# Corporates

# **Berkshire Hathaway Energy Company**

Subsidiary of Berkshire Hathaway Inc. Full Rating Report

#### Ratings

| Long-Term IDR    | BBB+ |
|------------------|------|
| Short-Term IDR   | F2   |
| Senior Unsecured | BBB+ |

IDR – Issuer Default Rating.

#### **Rating Outlook**

Stable

#### **Financial Summary**

| Berkshire Hathaway Energy Company |         |        |  |  |
|-----------------------------------|---------|--------|--|--|
|                                   | LTM     |        |  |  |
| (\$ Mil.)                         | 6/30/16 | 2015   |  |  |
| Adjusted Revenue                  | 17,373  | 17,880 |  |  |
| Operating EBITDAR                 | 6,864   | 6,917  |  |  |
| Cash Flow from                    |         |        |  |  |
| Operations                        | 6,218   | 6,980  |  |  |
| Total Adjusted Debt               | 38,658  | 38,762 |  |  |
| Total Capitalization              | 60,877  | 60,009 |  |  |
| Capex/                            |         |        |  |  |
| Depreciation (%)                  | 213.7   | 242.0  |  |  |
| FFO Fixed-                        |         |        |  |  |
| Charge Coverage (x)               | 3.9     | 4.1    |  |  |
| FFO-Adjusted                      |         |        |  |  |
| Leverage (x)                      | 4.9     | 4.6    |  |  |
| Total Adjusted                    |         |        |  |  |
| Debt/EBITDAR (x)                  | 5.6     | 5.6    |  |  |
|                                   |         |        |  |  |

#### **Related Research**

U.S. Transmission and Distribution Utilities Handbook (A Detailed Review of Electric and Gas T&D Utilities — Second Edition) (May 2016)

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### **Key Rating Drivers**

**BRK Affiliation:** Berkshire Hathaway Energy Company's (BHE) ratings consider the favorable impact of affiliation with Berkshire Hathaway Inc. (BRK; AA–/Stable). As a result, BHE is able to retain capital typically paid out in dividends by publicly held investor-owned utilities (IOUs). This dynamic is a function of BRK's strong credit profile, large cash position (\$73 billion as of June 30, 2016) and investment appetite. Other benefits include BRK's ability to use tax shields and fund strategic growth opportunities.

**Diversified Asset Base:** BHE's ratings are supported by its large, high-quality portfolio of utility and utility-like assets primarily located in the U.S., Canada and the U.K. BHE owns three large integrated electric utilities with generally constructive regulatory compacts and average to moderately above industry average growth trends, operating in the U.S. Rocky Mountain/ Pacific Northwest, Midwest and Desert Southwest regions. The highly politicized Nevada solar energy debate injects a measure of uncertainty into the state's political/regulatory environment.

**Mergers and Acquisitions:** BHE has been an active consolidator in the utilities, power and gas (UPG) sector, acquiring high-quality, low-risk electric and gas utility, electric transmission and natural gas pipeline assets. Major acquisitions in recent years include AltaLink, L.P. (ALP) and NV Energy, Inc. (NVE; BBB–/Stable) in 2014 and 2013, respectively. The impact of M&A on BHE's credit will be driven by price, asset quality and funding choices. Debt-funded transactions and/or acquisition of higher-risk businesses could challenge future credit quality.

**Manageable Leverage:** Consolidated BHE leverage is relatively high. However, Fitch Ratings projects future cash flows from BHE's diverse portfolio of businesses to amply cover estimated parent-only obligations. BHE's parent-level debt increased sharply, reflecting the close of two major utility acquisitions in 2013 and 2014. Long-term debt at BHE topped out at \$38.6 billion in 2014 before declining to \$36.9 billion as of June 30, 2016. Fitch expects significant debt reduction will continue through 2020, absent further M&A activity.

**Rating Outlook:** The Stable Outlook considers BHE's relatively high consolidated leverage, strong cash flows and cash retention, funding and tax advantages associated with BRK affiliation. The Stable Outlook also reflects BHE's portfolio of high-quality utility and utility-like businesses.

# **Rating Sensitivities**

**Positive Rating Action:** High consolidated leverage limits positive rating actions in the near to intermediate term. Improvement in FFO-adjusted leverage to 4.0x or better on a sustained basis could result in future credit rating upgrades at BHE.

**Negative Rating Action:** Deterioration of BHE's FFO-adjusted leverage to 5.0x–5.5x or worse on a consistent basis would likely lead to future credit downgrades. Longer term, a change in ownership structure and/or strategic direction at BRK that eliminates or diminishes capital retention and other benefits available to BHE from its affiliation with BRK would likely lead to downgrades at BHE.

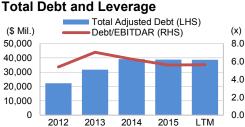
# **Financial Overview**

## Liquidity and Debt Structure

BHE's liquidity is strong, with total available consolidated liquidity of \$5.2 billion as of June 30, 2016. Liquidity consists of BHE's \$778 million in consolidated cash and \$4.4 billion of unused borrowing capacity under its \$6.3 billion of committed revolving credit facilities. BHE has a \$2 billion parent-only credit facility that matures in June 2019 and supports its CP program. Debt maturities are manageable, averaging \$2.2 billion in 2016-2019.

