BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Sixth Prudence Review of Costs Subject to the Commission-Approved Fuel Adjustment Clause of The Empire District Electric Company	**))))**	**Case No. EO-2017-0065**

INITIAL BRIEF OF STAFF

Respectfully submitted,

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I. BACKGROUND SUMMARY

On February 28, 2017, the Staff filed its report of its Sixth Prudence Review of Costs Related to the Fuel Adjustment Clause ("FAC") For The Electric Operations of The Empire District Electric Company ("Empire" or "Company") for the period March 1, 2015 through August 31, 2016 ("Review Period") (hereafter Staff's "Prudence Review Report").[1]

As discussed below the Staff did not identify any instances of imprudence by Empire during the FAC Review Period.

Staff conducted its prudence review of Empire's FAC costs as required under Missouri statute Sect. 386.266(4)[2] and prepared its Prudence Review Report in accordance with Commission rule 4 CSR 240-20.090(7). As allowed under the rule, Office of Public Counsel ("OPC") timely requested a hearing on Staff's Prudence Review Report.

Pursuant to the Commission-ordered procedural schedule, the Commission held a hearing on August 24, 2017, to address the issues raised by OPC.

Even though the Commission issued notice of the start of Staff's prudence review to each of the parties in Empire's most recent rate case, Case No. ER-2016-0023, and set an intervention period for other interested entities, the only participants were the Staff, OPC and Empire.

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[1] Ex. 200.

[2] "In the case of an adjustment mechanism submitted under subsection 1 or 2 of this section includes provision for prudence reviews of the costs subject to the adjustment mechanism no less frequently than at eighteen-month intervals, and shall require refund of any imprudently incurred costs plus interest at the utility's short-term borrowing rate." Sect. 386.266(4) RSMo as supplemented.

Staff's Brief addresses the issues raised in the joint list of issues.[3]

II. JOINT ISSUES & ARGUMENT

Was Empire's natural gas hedging policy that caused costs to be incurred for the period of March 1, 2015 through August 31, 2016 (Review Period) *imprudent? If the Commission finds that Empire's hedging policy was imprudent, should the Commission order a refund to Empire's customers? If so, what should be the amount of the refund?*

Staff's FAC Prudence Review Report did not identify any instances of imprudence by Empire during the FAC Prudence Review Period.

Staff's Prudence Review Report included a review of Empire's Energy Risk Management Policy ("RMP"). The FAC allows the Company to engage in natural gas hedging activities as a part of Empire's RMP to mitigate its operations risk, market risk, and counterparties/credit risk. Staff did not find any evidence of imprudence in Empire's administration of its risk management strategies during the Review Period.[4] As a point of distinction, Staff auditor Ashley Sarver reviewed the RMP for compliance by the Company and did not review the RMP for prudence because the prudency of the policy was addressed in Empire's rate case which approved its current FAC.[5]

However, because OPC made prudency of Empire's gas hedging under its RMP an issue for hearing, the parties addressed it in their pre-filed and live testimonies. Staff policy witness, auditor Dana Eaves, testified that Staff continues to believe in the prudency of Empire's gas hedging activities and those activities should be continued under its RMP. Mr. Eaves' rebuttal testimony, discussed below, analyzes historic gas

[3] The Staff, OPC, and Empire filed their *Joint List of Issues and Orders of Witnesses, Cross-Examination and Opening Statements* ("*Joint List of Issues*") pursuant to the ordered procedural schedule on August 10, 2017. (EFIS Item No. 45, Case No. EO-2017-0065). Public Counsel had raised numerous other issues in the prefiled testimony of its four witnesses. Upon further discussion of these issues Public Counsel agreed to limit its issues for hearing to only those issues posed in the joint pleading. Even though the Commission admitted into the record all of OPC's prefiled testimony on other issues, along with prefiled testimonies of Empire and Staff, only the surviving issues on the *Joint List of Issues* are presented for Commission decision as required by Commission rule 4 CSR 240-2.080(19).
[4] Ex. 200, pp 9 – 14.
[5] Tr. Vol. 2, p. 260 lns 2-8.

price volatility over a 20 year period including the historically low gas prices experienced in the Review Period.

