruments | | | | |
| Crude Oil | 233 | 242 | 360 | 297 |
| Natural Gas | 62 | 32 | 69 | 37 |
| Total Non-cash Portion of Loss on Commodity Derivative Instruments | 295 | 274 | 429 | 334 |
| Loss (Gain) on Commodity Derivative Instruments | | | | |
| Crude Oil | 113 | 85 | 84 | (45) |
| Natural Gas | 38 | 2 | 23 | (18) |
| Total Loss (Gain) on Commodity Derivative Instruments | \$ 151 | \$ 87 | \$ 107 | \$ (63) |

Note 6. Debt

Debt consists of the following:

| <i>(millions, except percentages)</i> | June 30, 2016 | | December 31, 2015 | |
|---|------------------|---------------|----------------------|---------------|
| | Debt | Interest Rate | Debt | Interest Rate |
| Revolving Credit Facility, due August 27, 2020 | \$ — | —% | \$ — | —% |
| Capital Lease and Other Obligations | 377 | —% | 403 | —% |
| Term Loan Facility, due January 6, 2019 | 1,400 | 1.71% | — | —% |
| 8.25% Senior Notes, due March 1, 2019 | 1,000 | 8.25% | 1,000 | 8.25% |
| 5.625% Senior Notes, due May 1, 2021 | 379 | 5.625% | 693 | 5.625% |
| 4.15% Senior Notes, due December 15, 2021 | 1,000 | 4.15% | 1,000 | 4.15% |
| 5.875% Senior Notes, due June 1, 2022 | 18 | 5.875% | 597 | 5.875% |
| 7.25% Senior Notes, due October 15, 2023 | 100 | 7.25% | 100 | 7.25% |
| 5.875% Senior Notes, due June 1, 2024 | 8 | 5.875% | 499 | 5.875% |
| 3.90% Senior Notes, due November 15, 2024 | 650 | 3.90% | 650 | 3.90% |
| 8.00% Senior Notes, due April 1, 2027 | 250 | 8.00% | 250 | 8.00% |
| 6.00% Senior Notes, due March 1, 2041 | 850 | 6.00% | 850 | 6.00% |
| 5.25% Senior Notes, due November 15, 2043 | 1,000 | 5.25% | 1,000 | 5.25% |
| 5.05% Senior Notes, due November 15, 2044 | 850 | 5.05% | 850 | 5.05% |
| 7.25% Senior Debentures, due August 1, 2097 | 84 | 7.25% | 84 | 7.25% |
| Total | 7,966 | | 7,976 | |
| Unamortized Discount | (23) | | (24) | |
| Unamortized Premium | 18 | | 113 | |
| Unamortized Debt Issuance Costs | (37) | | (36) | |
| Total Debt, Net of Unamortized Discount, Premium and Debt Issuance Costs | 7,924 | | 8,029 | |
| Less Amounts Due Within One Year | | | | |
| Capital Lease Obligations | (56) | | (53) | |
| Long-Term Debt Due After One Year | \$ 7,868 | | \$ 7,976 | |

Revolving Credit Facility Our Credit Agreement, as amended, provides for a \$4.0 billion unsecured revolving credit facility (Revolving Credit Facility), which is available for general corporate purposes. The Revolving Credit Facility (i) provides for facility fee rates that range from 10 basis points to 25 basis points per year depending upon our credit rating, (ii) provides for interest rates that are based upon the Eurodollar rate plus a margin that ranges from 90 basis points to 150 basis points depending upon our credit rating, and (iii) includes a sub-limit for letters of credit up to an aggregate amount of \$500 million (\$450 million of this capacity is committed as of June 30, 2016).

Noble Energy, Inc.
Notes to Consolidated Financial Statements

Term Loan Agreement and Completed Tender Offers On January 6, 2016, we entered into a term loan agreement (Term Loan Facility) with Citibank, N.A., as administrative agent, Mizuho Bank, Ltd., as syndication agent, and certain other financial institutions party thereto, which provides for a three-year term loan facility for a principal amount of \$1.4 billion. Provisions of the Term Loan Facility are consistent with those in the Revolving Credit Facility. Borrowings under the Term Loan Facility may be prepaid prior to maturity without premium. The Term Loan Facility will accrue interest, at our option, at either (a) a base rate equal to the highest of (i) the rate announced by Citibank, N.A., as its prime rate, (ii) the Federal Funds Rate plus 0.5%, and (iii) a London interbank offered rate plus 1.0%, plus a margin that ranges from 10 basis points to 75 basis points depending upon our credit rating, or (b) a London interbank offered rate, plus a margin that ranges from 100 basis points to 175 basis points depending upon our credit rating. The interest rate for our Term Loan Facility is 1.71% as of June 30, 2016.

In connection with the Term Loan Facility, we launched cash tender offers for the 5.875% Senior Notes due June 1, 2024, 5.875% Senior Notes due June 1, 2022 and 5.625% Senior Notes due May 1, 2021, all of which were assumed in the Rosetta Merger. The borrowings under the Term Loan Facility were used solely to fund the tender offers. Approximately \$1.38 billion of notes were validly tendered and accepted by us, with a corresponding amount borrowed under the new Term Loan Facility. As a result, we recognized a gain of \$80 million which is reflected in other operating (income) expense, net in our consolidated statements of operations.

[See Note 7. Fair Value Measurements and Disclosures](#) for a discussion of methods and assumptions used to estimate the fair values of debt.

Note 7. Fair Value Measurements and Disclosures

Assets and Liabilities Measured at Fair Value on a Recurring Basis

Certain assets and liabilities are measured at fair value on a recurring basis in our consolidated balance sheets. The following methods and assumptions were used to estimate the fair values:

Cash, Cash Equivalents, Accounts Receivable and Accounts Payable The carrying amounts approximate fair value due to the short-term nature or maturity of the instruments.

Mutual Fund Investments Our mutual fund investments consist of various publicly-traded mutual funds that include investments ranging from equities to money market instruments. The fair values are based on quoted market prices for identical assets.

Commodity Derivative Instruments Our commodity derivative instruments may include variable to fixed price commodity swaps, two-way collars, three-way collars, swaptions and enhanced swaps. We estimate the fair values of these instruments using published forward commodity price curves as of the date of the estimate. The discount rate used in the discounted cash flow projections is based on published LIBOR rates, Eurodollar futures rates and interest swap rates. The fair values of commodity derivative instruments in an asset position include a measure of counterparty nonperformance risk, and the fair values of commodity derivative instruments in a liability position include a measure of our own nonperformance risk, each based on the current published credit default swap rates. In addition, for collars, we estimate the option values of the put options sold and the contract floors and ceilings using an option pricing model which takes into account market volatility, market prices and contract terms. [See Note 5. Derivative Instruments and Hedging Activities.](#)

Deferred Compensation Liability The value is dependent upon the fair values of mutual fund investments and shares of our common stock held in a rabbi trust. See *Mutual Fund Investments* above.

Phantom Units The fair value of phantom unit awards is measured based on the fair market value of our common stock on the date of grant. We recognize the value of these awards utilizing the liability method whereby these liability awards are remeasured at each reporting date, based on the fair market value of a share of common stock of the Company as of the reporting date, through the settlement date with the change in fair value recognized as compensation expense over that period. [See Note 2. Basis of Presentation.](#)

Noble Energy, Inc.
Notes to Consolidated Financial Statements

Measurement information for assets and liabilities that are measured at fair value on a recurring basis was as follows:

| | Fair Value Measurements Using | | | | Fair Value Measurement |
|--|--|--|--|---------------------------|------------------------|
| | Quoted Prices in Active Markets (Level 1) ⁽¹⁾ | Significant Other Observable Inputs (Level 2) ⁽²⁾ | Significant Unobservable Inputs (Level 3) ⁽³⁾ | Adjustment ⁽⁴⁾ | |
| <i>(millions)</i> | | | | | |
| June 30, 2016 | | | | | |
| Financial Assets | | | | | |
| Mutual Fund Investments | \$ 79 | \$ — | \$ — | \$ — | \$ 79 |
| Commodity Derivative Instruments | — | 237 | — | (8) | 229 |
| Financial Liabilities | | | | | |
| Commodity Derivative Instruments | — | (74) | — | 8 | (66) |
| Portion of Deferred Compensation Liability Measured at Fair Value | (102) | — | — | — | (102) |
| Portion of Stock Based Compensation Liability Measured at Fair Value | (4) | — | — | — | (4) |
| December 31, 2015 | | | | | |
| Financial Assets | | | | | |
| Mutual Fund Investments | \$ 90 | \$ — | \$ — | \$ — | \$ 90 |
| Commodity Derivative Instruments | — | 600 | — | (8) | 592 |
| Financial Liabilities | | | | | |
| Commodity Derivative Instruments | — | (8) | — | 8 | — |
| Portion of Deferred Compensation Liability Measured at Fair Value | (98) | — | — | — | (98) |

⁽¹⁾ Level 1 measurements are fair value measurements which use quoted market prices (unadjusted) in active markets for identical assets or liabilities. We use Level 1 inputs when available as Level 1 inputs generally provide the most reliable evidence of fair value.

⁽²⁾ Level 2 measurements are fair value measurements which use inputs, other than quoted prices included within Level 1, which are observable for the asset or liability, either directly or indirectly.

⁽³⁾ Level 3 measurements are fair value measurements which use unobservable inputs.

⁽⁴⁾ Amount represents the impact of netting provisions within our master agreements that allow us to net cash settle asset and liability positions with the same counterparty.

Assets and Liabilities Measured at Fair Value on a Nonrecurring Basis

Certain assets and liabilities are measured at fair value on a nonrecurring basis in our consolidated balance sheets. The following methods and assumptions were used to estimate the fair values:

Asset Impairments Information about impaired assets is as follows:

| | Fair Value Measurements Using | | | | Net Book Value ⁽¹⁾ | Total Pre-tax (Non-cash) Impairment Loss |
|---|---|---|---|------|-------------------------------|--|
| | Quoted Prices in Active Markets (Level 1) | Significant Other Observable Inputs (Level 2) | Significant Unobservable Inputs (Level 3) | | | |
| <i>(millions)</i> | | | | | | |
| Three Months Ended June 30, 2016 | | | | | | |
| Impaired Oil and Gas Properties | \$ — | \$ — | \$ — | \$ — | \$ — | \$ — |
| Three Months Ended June 30, 2015 | | | | | | |
| Impaired Oil and Gas Properties | — | — | — | 15 | — | 15 |
| Six Months Ended June 30, 2016 | | | | | | |
| Impaired Oil and Gas Properties | \$ — | \$ — | \$ — | \$ — | \$ — | \$ — |
| Six Months Ended June 30, 2015 | | | | | | |
| Impaired Oil and Gas Properties | — | — | — | 43 | — | 43 |

⁽¹⁾ Amount represents net book value at the date of assessment.

Noble Energy, Inc.
Notes to Consolidated Financial Statements

The fair value of impaired crude oil and natural gas properties was determined as of the date of the assessment using a discounted cash flow model based on management's expectations of future production prior to abandonment date, commodity prices based on NYMEX WTI, NYMEX Henry Hub, and Brent futures price curves as of the date of the estimate, estimated operating and abandonment costs, and a risk-adjusted discount rate. Impairments for the first six months of 2015 were due primarily to increases in asset carrying values associated with increases in estimated abandonment costs.

Additional Fair Value Disclosures

Debt The fair value of fixed-rate, public debt is estimated based on the published market prices for the same or similar issues. As such, we consider the fair value of our public, fixed-rate debt to be a Level 1 measurement on the fair value hierarchy.

Our Term Loan Facility is variable-rate, non-public debt. The fair value is estimated based on significant other observable inputs. As such, we consider the fair value of our Term Loan Facility to be a Level 2 measurement on the fair value hierarchy. [See Note 6. Debt.](#)

Fair value information regarding our debt is as follows:

| <i>(millions)</i> | June 30, 2016 | | December 31, 2015 | |
|------------------------------------|--------------------|------------|----------------------|------------|
| | Carrying Amount | Fair Value | Carrying Amount | Fair Value |
| Long-Term Debt, Net ⁽¹⁾ | \$ 7,547 | \$ 7,936 | \$ 7,626 | \$ 7,105 |

⁽¹⁾ Net of unamortized discount, premium and debt issuance costs and excludes capital lease and other obligations.

Note 8. Capitalized Exploratory Well Costs and Undeveloped Leasehold

Capitalized Exploratory Well Costs We capitalize exploratory well costs until a determination is made that the well has found proved reserves or is deemed noncommercial. On a quarterly basis, we review the status of suspended exploratory well costs and assess the development of these projects. If a well is deemed to be noncommercial, the well costs are charged to exploration expense as dry hole cost.

Changes in capitalized exploratory well costs are as follows and exclude amounts that were capitalized and subsequently expensed in the same period:

| <i>(millions)</i> | Six Months Ended June 30, 2016 |
|--|-----------------------------------|
| Capitalized Exploratory Well Costs, Beginning of Period | \$ 1,353 |
| Additions to Capitalized Exploratory Well Costs Pending Determination of Proved Reserves | 68 |
| Divestitures ⁽¹⁾ | (143) |
| Reclassified to Proved Oil and Gas Properties Based on Determination of Proved Reserves | (4) |
| Capitalized Exploratory Well Costs Charged to Expense ⁽²⁾ | (82) |
| Capitalized Exploratory Well Costs, End of Period | \$ 1,192 |

⁽¹⁾ Represents our farm-out of a 35% interest in Block 12 offshore Cyprus to a new partner.

⁽²⁾ Includes amounts related to contract termination offshore Falkland Islands, Dolphin 1 exploratory well offshore Israel, and Silvergate exploratory well deepwater Gulf of Mexico.

The following table provides an aging of capitalized exploratory well costs based on the date that drilling commenced, and the number of projects that have been capitalized for a period greater than one year:

| <i>(millions)</i> | June 30, 2016 | December 31, 2015 |
|---|------------------|----------------------|
| Exploratory Well Costs Capitalized for a Period of One Year or Less | \$ 86 | \$ 95 |
| Exploratory Well Costs Capitalized for a Period Greater Than One Year Since Commencement of Drilling | 1,106 | 1,258 |
| Balance at End of Period | \$ 1,192 | \$ 1,353 |
| Number of Projects with Exploratory Well Costs That Have Been Capitalized for a Period Greater Than One Year Since Commencement of Drilling | 13 | 14 |

Noble Energy, Inc.
Notes to Consolidated Financial Statements

The following table includes exploratory well costs that have been capitalized for a period greater than one year since the commencement of drilling as of June 30, 2016:

| <i>(millions)</i> | Total by Project | Progress |
|--|---------------------|--|
| Country/Project: | | |
| Deepwater Gulf of Mexico | | |
| Troubadour | \$ 51 | Evaluating development scenarios for this 2013 natural gas discovery including subsea tieback to existing infrastructure. |
| Katmai | 95 | Evaluating development scenarios for this 2014 crude oil discovery. In second quarter 2016, drilling operations at the Katmai 2 appraisal well, located in Green Canyon 39, were temporarily abandoned as a result of encountering high pressure in the untested fault block. Plans to complete appraisal of the discovery at a future date are being developed. |
| Offshore Equatorial Guinea (Blocks I and O) | | |
| Diega (Block I) and Carmen (Block O) | 237 | Evaluating regional development scenarios for this 2008 crude oil discovery. We drilled subsequent appraisal wells. During 2014, we conducted additional seismic activity over Blocks I and O and are interpreting and evaluating the acquired seismic data. |
| Carla (Block O) | 182 | Evaluating regional development scenarios for this 2011 crude oil discovery. We drilled subsequent appraisal wells. During 2014, we conducted additional seismic activity over Blocks I and O and are interpreting and evaluating the acquired seismic data. |
| Yolanda/Felicita | 66 | Evaluating regional development plans for these 2007/2008 condensate and natural gas discoveries. A natural gas development team is working with the governments of Equatorial Guinea and Cameroon to evaluate natural gas monetization options and finalize a data exchange agreement between the two countries. |
| Offshore Cameroon | | |
| YoYo | 52 | Evaluating regional development plans for this 2007 condensate and natural gas discovery. A natural gas development team is working with the governments of Cameroon and Equatorial Guinea to evaluate natural gas monetization options and finalize a data exchange agreement between the two countries. Our 50% working interest partner has given notice to us and the Cameroon government of their intention to exit this acreage position. Once the assignment process is finalized, we will hold 100% operating working interest. We are marketing this additional 50% working interest. |
| Offshore Israel | | |
| Leviathan | 194 | Our development plan was approved by the Government and we are engaged in natural gas marketing activities to meet both Israeli domestic and regional export demands. |
| Leviathan-1 Deep | 83 | The well did not reach the target interval. We are developing future drilling plans to test this deep oil concept, which is held by the Leviathan Development and Production Leases. |
| Dalit | 31 | Our development plan was approved by the Government of Israel to develop this 2009 natural gas discovery with a tie-in to existing infrastructure at Tamar. |
| Offshore Cyprus | | |

Noble Energy, Inc.
Notes to Consolidated Financial Statements

| | | |
|--|-----------------|--|
| | 87 | During first quarter 2016, we received proceeds of \$131 million from our 35% farm-down of interest with a partner in Block 12. In second quarter 2016, we submitted an updated development plan and continue to work with the Government of Cyprus to obtain approval of the development plan and the subsequent issuance of an Exploitation License. Receiving an Exploitation License will allow us and our partners to perform the necessary engineering and design studies and progress the project to final investment decision. |
| Other | | |
| Individual Projects Less than \$20 million | 28 | Continuing to assess and evaluate wells. |
| Total | \$ 1,106 | |

Undeveloped Leasehold Costs As of June 30, 2016, we had capitalized undeveloped leasehold costs of \$2.1 billion, of which approximately \$1.9 billion relates to our core operating areas onshore US and is included in our proved property impairment testing for these areas. In addition, we have capitalized undeveloped leasehold of \$57 million relating to international operations, and \$195 million relating to deepwater Gulf of Mexico.

