VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Daniel K. Arbough**, being duly sworn, deposes and says that he is Treasurer for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

Daniel K. Arbough

Daniel K. Arbough

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 6th day of February 2019.

Judy Schooler

Notary Public

My Commission Expires:

Judy Schooler
Notary Public, ID No. 603967
State at Large, Kentucky
Commission Expires 7/11/2022

KENTUCKY UTILITIES COMPANY

February 6, 2019 Supplemental Response to First Request for Information of the U. S. Department of Defense Dated November 13, 2018

Case No. 2018-00294

Question No. 3

Responding Witness: Daniel K. Arbough / Adrien M. McKenzie

Q-3. Please provide copies of all publications and credit reports referenced in or considered by witnesses Mr. McKenzie and Mr. Arbough. This is an ongoing request for all subsequent testimonies filed by these witnesses.

A-3. **Original Response:**

See Exhibit DKA-3 of Mr. Arbough's Direct Testimony (Moody's Rating Methodology, Regulated Electric and Gas Utilities, dated June 23, 2017).

See Exhibit DKA-4 of Mr. Arbough's Direct Testimony (S&P Corporate Methodology and Key Credit Factors for the Regulated Utilities Industry, dated November 19, 2013).

See Exhibit DKA-5 of Mr. Arbough's Direct Testimony (Moody's Outlook on Utility Industry, dated June 18, 2018).

With the exception of court and regulatory decision and publications of federal agencies, which are publicly available from the respective sources, copies of all publications and source documents cited in Mr. McKenzie's testimony are attached.

February 6, 2019 Supplemental Response:

Attached is a recent rating action report issued by Moody's Investors Service and is supplemental information being provided by Mr. Arbough.

MOODY'S
INVESTORS SERVICE

Rating Action: Moody's affirms the ratings of Kentucky Utilities Co., Louisville Gas & Electric Company, and LG&E and KU Energy LLC; rating outlooks stable

15 Jan 2019

New York, January 15, 2019 -- Moody's Investors Service ("Moody's") affirmed the ratings of Kentucky Utilities Co. (KU) and Louisville Gas & Electric Company (LGE), including the A3 Long Term Issuer Rating and Prime-2 short-term rating. Also, Moody's affirmed the Baa1 rating of LG&E and KU Energy LLC (LKE). The rating outlooks for all three issuers is stable. The affirmation of the ratings is based on the continued constructive regulatory environments, primarily in Kentucky where the two utilities have most of their operations, and the stable generation of cash flows.

Outlook Actions:

..Issuer: Kentucky Utilities Co.

....Outlook, Remains Stable

..Issuer: LG&E and KU Energy LLC

....Outlook, Remains Stable

..Issuer: Louisville Gas & Electric Company

....Outlook, Remains Stable

Affirmations:

..Issuer: Carroll (County of) KY

....Long Term Senior Secured Revenue Bonds, Affirmed A1

....Underlying Long Term Senior Secured Revenue Bonds, Affirmed A1

....Short Term Senior Secured Revenue Bonds, Affirmed P-2

....Long Term Senior Unsecured Revenue Bonds, Affirmed A1

....Short Term Senior Unsecured Revenue Bonds, Affirmed P-2

..Issuer: Jefferson (County of) KY

....Long Term Senior Secured Revenue Bonds, Affirmed A1

....Underlying Long Term Senior Secured Revenue Bonds, Affirmed A1

....Short Term Senior Secured Revenue Bonds, Affirmed P-2

..Issuer: Kentucky Utilities Co.

.... Issuer Rating, Affirmed A3

....Senior Secured First Mortgage Bonds, Affirmed A1

....Senior Unsecured Bank Credit Facility, Affirmed A3

....Senior Unsecured Commercial Paper, Affirmed P-2

..Issuer: LG&E and KU Energy LLC

.... Issuer Rating, Affirmed Baa1

....Senior Unsecured Regular Bond/Debenture, Affirmed Baa1

..Issuer: Louisville & Jefferson Co. Metro. Govt., KY

....Senior Secured Revenue Bonds, Affirmed A1

..Issuer: Louisville Gas & Electric Company

.... Issuer Rating, Affirmed A3

....Senior Secured First Mortgage Bonds, Affirmed A1

....Senior Unsecured Bank Credit Facility, Affirmed A3

....Senior Unsecured Commercial Paper, Affirmed P-2

..Issuer: Mercer (County of) KY

....Long Term Senior Secured Revenue Bonds, Affirmed A1

....Short Term Senior Secured Revenue Bonds, Affirmed P-2

..Issuer: Muhlenberg (County of) KY

....Long Term Senior Secured Revenue Bonds, Affirmed A1

....Short Term Senior Secured Revenue Bonds, Affirmed P-2

..Issuer: Trimble (County of) KY

....Senior Secured Revenue Bonds, Affirmed A1

....Underlying Senior Secured Revenue Bonds, Affirmed A1

....Senior Unsecured Revenue Bonds, Affirmed A1

....Underlying Senior Unsecured Revenue Bonds, Affirmed A1

RATINGS RATIONALE

"PPL's Kentucky utilities balance the longer term risks of carbon transition and climate change with a strong balance sheet and steady cash flow metrics, thanks to a supportive regulatory environment," stated Jairo Chung, a Moody's analyst. Prospectively, KU and LGE's key financial metrics are expected to be lower than historical levels due to sizeable capital expenditures and the resetting of its rates due to tax reform in 2017. For example, the ratio of cash flow from operations excluding changes in working capital (CFO pre-WC) to debt is expected to decline to the low 20% level from the mid-20% level.