## **Debt Maturities and Liquidity**

| 2016                                    | 268    |
|---|--------|
| 2017                                    | 899    |
| 2018                                    | 3,619  |
| 2019                                    | 4,075  |
| 2020                                    | 2,012  |
| Thereafter                              | 27,674 |
| Cash and Cash Equivalents               | 778    |
| Undrawn Committed Facilities            | 5,203  |
| Source: Company data, Bloomberg, Fitch. |        |

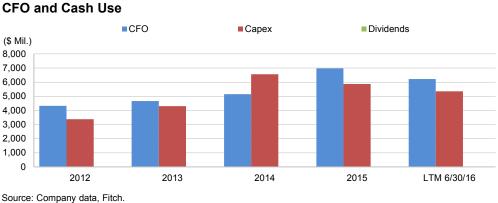


Source: Company data, Fitch.

6/30/16

# **Cash Flow Analysis**

BHE's FCF was \$864 million in the LTM ended June 30, 2016, as indicated in the Peer Group Analysis table on the page 3. Notwithstanding significant asset acquisitions, including NVE and ALP, and significant capital investment, BHE was FCF positive in 2012-2015. Over that period, BHE averaged approximately \$200 million in FCF annually. Fitch estimates that BHE will generate more than \$1.8 billion in average annual FCF during 2016-2020. Fitch estimates that FFO-adjusted debt will range from 4.6x-4.8x during 2016-2020.



6,000

**Related Criteria** 

Criteria for Rating Non-Financial Corporates (September 2016)

Parent and Subsidiary Rating Linkage (Fitch's Approach to Rating Entities within a Corporate Group Structure) (August 2016)

Recovery Ratings and Notching Criteria for Utilities (March 2016)

Rating U.S. Utilities, Power and Gas Companies (Sector Credit Factors) (March 2014)

# **Fitch**Ratings

# **Peer Group**

| Issuer               | Country |
|----------------------|---------|
| A-                   |         |
| Southern Company     | U.S.    |
| NextEra Energy, Inc. | U.S     |
|                      |         |
| BBB+                 |         |

Duke Energy Corporation U.S.

# **Issuer Rating History**

|                | LT IDR | Outlook/ |
|----------------|--------|----------|
| Date           | (FC)   | Watch    |
| May 5, 2016    | BBB+   | Stable   |
| Nov. 24, 2015  | BBB+   | Stable   |
| April 24, 2015 | BBB+   | Stable   |
| Dec. 1, 2014   | BBB+   | Stable   |
| Oct. 3, 2014   | BBB+   | RWN      |
| May 6, 2014    | BBB+   | RWN      |
| April 7, 2014  | BBB+   | Stable   |
| Sept. 16, 2013 | BBB+   | Stable   |
| May 30, 2013   | BBB+   | Stable   |
| Sept. 17, 2012 | BBB+   | Stable   |
| Sept. 29, 2011 | BBB+   | Stable   |
| Oct. 1, 2010   | BBB+   | Stable   |
| Oct. 2, 2009   | BBB+   | Stable   |
| Sept. 18, 2008 | BBB+   | Stable   |
| Aug. 13, 2008  | BBB+   | Stable   |
| July 13, 2007  | BBB+   | Stable   |
| March 9, 2006  | BBB+   | Stable   |
| Dec. 6, 2005   | BBB    | Stable   |
| May 24, 2005   | BBB    | Stable   |
| Feb. 10, 2004  | BBB    | Stable   |
| Nov. 27, 2002  | BBB    | Stable   |
| Sept. 26, 2002 | BBB    | Stable   |
| March 7, 2002  | BBB    | Stable   |
| Jan. 31, 2002  | BBB    | Stable   |
| May 9, 2000    | BBB    | Stable   |
| March 11, 1999 | BBB-   | _        |
| Feb. 10, 1998  | BB+    | _        |
| Oct. 8, 1997   | BBB-   | _        |
| March 14, 1994 | BB–    | —        |
|                |        |          |

LT IDR – Long-term Issuer Default Rating. FC – Foreign currency. RWN – Rating Watch Negative. Source: Fitch.