As part of performing her prudence review of gas costs, Staff auditor Sarver determined that Empire had experienced a hedging net loss on natural gas derivatives of $10,712,168 from its gas hedging activities. This represents about 15% of Empire's total natural gas cost of $69,201,828 for the Review Period.[6]

Staff auditor Sarver testified at hearing that she reviewed the actual cost of each hedge placed by Empire, in addition to the monthly total costs during the Review Period.[7] Ms. Sarver stated that she did not find any imprudent hedging costs.[8] Furthermore, Ms. Sarver found these costs to be in compliance with the Company's FAC tariff sheets and compliant with the hedging parameters set forth in the RMP.[9]

Staff auditor Eaves also testified that Empire's FAC tariff sheets, which are a starting point for Staff's prudence review, allow the Company to engage in and collect gas hedging costs. Further, when the Commission makes changes to what type of charges may be included in any utility's FAC tariff sheets, it does so in a general rate case[10] and for good reason. Statute requires it.

<u>The Commission may only modify an FAC in a general rate case proceeding under Sect. 386.266.</u>

The longstanding Commission practice of approving, modifying, or rejecting an electric utility's FAC follows Sect. 386.266.4:

[6] Ex. 200, p. 16. Tr. Vol. 2, p. 254, lns 7-14.
[7] Tr. Vol. 2, p.278, lns 7 – 24.
[8] Tr. Vol. 2, p. 280, lns 14-17.
[9] Tr. Vol. 2, p. 280, lns 4-16. *Staff's Prudence Review Report*, Ex. 200, p. 16 includes pertinent Confidential excerpts of Empire's RMP which set out the minimum hedging parameters to be followed for years 4, 3, 2, and 1 in anticipation of the expected gas burn.
[10] Tr. Vol. 2, p. 308, ln 24 – p. 309 ln 10.

> The commission shall have the power to *approve, modify, or reject* adjustment mechanisms submitted under subsections 1 to 3 of this section *only after providing the opportunity for a full hearing in a general rate proceedin*g, including a general rate proceeding initiated by complaint. The commission may approve such rate schedules *after considering all relevant factors which may affect the costs or overall rates and charges* of the corporation…. [*emphasis added*]

Sect. 386.266.5 limits the Commission to making changes to existing FAC clauses, like Empire's, in a general rate case or complaint proceeding.[11] FAC tariff sheets are always addressed in some fashion by the parties in a general rate case proceeding because it is the proper forum for determining the type of costs and revenues that are to be included in the FAC and how costs and revenues are to be reported, accounted for and collected from or returned to customers by the electric utility.

<u>Staff's FAC Prudence Review of Empire's FAC costs and revenues is not a proper forum for changing the FAC.</u>

In all, Public Counsel's aim to use this FAC prudence review proceeding to remove Empire's gas hedging provision from its FAC tariff is misguided and would needlessly expose Empire's customers to the risk of gas price volatility. OPC's effort to end gas hedging is an inapt attempt to modify Empire's FAC outside the statutorily required general rate case. OPC could easily have raised this issue in Empire's last rate case, Case No. ER-2016-0023, but it did not pursue it. Nor did OPC raise the issue in the rate case before last, Case No. ER-2014-0351. FAC tariff sheets from both rate cases were in effect during the Review Period.

[11] Sect. 386.266.5 states "Once such an adjustment mechanism is approved by the commission under this section, it shall remain in effect until such time as the commission authorizes the modification, extension, or discontinuance of the mechanism in a general rate case or complaint proceeding."

