

**THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS**

Before Commissioners: Pat Apple, Chairman
Shari Feist Albrecht
Jay Scott Emler

In the Matter of The Empire District Electric)
Company Filing Monthly Fuel Purchase)
Reports in Compliance with the Policy) Docket No. 06-EPDE-1016-EPR
Established by Commission Order Dated)
September 25, 2002, in Docket No.)
106,850-U/75-GIMC-009-GIG.)

NOTICE OF FILING OF STAFF REPORT AND RECOMMENDATION

COMES NOW the Staff of the State Corporation Commission of the State of Kansas (“Staff” and “Commission”, respectively) and for its Notice of Filing of Staff Report and Recommendation states as follows:

Staff hereby files its January 27, 2017 Report and Recommendation attached hereto and made a part hereof by reference, containing its analysis of the December 14, 2016 annual meeting among The Empire District Electric Company (Empire), Staff, and Citizens’ Utility Ratepayer Board held for the purpose of reviewing and discussing Empire’s *Fuel Procurement Planning and Natural Gas Purchasing Schedule for 2017*. The annual meeting was convened in accordance with Paragraph 6 of the Commission’s Order dated September 25, 2002, entered in Docket No. 106,850-U/75-GIMC-009-GIG, requiring that each utility with an energy cost adjustment (ECA) meet with the Commission Staff at least once a year to discuss the utility’s fuel planning and purchasing practices.

Inasmuch as Staff’s Memorandum contains confidential commercial information pertaining to Empire, Staff, in accordance with K.S.A. 2015 Supp. 66-1220a, has filed both confidential and public versions of its Memorandum.

WHEREFORE, Staff submits its Report and Recommendation for the Commission's information and consideration.

Respectfully submitted,



Otto A. Newton
Litigation Counsel
Kansas Corporation Commission
1500 SW Arrowhead Road
Topeka, KS 66604-4027

**REPORT AND RECOMMENDATION
UTILITIES DIVISION
PUBLIC VERSION**

TO: Chairman Pat Apple
Commissioner Shari Feist Albrecht
Commissioner Jay Scott Emler

FROM: John Turner, Research Economist
Darren Prince, Research Economist
Lana Ellis, Deputy Chief of Economics and Rates
Robert Glass, Chief of Economics and Rates
Jeff McClanahan, Director of Utilities

DATE: January 27, 2017

SUBJECT: Docket No. 06-EPDE-1016-EPR: *In the Matter of The Empire District Electric Company Filing Monthly Fuel Purchase Reports in Compliance with the Policy Established by Commission Order Dated September 25, 2002, In Docket No. 106,850-U/75-GIMC-009-GIG.*

EXECUTIVE SUMMARY:

On December 14, 2016, Staff held a conference call with Empire District Electric Company (Empire) and the Citizens' Utility Ratepayer Board (CURB) at the Kansas Corporation Commission Office to discuss Empire's 2017 Annual Report relating to natural gas supply and purchasing practices. This Report and Recommendation provides an overview of that meeting, along with key information from Empire's *Fuel Procurement Planning and Natural Gas Purchasing Schedule for 2017*. Staff has no concerns regarding Empire's natural gas procurement strategy at this time; however, due to the expiration of a storage contract in March 2016 and Empire's natural gas purchasing practices, Staff would like to note that the Company has eliminated the opportunity for long-term planning by not holding storage capacity.

BACKGROUND:

On December 14, 2016, Staff met with members of Empire and CURB at the Kansas Corporation Commission Office by conference call. The purpose of the meeting was to discuss Empire's fuel contracts and purchasing practices for the upcoming year. Empire has an energy cost adjustment (ECA)¹ mechanism, therefore, this meeting is an annual requirement pursuant to the Commission's September 25, 2002, Order issued in Docket No. 106,850-U/75-GIMX-009-GIG. Empire must also file monthly reports detailing natural gas purchase contracts and an annual report discussing its fuel planning and purchasing practices. The Company continues to file monthly contract reports with Staff and filed its Annual Report on December 5, 2016.

¹ The Commission approved Empire's ECA mechanism on December 9, 2005, in Docket No. 05-EPDE-980-RTS.