# Peer and Sector Analysis

# **Peer Group Analysis**

|  | Berkshire                  | Southern                 | NextEra                  | Duke Energy                |
|--|----------------------------|--------------------------|--------------------------|----------------------------|
| (\$ Mil.)  | Hathaway<br>Energy Company | Company                  | Energy, Inc.             | Duke Energy<br>Corporation |
| As of  | 6/30/16                    | 6/30/16                  | 6/30/16                  | 6/30/16                    |
| IDR  | BBB+                       | A–                       | A–                       | BBB+                       |
| Outlook  | Rating Outlook<br>Stable   | Rating Outlook<br>Stable | Rating Outlook<br>Stable | Rating Outlook<br>Negative |
|  |                            |                          |                          |                            |
| Fundamental Ratios (x)<br>Operating EBITDAR/                 |                            |                          |                          |                            |
| (Gross Interest Expense + Rents)                             | 3.3                        | 6.2                      | 4.1                      | 4.4                        |
| FFO Fixed-Charge Coverage                                    | 3.9                        | 6.0                      | 4.3                      | 3.8                        |
| Total Adjusted Debt/Operating EBITDAR                        | 5.6                        | 5.8                      | 4.0                      | 4.6                        |
| FFO/Total Adjusted Debt (%)                                  | 20.5                       | 17.6                     | 26.2                     | 18.7                       |
| FFO-Adjusted Leverage  | 4.9                        | 5.7                      | 3.8                      | 5.4                        |
| Common Dividend Payout (%)                                   | _                          | 84.7                     | 58.7                     | 65.7                       |
| Internal Cash/Capex (%)                                      | 116.1                      | 65.8                     | 45.8                     | 63.5                       |
| Capex/Depreciation (%)                                       | 213.7                      | 257.5                    | 384.4                    | 200.1                      |
| Return on Equity (%)   | 10.5                       | 10.9                     | 11.5                     | 6.6                        |
| Financial Information  |                            |                          |                          |                            |
| Revenue  | 17.373                     | 17.393                   | 16.588                   | 23,017                     |
| Revenue Growth (%)   | (1.5)                      | (2.7)                    | (6.3)                    | 0.0                        |
| EBITDA   | 6.703                      | 6.866                    | 7.532                    | 9.242                      |
| Operating EBITDA Margin (%)                                  | 38.6                       | 39.5                     | 45.4                     | 40.2                       |
| FCF  | 864                        | (2,225)                  | (5,765)                  | (2,700)                    |
| Total Adjusted Debt with Equity Credit                       | 38,658                     | 40,280                   | 30,321                   | 44,310                     |
| Readily Available Cash                                       | 778                        | 1,897                    | 730                      | 676                        |
| Funds Flow from Operations                                   | 5,880                      | 5,939                    | 6,228                    | 6,107                      |
| Сарех  | (5,354)                    | (6,514)                  | (10,636)                 | (7,398)                    |
| IDR – Issuer Default Rating.<br>Source: Company data, Fitch. |                            |                          |                          |                            |

# Key Rating Issues

# Ownership

BHE is 90% owned by BRK. Ownership of BHE by BRK affords the former with the ability to retain capital typically paid out in the form of dividends by publicly held IOUs. This dynamic is a function of BRK's strong credit profile, large cash position (\$73 billion as of June 30, 2016) and investment appetite.

The higher relative cash flows and liquidity, all else equal, compared with the typical IOU, provides a distinct competitive advantage, in Fitch's opinion. Other benefits include BRK's ability to use tax benefits and willingness to provide competitive funding to support BHE's strategic growth initiatives, including M&A.

# **Diverse Asset Base**

BHE's ratings are supported by its large, high-quality portfolio of utility and utility-like assets primarily located in the U.S., Canada and the U.K. Consolidated BHE leverage is relatively high. However, Fitch projects future cash flows from BHE's diverse portfolio of businesses to amply cover its estimated parent-only obligations. Fitch calculates BHE's U.S. utility operations represented 61% of consolidated 2015 EBITDAR, with global utility and utility-like businesses accounting for 89%. The remainder of 2015 EBITDA was provided by BHE's renewables

business, which invests in projects that have negotiated long-term contracts with creditworthy counterparties in place, and its relatively small real-estate brokerage business.

#### PacifiCorp

PacifiCorp (PPW, A–/Stable), with its six-state Pacific Northwest/Rocky Mountain region service territory, is the largest of BHE's three U.S. integrated utility operations. PPW accounted for 30% of BHE's consolidated 2015 EBITDA. By comparison, BHE subsidiaries NVE and MidAmerican Funding accounted for 18% and 13% of consolidated 2015 EBITDA, respectively.

Regulation across PPW's service territory is generally balanced, with the exception of Washington, which has been somewhat challenging and represents a relatively small slice of jurisdictional revenue. PPW's Washington operations represented approximately 8% of consolidated 2015 kWh sales. By comparison, Utah, Oregon and Wyoming represent 44%, 24% and 17% of kWh sales, respectively. Fitch believes that PPW's most recent Washington jurisdictional general rate case (GRC) was more constructive from a credit perspective than two previous GRC decisions. In September 2016, the Washington Utilities and Transportation Commission approved a two-phase rate increase totaling \$13.7 million based on a 9.5% authorized ROE.

Regulatory outcomes across the remainder of PPW's service territory have been and are expected to continue to be balanced. Various riders are in place to facilitate recovery of certain costs outside of GRCs, including fuel-adjustment clauses that mitigate commodity price exposure in all of PPW's regulatory jurisdictions.

PPW's capex in 2015 declined 14% to \$916 million from \$1.07 billion in 2014 and was 32% below 2012 capex of \$1.3 billion. By comparison, PPW capex averaged \$1.5 billion per year in 2010–2012, while projected 2016–2018 capex approximates \$807 million per year on average. Lower capex levels at PPW in recent years reflect completion of large projects, including major transmission and renewables investments. In addition, capex incorporates slower PPW service territory load growth and efforts by management to minimize customer rate increases. Efforts by management to minimize customer rate increases while maintaining system reliability, safety and customer service have resulted in generally flat O&M expense.