Significant undeveloped leases are individually assessed for impairment. While none of our significant undeveloped leases were impaired as of June 30, 2016, if, based upon a change in exploration plans, availability of capital and suitable rig and drilling equipment, resource potential, changing regulations and/or other factors, an impairment is indicated, a valuation allowance will be provided. Costs of individually insignificant leases are combined and amortized over their lease term. Expense associated with either impairment or amortization of undeveloped leases is included in exploration expense in our consolidated statement of operations.

Note 9. Asset Retirement Obligations

Asset retirement obligations (ARO) consist primarily of estimated costs of dismantlement, removal, site reclamation and similar activities associated with our oil and gas properties. Changes in ARO are as follows:

| <i>(millions)</i> | Six Months Ended June 30, | |
|---|------------------------------|--------|
| | 2016 | 2015 |
| Asset Retirement Obligations, Beginning Balance | \$ 989 | \$ 751 |
| Liabilities Incurred | 3 | 16 |
| Liabilities Settled | (38) | (15) |
| Revision of Estimate | 4 | 79 |
| Accretion Expense ⁽¹⁾ | 25 | 21 |
| Asset Retirement Obligations, Ending Balance | \$ 983 | \$ 852 |

⁽¹⁾ Accretion expense is included in Depreciation, Depletion and Amortization (DD&A) expense in the consolidated statements of operations.

For the six months ended June 30, 2016 Liabilities incurred were due to new wells and facilities for onshore US. Liabilities settled primarily related to onshore US property abandonments.

For the six months ended June 30, 2015 Liabilities incurred were due to new wells and facilities for onshore US and deepwater Gulf of Mexico. Liabilities settled in 2015 relate primarily to non-core, onshore US properties sold.

Revisions were primarily due to changes in estimated costs for future abandonment activities and acceleration of timing of abandonment and included \$43 million for Eastern Mediterranean and \$28 million for DJ Basin.

Noble Energy, Inc.
Notes to Consolidated Financial Statements

Note 10. Loss Per Share

Basic loss per share of common stock is computed using the weighted average number of shares of common stock outstanding during each period. The following table summarizes the calculation of basic and diluted loss per share:

| <i>(millions, except per share amounts)</i> | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|--------------------------------|------------------|------------------------------|------------------|
| | 2016 | 2015 | 2016 | 2015 |
| Net Loss | \$ (315) | \$ (109) | \$ (602) | \$ (131) |
| Weighted Average Number of Shares Outstanding, Basic ⁽¹⁾ | 430 | 387 | 429 | 378 |
| Weighted Average Number of Shares Outstanding, Diluted ⁽²⁾ | 430 | 387 | 429 | 378 |
| Loss Per Share, Basic | \$ (0.73) | \$ (0.28) | \$ (1.40) | \$ (0.35) |
| Loss Per Share, Diluted | (0.73) | (0.28) | (1.40) | (0.35) |
| Number of Antidilutive Stock Options, Shares of Restricted Stock, and Shares of Common Stock in Rabbi Trust Excluded from Calculation Above | 15 | 10 | 15 | 9 |

⁽¹⁾ The weighted average number of shares outstanding includes the weighted average shares of common stock issued in connection with the underwritten public offering of 24.15 million shares of Noble Energy common stock in first quarter 2015 and issued in connection with the exchange of approximately 41 million shares for all outstanding shares of Rosetta common stock on July 20, 2015.

⁽²⁾ For all periods, all outstanding options and non-vested restricted shares have been excluded from the calculation of diluted loss per share as Noble Energy incurred a net loss. Therefore, inclusion of outstanding options and non-vested restricted shares in the calculation of diluted loss per share would be anti-dilutive.

Note 11. Income Taxes

The income tax benefit consists of the following:

| <i>(millions)</i> | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---------------------------------|--------------------------------|-----------------|------------------------------|-----------------|
| | 2016 | 2015 | 2016 | 2015 |
| Current | \$ 45 | \$ 99 | \$ 65 | \$ 109 |
| Deferred | (228) | (283) | (414) | (312) |
| Total Income Tax Benefit | \$ (183) | \$ (184) | \$ (349) | \$ (203) |
| Effective Tax Rate | 36.7% | 62.8% | 36.7% | 60.8% |

Accumulated Undistributed Earnings of Foreign Subsidiaries As of December 31, 2015, we no longer consider our foreign subsidiaries' undistributed earnings to be indefinitely reinvested outside the United States and, accordingly, recorded additional deferred income taxes, net of estimated foreign tax credits.

Effective Tax Rate (ETR) Our ETR for the three months and six months ended June 30, 2016, varied as compared with three months and six months ended June 30, 2015 primarily as a result of a tax benefit. This is primarily due to a higher income tax benefit as compared with the change in the components of the overall net loss from period to period, which is impacted by certain income items with different tax rates.

Also, during 2016, the change in our permanent reinvestment assumption, noted above, resulted in additional deferred income tax expense (net of estimated foreign tax credits) being recorded on certain income items, including income from equity method investees and increased earnings in our foreign jurisdictions with rates that vary from the US statutory rate. This additional deferred income tax expense had the result of offsetting our income tax benefit to a greater extent in the three months and six months ended June 30, 2016 thereby driving the ETR lower than it would have been if additional deferred taxes had not been recorded.

In our major tax jurisdictions, the earliest years remaining open to examination are as follows: US – 2012, Equatorial Guinea – 2011 and Israel – 2011.

Noble Energy, Inc.
Notes to Consolidated Financial Statements

Note 12. Segment Information

We have operations throughout the world and manage our operations by country. The following information is grouped into four components that are all in the business of crude oil and natural gas exploration, development, production, and acquisition: the United States; West Africa (Equatorial Guinea, Cameroon, Gabon and Sierra Leone (which we exited in second quarter 2015)); Eastern Mediterranean (Israel and Cyprus); and Other International and Corporate. Other International includes the North Sea, Falkland Islands, Suriname, Nicaragua (which we exited in first quarter 2015) and new ventures.

| <i>(millions)</i> | Consolidated | United States | West Africa | Eastern Mediterranean | Other Int'l & Corporate |
|--|--------------|---------------|-------------|-----------------------|-------------------------|
| Three Months Ended June 30, 2016 | | | | | |
| Revenues from Third Parties | \$ 823 | \$ 576 | \$ 116 | \$ 131 | \$ — |
| Income from Equity Method Investees | 24 | 15 | 9 | — | — |
| Total Revenues | 847 | 591 | 125 | 131 | — |
| DD&A | 622 | 544 | 49 | 19 | 10 |
| Loss on Divestitures | 23 | 23 | — | — | — |
| Loss on Commodity Derivative Instruments | 151 | 129 | 22 | — | — |
| (Loss) Income Before Income Taxes | (498) | (183) | 18 | 71 | (404) |
| Three Months Ended June 30, 2015 | | | | | |
| Revenues from Third Parties | \$ 732 | \$ 451 | \$ 174 | \$ 106 | \$ 1 |
| Income (Loss) from Equity Method Investees | 6 | 8 | (2) | — | — |
| Total Revenues | 738 | 459 | 172 | 106 | 1 |
| DD&A | 451 | 344 | 79 | 15 | 13 |
| Gain on Divestitures | (1) | (1) | — | — | — |
| Asset Impairments | 15 | 8 | — | 7 | — |
| Loss on Commodity Derivative Instruments | 87 | 62 | 25 | — | — |
| (Loss) Income Before Income Taxes | (293) | (163) | 23 | 69 | (222) |
| Six Months Ended June 30, 2016 | | | | | |
| Revenues from Third Parties | \$ 1,528 | \$ 1,065 | \$ 206 | \$ 257 | \$ — |
| Income from Equity Method Investees | 43 | 31 | 12 | — | — |
| Total Revenues | 1,571 | 1,096 | 218 | 257 | — |
| DD&A | 1,239 | 1,074 | 104 | 39 | 22 |
| Loss on Divestitures | 23 | 23 | — | — | — |
| Loss on Commodity Derivative Instruments | 107 | 92 | 15 | — | — |
| (Loss) Income Before Income Taxes | (951) | (475) | 27 | 155 | (658) |
| Six Months Ended June 30, 2015 | | | | | |
| Revenues from Third Parties | \$ 1,481 | \$ 938 | \$ 312 | \$ 226 | \$ 5 |
| Income from Equity Method Investees | 24 | 19 | 5 | — | — |
| Total Revenues | 1,505 | 957 | 317 | 226 | 5 |
| DD&A | 905 | 701 | 156 | 30 | 18 |
| Gain on Divestitures | — | — | — | — | — |
| Asset Impairments | 43 | 11 | — | 32 | — |
| Gain on Commodity Derivative Instruments | (63) | (43) | (20) | — | — |
| (Loss) Income Before Income Taxes | (334) | (164) | 97 | 120 | (387) |
| June 30, 2016 | | | | | |
| Total Assets | \$ 22,516 | \$ 17,742 | \$ 2,087 | \$ 2,424 | \$ 263 |
| December 31, 2015 | | | | | |
| Total Assets | 24,196 | 18,831 | 2,299 | 2,677 | 389 |

Noble Energy, Inc.
Notes to Consolidated Financial Statements

Note 13. Commitments and Contingencies

CONSOL Carried Cost Obligation In accordance with our Marcellus Shale joint venture arrangement with a subsidiary of CONSOL Energy Inc. (CONSOL), we agreed to fund one-third of CONSOL's 50% working interest share of future drilling and completion costs, capped at \$400 million each year (CONSOL Carried Cost Obligation). The remaining obligation totaled approximately \$1.6 billion at June 30, 2016.

The CONSOL Carried Cost Obligation is suspended if average Henry Hub natural gas prices fall and remain below \$4.00 per MMBtu in any three consecutive month period and remain suspended until average Henry Hub natural gas prices equal or exceed \$4.00 per MMBtu for three consecutive months. The funding has been suspended since November 2014 due to lower natural gas prices. Based on the June 30, 2016 NYMEX Henry Hub natural gas price curve, we expect that the CONSOL Carried Cost Obligation will be suspended for the next 12 months.

Delivery and Firm Transportation Commitments We have commitments to deliver approximately 422 Bcf of natural gas produced onshore US (primarily in the Marcellus Shale) under long-term sales contracts and have also entered into various long-term gathering, processing and transportation contracts for approximately 287 MMBbls of crude oil and nearly 7.7 Tcf of natural gas for certain of our onshore US production (primarily in the Marcellus Shale, DJ Basin and Eagle Ford Shale).

We enter into long-term contracts to provide production flow assurance in over-supplied basins and/or areas with limited infrastructure. This strategy provides for optimization of transportation and processing costs. As properties are undergoing development activities, we may experience temporary delivery or transportation shortfalls until production volumes grow to meet or exceed the minimum volume commitments. For the three and six months ended June 30, 2016, we incurred expense of approximately \$7 million and \$23 million, respectively, related to deficiencies and/or unutilized commitments. We expect to continue to incur deficiency and/or unutilized costs in the near-term as development activities continue. Should commodity prices continue to decline or if we are unable to continue to develop our properties as planned, or certain wells become uneconomic and are shut-in, we could incur additional shortfalls in delivering or transporting the minimum volumes and we could be required to make payments in the event that these commitments are not otherwise offset.

Legal Proceedings We are involved in various legal proceedings in the ordinary course of business. These proceedings are subject to the uncertainties inherent in any litigation. We are defending ourselves vigorously in all such matters and we believe that the ultimate disposition of such proceedings will not have a material adverse effect on our financial position, results of operations or cash flows.

Colorado Air Matter In April 2015, we entered into a joint consent decree (Consent Decree) with the US Environmental Protection Agency, US Department of Justice, and State of Colorado to improve emission control systems at a number of our condensate storage tanks that are part of our upstream crude oil and natural gas operations within the Non-Attainment Area of the DJ Basin. The Consent Decree was entered by the Court on June 2, 2015.

The Consent Decree, which alleges violations of the Colorado Air Pollution Prevention and Control Act and Colorado's federal approved State Implementation Plan, specifically Colorado Air Quality Control Commission Regulation Number 7, requires us to perform certain injunctive relief activities to complete mitigation projects and supplemental environmental projects (SEP), and pay a civil penalty. Costs associated with the settlement consist of \$4.95 million in civil penalties which were paid in 2015. Mitigation costs of \$4.5 million and SEP costs of \$4 million are being expended in accordance with schedules established in the Consent Decree. Costs associated with the injunctive relief are not yet precisely quantifiable as they will be determined in accordance with the outcome of evaluations on the adequate design, operation, and maintenance of certain aspects of tank systems to handle potential peak instantaneous vapor flow rates between now and mid-2017.

Compliance with the Consent Decree could result in the temporary shut in or permanent plugging and abandonment of certain wells and associated tank batteries. The Consent Decree sets forth a detailed compliance schedule with deadlines for achievement of milestones through early 2019. The Consent Decree contains additional obligations for ongoing inspection and monitoring beyond that which is required under existing Colorado regulations. Inspection and monitoring findings may influence decisions to temporarily shut in or permanently plug and abandon wells and associated tank batteries.

We have concluded that the penalties, injunctive relief, and mitigation expenditures that resulted from this settlement did not have, and based on currently available information will not have, a material adverse effect on our financial position, results of operations or cash flows.

Colorado Air Compliance Order on Consent In December 2015, we received a proposed Compliance Order on Consent (COC) from the Colorado Department of Public Health and Environment's Air Pollution Control Division (APCD) to resolve allegations of noncompliance associated with certain engines subject to various General Permit 02 conditions and/or individual permit conditions as well as certain emission control devices subject to various individual permit conditions that applied to assets currently owned and operated by both Noble Energy, Inc. and Noble Midstream Services, LLC. In May, 2016, Noble Energy, Inc. on behalf of itself and its wholly owned subsidiary Noble Midstream Services, LLC, on behalf of itself and its wholly owned subsidiary Colorado River DevCo LP, reached a final resolution with the APCD, which requires completion of compliance testing, modification of certain permits, payment of a civil penalty of \$44,695, and an expenditure of no less than \$178,780 on an approved SEP. This resolution is not believed to have a material adverse effect on our financial position, results of operations or cash flows.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) is intended to provide a narrative about our business from the perspective of our management. We use common industry terms, such as thousand barrels of oil equivalent per day (MBoe/d) and million cubic feet equivalent per day (MMcfe/d), to discuss production and sales volumes. Our MD&A is presented in the following major sections:

- [Executive Overview](#);
- [Operating Outlook](#);
- [Results of Operations](#); and
- [Liquidity and Capital Resources](#).

The preceding consolidated financial statements, including the notes thereto, contain detailed information that should be read in conjunction with our MD&A.

EXECUTIVE OVERVIEW

We are a globally diversified explorer and producer of crude oil, natural gas and natural gas liquids (NGLs). We aim to achieve sustainable growth in value and cash flow through the development of a high-quality and diverse, worldwide portfolio of assets with investment flexibility between onshore unconventional developments and offshore exploration leading to major development projects. Our portfolio is further diversified through US and international projects and production mix among crude oil, natural gas, and NGLs. Our core operating areas include onshore US, primarily the DJ Basin, Marcellus Shale, Eagle Ford Shale and Permian Basin; offshore US Gulf of Mexico; West Africa; and Eastern Mediterranean. In these areas we believe we have a strategic competitive advantage and will generate attractive returns throughout oil and gas business cycles.

Our portfolio is further complimented through the pursuit of certain exploration opportunities as we seek to establish potential new core areas, such as Suriname and Gabon. We may conclude that an exploration area is not commercially viable and, therefore, may exit locations, such as we did in 2015 with Nevada, Sierra Leone and Nicaragua.

The following discussion highlights significant operating and financial results for second quarter 2016. This discussion includes operating results associated with our Rosetta Merger, which closed in third quarter of 2015, and should be read in conjunction with our Annual Report on Form 10-K for the year ended December 31, 2015, which includes disclosures regarding our critical accounting policies as part of "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Second Quarter 2016 Significant Operating Highlights Included:

- continued cost reduction efforts in capital, lease operating expense and general and administrative areas, with sustained efforts to further optimize operational performance in the current commodity price environment (see Cost Reduction Efforts, below);
- averaged record quarterly total sales volumes of 427 MBoe/d, net, including a record 282 MBoe/d, net, from onshore US assets;
- set a second quarter net sales volume record of 276 MMcfe/d in Israel, primarily reflecting seasonal demand and increased use of natural gas over coal to fuel power generation;
- received approval of our Leviathan development plan and a new economic stability provision as part of the Natural Gas Framework (Framework) was adopted. We continue to work towards a final investment decision to develop the infrastructure needed to supply domestic and regional demand;
- recorded expense of \$27 million related to our Dolphin 1 natural gas discovery offshore Israel lease expiry resulting from the fact the Petroleum Commissioner of Israel deemed the discovery to be non-commercial;
- continued to enhance well completion designs across our onshore US assets leading to capital efficiencies;
- suspended drilling operations temporarily at the Katmai 2 appraisal well, deepwater Gulf of Mexico;
- completed hook-up and commissioning activities at the Alba B3 compression project, offshore Equatorial Guinea, and commenced production in July 2016;
- entered into an agreement to divest certain producing and undeveloped crude oil and natural gas interests in Colorado for \$505 million and executed an exchange acreage to further enhance our Wells Ranch position in Colorado;
- entered into an agreement on July 4, 2016, subsequent to quarter-end, for the divestiture of 3% working interest in the Tamar field for \$369 million. [See Item 1. Financial Statements – Note 4. Divestitures](#); and
- commenced production from our Gunflint field, deepwater Gulf of Mexico, in July 2016.