The affirmation of the A3 rating for KU and LGE incorporates Moody's view that the regulatory environment will continue to be supportive and allow these utilities to generate stable cash flows. It should be noted that these utilities rely heavily on coal as a fuel for their power generation, with approximately 64% of capacity using coal as fuel. However, the state of Kentucky is very supportive of the coal industry in general and coal usage specifically. This support is evidenced by various cost recovery riders such as the environmental cost recovery surcharge mechanism and the fuel adjustment clause. Under the constructive Kentucky regulatory environment, Moody's expects KU and LGE to be able to mitigate some of their carbon transition risk over time, although the transition risk is higher relative to other regulated utilities.

In addition, the outcomes of KU and LGE's regulatory proceedings have been more supportive in Kentucky. Both KU and LGE utilize a suite of tracker mechanisms, allowing timely cost recovery for utility investments, particularly environmental investment, outside of a general rate base. Also, a forward test year is used in general rate cases. Thus, KU and LGE typically begin recovering their annual investments within 12-18 months of the spend with the every other year cadence for the general rate case filings. Also, the service territories of KU and LGE have better demographics and somewhat benefit from the regional differences between metropolitan areas around Louisville and other rural areas in the east.

Moody's expects KU and LGE's key credit metrics to be lower than historical levels. The 2017 Tax Cuts and Jobs Act had a negative impact on several key financial metrics. Also, their robust capital investment programs continue to put some pressure on their metrics. However, the capital investment programs are expected to decrease over the next four years and there are no large projects within the plan, providing some flexibility within the plan. Moody's expects KU and LGE to maintain its CFO pre-WC to debt ratio in the low 20% range over the next few years.

The affirmation of LKE's Baa1 issuer rating reflects the support from the consistent and stable operations at its utility subsidiaries, KU and LGE. Although LKE's key metrics are expected to be weaker than their historical levels, including CFO pre-WC to debt in the 15% range compared to 18%-20% historical range, we do not expect any material changes to its fundamental profile. The expected decrease in the metrics are mainly due to the reduction in the cash flows related to deferred income taxes. Furthermore, LKE has $725 million of debt issued at this level under two notes outstanding. These notes are due in November 2020 and October 2021 and are likely to be either repaid or refinanced at PPL Capital Funding, Inc.

Rating Outlook

The stable outlook for KU and LGE reflects Moody's expectation that the regulatory environments will remain credit supportive. The stable outlook also incorporates Moody's view that both KU and LGE will continue to generate stable cash flow and adequate financial metrics, including a ratio of CFO pre-WC to debt in the low-20% range for KU and LGE.

Similarly, the stable outlook for LKE reflects Moody's expectation of consistently credit supportive regulatory environments for its utility subsidiaries, KU and LGE. It also incorporates in Moody's view that LKE's overall leverage remains the same and considers the stable outlook of its parent company, PPL Corporation.

Liquidity

Moody's expects all three entities to maintain an adequate but weaker liquidity profile over the next 12 months. KU and LGE have a P-2 short-term commercial paper rating and have separate credit facilities. KU's liquidity is supported by a separate $400 million syndicated credit facility expiring in January 2023 and a $198 million letter of credit facility expiring in October 2020. LGE's liquidity is supported by a separate $500 million syndicated credit facility expiring in January 2023 and a $200 million term loan credit facility expiring in October 2019, which is now current and weakening the family's overall liquidity. Furthermore, LKE's $75 million syndicated credit facility expired in October 2018, further weakening LKE's liquidity position. LKE's next long-term debt maturity is $475 million senior notes due in November 2020. The companies plan to address the recent weakness in their liquidity position in early 2019.

Factors That Could Lead to an Upgrade

KU and LG&E's rating could be upgraded if its financial metrics improve, including CFO pre-WC to debt at or above 26% on a sustained basis. An upgrade could be considered if the regulatory environment in Kentucky improves materially and provides more favorable regulatory recovery mechanisms.

A rating upgrade for LKE would likely require a rating upgrade at KU and LGE or a material reduction of debt issued at LKE. A rating upgrade could be also considered for LKE if its financial metrics improve, including CFO pre-WC to debt at or above 22% on a sustained basis.

Factors That Could Lead to a Downgrade

A rating downgrade could be possible at KU and LGE if there is a significant deterioration in the credit supportiveness of the regulatory environments. Also, if the financial metrics deteriorate, such that CFO pre-WC to debt declines below 20% for an extended period, a downgrade could be considered for KU and LGE.

LKE's rating could be downgraded if one or both of the utility subsidiaries experiences negative rating actions or a significant deterioration in the credit supportiveness of the regulatory environments. Additionally, a rating downgrade could be possible if its financial metrics declines, including CFO pre-WC to debt below 15% on a sustained period. LKE's rating could be downgraded if there is a material increase in LKE debt level.

Kentucky Utilities Co. (KU) and Louisville Gas & Electric Company (LGE) are wholly-owned subsidiaries of LG&E and KU Energy LLC (LKE). LKE is a wholly-owned subsidiary of PPL Corporation, a diversified utility holding company headquartered in Allentown, Pennsylvania. In Kentucky, these two utilities serve approximately 1.3 million electric and gas customers and under the purview of the Kentucky Public Service

Commission. KU also has some utility operations in Virginia and they are regulated by the Virginia State Corporation Commission.

The principal methodology used in these ratings was Regulated Electric and Gas Utilities published in June 2017. Please see the Rating Methodologies page on www.moodys.com for a copy of this methodology.

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