Slowing PPW service territory load growth trends are driven primarily, in Fitch's view, by energy efficiency gains and are a source of some uncertainty, along with the impact of environmental rules and regulations on PPW's coal-fired generation. Fitch believes these dynamics are manageable within the regulatory compact and unlikely to meaningfully weaken PPW's creditworthiness in the near to intermediate term.

Conversely, legislation enacted this year in Oregon and Utah is credit supportive, in Fitch's opinion. Oregon Senate Bill (S.B.) 1547-B, phasing out coal-fired generation by 2035 while sharply increasing Oregon's renewable standard, was signed into law March 2016 by Gov. Kate Brown. The law sets firm milestones for the elimination of coal generation for the state's two largest electric utilities, Portland General by 2035 and Pacific Power (which is a division of PPW), by 2030. S.B. 1547-B also sets a significantly higher renewable portfolio standard (RPS), requiring that 35% of retail load is sourced from qualifying renewables by 2030, 45% in 2035 and 50% by 2040.

Oregon's 2007 RPS required that 25% of retail customer power needs be met by qualifying renewables by 2025. S.B. 1547-B is the result of a collaborative process of stakeholders, including PPW and environmental groups, and will help the state achieve its ambitious carbon reduction goal of 75% below 1990 levels by 2050. PPW estimates that the legislation will save consumers up to \$600 million compared with a ballot initiative sponsored by Renew Oregon

that was withdrawn as part of the settlement. Fitch expects the legislation will bring pressure PPW cost structure. Costs related to the legislation are expected to be recoverable in rates.

In Utah, Gov. Gary Herbert signed Utah Senate Bill 115 on March 30, 2016. Enactment of S.B. 115 is a constructive development that includes, among other things, authorization of recovery of 100% of net power costs outside of GRC proceedings. The law also requires the Utah Public Service Commission to establish a fund through a change in accounting for energy-efficiency programs as a reserve for coal plant exposure. In addition, S.B. 115 establishes and funds a pilot for investment in electric vehicle infrastructure and clean coal research.

#### MF/MEC

MidAmerican Funding LLC (MF; BBB+/Stable) is an intermediate holding company that owns all of MidAmerican Energy Company's (MEC; A–/Stable) equity and accounted for approximately 13% of BHE's pro forma 2015 EBITDA. MEC is headquartered in Des Moines, IA, and operates in four Midwestern states. The utility's Iowa service territory accounts for the vast majority of MEC and MF's consolidated earnings and cash flows. The regulatory regime in Iowa is balanced from a credit point of view.

In MEC's last GRC, the Iowa Utilities Board (IUB) authorized a stipulation that increased MEC's base rates by \$266 million, representing 100% of MEC's request. The rate order included revenue sharing based on specific ROE hurdles and authorized energy and transmission cost adjustment mechanisms. Separately, the IUB, in an August 2016 order approving ratemaking principles for the planned construction of MEC's 2,000-MW Wind XI project, modified MEC's sharing mechanism. The modified mechanism would recalculate the sharing trigger annually using a weighted average of all rate-making principle equity returns and all other rate base. All other rate base, including Wind XI, would be calculated based on the 30-year single-A utility bond yield plus 400 basis points with a minimum 9.5% ROE sharing trigger. The current threshold would be 10.7%.

If approved by the IUB, MEC would use 100% of net income in excess of the weighted average ROE sharing trigger to reduce coal and nuclear rate base, in effect, reducing future rates to customers. Currently, the revenue sharing mechanism trigger is an 11% ROE with 80% of MEC net income over the 11% ROE used to reduce rate base and 20% retained by the company up to a 14% ROE. Over 14%, all earnings are used to reduce rate base.

MEC has significantly diversified its fuel mix in recent years via meaningful new-build wind generation while maintaining rates that are competitive regionally and compared with the national average. With anticipated completion of Wind XI in 2019, MEC's wind generating capacity will increase to more than 6,000 MW from 3,448 MW at year-end 2015. Nonetheless, compliance with EPA's Clean Power Plan's carbon-reduction targets is a source of some uncertainty.

#### NV Energy

NVE's operating subsidiaries, Nevada Power Company (NPC; BBB/Stable) and Sierra Pacific Power Company (SPPC; BBB/Stable), provide utility service to the greater Las Vegas area, Reno and northern Nevada. NVE accounted for 18% of BHE's 2015 EBITDA. In Fitch's view, recent developments in Nevada, including New Energy Industry Task Force (NETF) recommendations to Gov. Brian Sandoval, turnover at the commission and a highly politicized debate regarding net energy metering (NEM) inject a level of uncertainty into the state's regulatory compact. Fitch believes regulation in Nevada has been and is likely to continue to remain credit supportive.

Under Nevada regulation, GRC filings are required at least every three years. The Public Utilities Commission of Nevada (PUCN) is required to issue a final decision within seven months of the filing date. Nevada regulation allows inclusion of known and measurable adjustments to the test year; preapproval of capex; and mechanisms for the timely recovery of fuel and purchase power, energy efficiency and conservation program costs. Twenty-year integrated resource plans are filed every three years and are subject to PUCN review with regard to ultimate inclusion in base rates.