Second Quarter 2016 Financial Results Included:

- net loss of \$315 million, as compared with net loss of \$109 million for second quarter 2015;

Table of Contents

- net loss on commodity derivative instruments of \$151 million as compared with net loss on commodity derivative instruments of \$87 million for second quarter 2015;
- reduced unit costs by 35% in lease operating expense and 28% in general and administrative expense as compared to second quarter 2015 driven by continued cost reduction initiatives and increased sales volumes;
- other income of \$25 million related to the finalization of purchase price accounting for the Rosetta Merger;
- diluted loss per share of \$0.73, as compared with diluted loss per share of \$0.28 for second quarter 2015;
- cash flow provided by operating activities of \$189 million, as compared with \$425 million for second quarter 2015;
- cash proceeds from divestitures of \$529 million, as compared with \$32 million for second quarter 2015; and
- capital expenditures of \$262 million, as compared with \$799 million for second quarter 2015.

Quarter-End Key Financial Metrics Included:

- ending cash balance of \$1.3 billion, as compared with \$1.0 billion at December 31, 2015;
- total liquidity of approximately \$5.3 billion at June 30, 2016, as compared with \$5.0 billion at December 31, 2015; and
- ratio of debt-to-book capital of 45% at June 30, 2016, as compared with 43% at December 31, 2015.

Impact of Current Commodity Prices on our Business

The upstream oil and gas business is cyclical and we are currently operating in a period of low commodity prices. Commodity prices began declining sharply during fourth quarter 2014 and continued to decline throughout 2015. Thus far in 2016, crude oil and natural gas prices have remained volatile ranging from below \$30 per barrel to above \$50 per barrel and less than \$2 per MMBtu to near \$3 per MMBtu. Current commodity prices continue to negatively impact our revenues, profitability, and cash flows. In response to the commodity price environment, we have taken a disciplined approach to our 2016 capital program by focusing on long-term value creation, optimizing allocation of capital and driving operational and cost efficiencies across our asset portfolio. Our current 2016 capital spending program accommodates an investment level of less than \$1.5 billion, approximately 50% lower than 2015 and approximately 70% lower than 2014. See Operating Outlook – 2016 Capital Investment Program, below.

Positioning for the Future

We have taken steps to sustain our business in the current volatile and low commodity price environment. We have adopted a comprehensive effort to maintain strong liquidity and balance sheet, manage our capital investment and asset portfolio and maximize operational returns, particularly through use of existing infrastructure. Our 2016 capital program is focused in areas of highest returns at current prices and is complimented by proceeds from asset monetizations. In addition, we adjusted the quarterly dividend to 10 cents per common share beginning in first quarter 2016, representing a reduction of 8 cents, or 44%, from 2015 quarterly dividend levels. We also engaged in debt refinancing activities in first quarter 2016 by tendering for certain outstanding notes and refinanced with a lower cost three year loan (1.71% as of June 30, 2016). In late 2015, we also extended our Credit Facility maturity date from 2018 to 2020.

We believe we have positioned the Company for sustainability, improved operational efficiency, and long-term success throughout the oil and gas business cycle. However, if the industry downturn continues for an extended period, or becomes more severe, we could experience additional material negative impacts on our revenues, profitability, cash flows, liquidity and proved reserves, and in response, we may consider additional reductions in our capital program or dividends, and further asset sales and/or additional organizational changes. Our production and our stock price could decline further as a result of these potential developments.

Cost Reduction Efforts

We continue to focus on maintaining a strong safety culture, driving operational efficiencies, increasing productivity and leveraging the current commodity price environment to reduce our cost structure. Cost reduction initiatives, including operational enhancements, reduction of overhead costs and new pricing arrangements with suppliers, have resulted in total lease operating expense decreases of 8% and 2% from second quarter 2015 and first half 2015, respectively. Total general and administrative expense remained relatively flat as compared to the same periods. These cost measurements are especially meaningful given the increase in our sales volumes by 128 MBoe/d and 113 MBoe/d as compared to the same periods in prior year. In addition, we have continued to leverage our expertise in the DJ Basin and Marcellus Shale and have begun to realize operational synergies positively impacting costs and performance associated with our recently acquired Texas assets.

Our onshore and global portfolio provides significant optionality, allowing us to reduce our capital spending by nearly 60% for the first half of 2016, as compared to the same period of 2015. As the majority of our onshore US assets are held by production, the investment flexibility of our portfolio allows us to invest at levels appropriate to the commodity price environment.

Sales Volumes

On a barrel of oil equivalent basis, or BOE, total sales volumes were 43% higher for second quarter 2016 as compared with second quarter 2015, and our mix of sales volumes was 44% global liquids, 36% US natural gas and 20% international natural gas. On a BOE basis and excluding the impact of the Rosetta Merger, total sales volumes were 18% higher for second quarter 2016 as compared with second quarter 2015, and our mix of sales volumes was 40% global liquids, 36% US natural gas and 24% international natural gas. See Results of Operations – Revenues, below.

Commodity Price Changes

Crude oil prices are driven by global crude oil supply and demand factors. During 2014, crude oil became oversupplied as production from non-OPEC producers increased, primarily driven by US crude oil production growth from tight formations and the de-bottlenecking of transportation infrastructure, while global crude oil demand growth was curtailed by lower global economic growth, especially in Europe, coupled with slower growth in China.

The outlook for crude oil prices for the remainder of 2016 and beyond depends primarily on supply and demand dynamics and geopolitical and security concerns in crude oil-producing nations. In June 2016, OPEC and other major oil producers reconvened to discuss efforts to reduce the oversupply and attempt to re-balance the market, but again failed to reach an agreement to limit crude oil production. On the demand side, recent projections have reduced anticipated global crude oil demand growth for 2016 and Chinese economic indicators have weakened, which continue to exacerbate the current oversupply position, resulting in a softer commodity price environment.

Longer term, we expect supply and demand to re-balance. If prices remain at lower levels, we expect producers will reduce investment which will, over time, reduce production and stored inventory levels, helping to balance supply and demand in the crude oil market.

We plan for commodity price cyclicity in our business and believe we are well positioned to withstand current and future commodity price volatility due to the following:

- we have a high-quality, globally diversified portfolio of assets, the majority of which are held by production and provide investment flexibility;
- we have achieved substantial cost reductions impacting both operating expenses and capital expenditures, including a significantly reduced capital investment program which allows us to respond to changing commodity price conditions in 2016, thereby positively impacting operating cash flows;
- we have hedged a portion of our domestic natural gas and global liquids sales volumes and are partially hedged for 2017;
- we have a strong balance sheet with a ratio of debt-to-book capital of 45% at June 30, 2016; and
- we have robust liquidity of approximately \$5.3 billion at June 30, 2016 and ability to access capital markets.

Major Development Project Updates

We continue to advance our major development projects, which we expect to deliver incremental production over the next several years. Updates on major development projects are as follows:

Sanctioned Ongoing Development Projects

A "sanctioned" development project is one for which a final investment decision has been made.

DJ Basin (Onshore US) During the quarter, we operated two drilling rigs, drilled 26 wells and commenced production on 25 wells. We continued to improve and enhance our completion designs, including utilizing extended-reach laterals with monobore drilling, slickwater completion fluid, and enhanced proppant loading, and were able to deliver production at lower capital and lease operating expense costs than second quarter of 2015. We also entered into certain strategic transactions during the quarter including an agreement for \$505 million to divest approximately 33,100 producing and undeveloped net acres in the Greeley Crescent area of Weld County, Colorado, representing approximately 8% of our total DJ Basin acreage. In addition, we executed an acreage exchange agreement to receive approximately 11,700 net acres within our Wells Ranch development area in exchange for approximately 13,500 net acres primarily from our Bronco area, located southwest of Wells Ranch. Both of these transactions allow for asset value acceleration and are part of our ongoing portfolio management efforts.

Marcellus Shale (Onshore US) Currently, we have no operated or non-operated rigs running in the Marcellus Shale. For 2016, we and CONSOL have agreed to operate within cash flow and have agreed to a plan which will focus on well completions. As such, our allocated capital to be invested in the Marcellus Shale will be limited to the completion of certain previously-drilled wells primarily located in non-operated dry gas areas. During the quarter, our joint venture partner commenced production on 17 wells.

Eagle Ford Shale and Permian Basin (Onshore US) In the Eagle Ford Shale, we had no operated drilling rigs running in the quarter; however, we commenced production on seven wells. In the Permian Basin, we operated one drilling rig and drilled one

[Table of Contents](#)

horizontal well during the quarter. We also commenced production from one well in this basin. We have continued improving our completion designs and are applying best practices from our other onshore US operations, including utilizing slickwater as a completion fluid and testing varying well spacing, lateral lengths and proppant quantities.

Gunflint (Deepwater Gulf of Mexico) Gunflint (31% operated working interest) was a 2008 crude oil discovery, utilizing a two-well subsea tieback to the third-party owned Gulfstar One facility. Production commenced in July 2016.

Operatorship of the Thunder Hawk Production Facility Production from our Big Bend and Dantzer fields (54% and 45% operated working interests, respectively) flows to and is processed by the Thunder Hawk facility. We are in the process of assuming operatorship and are targeting transition by late third quarter 2016.

Alba Field (Offshore Equatorial Guinea) The Alba B3 compression platform was successfully installed in first quarter 2016. Additionally in July 2016, hook-up and commissioning activities were completed and first production commenced. The successful completion of this project extends the resource recovery life and slows the natural decline of this field.

Tamar Southwest We continue to work with the Government of Israel to obtain regulatory approval of our development plan, which is intended to utilize current Tamar infrastructure. The Government of Israel agreed, following a recommendation of the Supreme Court, to enter into mediation discussions that may resolve the dispute relating to the possible unitization of the Eran license, which is adjacent to the Tamar Southwest field. Timely development of Tamar Southwest will help to reinforce the reliability for our Tamar project and support increased demand.

Unsanctioned Development Projects

Leviathan Project (Offshore Israel) The marketing and development of natural gas is intended to serve both domestic demand and regional export. We are actively engaged in natural gas marketing activities and executed our second natural gas sales and purchase agreement in mid-2016. Our Plan of Development was approved by the Government of Israel during second quarter 2016 and we and our partners are beginning to perform front-end engineering design (FEED) studies necessary to progress the project to final investment decision. Timing of project sanction depends on numerous factors, including completion of necessary marketing activities, engineering and construction planning and availability of funds from us and our partners to invest in the project. See Update on Israel Natural Gas Regulatory Framework, below.

Tamar Expansion Project (Offshore Israel) We have begun the planning phase for an expansion project which would expand Tamar field deliverability to approximately 2.1 Bcf/d, a quantity that would allow for regional export. Expansion would include a third flow line component and additional producing wells. Timing of project sanction will be dependent upon progression of marketing efforts of these resources. See Update on Israel Natural Gas Regulatory Framework, below.

Cyprus Project (Offshore Cyprus) During fourth quarter 2015, we entered into a farm-out agreement with a partner for a 35% interest in Block 12, which includes the Aphrodite natural gas discovery, for \$171 million. In first quarter 2016, we received proceeds of \$131 million related to the farm-out agreement and expect to receive the remaining consideration of \$40 million, subject to post-close adjustments, in 2017. The proceeds were applied to the Cyprus project asset with no gain or loss recognized. We will continue to operate with a 35% interest. As part of the farm-out process, we negotiated a waiver of our remaining exploration well obligation.

During 2015, we submitted a Declaration of Commerciality and in second quarter 2016, we submitted an updated Development Plan to the Government of Cyprus. We continue to work with the Government of Cyprus to obtain approval of the development plan and the issuance of an Exploitation License for the Aphrodite field. Receiving an Exploitation License, in conjunction with securing markets for Aphrodite gas, will allow us and our partners to perform the necessary FEED studies and progress the project to final investment decision. In preparation for FEED, we and our partners are currently performing preliminary engineering and design (pre-FEED) for the potential development of Aphrodite field that, as currently planned, would deliver natural gas to potential customers in Cyprus and Egypt.

[See Item 1. Financial Statements – Note 8. Capitalized Exploratory Well Costs and Undeveloped Leasehold.](#)

Exploration Program Update

Our 2016 exploration budget has been substantially reduced compared to prior years, but provides flexibility to respond to commodity price changes. While we are conducting limited exploratory activities in the current year, our core areas provide for exploration opportunities and we have increased our evaluation of new venture opportunities in both US and international locations.

We do not always encounter hydrocarbons through our drilling activities. In addition, we may find hydrocarbons but subsequently reach a decision, through additional analysis or appraisal drilling, that a development project is not economically or operationally viable. In the event we conclude that one of our exploratory wells did not encounter hydrocarbons or that a discovery is not economically or operationally viable, the associated capitalized exploratory well costs would be recorded as dry hole expense.

[Table of Contents](#)

Additionally, we may not be able to conduct exploration activities prior to lease expirations. As a result, in a future period, dry hole cost and/or leasehold abandonment expense could be significant. See [Item 1. Financial Statements – Note 8. Capitalized Exploratory Well Costs and Undeveloped Leasehold](#) and Operating Outlook – Potential for Future Impairment, Dry Hole or Lease Abandonment Expense, below.

Updates on significant exploration activities are as follows:

Deepwater Gulf of Mexico In first quarter 2016, drilling operations were completed at our Silvergate exploration well. The well did not encounter commercial hydrocarbons and was plugged and abandoned, resulting in dry hole expense of \$91 million in first half 2016. In second quarter 2016, we spud our Katmai 2 appraisal well (38% operated working interest), located in Green Canyon 39, and encountered high pressure in the untested fault block. In response, we temporarily abandoned the well and are assessing plans to complete appraisal. As of June 30, 2016, we have capitalized approximately \$35 million of costs associated with our Katmai 2 appraisal well.

Offshore West Africa We are interpreting and evaluating recently acquired 3D seismic data across Equatorial Guinea Blocks I and O which will aid in advancing exploration and development opportunities, including the Diega/Carmen and Carla discoveries.

Offshore Cameroon We have an interest in approximately 167,800 gross undeveloped acres offshore Cameroon in our YoYo mining concession (50% operating working interest). Petronas Carigali Overseas Sdn. Bhd. (PETRONAS) holds the other 50% operating working interest and has given notice to us and the Cameroon government of their intention to exit this acreage position. Once the assignment process is finalized, we will hold 100% operating working interest in the YoYo mining concession. We have begun efforts to market this additional working interest. The YoYo-1 exploratory well was drilled in 2007, discovering natural gas and condensate. We are working with the government of Cameroon to evaluate natural gas development options and are negotiating with the Cameroon government to convert the YoYo mining concession to a production sharing contract. We have completed the reprocessing of 3D seismic data over our YoYo mining concession and are currently evaluating the results. We provided notice in April 2016 to the Cameroon government of our intention to exit our acreage position in the Tilapia block (46.67% operating working interest). In July 2016, we relinquished our acreage position to the Cameroon government which covered an area of approximately 900,000 gross acres. We continue to work with the Cameroon government to finalize our exit.

Offshore Eastern Mediterranean In July 2016, the Petroleum Commissioner of Israel deemed our Dolphin 1 (39.66% operated working interest) 2011 natural gas discovery to be non-commercial. As a result, we recorded exploration expense of \$27 million in second quarter 2016 due to the expiration of our exploration license. For other offshore Eastern Mediterranean updates, see Update on Israel Natural Gas Regulatory Framework, below.

Offshore Falkland Islands In 2015, we experienced material operational issues with a drilling rig while drilling the Humpback well. The same drilling rig was scheduled to drill another prospect but due to significant safety and operational concerns, the drilling contract was terminated in first quarter 2016. We have been and will continue to work closely with our partners and the Falkland Islands Government to evaluate a path forward that includes retaining flexibility for any possible prospects. In the first half of 2016, we expensed \$47 million of capitalized rig costs relating to pre-drill activities. These costs are reflected in Other Operating Expense, Net in the consolidated statements of operations.

Offshore Suriname The initial phase of exploration on Block 54 (non-operated 20% working interest) requires acquisition of a 3D seismic survey, which has been completed and is currently being processed. Evaluation of the seismic survey will determine if a commitment to a subsequent exploration phase to drill an exploration well is warranted.

Offshore Gabon We are the operator of Block F15 (60% working interest), an undeveloped, deep water area. Our exploration commitment includes a 3D seismic obligation which was acquired during second quarter 2016 and is currently being processed. Final product delivery is anticipated early 2017.

Update on Israel Natural Gas Regulatory Framework

The Natural Gas Framework (Framework), as adopted by the Government of Israel, provides clarity on numerous matters concerning resource development, including certain fiscal, antitrust and other regulatory matters, which we will rely upon to support a final investment decision and upon which we can develop these resources while ensuring economic benefits to the state of Israel and its citizens. The Framework provides for the reduction of our ownership interest in Tamar to 25% within six years, while enabling the marketing of Leviathan natural gas to Israeli customers. The development of Leviathan will substantially expand our capacity to deliver natural gas to Israel and the region, as well as provide a second source of domestic natural gas supply and redundancy of infrastructure.