Empire's *Fuel Procurement Planning and Natural Gas Purchasing Schedule for 2017* provides operational information, as well as projected natural gas requirements for the upcoming year and how those requirements will be met. With the start-up of the Southwest Power Pool Integrated Marketplace (SPP IM) in March 2014, 100 % of Empire's native load requirements are purchased from the SPP IM and Empire's generating resources are sold to the SPP IM.²

Empire utilizes PROSYM software to simulate an SPP IM dispatch for Empire's generation to arrive at a five-year fuel requirements budget, which is then used to estimate the annual ECA.³ Finally, using temperature forecasts, SPP load requirements, and SPP price forecasts, Empire is able to estimate its day-ahead natural gas purchase requirements for each generation plant.

Empire fulfills its natural gas requirements through daily or monthly purchases and obtains all of its natural gas from marketers who deliver it into the Southern Star Central Gas Pipeline (Southern Star) system for transport to Empire's generating units. The Southern Star system is divided into production and market areas and Empire's current contracts with Southern Star includes capacity in both areas.⁴

ANALYSIS:

Gas Procurement Year 2016

The 2015-2016 winter was mild.⁵ On the other hand, the 2016 summer was significantly warmer.⁶ Empire experienced its peak demand in August of 2016.

Empire forecasted purchases of **■■■■■** MMBtu of natural gas for generation in 2016, compared to **■■■■■** MMBtu in 2015. From November 2015 to October 2016, actual total natural gas purchases totaled **■■■■■** MMBtu. Since 2013, Empire has increased its use of natural gas for generation by approximately **■■■■■**. This increase is largely attributable to the conversion of Empire's existing gas-fired Riverton Unit 12 simple cycle combustion turbine to a combined cycle unit. The Riverton combined cycle unit began operation on May 1, 2016, and increased capacity by approximately **■■■■■** megawatts. The Riverton facility has been entirely natural gas fired since September 2012. Empire also owns natural gas-fired resources at its Energy Center and State Line generating plants.⁷

Gas Procurement Year 2017

Empire estimates that its 2017 energy production will be comprised of **■■■■■** coal, **■■■■■** natural gas, **■■■■■** wind, and **■■■■■** hydro.⁸ Empire reports that it will cover 2017 natural

² *Fuel Procurement Planning for Calendar Year 2017 & Natural Gas Purchase Schedule*, Empire, December 5, 2016, p. 1. Any margins earned on the sales to the SPP IM are used to reduce the cost of power to Empire's native load customers.

³ *Ibid.*, pp. 1-2. This model takes into account projected natural gas and market power prices, generating plant efficiencies, generating plant outage rates, and Empire's system load forecast, based on normal weather, to arrive at forecasted usage rates. The model yields a forecast of the monthly generation and fuel requirements at each of the Company's power-plants.

⁴ *Ibid.*, pp. 1 & 3.

⁵ Empire's service territory experienced 23% fewer Heating Degree Days (HDD) than normal.

⁶ Empire reported 29% more Cooling Degree Days (CDD) than normal.

⁷ *Ibid.*, p. 5.

⁸ *Ibid.*, p. 1.

gas supply requirements by purchasing ** [REDACTED] ** MMBtu of natural gas through physical, long-term contracts, and ** [REDACTED] ** MMBtu purchased in the natural gas spot market for a total of ** [REDACTED] ** MMBtu. Further, Empire has backed ** [REDACTED] ** MMBtu with a financial hedge position. After excluding the impact of its financial hedging position for 2017¹⁰, Empire estimates that its overall weighted average cost of natural gas for the upcoming year will be ** [REDACTED] ** per MMBtu for the Kansas ECA (based on natural gas prices as of October 31, 2016), and an Average Natural Gas Fuel Cost of ** [REDACTED] ** per MWh. Overall, Empire is forecasting an average net fuel and purchased power cost for 2017 of ** [REDACTED] ** per MWh.¹²

Empire will continue to utilize PROSYM software to simulate an SPP IM dispatch in order to project monthly natural gas consumption and fuel requirements at each of its power plants. During the meeting with Staff, Empire indicated that its load purchase quantities are based on normal weather and that it expects the natural gas costs to remain low.

