BEFORE THE CORPORATION COMMISSION OF THE STATE OF OKLAHOMA

IN THE MATTER OF THE APPLICATION OF)	
OKLAHOMA GAS AND ELECTRIC COMPANY)	
FOR AN ORDER OF THE COMMISSION)	
AUTHORIZING APPLICANT TO MODIFY ITS)	CASE NO. PUD 2023-000087
RATES, CHARGES, AND TARIFFS FOR RETAIL)	
ELECTRIC SERVICE IN OKLAHOMA)	

Rebuttal Testimony

of

Shawn McBroom

on behalf of

Oklahoma Gas and Electric Company

May 17, 2024

Shawn McBroom Rebuttal Testimony

1 **QUALIFICATIONS, EXPERIENCE, AND PURPOSE** 2 Q. Please state your name, position, by whom you are employed, and your business 3 address. My name is Shawn McBroom, and I am the Senior Manager, Market Operations for 4 A. 5 Oklahoma Gas and Electric Company ("OG&E"). My business address is 321 N. Harvey, 6 P.O. Box 321, Oklahoma City, Oklahoma 73101. 7 8 Please summarize your professional experience and educational background. Q. 9 A. I received a Bachelor of Business Administration in Management in 2005 and a Master of 10 Business Administration in 2008 from the University of Central Oklahoma. I joined the 11 Company in 2001 and have been involved with generation operations and the energy 12 markets including the Energy Imbalance Service ("EIS") market operations and Southwest Power Pool ("SPP") Integrated Marketplace ("IM") design and operations. In 2020, I was 13 14 promoted to Senior Manager, Commercial Operations where my responsibilities include SPP IM activities, fuels procurement, storage and transportation for coal, oil, and natural 15 16 gas for OG&E. I also hold voting representation on the SPP Market Working Group. 17 18 Q. Have you previously testified or appeared before the Oklahoma Corporation 19 **Commission ("Commission")?** 20 A. Yes. 21 22 Q. Please state the purpose of your Rebuttal Testimony in this proceeding. The purpose of my Rebuttal Testimony is to rebut the Responsive Testimony of Oklahoma 23 A. 24 Industrial Energy Consumers ("OIEC") witness Norwood regarding the declining energy 25 production levels at OG&E's coal units over the last several years, and Mr. Norwood's 26 assessment of low Locational Marginal Prices, ("LMPs") and high congestion cost at Sooner, as well as high energy production cost for OG&E's coal units. 27

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RESPONSE TO OIEC WITNESS NORWOOD

- Q. What are Mr. Norwood's concerns about the operation of OG&E's coal units during the test year?
- A. In his Responsive Testimony, Mr. Norwood states he is concerned about the level of OG&E's requested coal inventory because there were declining energy production levels and high operating costs at OG&E's Sooner and Muskogee coal units in recent years.¹

Q. Do you agree that energy production levels for OG&E coal-fired generation units
 were low during the test year?

10 Yes. Energy production levels for OG&E coal-fired units were lower in the test year, but A. 11 we must look beyond test year production levels to see that coal units are critical for reliability. As shown Chart 1 below, while energy production from OG&E's fossil fuel 12 13 generating units has historically fluctuated based on the price of gas, there have been recent periods with much higher energy production from the coal units. OG&E must maintain 14 15 higher coal inventory levels so it can sustain higher energy production levels when called 16 on by the SPP IM. OG&E witness Robert Doupe discusses OG&E's coal inventory in more detail. 17

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Responsive Testimony of Scott Norwood, page 15 line 17 – page 16, line 2.