In second quarter 2016, the Government of Israel adopted a new economic stability clause which does not prevent possible adverse legislation but instead provides for project economic stability in the event of certain future adverse actions. While it is

possible that adoption of the new stability clause could be challenged in the Israeli Supreme Court, we believe this new clause addresses concerns raised by the Court in its March 2016 ruling and is consistent with that ruling.

Pending Master Limited Partnership

On October 22, 2015, Noble Midstream Partners LP (Noble Midstream), a wholly owned subsidiary of Noble Energy, filed a registration statement on Form S-1 with the U.S. Securities and Exchange Commission (SEC) relating to a proposed master limited partnership. On July 22, 2016, Noble Midstream filed an amendment to the Form S-1. Under the proposed structure, Noble Midstream will own, operate and develop certain of our DJ Basin crude oil, natural gas and water-related midstream infrastructure and will develop crude oil and produced water midstream infrastructure in the Delaware Basin of the Permian Basin. Noble Energy will own the general partner of Noble Midstream and will retain a majority of limited partnership interests in the proposed master limited partnership. As of the date of this report, the registration statement is not effective. The completion of the proposed offering is subject to numerous considerations, including capital market conditions, and we can provide no assurance that it will be successfully completed.

Divestiture and Acreage Exchange Activities

We actively manage our asset portfolio and periodically divest assets. During first half 2016, we:

- entered into an agreement to divest certain producing and undeveloped crude oil and natural gas interests in the DJ Basin for \$505 million, receiving partial proceeds of \$486 million;
- executed an acreage exchange to further enhance our Wells Ranch position in the DJ Basin;
- entered into an agreement on July 4, 2016 for the divestiture of 3% working interest in the Tamar field for \$369 million, partially fulfilling our commitment required by the Framework; Under the terms of the agreement, the purchaser has the option to elect, before closing, to purchase an additional 1% working interest at the same valuation;
- closed the sale of certain smaller onshore US property packages resulting in net proceeds of \$63 million;
- closed the divestiture of our interest in the Karish and Tanin fields for \$73 million in first quarter 2016; and
- closed our farm-out of 35% interest in the Aphrodite field having received partial payment of \$131 million in first quarter 2016.

Proceeds from divestitures allow us to allocate capital and other resources to potentially higher-value and higher-growth areas and enhances our balance sheet strength. We will continue to evaluate divestment opportunities of other assets within our portfolio.

See [Item 1. Financial Statements – Note 4. Divestitures](#) and [Operating Outlook - Potential for Future Impairment, Dry Hole or Lease Abandonment Expense](#), below.

Update on Regulations

US Offshore Regulatory Developments On April 14, 2016, the Bureau of Safety and Environmental Enforcement (BSEE) adopted a final rule establishing updated standards for blowout prevention systems and other well controls for offshore oil and gas activities conducted in US federal waters, including the Gulf of Mexico. Although the final rule incorporates some of the changes recommended by the oil and gas industry, it imposes a number of new requirements relating to well design, well control, casing, cementing, real-time well monitoring and subsea containment. For example, the new rule requires double sets of shear rams on all deepwater blowout preventers (BOPs), periodic inspections of BOPs and outside audits of equipment, and real-time well monitoring requirements. The new rule will likely increase the costs associated with well design, drilling and completion operations, as well as ongoing monitoring costs for our wells in the Gulf of Mexico. The final rule went into effect on July 28, 2016.

On March 17, 2016, the Bureau of Ocean Energy Management (BOEM) proposed a new air quality monitoring rule that would significantly broaden the scope of air emissions that operators in US federal waters, including the Gulf of Mexico, must measure, monitor and control. Among other items, the proposed rule would expand the types of emissions that must be measured, require operators to measure emissions more frequently, and increase the scope of facilities that must be monitored. If adopted as proposed, the new rule would likely increase the cost associated with our activities in the Gulf of Mexico. The comment period for the proposed rule expired June 20, 2016.

On July 14, 2016, the BOEM issued an updated Notice to Lessees and Operators (NLT) providing details on revised procedures the agency will be using to determine a lessee's ability to carry out decommissioning obligations for activities on the Outer Continental Shelf, including the Gulf of Mexico. This revised policy becomes effective September 12, 2016 and will institute new criteria by which the BOEM will evaluate the financial strength and reliability of lessees and operators active on the Outer Continental Shelf. If the BOEM determines under the revised policy that a company does not have the financial ability to meet its decommissioning and other obligations, the company will be required to post additional financial security as assurance. We are currently evaluating the policy changes and the impact they may have on our operations in the Gulf of Mexico. Compliance with the revised policy could increase the costs associated with our activities in the Gulf of Mexico.

[Table of Contents](#)

The National Oceanic and Atmospheric Administration (NOAA) is proposing to expand the boundaries of the Flower Garden Banks National Marine Sanctuary in the Gulf of Mexico. NOAA released its draft environmental impact statement (DEIS) on the proposed expansion in June 2016, in which it proposed five alternatives for expanding existing sanctuary regulations to new geographic areas. Two of these alternatives for sanctuary expansion have the potential to impact certain of our leases which could increase drilling, operating and decommissioning costs. Public comments to the DEIS are due August 19, 2016 and we are currently evaluating the expansion alternatives as outlined in the DEIS and any potential impact on our operations in the Gulf of Mexico.

Colorado Crude Oil and Natural Gas Regulation In 2014, by executive order, Colorado Governor Hickenlooper created a 21-member Oil and Gas Task Force (Task Force) made up of representatives of local governments, civic entities, environmental organizations and industry for the purpose of making recommendations regarding oil and gas development in communities. After 18 months, the Task Force, which included a representative from Noble Energy, concluded its activities on February 27, 2015. Nine recommendations were sent to the governor, seven of which were unanimously supported by members of the Task Force. All nine recommendations have been adopted by legislation or regulation and the Colorado Oil and Gas Conservation Commission completed work on new rules which govern the siting of large oil and gas operations in urban areas and require greater coordination of drilling operations with local governments. These new rules took effect in March 2016 and there is strong public support for them to be implemented.

Earlier in 2016, the State of Colorado approved for signature gathering four ballot measures which would impact oil and gas operations. Measure 40, which would grant local communities self-governance and the opportunity to ban certain businesses from operating in their jurisdictions, has been withdrawn. Measure 63 would establish a constitutional right to a healthy environment and provide local governments the obligation to protect the environment. Measure 75 would grant local governments control over oil and gas development, notwithstanding state law. Measure 78 would require that all new oil and gas facilities be located 2,500 feet from occupied structures and an expansive list of landscape features called "areas of special concern." If implemented, Measure 78 in particular would significantly and adversely impact future oil and gas operations and has strong opposition from the oil and gas industry, the governor, the broad business community and other stakeholder groups.

Measures 63, 75 and 78 are currently in the signature gathering phase and the proponents have until August 8, 2016 to gather 98,492 valid signatures to qualify for the November 2016 ballot. If balloted and approved in the November 2016 election, these measures would limit oil and gas operations, require greater distances between oil and gas facilities and occupied structures, and would otherwise limit the production and development of crude oil and natural gas in the state.

The adoption of these measures would result in significantly limiting or even potentially preventing the future development of crude oil and natural gas in areas where we conduct operations. In addition, we may incur additional costs to comply with any such requirements or may experience delays and/or curtailment in the permitting or pursuit of exploration, development, or production activities. Furthermore, our drilling activities could possibly be limited or hindered and the amounts that we are ultimately able to produce from our undeveloped reserves could be adversely affected. Such compliance costs and delays, curtailments, limitations, or prohibitions could have a material adverse effect on our business, prospects, results of operations, financial condition, and liquidity and could result in a material impairment of these assets.

We continue to monitor proposed and new regulations and legislation in all our operating jurisdictions to assess the potential impact on our company. Concurrently, we are engaged in extensive public education and outreach efforts with the goal of engaging and educating the general public and communities about the economic and environmental benefits of safe and responsible crude oil and natural gas development.

Impact of Dodd-Frank Act Section 1504 On June 27, 2016, the SEC adopted resource extraction issuer payment disclosure rules under Section 1504 of the Dodd-Frank Act that will require resource extraction companies, such as us, to publicly file with the SEC information about the type and total amount of payments made to a foreign government, including subnational governments (such as states and/or counties), or the U.S. federal government for each project related to the commercial development of crude oil, natural gas or minerals, and the type and total amount of payments made to each government. Reporting and disclosure will be required annually beginning with the 2018 fiscal year.

Recently Issued Accounting Standards

[See Item 1. Financial Statements – Note 2. Basis of Presentation.](#)

OPERATING OUTLOOK

2016 Production We have adopted a comprehensive effort to manage the Company's balance sheet and position ourselves for future growth. While we seek to enhance operational efficiencies and maximize our return on employed capital, our total crude oil, natural gas and NGL production for 2016 may not grow at a rate consistent with prior years and potentially could decline. Production may be impacted by factors including:

- commodity prices which, if subject to further decline, could result in certain current production becoming uneconomic;
- overall level and timing of capital expenditures which, as discussed below and dependent upon our drilling success, will impact near-term production volumes;
- Israeli industrial and residential demand for electricity, which is largely impacted by weather conditions and conversion of the Israeli electricity portfolio from coal to natural gas;
- timing of crude oil and condensate liftings impacting sales volumes in West Africa;
- natural field decline in the onshore US, deepwater Gulf of Mexico and offshore Equatorial Guinea;
- potential weather-related volume curtailments due to hurricanes in the deepwater Gulf of Mexico, or winter storms and flooding impacting onshore US operations;
- reliability of support equipment and facilities, pipeline disruptions, and/or potential pipeline and processing facility capacity constraints which may cause restrictions or interruptions in production and/or mid-stream processing;
- malfunctions and/or mechanical failures at terminals or other onshore US delivery points;
- impact of enhanced completion efforts for onshore US assets;
- potential shut-in of US producing properties if storage capacity becomes unavailable;
- potential drilling and/or completion permit delays due to future regulatory changes; and
- potential purchases of producing properties or divestments of operating assets.

2016 Capital Investment Program Given the current commodity price environment, we have designed a substantially reduced and flexible capital investment program that is part of our comprehensive effort to manage our balance sheet while preserving and building value. Our current 2016 capital investment program accommodates an investment level of less than \$1.5 billion, or approximately 50% lower than our 2015 program. Allocation of capital within our program is primarily focused in areas of best returns and where we are able to maximize use of existing infrastructure. In this regard, our program allocates two-thirds of total investment to core onshore US assets and the remaining one-third to offshore development and exploration.

See [Liquidity and Capital Resources – Financing Activities](#).

Potential for Future Dry Hole Cost, Lease Abandonment Expense or Property Impairments

Exploration Activities Our exploratory drilling program seeks to provide long-term growth from existing and potential new core areas. In the event we conclude that an exploratory well did not encounter hydrocarbons or that a discovery is not economically or operationally viable, the associated capitalized exploratory well costs would be charged to expense. For example, in the first half of 2016, we recorded total dry hole costs of \$114 million primarily associated with our Silvergate exploratory well in Gulf of Mexico and our Dolphin 1 discovery offshore Israel. The Silvergate well did not encounter commercial hydrocarbons and was plugged and abandoned, and our Dolphin 1 discovery was ruled by the Petroleum Commissioner of Israel to be non-commercial. We recorded \$27 million of exploration expense following expiration of the exploration license. [See Item 1. Financial Statements - Note 8. Capitalized Exploratory Well Costs and Undeveloped Leasehold.](#)

Additionally, we may not conduct exploration activities prior to lease expirations. For example, in the deepwater Gulf of Mexico, we continue to mature our prospect portfolio. However, regulations have become more stringent due to the Deepwater Horizon incident in 2010. In some instances, specifically engineered blowout preventers, rigs, and completion equipment may be required for high pressure environments. Regulatory requirements or lack of readily available equipment could prevent us from engaging in future exploration activities during our current lease terms. In addition, the current commodity price environment may render certain prospects economically less attractive and we may not conduct exploration activities before lease expiration.

We currently have capitalized undeveloped leasehold cost of approximately \$195 million related to deepwater Gulf of Mexico prospects that have not yet been drilled. These leases will expire over the years 2016 - 2024. Certain of these leases are individually significant and are separately assessed for impairment. Costs of individually insignificant leases are combined and amortized over their lease term. While none of our significant undeveloped leases were impaired as of June 30, 2016, changes in exploration plans, availability of capital and suitable rig and drilling equipment, insufficient resource potential, changing regulations and/or other factors, could result in future impairment. Moreover, in the deepwater Gulf of Mexico, some leases may become impaired for other reasons such as production not being established, foregoing actions to extend the terms of the leases, and/or leases becoming uneconomic due to low commodity prices or the rising costs of complying with new regulations.

[Table of Contents](#)

As a result of our exploration activities, future exploration expense, including leasehold expense, could be significant. [See Results of Operations - Oil and Gas Exploration Expense](#), below. [See also Item 1A, Risk Factors](#).

Producing Properties In 2016, leading commodity indices, including WTI, Brent and HH continue to trade lower than prior years and remain volatile. A further decline in future crude oil, natural gas or NGL prices could result in some of our properties becoming uneconomic, resulting in additional impairment charges, decrease in proved reserves and/or shut-in of currently producing wells.

In second quarter 2016, we assessed proved properties for possible impairment due to current commodity prices. While the estimated undiscounted future cash flows of our properties, including certain of our offshore assets, did not indicate an impairment at June 30, 2016, certain properties may become impaired if, for example, commodity prices decline further, operating or development costs increase, or estimated proved reserves are revised downward.

In addition, in certain onshore US areas, transportation bottlenecks caused by oversupply and/or lack of infrastructure can reduce the amount of production reaching higher priced out-of-basin locations, resulting in less favorable basis differentials, or differences between WTI and HH pricing and the average prices we actually receive. A worsening of these basis differentials could also reduce cash flows and result in property impairment charges.

The cash flow model that we use to assess proved properties for impairment includes numerous assumptions, such as management's estimates of future crude oil and natural gas production along with operating and development costs, market outlook on forward commodity prices, and interest rates. All inputs to the cash flow model must be evaluated at each date of estimate. However, a decrease in forward commodity prices, or widening of basis differentials, alone could result in an impairment.

In addition, well decommissioning programs, especially in deepwater or remote locations, are often complex and expensive. It may be difficult to estimate timing of actual abandonment activities, which are subject to regulatory approval and the availability of rigs and services. It may be difficult to estimate costs of rigs and services in periods of fluctuating demand. In addition, we do not operate certain assets and therefore we work with respective operators to receive updated estimates of abandonment activities and costs. As such, our ARO estimates may change, sometimes significantly, and could result in asset impairment and/or have other financial impacts.

Divestments We actively manage our asset portfolio. If properties are reclassified as assets held for sale in the future, they will be valued at the lower of net book value or anticipated sales proceeds less costs to sell. Impairment expense would be recorded for any excess of net book value over anticipated sales proceeds less costs to sell.

RESULTS OF OPERATIONS**Revenues**

Revenues were as follows:

| <i>(millions)</i> | 2016 | 2015 | (Decrease) / Increase from Prior Year |
|-------------------------------------|----------|----------|--|
| Three Months Ended June 30, | | | |
| Oil, Gas and NGL Sales | \$ 823 | \$ 732 | 12% |
| Income from Equity Method Investees | 24 | 6 | 300% |
| Total | \$ 847 | \$ 738 | 15% |
| Six Months Ended June 30, | | | |
| Oil, Gas and NGL Sales | \$ 1,528 | \$ 1,481 | 3% |
| Income from Equity Method Investees | 43 | 24 | 79% |
| Total | \$ 1,571 | \$ 1,505 | 4% |

Changes in revenues are discussed below.

Oil, Gas and NGL Sales

We generally sell crude oil, natural gas, and NGLs under two types of agreements common in our industry. Both types of agreements may include transportation charges. One type of agreement is a netback agreement, under which we sell crude oil and natural gas at the wellhead and receive a price, net of transportation expense incurred by the purchaser. In the case of NGLs, we may receive a price from the purchaser, which is net of fractionation and processing costs. Historically, we have recorded revenue at the net price we had received from the purchaser, net of transportation, fractionation or processing costs. Beginning in 2016, we changed our presentation of revenue to no longer include expenses netted from revenue by the purchaser. Crude oil, natural gas and NGL sales are now shown without deductions relating to transportation, fractionation or processing. These deductions are now recorded as production expense. Prior year amounts, including revenues, expenses, average realized sales prices and average production costs per BOE, have been reclassified to conform to the current presentation. For NGL sales, amounts reclassified for the three and six months ended June 30, 2015 totaled \$10 million and \$19 million, respectively. Amounts reclassified for crude oil and natural gas sales were de minimis.

In addition, commodity prices we receive may be reduced by location basis differentials, which can be significant. For example, transportation bottlenecks and oversupply in the Marcellus Shale have reduced the amount of production reaching higher priced out-of-basin locations. As a result of location basis differentials, our reported sales prices may differ significantly from published commodity price benchmarks for the same period.