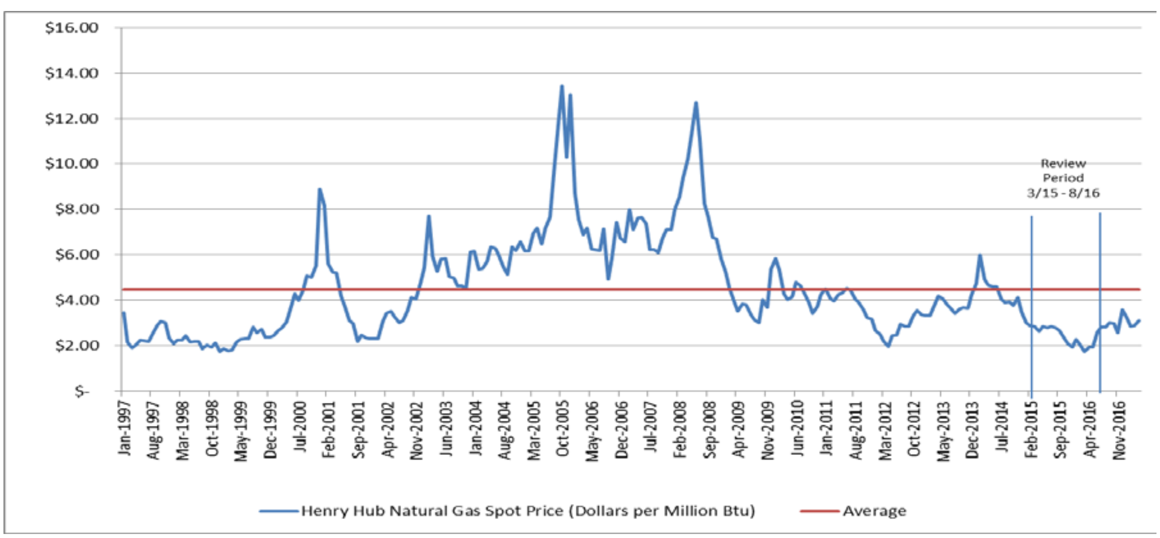
<u>Empire's customers are protected from natural gas price volatility as a result of the Company's gas hedging activities under its Energy Risk Management Policy</u>.

In summarizing Staff's concern for exposing Empire customers to the risk of fuel volatility, Staff auditor Eaves opined "…leaving Empire's customers exposed to price volatility in the natural gas market is not a prudent action. Staff recommends that Empire leave its risk management policies in place and continue natural gas fuel hedging."[12]

In support of Empire's gas hedging activities and its RMP, Mr. Eaves analyzed natural gas spot prices over a 20 year time period at the Henry Hub and concluded:

> The recent 20 year history of natural gas prices show volatility and cannot be predicted with any certainty. During the period of this prudence review, natural gas commodity price levels are lower than any 18 month period since 2000. It would be highly speculative and likely imprudent to believe that such historically low gas prices as seen during the prudence review period can be sustained going forward.[13]

See below a 20 year timeline, including the Review Period, showing gas price volatility at the Henry Hub. (Ex. 202, Eaves rebuttal testimony, p. 6).



[12] Ex. 202, p. 5, lns 7-11.
[13] Ex. 202, p.6 ln 1 – p. 7 ln 7.

Historic low gas prices experienced during the Review Period could only be known in hindsight and not when the hedges were placed for future gas requirements.[14]

When looking back at gas market prices during the March 1, 2015 through August 31, 2016 Review Period, it must be remembered that the Company began placing those hedges between 2010 and 2015.[15] Empire followed its RMP which set out minimum hedging requirements for years 4, 3, 2, and 1 prior to anticipated gas burn.[16] When Empire placed its hedges in 2010 to 2015 for the Review Period, the market prices known at that time showed significant price volatility – the very thing Empire sought to avoid, and did, when it placed its hedges for future gas requirements.

OPC's challenge of Empire's fuel gas hedging and its RMP for the Review Period fails because it is based on hindsight and second-guesses the reasoned decisions of Empire management.