SPPC filed its electric and gas GRC in June 2016 and Fitch expects NPC to file its next GRC in 2017, consistent with the mandatory three-year cycle for base electric rate case filings in effect in Nevada. NVE management is focussed on minimizing cost inflation and providing stable customer rates. In its filing, SPPC is seeking no change in electric rates, but indicates a \$21 million revenue deficiency. SPPC also filed a natural gas GRC seeking an \$8,000 revenue reduction. The electric and gas filings are based on a calendar 2015 test years updated for known and measurable changes through May 31, 2016. The PUCN staff filed testimony in the proceeding supporting a \$4.9 million electric rate increase and a \$4.4 million gas rate reduction.

In addition, the Office of Attorney General Bureau of Consumer Protection filed testimony in the GRC supporting a \$12.7 million electric rate reduction and a \$6.7 million gas rate reduction. A final PUCN decision is expected by year end with rates effective Jan. 1, 2017.

On Oct. 18, 2016, SPPC filed a stipulation with the PUCN that includes the regulatory operations staff of the PUCN and the bureau of consumer protection, among other signatories. The stipulation supports electric and gas tariff decreases of \$2.9 million and \$2.4 million, respectively, through existing rate design based on sales and lower volumetric rates. The settlement does not address non-grandfathered NEM rate design or optional time-of-use rate schedules for certain customer classes. Authorized returns on equity for SPPC's electric and gas operations as proposed by the stipulation are 9.6% and 9.5%, respectively. The PUCN is not bound by the agreement and the parties to the stipulation request that new rates become effective Jan. 1, 2017.

In SPPC's 2013 GRC, the PUCN issued a final order in December 2014. SPPC filed the GRC in June 2013, supporting a \$2.5 million net rate decrease composed of an \$8.4 million electric rate reduction and a \$5.9 million gas rate increase. The final PUCN order granted a \$35.2 million net rate decrease, consisting of a \$39.1 million electric rate reduction and a \$3.9 million gas rate increase.

In its last rate case, NPC reached a settlement agreement that was approved by the PUCN with modification, resulting in no change to base rates. In addition, the settlement included several rate design adjustments that are modestly constructive from a credit perspective. The authorized ROE included in the settlement was somewhat below the industry average at that time. The rate case was initiated by NPC in May 2014 and the commission order approving the settlement agreement issued October 2014.

Customer choice for large commercial and industrial customers has been in effect since 2002, following enactment of enabling legislation. In 2015, the PUCN approved requests by two casinos to procure their energy supply from alternative providers contingent upon the casinos paying exit fees totalling approximately \$103 million. Two large casinos, MGM Resorts International and Wynn, served notice to the PUCN and began procuring energy and ancillary services from an alternative supplier in October 2016.

# **Net Metering Update**

In December 2015, the PUCN issued an order that established separate rate classes for customers with installed distributed renewable generation resources. The PUCN order also established new rates for NEM customers. The new rates include a higher basic service charge to better reflect fixed utility service costs and a lower volumetric rate. The changes in rates are revenue neutral to the utility and, combined with the cordoning off of NEM customers as a separate class, are expected to effectively mitigate cross-subsidization issues.

In addition, the commission order reduced the credit for customer exports to NVE from the full retail rate to the actual value of excess generation based on the utility's avoided cost, phasing in the lower NEM customer credits over 12 years. S.B. 374 enacted in June 2015 directed the PUCN to review net metering rates and identify and eliminate unreasonable shifts in costs from net metering customers to non-net metering customers by year-end 2015. The commission's order regarding NEM was controversial, especially in light of the fact that existing distributed solar installations were not protected.

The political backlash to the commission action has been strong. In September, Gov. Sandoval did not reappoint Chairman David Noble, opting instead to appoint Joe Reynolds, former general counsel for the Sandoval administration, as chairman of the PUCN. Sandoval also appointed Leo Drozdoff as acting commissioner. The appointments replace departing PUCN Chairman Noble and Commissioner Alaina Burtenshaw. Also in September, the PUCN voted to approve a net metering tariff that grandfathers existing distributed systems for a 20-year period. In addition, the New Energy Industry Task Force submitted recommendations to address long-term energy issues in Nevada to Gov. Sandoval that include reinstatement of NEM, among other things. Nevada's Nov. 8, 2016 election ballot will include a proposed constitutional amendment to implement full retail customer choice in the state. Currently in Nevada, only large commercial and industrial customers have access to retail customer choice.

# **Modest Sales Growth**

Total NVE retail electricity sales rose 1.7% in 2015 compared with 2014 levels, reflecting strong residential, commercial and industrial sales at NPC and weak mining segment load at SPPC. Retail sales are expected to be essentially flat in 2016 and increase 1.6% in 2017, reflecting stronger nonresidential load growth at both NPC and SPPC. A solid service territory economy, no state income tax and low business taxes support future growth, offset in part by energy efficiency initiatives. Fitch believes competitive inroads from competing, alternative energy resources, including distributed generation and energy efficiency, are a secular credit concern for NVE that will prove manageable within the regulatory compact. NVE management is focused on working with Nevada regulators and legislators to equitably balance the interests of all constituents with regard to emerging growth in demand for distributed resources, including rooftop solar.