[Table of Contents](#)

Average daily sales volumes and average realized sales prices were as follows:

| | Sales Volumes | | | | Average Realized Sales Prices | | |
|---|---------------------------------|----------------------|---------------|-------------------------------|----------------------------------|-----------------------|----------------|
| | Crude Oil & Condensate (MBbl/d) | Natural Gas (MMcf/d) | NGLs (MBbl/d) | Total (MBoe/d) ⁽¹⁾ | Crude Oil & Condensate (Per Bbl) | Natural Gas (Per Mcf) | NGLs (Per Bbl) |
| Three Months Ended June 30, 2016 | | | | | | | |
| United States | 96 | 924 | 59 | 309 | \$ 40.64 | \$ 1.75 | \$ 14.10 |
| Equatorial Guinea ⁽²⁾ | 27 | 233 | — | 66 | 44.55 | 0.27 | — |
| Israel | — | 276 | — | 46 | — | 5.15 | — |
| Total Consolidated Operations | 123 | 1,433 | 59 | 421 | 41.51 | 2.16 | 14.10 |
| Equity Investees ⁽³⁾ | 1 | — | 5 | 6 | 49.94 | — | 27.64 |
| Total | 124 | 1,433 | 64 | 427 | \$ 41.61 | \$ 2.16 | \$ 15.07 |
| Three Months Ended June 30, 2015 | | | | | | | |
| United States | 65 | 613 | 27 | 194 | \$ 52.44 | \$ 1.90 | \$ 13.71 |
| Equatorial Guinea ⁽²⁾ | 31 | 202 | — | 65 | 60.02 | 0.27 | — |
| Israel | — | 215 | — | 36 | — | 5.34 | — |
| Total Consolidated Operations | 96 | 1,030 | 27 | 295 | 54.91 | 2.30 | 13.71 |
| Equity Investees ⁽³⁾ | 1 | — | 3 | 4 | 60.34 | — | 33.34 |
| Total | 97 | 1,030 | 30 | 299 | \$ 54.95 | \$ 2.30 | \$ 15.70 |
| Six Months Ended June 30, 2016 | | | | | | | |
| United States | 99 | 917 | 56 | 308 | \$ 35.22 | \$ 1.82 | \$ 12.73 |
| Equatorial Guinea ⁽²⁾ | 27 | 214 | — | 63 | 39.53 | 0.27 | — |
| Israel | — | 271 | — | 45 | — | 5.17 | — |
| Total Consolidated Operations | 126 | 1,402 | 56 | 416 | 36.14 | 2.23 | 12.73 |
| Equity Investees ⁽³⁾ | 1 | — | 4 | 6 | 42.34 | — | 25.02 |
| Total | 127 | 1,402 | 60 | 422 | \$ 36.20 | \$ 2.23 | \$ 13.63 |
| Six Months Ended June 30, 2015 | | | | | | | |
| United States | 69 | 616 | 26 | 198 | \$ 48.20 | \$ 2.31 | \$ 16.11 |
| Equatorial Guinea ⁽²⁾ | 30 | 216 | — | 66 | 54.97 | 0.27 | — |
| Israel | — | 229 | — | 38 | — | 5.40 | — |
| Other International ⁽⁴⁾ | 1 | — | — | 1 | 55.52 | — | — |
| Total Consolidated Operations | 100 | 1,061 | 26 | 303 | 50.29 | 2.56 | 16.11 |
| Equity Investees ⁽³⁾ | 1 | — | 4 | 6 | 51.86 | — | 31.27 |
| Total | 101 | 1,061 | 30 | 309 | \$ 50.31 | \$ 2.56 | \$ 18.33 |

⁽¹⁾ Natural gas is converted on the basis of six Mcf of gas per one barrel of crude oil equivalent. This ratio reflects an energy content equivalency and not a price or revenue equivalency. Given commodity price disparities, the price for a barrel of crude oil equivalent for US natural gas and NGLs are significantly less than the price for a barrel of crude oil. In Israel, we sell natural gas under contracts where the majority of the price is fixed, resulting in less commodity price disparity.

⁽²⁾ Natural gas from the Alba field in Equatorial Guinea is under contract for \$0.25 per MMBtu to a methanol plant, an LPG plant, an LNG plant and a power generation plant. The methanol and LPG plants are owned in part by affiliated entities accounted for under the equity method of accounting.

⁽³⁾ Volumes represent sales of condensate and LPG from the LPG plant in Equatorial Guinea. See *Income from Equity Method Investees*, below.

⁽⁴⁾ Other International includes de minimis North Sea sales volumes with last production in May 2015.

[Table of Contents](#)

An analysis of revenues from sales of crude oil, natural gas and NGLs is as follows:

| <i>(millions)</i> | Sales Revenues | | | |
|---|------------------------|-------------|--------|----------|
| | Crude Oil & Condensate | Natural Gas | NGLs | Total |
| Three Months Ended June 30, 2015 | \$ 483 | \$ 215 | \$ 34 | \$ 732 |
| Changes due to | | | | |
| Increase in Sales Volumes | 90 | 81 | 40 | 211 |
| (Decrease) Increase in Sales Prices | (108) | (14) | 2 | (120) |
| Three Months Ended June 30, 2016 | \$ 465 | \$ 282 | \$ 76 | \$ 823 |
| Six Months Ended June 30, 2015 | \$ 914 | \$ 492 | \$ 75 | \$ 1,481 |
| Changes due to | | | | |
| Increase in Sales Volumes | 141 | 155 | 75 | 371 |
| Decrease in Sales Prices | (226) | (78) | (20) | (324) |
| Six Months Ended June 30, 2016 | \$ 829 | \$ 569 | \$ 130 | \$ 1,528 |

Crude Oil and Condensate Sales – Revenues from crude oil and condensate sales decreased during second quarter and the first six months of 2016 as compared with 2015 due to the following:

- decreases in average realized prices primarily due to the decline in global commodity prices that began in the second half of 2014; partially offset by:
 - higher sales volumes in the deepwater Gulf of Mexico due to production from the Big Bend and Dantzler development projects, which began producing in fourth quarter 2015, which contributed 8 MBbl/d and 7 MBbl/d, net, respectively, during the first six months of 2016; and
 - sales volumes contributed by our Eagle Ford Shale and Permian Basin assets acquired in third quarter 2015, which contributed 12 MBbl/d and 6 MBbl/d, net, respectively, during the first six months of 2016.

Natural Gas Sales – Revenues from natural gas sales increased during second quarter and the first six months of 2016 as compared with 2015 due to the following:

- quarterly sales volumes from the Tamar field, offshore Israel, which contributed 276 MMcf/d, net, in response to seasonal demand and the increased use of natural gas over coal to fuel power generation;
 - higher sales volumes in the Marcellus Shale due to commencing production on eight operated wells, our joint venture partner commencing production on 34 wells, and the recognition of efficiencies in base production performance; and
 - sales volumes contributed by our Eagle Ford Shale and Permian Basin assets acquired in third quarter 2015, which contributed 142 MMcf/d and 8 MMcf/d, net, respectively, during the first six months of 2016;
- partially offset by:
- decreases in average realized prices primarily due to the decline in global commodity prices that began in the second half of 2014.

NGL Sales – Revenues from NGL sales increased during second quarter and the first six months of 2016 as compared with 2015 due to the following:

- higher sales volumes in the DJ Basin due to increased activity in East Pony and Wells Ranch; and
 - sales volumes contributed by our Eagle Ford Shale and Permian Basin assets acquired in third quarter 2015, which contributed 23 MBbl/d and 1 MBbl/d, net, respectively, during the first six months of 2016;
- partially offset by:
- decreases in average realized prices primarily driven by oversupply.

Income from Equity Method Investees We have interests in equity method investees that operate midstream assets onshore US and West Africa. Equity method investments are included in other noncurrent assets in our consolidated balance sheets, and our share of earnings is reported as income from equity method investees in our consolidated statements of operations. Within our consolidated statements of cash flows, activity is reflected within cash flows provided by operating activities and cash flows provided by (used in) investing activities.

Income from equity method investees increased \$19 million during the first six months of 2016 as compared with 2015. The increase primarily includes a \$12 million increase from Atlantic Methanol Production Company, LLC (AMPCO), our methanol investee, which experienced a 45-day plant turnaround during first quarter 2015; a \$5 million decrease from Alba Plant, our

LPG investee, due to lower realized prices; an increase of \$10 million from our investments in CONE Gathering LLC and CONE Midstream Partners due primarily to higher throughput volumes; and an increase of \$2 million from other investments.

Operating Costs and Expenses

Operating costs and expenses were as follows:

| <i>(millions)</i> | 2016 | 2015 | Increase / (Decrease) from Prior Year |
|--|----------|----------|--|
| Three Months Ended June 30, | | | |
| Production Expense | \$ 274 | \$ 218 | 26 % |
| Exploration Expense | 89 | 41 | 117 % |
| Depreciation, Depletion and Amortization | 622 | 451 | 38 % |
| General and Administrative | 107 | 104 | 3 % |
| Other Operating (Income) Expense, Net | 17 | 85 | (80)% |
| Total | \$ 1,109 | \$ 899 | 23 % |
| Six Months Ended June 30, | | | |
| Production Expense | \$ 546 | \$ 469 | 16 % |
| Exploration Expense | 252 | 106 | 138 % |
| Depreciation, Depletion and Amortization | 1,239 | 905 | 37 % |
| General and Administrative | 198 | 198 | — % |
| Other Operating Expense, Net | 20 | 121 | (83)% |
| Total | \$ 2,255 | \$ 1,799 | 25 % |

Changes in operating costs and expenses are discussed below.

[Table of Contents](#)

Production Expense Components of production expense were as follows:

| <i>(millions, except unit rate)</i> | Total per BOE ⁽¹⁾ | Total | United States | Equatorial Guinea | Israel | Corporate |
|---|---------------------------------|---------|------------------|----------------------|---------|-----------|
| Three Months Ended June 30, 2016 | | | | | | |
| Lease Operating Expense ⁽²⁾ | \$ 3.11 | \$ 119 | \$ 86 | \$ 24 | \$ 7 | \$ 2 |
| Production and Ad Valorem Taxes | 1.04 | 40 | 40 | — | — | — |
| Transportation and Gathering Expense ⁽³⁾ | 3.00 | 115 | 115 | — | — | — |
| Total Production Expense | \$ 7.15 | \$ 274 | \$ 241 | \$ 24 | \$ 7 | \$ 2 |
| Total Production Expense per BOE | | \$ 7.15 | \$ 8.58 | \$ 3.99 | \$ 1.66 | N/M |
| Three Months Ended June 30, 2015 | | | | | | |
| Lease Operating Expense ⁽²⁾ | \$ 4.80 | \$ 129 | \$ 80 | \$ 36 | \$ 12 | \$ 1 |
| Production and Ad Valorem Taxes | 1.05 | 28 | 28 | — | — | — |
| Transportation and Gathering Expense ⁽³⁾ | 2.27 | 61 | 61 | — | — | — |
| Total Production Expense | \$ 8.12 | \$ 218 | \$ 169 | \$ 36 | \$ 12 | \$ 1 |
| Total Production Expense per BOE | | \$ 8.12 | \$ 9.55 | \$ 6.15 | \$ 3.65 | N/M |
| Six Months Ended June 30, 2016 | | | | | | |
| Lease Operating Expense ⁽²⁾ | \$ 3.71 | \$ 281 | \$ 207 | \$ 53 | \$ 17 | \$ 4 |
| Production and Ad Valorem Taxes | 0.57 | 43 | 43 | — | — | — |
| Transportation and Gathering Expense ⁽³⁾ | 2.93 | 222 | 222 | — | — | — |
| Total Production Expense | \$ 7.21 | \$ 546 | \$ 472 | \$ 53 | \$ 17 | \$ 4 |
| Total Production Expense per BOE | | \$ 7.21 | \$ 8.43 | \$ 4.63 | \$ 2.05 | N/M |
| Six Months Ended June 30, 2015 | | | | | | |
| Lease Operating Expense ⁽²⁾ | \$ 5.21 | \$ 286 | \$ 182 | \$ 70 | \$ 25 | \$ 9 |
| Production and Ad Valorem Taxes | 1.11 | 61 | 61 | — | — | — |
| Transportation and Gathering Expense ⁽³⁾ | 2.22 | 122 | 122 | — | — | — |
| Total Production Expense | \$ 8.54 | \$ 469 | \$ 365 | \$ 70 | \$ 25 | \$ 9 |
| Total Production Expense per BOE | | \$ 8.54 | \$ 10.20 | \$ 5.83 | \$ 3.59 | N/M |

N/M amount is not meaningful.

⁽¹⁾ Consolidated unit rates exclude sales volumes and expenses attributable to equity method investees.

⁽²⁾ Lease operating expense includes oil and gas operating costs (labor, fuel, repairs, replacements, saltwater disposal and other related lifting costs) and workover expense.

⁽³⁾ Certain of our revenue received from purchasers was historically presented with deduction for transportation, fractionation or processing costs. Beginning in 2016, we have changed our presentation of revenue to no longer include these expenses as deductions from revenue. These costs are now included within production expense and prior year amounts have been reclassified to conform to the current presentation. [See Results of Operations – Revenues](#), above.

For second quarter and the first six months of 2016, total production expense increased as compared with 2015 due to the following:

- an increase in lease operating and transportation and gathering expense due to higher production, including the addition of onshore US production from our Eagle Ford Shale and Permian Basin assets acquired in third quarter 2015 and from our Big Bend and Dantzler development projects, deepwater Gulf of Mexico, which began producing in fourth quarter 2015;

partially offset by:

- a decrease in lease operating expense due to continued focus on cost reduction and efficiency initiatives; and
- a decrease in production and ad valorem taxes resulting from lower revenues and an onshore US severance tax receivable, both driven by a decline in US commodity prices.

The unit rate per BOE for total production expense decreased for three months and six months ended June 30, 2016 as compared with 2015 primarily due to cost reduction initiatives in lease operating expense, and lower production and ad valorem taxes as a result of the pricing environment. The decrease in unit rate per BOE was partially offset by the increase in transportation and gathering expense primarily due to the addition of our Eagle Ford Shale and Permian Basin assets in third quarter 2015 and an increase in production in the Marcellus Shale.

Exploration Expense Components of exploration expense were as follows:

| <i>(millions)</i> | Total | United States | West Africa ⁽¹⁾ | Eastern Mediterranean ⁽²⁾ | Other Int'l, Corporate ⁽³⁾ |
|---|---------------|---------------|----------------------------|--------------------------------------|---------------------------------------|
| Three Months Ended June 30, 2016 | | | | | |
| Leasehold Impairment and Amortization | \$ 16 | \$ 16 | \$ — | \$ — | \$ — |
| Dry Hole Expense | 27 | — | — | 27 | — |
| Seismic, Geological and Geophysical | 23 | — | 10 | — | 13 |
| Staff Expense | 21 | 20 | 1 | — | — |
| Other ⁽⁴⁾ | 2 | 6 | (1) | — | (3) |
| Total Exploration Expense | \$ 89 | \$ 42 | \$ 10 | \$ 27 | \$ 10 |
| Three Months Ended June 30, 2015 | | | | | |
| Leasehold Impairment and Amortization | \$ 14 | \$ 14 | \$ — | \$ — | \$ — |
| Staff Expense | 18 | 3 | 2 | 1 | 12 |
| Other ⁽⁴⁾ | 9 | — | 3 | 1 | 5 |
| Total Exploration Expense | \$ 41 | \$ 17 | \$ 5 | \$ 2 | \$ 17 |
| Six Months Ended June 30, 2016 | | | | | |
| Leasehold Impairment and Amortization | \$ 31 | \$ 31 | \$ — | \$ — | \$ — |
| Dry Hole Expense | 114 | 91 | (1) | 27 | (3) |
| Seismic, Geological and Geophysical | 32 | — | 10 | — | 22 |
| Staff Expense | 39 | 21 | 2 | 1 | 15 |
| Other ⁽⁴⁾ | 36 | 23 | — | 7 | 6 |
| Total Exploration Expense | \$ 252 | \$ 166 | \$ 11 | \$ 35 | \$ 40 |
| Six Months Ended June 30, 2015 | | | | | |
| Leasehold Impairment and Amortization | \$ 26 | \$ 21 | \$ — | \$ 5 | \$ — |
| Dry Hole Expense | 19 | 18 | 1 | — | — |
| Seismic, Geological and Geophysical | 2 | 2 | — | — | — |
| Staff Expense | 50 | 10 | 2 | 3 | 35 |
| Other ⁽⁴⁾ | 9 | — | — | 1 | 8 |
| Total Exploration Expense | \$ 106 | \$ 51 | \$ 3 | \$ 9 | \$ 43 |

⁽¹⁾ West Africa includes Equatorial Guinea, Cameroon, Sierra Leone (which we exited in second quarter 2015), and Gabon.

⁽²⁾ Eastern Mediterranean includes Israel and Cyprus.

⁽³⁾ Other International, Corporate includes the Falkland Islands, other new ventures and corporate expenditures.

⁽⁴⁾ Includes lease rentals and other exploratory costs.

Exploration expense for second quarter and the first six months of 2016 included:

- dry hole cost primarily related to the Silvergate exploratory well, deepwater Gulf of Mexico and the Dolphin 1 natural gas discovery, offshore Israel;
- seismic expense related to the acquisition of 3D seismic data in the deepwater Gulf of Mexico, West Africa, and other international areas;
- Other cost for US includes lease rentals primarily related to Permian Basin leases; and
- salaries and related expenses for corporate exploration and new ventures personnel.

Exploration expense for second quarter and the first six months of 2015 included the following:

- dry hole cost related primarily to onshore US exploratory wells; and
- salaries and related expenses for corporate exploration and new ventures personnel.

[Table of Contents](#)

Depreciation, Depletion and Amortization DD&A expense was as follows:

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|--|--------------------------------|----------|------------------------------|----------|
| | 2016 | 2015 | 2016 | 2015 |
| DD&A Expense (millions) ⁽¹⁾ | \$ 622 | \$ 451 | \$ 1,239 | \$ 905 |
| Unit Rate per BOE ⁽²⁾ | \$ 16.23 | \$ 16.77 | \$ 16.37 | \$ 16.50 |

⁽¹⁾ For DD&A expense by geographical area, see [Item 1. Financial Statements – Note 12. Segment Information](#).