Asked where natural gas prices are headed, Mr. Aaron Doll, Director of Electrical Procurement for Empire, testified:

> I have not found a universal opinion from everybody that says that natural gas prices will stay low, that they typically act in cycles and that the cycles occur for a reason. So low natural gas prices presage increase[d] demand, which then raises the price.[17]

Asked why he disagreed with OPC witness Hyneman's belief that gas prices would stay low into the future, Mr. Doll proffered that an EnerKnol Research policy article he appended to his rebuttal testimony best articulated what he believes is happening in the natural gas market and why gas hedging remains necessary:

> Despite the trend towards lower prices and abundant supply forecast, the natural gas market remains dynamic. While natural gas prices are projected to stay low,

[14] Ex. 200, *Staff's Prudence Review Report*, p. 1. "*In evaluating prudence, Staff reviews whether a reasonable person would find both the information the decision-maker relied on and the process the decision-maker employed when making the decision under review was reasonable based on the circumstances at the time the decision was made, i.e., without the benefit of hindsight*."[*emphasis added*]

[15] Ex. 101, Rebuttal Testimony of Aaron Doll, p. 2, lns 9-11.

[16] Ex. 200, p. 16. Minimum hedging percentages are Confidential.

[17] Tr. Vol. 2, p. 203 ln 17 – p. 204 ln 1.

> lower prices will increase demand for electricity generation, petrochemical production, and LNG exports, placing some upward pressure on prices. The Environmental Protection Agency's (EPA) regulations on carbon emissions could result in retirement of older coal-fired electric generation facilities, potentially requiring combined cycle natural gas generation to fill the generation gap….Export facilities will greatly increase natural gas demand when they come on line. Demand is also influenced by weather and pipeline constraints. For these reasons, hedging could reach a point where the current costs to consumers turn in to substantial benefits.[18]

Curiously OPC witness John Riley, who is opposed to natural gas hedging, relied on the same EnerKnol Research article when he cited the Kentucky Public Service Commission's denial of a request for two gas distribution companies to continue their gas hedging programs.[19] As Empire witness Doll points out, Mr. Riley failed to connect his observation that as utilities turn to natural gas generation to replace coal-fired plants there also comes with it an expectation of gas price movement due to an increase in demand for natural gas.[20] The EnerKnol Research policy article relied on by Mr. Doll and Mr. Riley, albeit to opposite conclusions, points out numerous demand-side changes occurring that may increase the price for natural gas and cause price volatility in the market.

Mr. Blake Mertens, Vice President Operations – Electric for Empire,[21] points out "… The value of the hedge, not unlike the earthquake insurance, is to mitigate exposure in the event of a potentially adverse situation. Hedging is not least cost planning (as acknowledged by the Commission in Rule 4 CSR 240-40.018), rather it is risk reduction and provides benefits to customers. If the adverse situation does not

[18] Tr. Vol. 2, p. 201 ln 1 – p. 202 ln 10; Ex. 103, Rebuttal Testimony of Aaron Doll, Appendix AD-1, p. 8, EnerKnoll Research, Policy Brief, December 21, 2015.
[19] Ex. 1, Direct Testimony of John Riley, OPC, p. 4 lns6-13, FN3 *citing to* EnerKnol Research article Dec. 21, 2015.
[20] Ex. 103, Rebuttal Testimony of Aaron Doll, Empire, p. 9, lns 1-9 (rebutting p. 8 of John Riley direct testimony).
[21] Ex. 104, Rebuttal Testimony of Blake Mertens, p. 1, lns 3-4

occur, the value of the protection must not be devalued…"[22] The fact that nearly 40% of Empire's electrical generation is natural gas fueled[23] cannot understate the importance of gas hedging due to market volatility and the price risk exposure faced by Empire's customers.

Mr. Mertens shared similar gas price volatility concerns conveyed by Staff auditor Eaves and Mr. Doll. Mr. Mertens testified there is much greater risk today that gas prices would go higher rather than go down, adding further to the risk of gas price volatility for customers:

> …You know, we've seen even within the last three to four years with the polar vortex prices, you know, on a realtime basis got up into the teens and even higher. So, when they get up to those levels—you know, there's much more likelihood that they'll get up, you know, above $5 than they would be down below. So, there's much more risk on the upside.[24]

Mr. Mertens concluded "Simply stated, when prices are at historical lows, upward price risk is much greater than downward…Empire's current hedging plan is poised to mitigate those conditions and provide price certainty to our customers."[25]