# Capex

NVE capex ranged from \$372 million to \$572 million in 2012–2015 and totalled \$1.5 billion. By comparison, capex is expected to approximate \$1.2 billion in 2016–2018. The lower 2016–2018 capex compares to NVE's prior guidance of \$1.7 billion. Lower capex reflects removal of certain projects proposed by NVE to replace coal retirements mandated by S.B. 123 and rejected by the PUCN. The commission rejected planned construction by NVE of a 570 MW combined-cycle gas turbine in 2017 and investment in a 100 MW utility-scale photovoltaic power plant in 2017. Fitch estimates NVE will be modestly FCF negative during 2016–2018.

### S.B. 123

S.B. 123, enacted in 2013, mandates retirement of approximately 800 MW of generating capacity starting in December 2014. The retired coal-fired generating capacity will be replaced with a mix of renewable and natural gas-fired generation. NPC filed its emissions reduction and capacity replacement (ERCR) plan in May 2014, which was approved by the PUCN in October 2014. Under the PUCN-authorized ERCR plan, NPC will retire 812 MW of coal generation and replace the coal generation retirements with a mix of renewable energy, primarily through purchase power agreements. NPC retired Reid Gardner Generating Station units 1, 2 and 3 in 2014 and plans to close unit 4 in 2017. In addition, NPC will eliminate its ownership interest in the Navajo Generating Station in 2019. Enactment of S.B. 123 and PUCN authorization of NPC's ERCR is a constructive development, in Fitch's view, that is reflected in the company's current ratings.

# **Gas Transmission Business**

BHE's gas transmission business is composed of Northern Natural Gas (NNG; A/Stable) and Kern River Funding Corp. (KRF; A–/Stable), and delivers approximately 8% of the natural gas consumed in the U.S. NNG and KRF contributed approximately 9% to BHE's consolidated EBITDA in 2014.

NNG's natural gas transportation system is an essential source of contracted supply to its Upper Midwest utility customer base and its reticulated system is well positioned, in Fitch's view, with low business risk. Counterparty credit risk is ameliorated by the pipeline's diverse group of primarily highly rated offtakers with multiyear contracts. NNG's ratings also consider the pipeline operator's constructive regulatory compact and consistent ability to earn reasonable ROEs.

KRF transports competitive Rocky Mountain natural gas to large-volume end users in Utah, southern Nevada and Southern California. Recontracting risk and more stringent rules regarding pipeline integrity and related issues are potential sources of concern for NNG and KRF. However, Fitch believes these concerns are manageable within the pipelines' current rating categories, given their strong competitive positions in their respective markets and ongoing infrastructure investment by management.

#### Northern Powergrid Holdings Company

Northern Powergrid Holdings Company (NPG; BBB+/Stable) is a U.K.-based electricity distribution group that is wholly owned by BHE. NPG, through its distribution network operator (DNO) subsidiaries Northern Powergrid (Northeast) Limited (NPN; A–/Stable) and Northern Powergrid (Yorkshire) plc (NPY; A–/Stable), serves a 10,000-square-mile service area in Britain. NPG accounted for approximately 11% of BHE's consolidated 2015 EBITDA. The U.K.'s low-carbon energy policy, integration of increasing distribution generation production and efforts to modify consumer behavior will add a level of complexity to DNO operations. Nonetheless, the DNOs are stable regulated businesses with growing, relatively predicable, inflation-protected revenue and cash flow.

British energy regulator Office of Gas and Electricity Markets finalized its RIIO-ED1 (ED1) price controls effective April 1, 2015 through March 31, 2023. Fitch believes ED1 is tougher than its predecessor DPCR5, but considers ED1 to be credit neutral. ED1 authorizes a significantly lower ROE and requires delivery of higher outputs with greater efficiency. NPN and NPY delivered strong operating performance under DPCR5, and Fitch expects them to outperform ED1 targets. Fitch's March 2016 rating affirmation of NPG and its subsidiaries with a Stable

Outlook considers the companies solid incentive performance under the new price control and greater confidence that company performance will be consistent with ratio guidance, among other things.

#### BHE Transmission

BHE Transmission represented approximately 8% of consolidated 2015 BHE EBITDA and is comprised of BHE Canada Holdings Corp., including ALP and BHE U.S. Transmission. ALP is an Alberta, Canada-based transmission operator with a proscriptive, credit-supportive regulatory regime and low business risk profile. BHE completed the acquisition of ALP on Dec. 1, 2014, acquiring the company's equity for approximately \$2.7 billion. Factoring in assumed debt, the transaction's enterprise value was approximately \$7 billion. ALP operates solely in the Alberta transmission market, where it provides access to wholesale markets to power generators, utilities, retailers and industrial users. ALP, along with BHE's other transmission assets, accounted for approximately 7.6% of consolidated 2014 BHE pro forma EBITDA.

ALP is not subject to commodity or volumetric risk. Counterparty credit risk is significantly reduced by exclusive billings to the Alberta Electric System Operator (AESO), a financially robust offtaker. Rate shock concerns associated with the large build cycle underway in Alberta are mitigated by a highly standardized, transparent provincial regulatory process.

ALP is regulated by the Alberta Utilities Commission (AUC), which under the Electric Utilities Act is charged with providing ALP with a reasonable opportunity to recover prudently incurred and forecast costs and a fair return on investment. Rates are established based on a forecast test year on a cost-of-service basis. Once approved, revenue is paid to ALP by the AESO in monthly installments. Cost of capital issues are bifurcated from GRCs in generic cost of capital (GCOC) proceedings.