Southern Star Storage Contract

During the meeting with Staff, Empire indicated that it allowed its natural gas storage contract with Southern Star to expire in April 2016. Empire obtained the rights to storage on the Southern Star system in 2011, which provided the Company with the ability to store approximately ** [REDACTED] ** (BCF) of natural gas. The expiration of this contract reduced expenses for Empire of ** [REDACTED] ** annually.¹³ However, since natural gas storage practices typically dictate that gas is injected in the summer and withdrawn in the winter, Empire has effectively eliminated the opportunity for long-term planning by not holding storage capacity.

RECOMMENDATION:

Staff believes that Empire is able to supply sufficient gas for its generation during 2017, based on its *Fuel Procurement Planning and Natural Gas Purchasing Schedule* and the information provided at the meeting held on December 14, 2016. Staff has no concerns regarding Empire's natural gas procurement strategy at this time; however, Staff would like to note that the Company has eliminated the opportunity for long-term planning by not holding storage capacity.

⁹ Ibid. pp. 2-3.

¹⁰ Empire does not include hedging costs as part of its Kansas ECA.

¹¹ Ibid., p. 3.

¹² Ibid., p. 7. Average net fuel and purchased power excludes purchased power demand charges, air quality control consumables and renewable energy credits (RECs).

¹³ Empire indicated that since it was only able to withdraw ** [REDACTED] ** dekatherm (Dth) per day, the contract only covered a small portion of its daily pipeline requirement of ** [REDACTED] ** Dth, thus the benefits were not offsetting the cost of having storage due to the low daily withdraw limit.

CERTIFICATE OF SERVICE

06-EPDE-1016-EPR

I, the undersigned, certify that a true and correct copy of the above and foregoing Notice of Filing of Staff Report and Recommendation was served by electronic service on this 31st day of January, 2017, to the following:

* JAMES G. FLAHERTY, ATTORNEY
ANDERSON & BYRD, L.L.P.
216 S HICKORY
PO BOX 17
OTTAWA, KS 66067
Fax: 785-242-1279
jflaherty@andersonbyrd.com

* CARY CATCHPOLE, ACCOUNTANT/ECONOMIST
CITIZENS' UTILITY RATEPAYER BOARD
1500 SW ARROWHEAD RD
TOPEKA, KS 66604
Fax: 785-271-3116
c.catchpole@curb.kansas.gov

* THOMAS J. CONNORS, ATTORNEY AT LAW
CITIZENS' UTILITY RATEPAYER BOARD
1500 SW ARROWHEAD RD
TOPEKA, KS 66604
Fax: 785-271-3116
tj.connors@curb.kansas.gov

* DAVID W. NICKEL, CONSUMER COUNSEL
CITIZENS' UTILITY RATEPAYER BOARD
1500 SW ARROWHEAD RD
TOPEKA, KS 66604
Fax: 785-271-3116
d.nickel@curb.kansas.gov

* DELLA SMITH
CITIZENS' UTILITY RATEPAYER BOARD
1500 SW ARROWHEAD RD
TOPEKA, KS 66604
Fax: 785-271-3116
d.smith@curb.kansas.gov

* SHONDA SMITH
CITIZENS' UTILITY RATEPAYER BOARD
1500 SW ARROWHEAD RD
TOPEKA, KS 66604
Fax: 785-271-3116
sd.smith@curb.kansas.gov

* W. SCOTT KEITH, DIRECTOR OF PLANNING AND
REGULATORY
EMPIRE DISTRICT ELECTRIC COMPANY
602 S JOPLIN AVE (64801)
PO BOX 127
JOPLIN, MO 64802
Fax: 417-625-5169
skeith@empiredistrict.com

* OTTO NEWTON, LITIGATION COUNSEL
KANSAS CORPORATION COMMISSION
1500 SW ARROWHEAD ROAD
TOPEKA, KS 66604
Fax: 785-271-3167
o.newton@kcc.ks.gov
Hand Delivered



Pamela Griffeth
Administrative Specialist

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