III. EMPIRE'S ISSUES POINT TO SECOND-GUESSING MANAGEMENT

Empire added issues to the Joint Issues List which Empire asserts are management decisions that Public Counsel wishes to take from the Company:[26]

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[22] Ex. 105, Surrebuttal Testimony of Blake Mertens, p. 5, lns 6-11. Rule 4 CSR 240-40.018 is the Commission's rule on Natural Gas Price Volatility Mitigation which informs gas utilities that prudent planning includes structuring their gas supply portfolios with contracts and pricing provisions to mitigate upward gas price spikes and to provide a level of stability. The rule recognizes that a balanced gas supply portfolio may be higher than spot market prices as a result of prudent efforts to dampen upward mobility.
[23] Ex. 105, Surrebuttal Testimony of Blake Mertens, p.7, lns19-23. Mr. Mertens contrasts Empire's 40% reliance on natural gas fueled generation with Ameren Missouri fueling only 0.7% of its total generation with natural gas.
[24] Tr. Vol. 2, p. 213 lns 9 – 23.
[25] Ex. 104, Rebuttal Testimony of Blake Mertens, p. 15, lns 19 – 25.
[26] Tr. Vol. 2, p. 39 lns 15-23.

> *Should Empire change its hedging policy (as set forth in its Risk Management Policy)?*
>
> *If so, what changes should be made? Should Empire cease all hedging activities at this time?*
>
> *If Empire is directed to cease hedging at this time, under what circumstances should Empire resume hedging activities?*
>
> *Should a mechanism be put in place to allow stakeholders and/or the Commission to review and approve a utility's hedging plan prior to implementation?*

Both counsel for Empire and OPC agreed these issues do not require a Commission decision because they are management decisions. Therefore, Staff will not address them. However, the concerns expressed in Empire's issues were addressed in a Commission investigation and working docket on electric utility hedging practices.

IV. WORKING DOCKET EW-2013-0101 INVESTIGATED ELECTRIC UTILITY HEDGING PRACTICES

The Commission opened its working docket to investigate electric utility fuel hedging practices in September 2012 and closed it in April 2014. Empire and OPC participated.

The Commission ordered the Staff to file a comprehensive report[27] to update the Commission on progress and to provide, among other things, a list of identified issues, a list of proposed solutions and problems identified, an explanation regarding the viability of each solution proposes, and a list and explanation of alternatives to hedging programs to mitigate natural gas price volatility.[28]

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[27] See File No. EW-2013-0101 *In the Matter of a Working Docket to Address the Hedging Practices of Electric Utilities Used to Mitigate the Rising Costs of Fuel*. Staff filed two reports: its first *Staff Report* (EFIS Item No. 27) on April 8, 2013 and its *Additional Staff Report* (EFIS Item No. 61) on January 31, 2014.

[28] File No. EW-2013-0101, *Order Directing Staff To File A Comprehensive Report And Setting A Deadline For Responses*, March 4, 2013 (EFIS Item No. 26).

In pertinent part, Staff's first Staff Report identified these key issues and reported:[29]

What are the goals of your hedging program?

> Participants stated that, even when prices look stable, the goal of a hedging program is to mitigate risk, stabilize prices and provide reliable supply. "Beating the market" or turning profit through speculation should not be the goal of a utility hedging program. Some participants stated that one of the goals of a hedging program for electric utilities should be that the hedging program should result in the lowest cost of fuel, given the agreed-upon and accepted level of cost to mitigate significant price volatility in the underlying commodity.

Are those [hedging program] goals still relevant in the current market?

> Yes. Hedging should be viewed as the cost of mitigating risk, and the gas market is not without risk.

Should a utility's hedging goals change in response to predictions about future markets?

> Yes, hedging is necessary because no prediction is ever perfect. Appropriate use of hedging instruments can take advantage of the current relatively low price of natural gas.

Should hedging gains and losses even out over time?

> Participants explained that gains and losses would only "even out" over time if the market moved up and down in a perfect sine wave, with the exact same inputs and outputs across the market.