In its most recent GCOC proceeding, the AUC authorized an 8.3% ROE effective 2013–2015, 45 bp below the placeholder ROE included in ALP's last GRC of 8.75%. In addition, the AUC reduced ALP's authorized common equity ratio to 36% from 37%. In Fitch's view, the sharp reduction in ROE and lower equity ratio are concerns for investors from a credit perspective.

#### **Renewables Business**

BHE has invested in several utility-scale wind and solar generation projects that have long-term purchase power agreements in place with creditworthy counterparties, and remains committed to further development on a diversified basis. Future viable potential renewables investment includes tax equity and distributed generation. In addition to renewables, BHE owns 10 geothermal facilities and a real estate brokerage, among other investments. Renewables and other investments represented just less than 10% of consolidated EBITDA in aggregate.

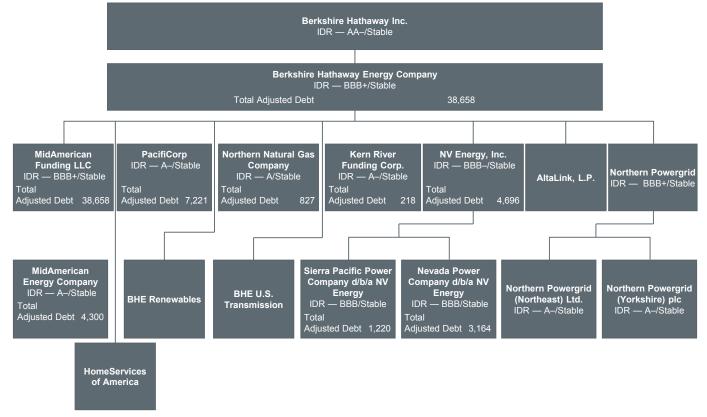
#### **Mergers and Acquisitions**

BHE has been an active consolidator in the UPG sector, acquiring high-quality, low-risk electric and gas utility, electric transmission and natural gas pipeline assets. Large acquisitions in recent years include ALP for \$7 billion enterprise value in December 2014, NVE for \$10 billion enterprise value in December 2013; and PPW for \$9.5 billion enterprise value in 2006. Future debt-financed transactions and/or acquisition of businesses with relatively high business risk could pressure BHE's credit ratings.

# **Organizational Structure**

#### Organizational and Debt Structure — Berkshire Hathaway Energy Company

(\$ Mil., As of June 30, 2016)

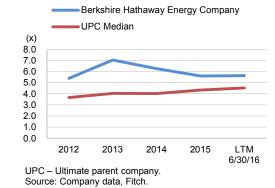


IDR – Issuer Default Rating. Source: Company filings, Fitch.

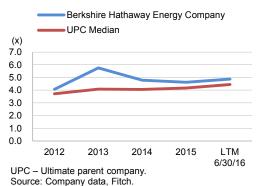
# **Fitch**Ratings

# **Key Metrics**

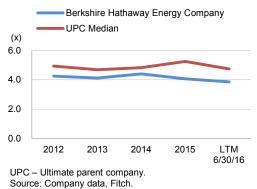
# Total Adjusted Debt/Op. EBITDAR



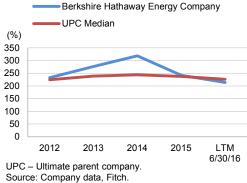
#### FFO-Adjusted Leverage



#### FFO Fixed-Charge Coverage



Capex/Depreciation



# Definitions Total Adjusted Debt/Op. EBITDAR: Total balance sheet adjusted for equity credit and

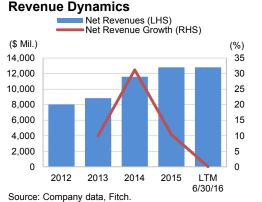
 by operating EBITDAR.
FFO Fixed-Charge Coverage: FFO plus gross interest minus interest received plus preferred dividends plus rental payments divided by gross interest plus preferred dividends plus rental payments.

off-balance-sheet debt divided

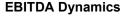
 FFO-Adjusted Leverage: Gross debt plus lease adjustment minus equity credit for hybrid instruments plus preferred stock divided by FFO plus gross interest paid plus preferred dividends plus rental expense.

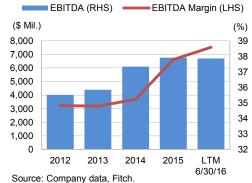
# **Company Profile**

BHE is 90% owned by BRK and is BRK's vehicle for expansion in the utilities, power and gas sector. BHE M&A activity accelerated in 2013 and 2014 with the acquisitions of NVE and ALP. BHE acquired PPW in 2006 for \$9.5 billion enterprise value. As the result of the addition of NVE, ALP and other investments, BHE revenue increased from \$11.5 billion in 2012 to \$17.9 billion in 2015. Meanwhile, EBITDA increased approximately 70% from \$4.0 billion in 2012 to \$6.8 billion in 2015 and total adjusted debt with equity credit increased from \$22 billion on Dec. 31, 2012 to \$39 billion on Dec. 31, 2015. BHE's unregulated operations accounted for 11% of consolidated, pro forma 2015 EBITDA and consist primarily of utility-scale wind and solar projects with long-term purchase power agreements. BHE also owns 10 geothermal facilities and a real estate brokerage, among other investments.