⁽²⁾ Consolidated unit rates exclude sales volumes and expenses attributable to equity method investees.

Total DD&A expense for second quarter and the first six months of 2016 increased as compared with 2015 due to the following:

- the addition of Eagle Ford Shale and Permian Basin production in third quarter 2015, resulting in \$98 million and \$18 million in DD&A expense respectively, during the first six months of 2016;
- an increase in the Marcellus Shale, Eastern Mediterranean and deepwater Gulf of Mexico due to higher sales volumes;
- a reduction in proved reserves in fourth quarter 2015 primarily due to downward price revisions in DJ Basin and Marcellus Shale;

partially offset by:

- a decrease in sales volumes offshore Equatorial Guinea due to downtime installing the B3 compression platform and scheduled maintenance in the Alba field; and
- the impact of lower net book value as a result of a fourth quarter 2015 impairment for offshore Equatorial Guinea properties.

The decrease in the unit rate per BOE for the second quarter and the first six months of 2016 as compared with 2015 was due primarily to increased lower-cost production volumes from certain onshore US properties and the Tamar and Alba fields. The decrease in the unit rate per BOE was partially offset by an increase in higher-cost production volumes in deepwater Gulf of Mexico and reductions in proved reserves in fourth quarter 2015 mainly due to downward price revisions.

Significant changes to the proved reserves at December 31, 2015 include; additions of 269 MMBoe resulting from the Rosetta Merger during the third quarter 2015 offset by downward revisions of 307 MMBoe that were commodity price driven. Estimates of proved reserves significantly affect our DD&A expense. Holding other factors constant, a decline in proved reserves estimates caused by decreases in the 12-month average commodity prices, will result in an increase in DD&A expense in future periods, which would reduce earnings.

General and Administrative Expense General and administrative expense (G&A) was as follows:

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|----------------------------------|--------------------------------|---------|------------------------------|---------|
| | 2016 | 2015 | 2016 | 2015 |
| G&A Expense (millions) | \$ 107 | \$ 104 | \$ 198 | \$ 198 |
| Unit Rate per BOE ⁽¹⁾ | \$ 2.79 | \$ 3.87 | \$ 2.62 | \$ 3.61 |

⁽¹⁾ Consolidated unit rates exclude sales volumes and expenses attributable to equity method investees.

G&A expense for the first six months of 2016 was flat as compared with 2015 primarily due to cost savings initiatives, including reduced use of contractors and consultants and decreased special projects and other discretionary expenses, and decreases in employee personnel costs, partially offset by the addition of Rosetta employees in the third quarter of 2015. The decrease in the unit rate per BOE for the second quarter and the first six months of 2016 as compared with 2015 was due primarily to the increase in production volumes in onshore US, deepwater Gulf of Mexico, and Eastern Mediterranean; and cost synergies achieved through the Rosetta Merger.

[Table of Contents](#)

Other Operating (Income) Expense Other operating (income) expense was as follows:

| <i>(millions)</i> | Three Months Ended June 30, | | Six Months Ended June 30, | |
|--|--------------------------------|--------------|------------------------------|---------------|
| | 2016 | 2015 | 2016 | 2015 |
| Loss on Asset Due to Terminated Contract | \$ 5 | \$ — | \$ 47 | \$ — |
| Marketing and Processing Expense, Net | 15 | 12 | 37 | 22 |
| Loss (Gain) on Divestitures | 23 | (1) | 23 | — |
| Corporate Restructuring Expense | — | 18 | 1 | 18 |
| Purchase Price Allocation Adjustment | (25) | — | (25) | — |
| Gain on Extinguishment of Debt | — | — | (80) | — |
| Asset Impairments | — | 15 | — | 43 |
| Pension Plan Expense | — | 21 | — | 21 |
| Stacked Drilling Rig Expense | 3 | 7 | 5 | 7 |
| Other, Net | (4) | 13 | 12 | 10 |
| Total | \$ 17 | \$ 85 | \$ 20 | \$ 121 |

See [Item 1. Financial Statements – Note 2. Basis of Presentation](#) for discussion of the above components of other operating (income) expense.

Other (Income) Expense

Other (income) expense was as follows:

| <i>(millions)</i> | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|--------------------------------|---------------|------------------------------|--------------|
| | 2016 | 2015 | 2016 | 2015 |
| Loss (Gain) on Commodity Derivative Instruments | \$ 151 | \$ 87 | \$ 107 | \$ (63) |
| Interest, Net of Amount Capitalized | 78 | 54 | 157 | 112 |
| Other Non-Operating Expense (Income), Net | 7 | (9) | 3 | (9) |
| Total | \$ 236 | \$ 132 | \$ 267 | \$ 40 |

Loss (Gain) on Commodity Derivative Instruments Loss (Gain) on commodity derivative instruments is a result of mark-to-market accounting. Many factors impact a gain or loss on commodity derivative instruments including: increases and decreases in the commodity forward price curves compared to the terms of our executed commodity instruments; increases in notional volumes; and the mix of instruments between NYMEX WTI, Dated Brent and NYMEX Henry Hub commodities. See [Item 1. Financial Statements – Note 5. Derivative Instruments and Hedging Activities](#) and [Note 7. Fair Value Measurements and Disclosures](#).

Interest Expense and Capitalized Interest Interest expense and capitalized interest were as follows:

| <i>(millions, except unit rate)</i> | Three Months Ended June 30, | | Six Months Ended June 30, | |
|-------------------------------------|--------------------------------|---------|------------------------------|---------|
| | 2016 | 2015 | 2016 | 2015 |
| Interest Expense, Gross | \$ 102 | \$ 92 | \$ 209 | \$ 185 |
| Capitalized Interest | (24) | (38) | (52) | (73) |
| Interest Expense, Net | \$ 78 | \$ 54 | \$ 157 | \$ 112 |
| Unit Rate per BOE ⁽¹⁾ | \$ 2.04 | \$ 2.01 | \$ 2.07 | \$ 2.04 |

⁽¹⁾ Consolidated unit rates exclude sales volumes and expenses attributable to equity method investees.

The increase in interest expense, gross, for second quarter and the first six months of 2016 as compared with 2015 is primarily due to the impact of senior notes assumed by us in the Rosetta Merger during third quarter 2015, a portion of which were subsequently tendered during first quarter 2016 through proceeds derived from our Term Loan Facility. See [Item 1. Financial Statements - Note 6. Debt](#).

The decrease in capitalized interest for second quarter and the first six months of 2016 as compared with 2015 is primarily due to lower work in progress amounts related to major long-term projects in deepwater Gulf of Mexico (due to the Big Bend and Dantzer development projects that were completed in fourth quarter 2015, partially offset by the Gunflint development project that was completed July 2016), offshore Cyprus (due to the farm-out agreement with a partner for a 35% interest in Block 12

during fourth quarter 2015), offshore Falkland Islands (due to the Humpback prospect that began drilling operations in June 2015 and was determined to be a dry hole during fourth quarter 2015), and timing of onshore US activities. [See Item 1. Financial Statements - Note 8. Capitalized Exploratory Well Costs and Undeveloped Leasehold.](#)

Income Taxes

[See Item 1. Financial Statements – Note 11. Income Taxes](#) for a discussion of the change in our effective tax rate for second quarter and the first six months of 2016 as compared with 2015.

LIQUIDITY AND CAPITAL RESOURCES

Capital Structure/Financing Strategy

In seeking to effectively fund and monetize our discovered hydrocarbons, we employ a capital structure and financing strategy designed to provide sufficient liquidity throughout the volatile commodity price cycle, including the current commodity price environment. Specifically, we strive to retain the ability to fund long cycle, multi-year, capital intensive development projects throughout a range of scenarios, while also funding a continuing exploration program and maintaining capacity to capitalize on financially attractive periodic mergers and acquisitions activity.

We endeavor to maintain a strong balance sheet and investment grade debt rating in service of these objectives. We utilize a commodity price hedging program to reduce the impacts of commodity price volatility and enhance the predictability of cash flows along with a risk and insurance program to protect against disruption to our cash flows and the funding of our business.

We strive to maintain a minimum liquidity level to address volatility and risk. Traditional sources of our liquidity are cash flows from operations, cash on hand, available borrowing capacity under our Revolving Credit Facility, and proceeds from sales of non-core properties.

We occasionally access the capital markets to ensure adequate liquidity exists in the form of unutilized capacity under our Revolving Credit Facility or to refinance scheduled debt maturities. On January 6, 2016, we entered into the Term Loan Facility which provides for a three-year term loan facility for a principal amount of \$1.4 billion. In connection with the Term Loan Facility, we launched cash tender offers for certain Senior Notes assumed in the Rosetta Merger. The borrowings under the Term Loan Facility were used solely to fund the tender offers. Collectively, the result of these transactions provides for significant future interest expense savings with a shorter term debt maturity. While we have no near-term debt maturities, we may seek to access the capital markets to refinance a portion of our outstanding indebtedness. As of June 30, 2016, we had \$7.5 billion of long-term debt outstanding, \$2.4 billion of which is due first quarter 2019. [See Item 1. Financial Statements – Note 6. Debt.](#)

In addition, we evaluate potential strategic farm-out arrangements of our working interests for reimbursement of our capital spending and may consider non-core asset sales or other sources of funding. Furthermore, as required by the Israel Natural Gas Framework, we are required to divest certain of our interests within a stipulated period of time. During first half 2016, we received cash proceeds of approximately \$767 million primarily from our divestment of certain onshore US assets primarily in the DJ Basin, our Cyprus farm-out and the sale of our Karish and Tanin discoveries offshore Israel. On July 4, 2016, we signed a definitive agreement to divest a 3% interest in the Tamar field, offshore Israel, for \$369 million, subject to customary closing adjustments.

Cash on hand at June 30, 2016 totaled approximately \$1.3 billion, which includes both domestic and foreign cash, and there were no amounts outstanding under our Revolving Credit Facility. [See Item 1. Financial Statements – Note 6. Debt](#) and *Revolving Credit Facility*, below.

Our nearly 60% reduction in capital spending during the first six months of 2016 as compared to the same period of 2015, coupled with operating efficiencies to increase production at lower costs, has allowed us to closely align capital spending with our operating cash flows. We will continue our effort to invest capital at a level supported by current operating cash flows. Our financial capacity and lack of near-term debt maturities, coupled with our diversified global portfolio, provides us with flexibility in our investment decisions including execution of our major development projects and exploration activity.

To support our investment program, we expect that production resulting from our core onshore US development programs, combined with new production from the Big Bend and Dantzier development projects, which began producing in fourth quarter 2015, and from the Gunflint development, which began producing in July 2016, as well as completion of the Alba B3 compression project, which commenced production in July 2016, and presuming no significant further deterioration of prices, will result in cash flows which will be available to meet a portion of future capital commitments in 2016 and subsequent years. See Results of Operations above.

We are currently evaluating potential development and/or financing scenarios for our significant natural gas discoveries offshore Eastern Mediterranean. The magnitude of these discoveries presents technical and financial challenges for us due to

[Table of Contents](#)

the large-scale development requirements. Each of these development options, including the development of Leviathan infrastructure to supply domestic and regional demands, would require a multi-billion dollar investment and require a number of years to complete. We received approval from the Government of Israel of a revised stability provision as part of the Israel Natural Gas Framework which is another key milestone in progressing the Leviathan project to development sanction. See Update on Israel Natural Gas Regulatory Framework, above.

Available Liquidity Information regarding cash and debt balances is as follows:

| <i>(millions, except percentages)</i> | June 30, 2016 | December 31, 2015 |
|--|------------------|----------------------|
| Cash and Cash Equivalents | \$ 1,300 | \$ 1,028 |
| Amount Available to be Borrowed Under Revolving Credit Facility ⁽¹⁾ | 4,000 | 4,000 |
| Total Liquidity | \$ 5,300 | \$ 5,028 |
| Total Debt ⁽²⁾ | \$ 7,966 | \$ 7,976 |
| Total Shareholders' Equity | 9,713 | 10,370 |
| Ratio of Debt-to-Book Capital ⁽³⁾ | 45% | 43% |

⁽¹⁾ See *Revolving Credit Facility*, below.

⁽²⁾ Total debt includes capital lease obligations and excludes unamortized debt discount/premium.

⁽³⁾ We define our ratio of debt-to-book capital as total debt (which includes long-term debt excluding unamortized discount, the current portion of long-term debt, and short-term borrowings) divided by the sum of total debt plus shareholders' equity.

Cash and Cash Equivalents We had approximately \$1.3 billion in cash and cash equivalents at June 30, 2016, primarily denominated in US dollars and invested in money market funds and short-term deposits with major financial institutions. Approximately \$347 million of this cash is attributable to our foreign subsidiaries. We have recorded a related deferred tax liability on undistributed foreign earnings for the future additional US tax liability for the US and foreign tax rate differences, net of estimated foreign tax credit.

Revolving Credit Facility Our Revolving Credit Facility matures on August 27, 2020. The commitment is \$4.0 billion through the maturity date of the Revolving Credit Facility. As of June 30, 2016, no amounts were outstanding under the Revolving Credit Facility. Borrowings under our Revolving Credit Facility subject us to interest rate risk. [See Item 1. Financial Statements – Note 6. Debt](#) and [Item 3. Quantitative and Qualitative Disclosures About Market Risk](#).

Commodity Derivative Instruments We use various derivative instruments in connection with anticipated crude oil and natural gas sales to minimize the impact of product price fluctuations and ensure cash flow for future capital needs. Such instruments may include variable to fixed price commodity swaps, two-way collars, three-way collars, swaptions and enhanced swaps.

Current period settlements on commodity derivative instruments impact our liquidity, since we are either paying cash to, or receiving cash from, our counterparties. We net settle by counterparty based on netting provisions within the master agreements. None of our counterparty agreements contain margin requirements.

Commodity derivative instruments are recorded at fair value in our consolidated balance sheets, and changes in fair value are recorded in earnings in the period in which the change occurs. As of June 30, 2016, the fair value of our commodity derivative assets was \$229 million and the fair value of our commodity derivative liabilities was \$66 million (after consideration of netting provisions within our master agreements). [See Item 1. Financial Statements – Note 7. Fair Value Measurements and Disclosures](#), for a description of the methods we use to estimate the fair values of commodity derivative instruments, and *Credit Risk*, below.

Credit Risk We monitor the creditworthiness of our trade creditors, joint venture partners, hedge counterparties, and financial institutions on an ongoing basis. Counterparty credit downgrades or liquidity problems could result in a delay in our receiving proceeds from commodity sales, reimbursement of joint venture costs, and potential delays in our major development projects. As operator of the joint ventures, we pay joint venture expenses and make cash calls on our non-operating partners for their respective shares of joint venture costs. Our projects are capital cost intensive and, in some cases, a non-operating partner may experience a delay in obtaining financing for its share of the joint venture costs or have liquidity problems resulting in slow payment of joint venture costs. In addition, in the event of bankruptcy or insolvency of a joint venture partner, we may be required to complete their share of remediation activities or fulfill their lease obligations which could result in significant financial losses.

We are unable to predict sudden changes in a party's creditworthiness or ability to perform. Even if we do accurately predict such sudden changes, our ability to negate these risks may be limited and we could incur significant financial losses.

Credit enhancements have been obtained from some parties in the form of parental guarantees, letters of credit or credit insurance; however, not all of our counterparty credit is protected through guarantees or credit support. In addition, we maintain

credit insurance associated with specific purchasers. However, nonperformance by a trade creditor, joint venture partner, hedge counterparty or financial institution could result in significant financial losses.

Contractual Obligations

Marcellus Shale Joint Development Agreement The joint development agreement for our jointly owned Marcellus Shale acreage provides for a multi-year drilling and development plan (default plan). We and CONSOL have agreed to an annual plan that provides for fewer wells to be drilled than the number of wells that was provided for in the default plan, and, for 2016, the amount of capital investment allocated to the Marcellus Shale core area will be less than the amount provided for in the default plan. Each of us has a non-consent right, which is the right to elect not to participate in all (but not less than all) of the operations provided for the following year. If one of us elects to exercise the non-consent right, then the other partner, in its sole discretion, may determine the number of wells, if any, it will drill in such year, which may be significantly less than the number of wells that was provided for in the default plan, or none at all. In the event we elect to exercise our non-consent right for a given year, we would still have to pay the carried costs that are contemplated by the development plan for that non-consent year. Under the joint development agreement, this non-consent right may be exercised by each partner twice (in non-consecutive years) prior to the termination of the default plan at the end of 2020. Neither of us has exercised the non-consent right, and thus, each of us may still elect to exercise the non-consent right twice (in non-consecutive years) prior to the end of 2020.

CONSOL Carried Cost Obligation See [Item 1. Financial Statements - Note 13. Commitments and Contingencies](#).

Exploration Commitments The terms of some of our production sharing contracts, licenses or concession agreements may require us to conduct certain exploration activities, including drilling one or more exploratory wells or acquiring seismic data, within specific time periods. These obligations can extend over periods of several years, and failure to conduct such exploration activities within the prescribed periods could lead to loss of leases or exploration rights.

Continuous Development Obligations Although the majority of our assets are held by production, certain of our onshore US assets are held through continuous development obligations. Therefore, we are contractually obligated to fund a level of development activity in these areas and failure to meet these obligations may result in the loss of a lease. Our 2016 capital program allows for managing these obligations.