As for how the rise in abundant shale gas would affect the future market price of gas, Staff's Additional Report concluded:[30]

> New sources of shale gas supply and decreased demand due to economic forces in the United States have dramatically driven down the price of natural

[29] File No. EW-2013-0101,see first *Staff Report* (EFIS Item No. 27) p. 6.
[30] File No. EW-2013-0101,see *Additional Staff Report* (EFIS Item No. 61) p. 6.

> gas. However, the IOUs [investor-owned utilities] made it clear that just because the market price of natural gas is lower than it has been in the past, there is no guarantee the price will remain at current levels, and price volatility still remains a concern. All of the IOUs emphasized that hedging is done to mitigate risk, not for price speculation and that price risk still exists, even when commodity prices are relatively low.

<u>As a result of workshop discussions and comments submitted by participants, the Staff concluded that periodic discussions with the IOUs was the most viable future course of action.</u>

Staff recommended to the Commission that each electric utility under the Commission's jurisdiction schedule a yearly confidential meeting between the IOU, Staff and OPC to discuss the past performance and future goals, policies and strategies of its individual hedging program(s) similar to the presentations currently provided to Staff and OPC by LDCs [local gas distribution companies].[31] Ameren Missouri, Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company agreed to this recommendation in their responses to Staff's reports.[32]

V. CONCLUSION & RECOMMENDATION

Staff conducted a prudence review of the natural gas fuel hedging costs allowed by Empire's Commission-approved FAC tariff sheets and found no evidence of imprudence on the part of the Company. Empire conducted its hedging activities within the parameters set out in its RMP. Staff relied on information supplied by Empire through data requests, Empire's general ledger and its Energy Risk Management Policy. Staff conducted its review as required by Missouri statute, Commission rule, and Empire's FAC tariff sheets.

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[31] File No. EW-2013-0101, see *Additional Staff Report* (EFIS Item No. 61) pp. 6-9 and *Staff Report* (EFIS Item No. 27) p. 14.

[32] File No. EW-2013-0101, *Ameren Missouri's Response to Additional Staff Report*, para. 3, p.2 (EFIS Item No.66) and *Kansas City Power & Light Company And KCP&L Greater Missouri Operations Company's Response to Staff's Reports*, para. 10, p. 5 (EFIS Item No.67).

As discussed above, OPC's objection and desire to end Empire's gas hedging activities under its RMP is not appropriate in this docket. Missouri statute requires that changes to an electric utility's FAC are to be ordered by the Commission in a general rate case proceeding when all relevant factors can be examined. OPC could have pursued its gas hedging issues and its challenge of Empire's RMP in the Company's last two rate cases, but did not. This is not a matter of prudence of a single gas hedge because OPC makes no challenge of imprudence on any one particular hedge placed by Empire. OPC dislikes gas hedging now because the market has experienced generally lower gas prices – though there is no guarantee low gas prices will continue.

As well, OPC's challenge of the hedging costs incurred by Empire in placing its hedges is based solely on hindsight. No one could have known at the time hedging decisions were made what the future market price of gas would be for gas delivered in the Review Period.

Lastly, because the Staff recognizes both the need for fuel price stability for Empire's customers and OPC's concern for the cost of hedging activities, Staff renews the recommendation it made, but not followed by the utilities, in the working docket on electric utility hedging practices in File No. EW-2013-0101.[33] Hence, Staff recommends that Empire schedule a meeting between the utility, Staff and the Office of the Public Counsel to further discuss Empire's hedging practices. Such a meeting should be the first of an annual event and should be done in the same manner as LDC's present their hedging/risk management strategies.

[33] Following the working docket, EW-2013-0101, Ameren Missouri, Kansas City Power & Light Company, and KCPL Greater Missouri Operations Company addressed natural gas fuel hedging practices in their most recent general rate case proceedings.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was served by electronic mail, or First Class United States Postal Mail, postage prepaid, on this 5th day of October 2017, to all counsel of record.

/s/ Robert S. Berlin