# **Business Trends**





Berkshire Hathaway Energy Company October 27, 2016

# Corporates

# Financial Summary — Berkshire Hathaway Energy Company

| (\$ Mil., As of June 30, 2016, IDR — BBB+/Rating Outlook Stable) | 2012    | 2013    | 2014    | 2015    | LTM 6/30/16 |
|--|---------|---------|---------|---------|-------------|
| Fundamental Ratios   |         |         |         |         |             |
| Operating EBITDAR/(Gross Interest Expense + Rents) (x)           | 3.2     | 3.4     | 3.4     | 3.4     | 3.3         |
| FFO Fixed-Charge Coverage (x)                                    | 4.2     | 4.1     | 4.4     | 4.1     | 3.9         |
| Total Adjusted Debt/Operating EBITDAR (x)                        | 5.4     | 7.0     | 6.3     | 5.6     | 5.6         |
| FFO/Total Adjusted Debt (%)                                      | 24.6    | 17.4    | 20.9    | 21.7    | 20.5        |
| FFO-Adjusted Leverage (x)  | 4.1     | 5.7     | 4.8     | 4.6     | 4.9         |
| Common Dividend Payout (%)                                       | _       | _       | _       | _       |             |
| Internal Cash/Capex (%)  | 128.0   | 108.4   | 78.5    | 118.8   | 109.8       |
| Capex/Depreciation (%)   | 232.3   | 276.1   | 318.7   | 242.0   | 213.7       |
| Return on Equity (%)   | 9.8     | 9.5     | 10.7    | 11.1    | 10.5        |
| Profitability  |         |         |         |         |             |
| Revenues   | 11,548  | 12,635  | 17,326  | 17,880  | 17,373      |
| Revenue Growth (%)   | 3.4     | 9.4     | 37.1    | 3.2     | (1.5)       |
| Net Revenues   | 8,031   | 8,836   | 11,594  | 12,801  | 12,812      |
| Operating and Maintenance Expense                                | (2,778) | (2,794) | (3,501) | (3,732) | (3,682)     |
| Operating EBITDA   | 4,022   | 4,395   | 6,103   | 6,756   | 6,703       |
| Operating EBITDAR  | 4,134   | 4,513   | 6,249   | 6,917   | 6,864       |
| Depreciation and Amortization Expense                            | (1,455) | (1,560) | (2,057) | (2,428) | (2,505)     |
| Operating EBIT   | 2,567   | 2,835   | 4,046   | 4,328   | 4,198       |
| Gross Interest Expense   | (1,176) | (1,222) | (1,711) | (1,904) | (1,897)     |
| Net Income for Common  | 1,472   | 1,636   | 2,095   | 2,370   | 2,369       |
| Operating Maintenance Expense % of Net Revenues                  | (34.6)  | (31.6)  | (30.2)  | (29.2)  | (28.7)      |
| Operating EBIT % of Net Revenues                                 | 32.0    | 32.1    | 34.9    | 33.8    | 32.8        |
| Cash Flow  |         |         |         |         |             |
| Cash Flow from Operations  | 4,327   | 4,669   | 5,146   | 6,980   | 6,218       |
| Change in Working Capital  | 150     | 491     | (1,170) | 649     | 338         |
| Funds from Operations  | 4,177   | 4,178   | 6,316   | 6,331   | 5,880       |
| Dividends  | _       | _       | _       | _       | _           |
| Capex  | (3,380) | (4,307) | (6,555) | (5,875) | (5,354)     |
| FCF  | 947     | 362     | (1,409) | 1,105   | 864         |
| Net Other Investment Cash Flow                                   | (450)   | (506)   | 8       | (268)   | (592)       |
| Net Change in Debt   | 534     | 5,079   | 3,799   | (146)   | (455)       |
| Net Equity Proceeds  | _       | 1,000   | _       | (36)    | _           |
| Capital Structure  |         |         |         |         |             |
| Short-Term Debt  | 887     | 232     | 1,445   | 974     | 1,469       |
| Total Long-Term Debt   | 20,735  | 32,012  | 38,649  | 37,972  | 36,881      |
| Total Debt with Equity Credit                                    | 21,684  | 30,947  | 38,197  | 37,474  | 37,378      |
| Total Adjusted Debt with Equity Credit                           | 22,241  | 31,723  | 39,141  | 38,762  | 38,658      |
| Total Common Shareholders' Equity                                | 15,866  | 18,711  | 20,442  | 22,401  | 23,357      |
| Total Capital  | 37,469  | 49,763  | 58,770  | 60,009  | 60,877      |
| Total Debt/Total Capital (%)                                     | 58      | 61      | 63      | 61      | 60          |
| Common Equity/Total Capital (%)                                  | 42      | 37      | 34      | 37      | 38          |
| IDR – Issuer Default Rating.                                     |         |         |         |         |             |

Source: Company data, Fitch.

The ratings above were solicited by, or on behalf of, the issuer, and therefore, Fitch has been compensated for the provision of the ratings.

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