Delivery and Firm Transportation Agreements We have entered into various long-term gathering, processing, transportation and delivery contracts for some of our onshore US crude oil and natural gas production. These contracts may commit us to deliver minimum volumes and require us to make payments for any shortfalls in delivering or transporting the minimum volumes under the commitments. We may use long-term contracts such as these, which may range in term from one to 40 years, to provide flow assurance for production in over-supplied basins with constrained infrastructure, such as currently in the Marcellus Shale, and to enable our production to reach higher priced out-of-basin locations.

Although we strive to schedule well completion activities to meet the minimum volumes under the commitments, we may experience temporary, and possibly prolonged, delivery or transportation shortfalls. During first half 2016, we incurred expense of approximately \$23 million related to deficiencies and/or unutilized commitments. We expect to continue to incur deficiency and/or unutilized costs in the near-term as development activities continue. For full year 2016, we estimate these costs could range from approximately \$45 million to \$55 million. Should commodity prices continue to remain low or decline further, or we are unable to continue to develop our properties as planned, or certain wells become uneconomic and are shut-in, we could incur additional shortfalls in delivering or transporting the minimum volumes under these commitments. In the event that these commitments are not otherwise offset, we could be required to make future payments for any shortfalls. While we continually seek to optimize under-utilized assets through capacity release and third-party arrangements, as well as, for example, through the shifting of transportation of production from rail cars to pipelines when we receive a higher netback price, we may continue to experience these shortfalls both in the near and long-term.

Credit Rating Events We do not have any triggering events on our corporate debt that would cause a default in case of a downgrade of our credit rating. In addition, there are no existing ratings triggers in any of our commodity hedging agreements that would require the posting of collateral. However, a series of downgrades or other negative rating actions could increase our cost of financing, and may increase our requirements to post collateral as financial assurance of performance under certain other contractual arrangements such as pipeline transportation contracts, crude oil and natural gas sales contracts, work commitments and certain abandonment obligations. A requirement to post collateral could have a negative impact on our liquidity.

Cash Flows

Cash flow information is as follows:

| <i>(millions)</i> | Six Months Ended June 30, | |
|---|------------------------------|---------|
| | 2016 | 2015 |
| Total Cash Provided By (Used in) | | |
| Operating Activities | \$ 440 | \$ 966 |
| Investing Activities | (51) | (1,812) |
| Financing Activities | (117) | 941 |
| Increase in Cash and Cash Equivalents | \$ 272 | \$ 95 |

Operating Activities Net cash provided by operating activities for the first six months of 2016 decreased significantly as compared with 2015. Decreases in average realized commodity prices and lower settlements of commodity derivative instruments were partially offset by increases in sales volumes. Working capital changes resulted in a \$381 million operating cash flow reduction in the first six months of 2016 as compared with a positive impact of \$34 million in the first six months of 2015.

Investing Activities Our investing activities include capital spending on a cash basis for oil and gas properties and investments in unconsolidated subsidiaries accounted for by the equity method. These investing activities may be offset by proceeds from property sales or dispositions, including farm-out arrangements, which may result in reimbursement for capital spending that had occurred in prior periods. Capital spending for property, plant and equipment decreased by \$1.09 billion during the first six months of 2016 as compared with 2015, primarily due to a reduced capital spending program. Investing activities included \$6 million in CONE Gathering LLC during the first six months of 2016 as compared with \$65 million in the same period of 2015. We received \$767 million in proceeds from asset divestitures during the first six months of 2016, as compared with \$151 million during the same period in 2015.

Financing Activities Our financing activities include the issuance or repurchase of our common stock, payment of cash dividends on our common stock, the borrowing of cash and the repayment of borrowings. During the first six months of 2016, funds were provided by cash proceeds from the term loan acquisition (\$1.4 billion). We used cash to pay dividends on our common stock (\$86 million), fund the purchase of certain of our outstanding senior notes (\$1.38 billion), and make principal payments related to capital lease obligations (\$27 million).

In comparison, during the first six months of 2015, funds were provided by cash proceeds from the issuance of shares of Company common stock to the public (\$1.1 billion). We used cash to pay dividends on our common stock (\$134 million) and make principal payments related to capital lease obligations (\$29 million).

[See Item 1. Financial Statements – Consolidated Statements of Cash Flows.](#)

Investing Activities

Acquisition, Capital and Exploration Expenditures Information for investing activities (on an accrual basis) is as follows:

| <i>(millions)</i> | Three Months Ended June 30, | | Six Months Ended June 30, | |
|--|--------------------------------|--------|------------------------------|----------|
| | 2016 | 2015 | 2016 | 2015 |
| Acquisition, Capital and Exploration Expenditures | | | | |
| Property Acquisition ⁽¹⁾ | \$ 23 | \$ 39 | \$ 42 | \$ 65 |
| Exploration | 58 | 71 | 156 | 140 |
| Development | 166 | 593 | 394 | 1,237 |
| Midstream | 5 | 39 | 20 | 97 |
| Corporate and Other | 10 | 36 | 20 | 59 |
| Total | \$ 262 | \$ 778 | \$ 632 | \$ 1,598 |
| Other | | | | |
| Investment in Equity Method Investee ⁽²⁾ | \$ — | \$ 21 | \$ 6 | \$ 65 |
| Increase in Capital Lease Obligations | \$ — | \$ 8 | \$ — | \$ 31 |

⁽¹⁾ Property acquisition cost for 2016 includes \$17 million in the DJ Basin, \$16 million in the Marcellus Shale, \$4 million in the Permian Basin and \$3 million in the Eagle Ford Shale. Proved property acquisition cost for 2015 includes \$26 million in the DJ Basin and \$39 million in the Marcellus Shale.

⁽²⁾ Investment in equity method investee represents primarily contributions to CONE Gathering LLC which owns and operates the natural gas gathering infrastructure associated with our Marcellus Shale joint venture.

Total expenditures decreased during the first six months of 2016 as compared with 2015 due to our reduced capital spending program. See [Operating Outlook – 2016 Capital Investment Program](#), above.

Financing Activities

Long-Term Debt Our principal source of liquidity is our Revolving Credit Facility that matures August 27, 2020. At June 30, 2016, there were no borrowings outstanding under the Revolving Credit Facility, leaving \$4.0 billion available for use. We may rely on our Revolving Credit Facility to help fund our capital investment program, and may periodically borrow amounts for working capital purposes. On January 6, 2016, we entered into the Term Loan Facility with Citibank, N.A., as administrative agent, Mizuho Bank, Ltd., as syndication agent, and certain other financial institutions party thereto, which provides for a three-year term loan facility for a principal amount of \$1.4 billion. In connection with the Term Loan Facility, we launched cash tender offers for certain Senior Notes assumed in the Rosetta Merger. The borrowings under the Term Loan Facility were used solely to fund the tender offers. [See Item 1. Financial Statements – Note 6. Debt.](#)

Our outstanding fixed-rate debt (excluding capital lease obligations) totaled approximately \$6.1 billion at June 30, 2016. The weighted average interest rate on fixed-rate debt was 5.69%, with maturities ranging from March 2019 to August 2097.

Dividends We paid total cash dividends of 20 cents per share of common stock during the first six months of 2016 as compared with 36 cents per share during the first six months of 2015.

On July 26, 2016, our board of directors declared a quarterly cash dividend of 10 cents per common share, which will be paid on August 22, 2016 to shareholders of record on August 8, 2016. The amount of future dividends will be determined on a quarterly basis at the discretion of our board of directors and will depend on earnings, financial condition, capital requirements and other factors.

Exercise of Stock Options We received cash proceeds from the exercise of stock options of \$7 million during the first six months of 2016 and \$4 million during the first six months of 2015.

Common Stock Repurchases We receive shares of common stock from employees for the payment of withholding taxes due on the vesting of restricted shares issued under stock-based compensation plans. We received 232,870 shares with a value of \$8 million during the first six months of 2016 and 253,597 shares with a value of \$12 million during the first six months of 2015.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Commodity Price Risk

Derivative Instruments Held for Non-Trading Purposes We are exposed to market risk in the normal course of business operations, and the volatility of crude oil and natural gas prices continues to impact the oil and gas industry. Due to the volatility of crude oil and natural gas prices, we continue to use derivative instruments as a means of managing our exposure to price changes.

At June 30, 2016, we had various open commodity derivative instruments related to crude oil and natural gas. Changes in fair value of commodity derivative instruments are reported in earnings in the period in which they occur. Our open commodity derivative instruments were in a net asset position with a fair value of \$163 million. Based on the June 30, 2016 published commodity futures price curves for the underlying commodities, a hypothetical price increase of \$10.00 per Bbl for crude oil would decrease the fair value of our net commodity derivative asset by approximately \$190 million. A hypothetical price increase of \$0.50 per MMBtu for natural gas would decrease the fair value of our net commodity derivative asset by approximately \$44 million. Our derivative instruments are executed under master agreements which allow us, in the event of default, to elect early termination of all contracts with the defaulting counterparty. If we choose to elect early termination, all asset and liability positions with the defaulting counterparty would be net cash settled at the time of election. [See Item 1. Financial Statements – Note 5. Derivative Instruments and Hedging Activities.](#)

Interest Rate Risk

Changes in interest rates affect the amount of interest we pay on borrowings under our Revolving Credit Facility and Term Loan Facility and the amount of interest we earn on our short-term investments.

At June 30, 2016, we had approximately \$7.5 billion (excluding capital lease obligations) of long-term debt, net, outstanding. Of this amount, \$6.1 billion was fixed-rate debt, net, with a weighted average interest rate of 5.69%. Although near term changes in interest rates may affect the fair value of our fixed-rate debt, they do not expose us to interest rate risk or cash flow loss.

However, we are exposed to interest rate risk related to our interest-bearing cash and cash equivalents balances. As of June 30, 2016, our cash and cash equivalents totaled nearly \$1.3 billion, approximately 48% of which was invested in money market funds and short-term investments with major financial institutions. In addition, borrowings under the Term Loan Facility are subject to variable interest rates which expose us to the risk of earnings or cash flow loss due to potential increases in market

interest rates. A change in the interest rate applicable to our variable-rate debt could expose us to additional interest cost. While we currently have no interest rate derivative instruments as of June 30, 2016, we may invest in such instruments in the future in order to mitigate interest rate risk. A change in the interest rate applicable to our short-term investments would have a de minimis impact.

Foreign Currency Risk

The US dollar is considered the functional currency for each of our international operations. Substantially all of our international crude oil, natural gas and NGL production is sold pursuant to US dollar denominated contracts. Transactions, such as operating costs and administrative expenses that are paid in a foreign currency, are remeasured into US dollars and recorded in the financial statements at prevailing currency exchange rates. Certain monetary assets and liabilities, such as taxes payable in foreign tax jurisdictions, are settled in the foreign local currency. A reduction in the value of the US dollar against currencies of other countries in which we have material operations could result in the use of additional cash to settle operating, administrative, and tax liabilities.

Net transaction gains and losses were de minimis for the three and six months ended June 30, 2016 and 2015.

We currently have no foreign currency derivative instruments outstanding. However, we may enter into foreign currency derivative instruments (such as forward contracts, costless collars or swap agreements) in the future if we determine that it is necessary to invest in such instruments in order to mitigate our foreign currency exchange risk.

Disclosure Regarding Forward-Looking Statements

This quarterly report on Form 10-Q contains forward-looking statements within the meaning of the federal securities laws. Forward-looking statements give our current expectations or forecasts of future events. These forward-looking statements include, among others, the following:

- our growth strategies;
- our ability to successfully and economically explore for and develop crude oil and natural gas resources;
- anticipated trends in our business;
- our future results of operations;
- our liquidity and ability to finance our exploration and development activities;
- market conditions in the oil and gas industry;
- our ability to make and integrate acquisitions;
- the impact of governmental fiscal terms and/or regulation, such as those involving the protection of the environment or marketing of production, as well as other regulations; and
- access to resources.

Forward-looking statements are typically identified by use of terms such as “may,” “will,” “expect,” “believe,” “anticipate,” “estimate,” “intend,” and similar words, although some forward-looking statements may be expressed differently. These forward-looking statements are made based upon our current plans, expectations, estimates, assumptions and beliefs concerning future events impacting us and therefore involve a number of risks and uncertainties. We caution that forward-looking statements are not guarantees and that actual results could differ materially from those expressed or implied in the forward-looking statements. You should consider carefully the statements under Item 1A. Risk Factors included in our Annual Report on Form 10-K for the year ended December 31, 2015 and in this quarterly report on Form 10-Q, which describe factors that could cause our actual results to differ from those set forth in the forward-looking statements. Our Annual Report on Form 10-K for the year ended December 31, 2015 is available on our website at www.nobleenergyinc.com.

Item 4. Controls and Procedures

Based on the evaluation of our disclosure controls and procedures by our principal executive officer and our principal financial officer, as of the end of the period covered by this quarterly report, each of them has concluded that our disclosure controls and procedures (as defined in Rule 13a-15(e) and Rule 15d-15(e) under the Securities Exchange Act of 1934, as amended (Exchange Act)), are effective. There were no changes in internal control over financial reporting (as defined in Exchange Act Rule 13a-15(f) and 15d-15(f)) that occurred during the quarter covered by this report that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Part II. Other Information

Item 1. Legal Proceedings

See discussion of legal proceedings in [Part I. Financial Information, Item 1. Financial Statements - Note 13. Commitments and Contingencies](#) of this Form 10-Q, which is incorporated by reference into this Part II. Item 1, as well as discussion in Item 3. Legal Proceedings, of our Annual Report on Form 10-K for the year ended December 31, 2015.

Item 1A. Risk Factors

There have been no material changes from the risk factors disclosed in Item 1A. Risk Factors of our Annual Report on Form 10-K for the year ended December 31, 2015, other than the following:

Certain proposed ballot measures considered in Colorado seek to vastly expand the right of local governments to regulate and dictate location parameters of future crude oil and natural gas exploration and development activities, and/or limit or prohibit crude oil and natural gas production and development activities in their jurisdictions. If these measures are approved and implemented, they could have material adverse effects on our operations in Colorado and the value of our DJ Basin assets and development activities.

Certain interest groups in Colorado opposed to crude oil and natural gas development generally, and hydraulic fracturing in particular, have advanced various ballot initiatives designed to significantly limit or prevent crude oil and natural gas development. The State of Colorado approved for signature gathering four ballot measures which would adversely impact our Colorado operations. A measure that would grant local communities certain additional rights to self-governance, including ability to ban certain businesses from operating in their jurisdictions has been withdrawn. Other measures would establish a constitutional right to a healthy environment and obligate local governments to protect the environment, grant local governments control over crude oil and natural gas development and require that all new crude oil and natural gas facilities be located 2,500 feet from occupied structures and an expansive list of landscape features called "areas of special concern." All of these measures are available for signature gathering and the proponents have until August 8, 2016 to gather the requisite number of signatures to qualify for the November 2016 ballot.

If any initiative or legislation of this nature is implemented and survives legal challenge, significant additional limitations or prohibitions could be placed on crude oil and natural gas production and development within certain areas of Colorado or the state as a whole. This could adversely affect the cost, manner, and feasibility of development activities in Colorado, particularly those involving hydraulic fracturing, and significantly and adversely affect the value of our assets, impede our growth and trigger a substantial impairment of these assets.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

The following table sets forth, for the periods indicated, our share repurchase activity:

| Period | Total Number of Shares Purchased ⁽¹⁾ | Average Price Paid Per Share | Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs | Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs (in thousands) |
|----------------------|---|------------------------------|--|---|
| 4/1/2016 - 4/30/2016 | 2,456 | \$ 33.97 | — | — |
| 5/1/2016 - 5/31/2016 | 879 | 35.50 | — | — |
| 6/1/2016 - 6/30/2016 | 618 | 35.12 | — | — |
| Total | 3,953 | \$ 34.49 | — | — |

⁽¹⁾ Stock repurchases during the period related to common stock received by us from employees for the payment of withholding taxes due on shares of common stock issued under stock-based compensation plans.

[Table of Contents](#)

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

The information required by this Part II. Item 6 is set forth in the Index to Exhibits accompanying this quarterly report on Form 10-Q and is incorporated by reference into this Part II. Item 6.

Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

NOBLE ENERGY, INC.
(Registrant)

Date August 3, 2016

/s/ Kenneth M. Fisher
Kenneth M. Fisher
Executive Vice President, Chief Financial Officer

Index to Exhibits

| <u>Exhibit Number</u> | <u>Exhibit</u> |
|-----------------------|---|
| 2.1 | Asset Acquisition Agreement dated August 17, 2011 between CNX Gas Company LLC and Noble Energy, Inc. including Appendix I (Definitions) thereto (filed as Exhibit 2.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2011 and incorporated herein by reference). |
| 2.2 | Agreement and Plan of Merger, dated as of May 10, 2015, by and among Noble Energy, Inc., Bluebonnet Merger Sub Inc. and Rosetta Resources Inc. (filed as Exhibit 2.1 of the Registrant's Current Report on Form 8-K (Date of Report: May 10, 2015) filed on May 11, 2015 and incorporated herein by reference). |
| 3.1 | Restated Certificate of Incorporation of Noble Energy Inc., (filed as Exhibit 3.3 to the Registrant's Current Report on Form 8-K (Date of Report: July 26, 2016) filed on July 28, 2016 and incorporated herein by reference). |
| 3.2 | By-Laws of Noble Energy, Inc. (as amended through July 27, 2016), (filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K (Date of Event: July 27, 2016) filed on July 29, 2016 and incorporated herein by reference). |
| 3.3 | Certificate of Elimination of the Series A Junior Participating Preferred Stock of Noble Energy, Inc., (filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K (Date of Report: July 26, 2016) filed on July 28, 2016 and incorporated herein by reference). |
| 3.4 | Certificate of Elimination of the Series B Mandatorily Convertible Preferred Stock of Noble Energy, Inc., (filed as Exhibit 3.2 to the Registrant's Current Report on Form 8-K (Date of Report: July 26, 2016) filed on July 28, 2016 and incorporated herein by reference). |
| 10.1* | Amendment No. 2 to the Noble Energy, Inc. 2005 Deferred Compensation Plan, dated effective as of January 1, 2015, filed herewith. |
| 10.2* | Amendment No. 3 to the Noble Energy, Inc. 2005 Deferred Compensation Plan, dated effective as of August 1, 2016, filed herewith. |
| 12.1 | Calculation of ratio of earnings to fixed charges, filed herewith. |
| 31.1 | Certification of the Company's Chief Executive Officer Pursuant To Section 302 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Section 7241), filed herewith. |
| 31.2 | Certification of the Company's Chief Financial Officer Pursuant To Section 302 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Section 7241), filed herewith. |
| 32.1 | Certification of the Company's Chief Executive Officer Pursuant To Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Section 1350), furnished herewith. |
| 32.2 | Certification of the Company's Chief Financial Officer Pursuant To Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Section 1350), furnished herewith. |
| 101.INS | XBRL Instance Document |
| 101.SCH | XBRL Schema Document |
| 101.CAL | XBRL Calculation Linkbase Document |
| 101.LAB | XBRL Label Linkbase Document |
| 101.PRE | XBRL Presentation Linkbase Document |
| 101.DEF | XBRL Definition Linkbase Document |

* Management contract or compensatory plan or arrangement required to be filed as an exhibit hereto.

** Copies of exhibits will be furnished upon prepayment of 25 cents per page. Requests should be addressed to the Executive Vice President and Chief Financial Officer, Noble Energy, Inc., 1001 Noble Energy Way, Houston, Texas 77070.

AMENDMENT NO. 2 TO THE
NOBLE ENERGY, INC.
2005 DEFERRED COMPENSATION PLAN

Pursuant to the provisions of Section 8.1 thereof, the Noble Energy, Inc. 2005 Deferred Compensation Plan, as amended and restated effective as of January 1, 2009 (the “Plan”), is hereby amended in the following respects only:

FIRST: Section 1.27 of the Plan is hereby amended by restatement in its entirety to read as follows:

1.27. “Settlement Date” shall mean the date on which a lump sum payment will be made, or the date on which an installment distribution will commence being made, to or with respect to a Participant. A Participant’s Settlement Date shall be (i) for a benefit payable from such Participant’s Participant Deferral Account or Employer Matching Contribution Account upon his or her Retirement, the date such benefit is to be paid or commence being paid under the elections made by such Participant on his or her Participant Election Forms in effect with respect to the Plan, and (ii) for a benefit payable from such Participant’s Participant Deferral Account or Employer Matching Contribution Account upon his or her Separation from Service for any reason other than Retirement, and for a benefit payable from a Participant’s Employer Retirement Savings Contribution Account or Employer Transition Contribution Account to be made in connection with a Participant’s Separation from Service, the date determined by the Committee that is no later than ninety (90) days after such Separation from Service; provided, however, that the Settlement Date that would otherwise apply with respect to a benefit to be paid to a Participant who is a Specified Employee shall be postponed to the earlier of (i) the first business day that is six (6) months after the date of his or her Separation from Service, or (ii) a date determined by the Committee that is no later than ninety (90) days after the date of such Participant’s death following his or her Separation from Service.

SECOND: Section 2.1 of the Plan is hereby amended by restatement its entirety to read as follows:

2.1 Participants. Each Eligible Employee shall become a Participant in this Plan upon electing to make a Base Salary or Bonus deferral pursuant to Section 2.2 of the Plan. In addition, in the case of an Eligible Employee who has never elected to make a Base Salary or Bonus deferral pursuant to Section 2.2 of the Plan, or in the case of an employee of an Employer who is not an Eligible Employee but who is otherwise a member of a select group of management or highly compensated employees of the Company and its participating affiliates, if the amount of the Employer retirement savings contribution and/or Employer transition contribution for a Plan Year made (or to be made) to the Qualified Plan for such employee is less than the amount that such contribution would have been if the Qualified Plan had been administered without regard to the Statutory Limitations, such employee shall become a Participant (but not an Eligible Employee) in this Plan as of the last day of such year.

THIRD: Section 3.3 of the Plan is hereby amended by restatement in its entirety to read as follows:

3 . 3 Employer Retirement Savings Contribution Accounts. For each Plan Year for which an Employer makes a retirement savings contribution to the Qualified Plan for a Participant, such Participant’s Employer Retirement Savings Contribution Account (known prior to January 1, 2015, as the Employer Profit Sharing Contribution Account) shall be credited with an amount equal to the amount by which (i) the amount of the Employer retirement savings contribution that would have been made to the Qualified Plan for such Participant for such year if the Qualified Plan had been administered without regard to the Statutory Limitations, exceeds (ii) the amount of the Employer retirement savings contribution actually credited or to be credited to such Participant under the Qualified Plan for such year. The amount to be credited to a Participant’s Employer Retirement Savings Contribution Account for a Plan Year shall be credited to such Account as of the last day of such year. Amounts credited to a Participant’s Employer Retirement Savings Contribution Account shall vest at the same time and under the same conditions as such amounts would have vested under the Qualified Plan had such contributions been made to the Qualified Plan, and shall be deemed to be credited through December 31, 2013, with notional earnings at the Crediting Rate from the date credited to such Account through the earlier of the Valuation Date or December 31, 2013. The amounts credited to a Participant’s Employer Retirement Savings Contribution Account after December 31, 2013, shall be deemed to be credited with notional earnings either at the Crediting Rate, or at the Participant’s election, in accordance with other investment directions given by the Participant in accordance with Section 3.6, through the Valuation Date. Notwithstanding the foregoing, upon a Change of Control, all amounts credited to a Participant’s Employer Retirement Savings Contribution Account (including notional earnings thereon) shall be fully vested.

FOURTH: Section 4.1 of the Plan is hereby amended by restatement in its entirety to read as follows:

4 . 1 Retirement Benefit. In the event of the Participant’s Retirement, the Participant shall be entitled to receive an

amount equal to the total balance of the Participant's Accounts credited with notional earnings as provided in Article 3 of the Plan through the Valuation Date. The benefit payable under this Section 4.1 from a Participant's Employer Retirement Savings Contribution Account and Employer Transition Contribution Account shall be paid to such Participant in the form of a single lump sum payment on his or her Settlement Date. The benefit payable pursuant to this Section 4.1 from a Participant's Participant Deferral Account or Employer Matching Contribution Account attributable to both deferrals made pursuant to Section 2.2 and amounts credited to the Employer Matching Contribution Account for services performed for the Plan Years prior to January 1, 2014, including the notional earnings credited with respect to such deferrals and amounts, (i) shall be paid to such Participant in the form of a single lump sum payment, or in the form of annual installments over a period of not more than fifteen (15) years, as elected by such Participant in his or her Participant Election Form in effect with respect to such Plan Years, and (ii) shall be paid or commence being paid, as the case may be, on such Participant's Settlement Date. The benefit payable pursuant to this Section 4.1 from a Participant's Participant Deferral Account or Employer Matching Contribution Account attributable to both deferrals made pursuant to Section 2.2 and amounts credited to the Employer Matching Contribution Account for services performed for any Plan Year after December 31, 2013, including the notional earnings credited with respect to such deferrals and amounts, (i) shall be paid to such Participant in the form of a single lump sum payment, or in the form of annual installments over a period of not more than fifteen (15) years, as elected by such Participant in his or her Participant Election Form in effect for such Plan Year, and (ii) shall be paid or commence being paid, as the case may be, on such Participant's Settlement Date. For the purposes of this Section 4.1, a distribution election (and any subsequent change with respect to the form or time of payment of a benefit pursuant to this Section 4.1) shall be made by a Participant on his or her Participant Election Form; provided, however, that except for a transition period election made on or before December 31, 2008 pursuant to Section 4.3 of the Plan, once a distribution election has been made by a Participant, no subsequent change with respect to an elected time or form of payment to be made pursuant to this Section 4.1 shall become effective for the purposes of the Plan (i) until a date that is at least twelve (12) months after the date of the filing of such change, (ii) unless the date for the payment or commencement of payments being changed is at least five (5) years after the date as of which such Participant's benefit would otherwise have been paid or commenced being paid under this Section 4.1 in the absence of such change, and (iii) unless such change is filed with or as directed by the Administrator not less than twelve (12) months before the date the payment being changed is scheduled to be paid or commence being paid.

FIFTH: Section 4.2 of the Plan is hereby amended by restatement in its entirety to read as follows:

4.2 Termination Benefit. Upon a Participant's Separation from Service for any reason other than Retirement, the Applicable Employer shall pay to the Participant a termination benefit equal to the total vested balance of the Participant's Accounts credited with notional earnings as provided in Article 3 of the Plan through the Valuation Date. Such termination benefit shall be paid in a single lump sum payment on the Participant's Settlement Date. Any amount credited to a Participant's Employer Matching Contribution Account or Employer Retirement Savings Contribution Account that is not vested at the time of such Participant's Separation from Service shall be forfeited by such Participant.

SIXTH: Section 6.1 of the Plan is hereby amended by restatement in its entirety to read as follows:

6.1 Election. A Participant may make an irrevocable election on his or her Participant Election Form at the time of making an election to defer Base Salary or Bonus to take a Scheduled Withdrawal from a Scheduled Withdrawal Account to be established for such Participant for such purpose, including any earnings credited thereon. Such Participant may elect to receive the Scheduled Withdrawal in any Plan Year that begins at least two (2) years after the end of the Election Period in which such Scheduled Withdrawal is elected, and may elect to have the Scheduled Withdrawal distributed over a period of up to four (4) years. The Participant may irrevocably elect to make additional deferrals into a Scheduled Withdrawal Account in subsequent Participant Election Forms that are effective for Plan Years before the Plan Year in which the Scheduled Withdrawal is to be made or commence being made, but may not change a Scheduled Withdrawal date for a particular Scheduled Withdrawal Account. One or more Scheduled Withdrawal Accounts may be established for a Participant. No Scheduled Withdrawal shall be available from an Employer Matching Contribution Account, an Employer Retirement Savings Contribution Account or an Employer Transition Contribution Account.

IN WITNESS WHEREOF, this Amendment has been executed by Noble Energy, Inc. on this 15th day of December, 2014, to

be effective as of January 1, 2015.

NOBLE ENERGY, INC.

By: /s/ David L. Stover

Title: President & CEO

060132 000217 10540755.2

AMENDMENT NO. 3 TO THE
NOBLE ENERGY, INC.
2005 DEFERRED COMPENSATION PLAN

Pursuant to the provisions of Section 8.1 thereof, the Noble Energy, Inc. 2005 Deferred Compensation Plan, as amended and restated effective as of January 1, 2009 (the "Plan"), is hereby amended in the following respects only:

FIRST: Section 3.7 of the Plan is hereby amended by restatement in its entirety to read as follows:

3.7 Retirement Restoration Plan Converted Accounts. Subject to and in accordance with Section 21 of the Noble Energy, Inc. Retirement Restoration Plan (the "Retirement Restoration Plan"), each Eligible Employee with a benefit under the Retirement Restoration Plan previously was permitted to elect to have credited to a Retirement Restoration Plan Converted Account the lump sum present value of his or her benefit under the Retirement Restoration Plan. Any other provision of this Plan to the contrary notwithstanding, the time and form of payment from a Retirement Restoration Plan Converted Account shall be identical to the time and form of payment provided for his or her benefit pursuant to the Retirement Restoration Plan, taking into account any change to his or her benefit payment election made in accordance with Section 21 of the Retirement Restoration Plan; provided, however, that a Participant may make a subsequent election to have his or her Retirement Restoration Plan Converted Account paid instead either in the form of a single lump sum payment or in the form of annual installments over a period of not more than fifteen (15) years, as elected by such Participant, that is paid or commences to be paid, as the case may be, on a date specified by the Participant; provided further, however, that no such subsequent change shall become effective for the purposes of the Plan (i) until a date that is at least twelve (12) months after the date of the filing of such change, (ii) unless the date for the payment or commencement of payments being changed is at least five (5) years after the date as of which such Participant's benefit would otherwise have been paid or commenced being paid under this Section 3.7 in the absence of such change, and (iii) unless such change is filed with or as directed by the Administrator not less than twelve (12) months before the date the payment being changed is scheduled to be paid or commence being paid. Amounts credited to a Participant's Retirement Restoration Plan Converted Account shall be fully vested at all times. The amounts credited to a Participant's Retirement Restoration Plan Converted Account shall be deemed to be credited with notional earnings either at the Crediting Rate, or at the Participant's election, in accordance with other investment directions given by the Participant in accordance with Section 3.6, through the Valuation Date.

SECOND: Section 8.1 of the Plan is hereby amended by restatement its entirety to read as follows:

8.1 Amendment or Termination of Plan. At any time prior to a Change in Control, the Board of Directors of the Company may amend or terminate the Plan, provided, however, that without the prior written consent of such Participant (or, if deceased, his or her Beneficiary), (i) no such amendment shall reduce the Crediting Rate applicable to a Participant's Account balance or installment distribution, (ii) no such amendment or termination may reduce or further defer the payment of a Participant's Account balance or installment distribution, and (iii) no such amendment or termination shall accelerate the time for the payment of a Participant's Account Balance or installment distribution in a manner that subjects such benefit to the tax imposed under Code section 409A. During the twenty-four (24) month period following a Change in Control, no amendment or termination of the Plan shall become effective with respect to a Participant or Beneficiary of a deceased Participant without the prior written consent of such Participant or Beneficiary. After the twenty-four (24) month period following a Change in Control, the Board of Directors of the Company shall have the same right to amend or terminate the Plan as such Board had prior to such Change in Control. Subject to all amendment restrictions of this Section 8.1, the Chief Executive Officer of the Company and the lead executive of the Company's Human Resources Department acting together may exercise the authority of the Board of Directors of the Company to amend the Plan in any manner that such executives determine in good faith will not increase or decrease the cost of any Employer's obligations under the Plan.

IN WITNESS WHEREOF, this Amendment has been executed by Noble Energy, Inc. on this 25th day of July, 2016, to be effective as of August 1, 2016.

NOBLE ENERGY, INC.

By: /s/ Arnold J. Johnson
Name: Arnold J. Johnson

Title: Senior Vice President, General Counsel and Secretary

060132 000217 17320003.2

Noble Energy, Inc.
Calculation of Ratio of Earnings to Fixed Charges

| | Six Months Ended June 30, | | Year Ended December 31, | | |
|---|------------------------------|------------|-------------------------|----------|----------|
| | 2016 | 2015 | 2014 | 2013 | 2012 |
| <i>(millions)</i> | | | | | |
| (Loss) Income From Continuing Operations Before Income Tax and Income From Equity Investees | \$ (994) | \$ (2,309) | \$ 1,540 | \$ 1,138 | \$ 1,170 |
| Add (Deduct) | | | | | |
| Fixed Charges | 222 | 435 | 349 | 296 | 288 |
| Capitalized Interest | (52) | (144) | (116) | (121) | (151) |
| Distributed Income From Equity Investees | 33 | 77 | 382 | 204 | 204 |
| Earnings as Defined | \$ (791) | \$ (1,941) | \$ 2,155 | \$ 1,517 | \$ 1,511 |
| Net Interest Expense | 157 | 263 | 210 | 158 | 125 |
| Capitalized Interest | 52 | 144 | 116 | 121 | 151 |
| Interest Portion of Rental Expense | 13 | 28 | 23 | 17 | 12 |
| Fixed Charges as Defined | \$ 222 | \$ 435 | \$ 349 | \$ 296 | \$ 288 |
| Ratio of Earnings to Fixed Charges | — | — | 6.2 | 5.1 | 5.2 |
| Amount by Which Earnings Were Insufficient to Cover Fixed Charges | \$ 1,013 | \$ 2,376 | \$ — | \$ — | \$ — |

**Certification Pursuant to
Section 302 of the Sarbanes-Oxley Act of 2002
(18 U.S.C. Section 7241)**

I, David L. Stover, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Noble Energy, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting, which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 3, 2016

/s/ David L. Stover

David L. Stover
Chief Executive Officer

**Certification Pursuant to
Section 302 of the Sarbanes-Oxley Act of 2002
(18 U.S.C. Section 7241)**

I, Kenneth M. Fisher, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Noble Energy, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting, which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 3, 2016

/s/ Kenneth M. Fisher
Kenneth M. Fisher
Chief Financial Officer

**Certification Pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002
(18 U.S.C. Section 1350)**

In connection with the accompanying Quarterly Report of Noble Energy, Inc. (the "Company") on Form 10-Q for the period ended June 30, 2016 (the "Report"), I, David L. Stover, Chief Executive Officer of the Company, hereby certify that to my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)); and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 3, 2016

/s/ David L. Stover

David L. Stover
Chief Executive Officer

**Certification Pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002
(18 U.S.C. Section 1350)**

In connection with the accompanying Quarterly Report of Noble Energy, Inc. (the "Company") on Form 10-Q for the period ended June 30, 2016 (the "Report"), I, Kenneth M. Fisher, Chief Financial Officer of the Company, hereby certify that to my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)); and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 3, 2016

/s/ Kenneth M. Fisher

Kenneth M. Fisher
Chief Financial Officer