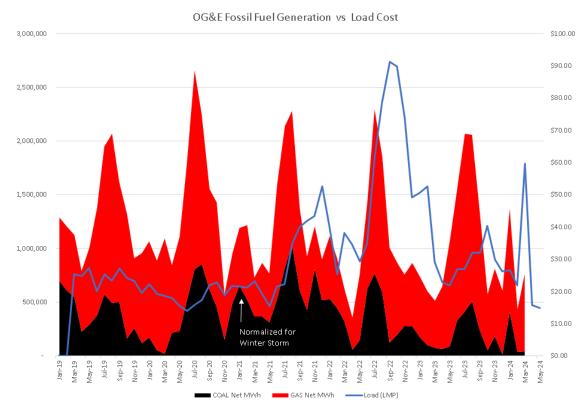


Chart 1: OG&E Fossil Fuel Unit Production (MWh)

1 Q. Do you agree with Mr. Norwood's assessment of high congestion cost at Sooner?

- 2 A. Yes. I do not dispute there have been high congestion costs at Sooner, but that is not something the Company can control.
- 5 Q. Are LMP's relatively low at the Sooner coal plant?

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- A. Yes, in more recent periods the Sooner LMPs are generally lower in comparison to other OG&E fossil fuel power plants. This has been caused by the higher congestion around the
- 8 Sooner facility and the large amount of wind generation in that same area.

- Q. Does Mr. Norwood mischaracterize OG&E's knowledge of congestion causes at the Sooner coal plant by stating that the Company does not know why congestion costs are high?
- 4 A. Yes. Mr. Norwood references OG&E's data response OIEC 18-19, which reads that the 5 Company cannot "be certain of the specific reasons" related to these congestion costs elevations. However, I can state in my professional opinion that the likely cause is not 6 7 simply congestion, but rather a conglomeration of renewable wind assets attempting to 8 connect to constrained transmission paths. My opinion is based on the market clearing 9 awards during periods when Sooner should otherwise be committed by the SPP, but is not, 10 while at the same time wind production output across the region is at or near maximum 11 output capabilities.

Q. Is it reasonable to identify wind generating resources as the most likely cause for
 increased congestion costs at the Sooner coal plant?

Yes. Pointing specifically to Mr. Norwood's generally accurate explanation of what are congestion costs and what drives them to increase, I would like to give a simple analogy that helps further support the general reason for increased congestion costs. Airline ticket prices increase as you approach the departure date of the flight. As a plane fills toward capacity, the ticket price of the next seat can move up rapidly, because there is increased value with limited supply. It is the same with transmission line congestion - as more electricity attempts to flow down a transmission path back toward load centers that will consume the electricity, there is an increase in the value of that transmission like capacity and thus increased congestion costs. In the airline example, in order to alleviate the congestion, they will offer credits for future flights or even cash. This is the same thing that occurs with transmission congestion. When paths are overloaded, the LMP will often show specific generating units are less desired by the market, and this is realized through lower congestion components of the resource's LMP.

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Q. What has OG&E done to address the high congestion cost?

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- A. OG&E continues to do what it has been doing since we began participating in the SPP

 Congestion Hedging products over 10 years ago: protecting our customers from congestion

 cost volatility. OG&E is allocated transmission congestion rights ("TCRs") by the SPP

 and these TCRs serve as a hedge against congestion. TCRs not only provide protection

 from congestion cost exposure but also provide congestion revenue that is returned directly

 to customers to offset fuel and market expenses.
- 9 Q: Is OG&E doing anything to alleviate the elevated level of congestion near the Sooner coal plant in particular?
- 12 Yes. By holding TCRs at Sooner power plant, the Company can offset the reduced energy 12 production market revenues that would have been realized if there was not the added 13 transmission congestion caused by too many resources attempting to connect to the 14 transmission system near the Sooner location. These TCRs are producing congestion 15 revenues and, while they are not energy production revenues, they are revenues just the 16 same that flow directly back to customers and offset customer fuel expense.

18 Q. Have OG&E's TCRs been valuable to its customers?

19 A. Yes. In the past five years, OG&E has received a total of \$512 million from all of its TCRs
20 positions, more than offsetting the high congestion costs at Sooner. To this fact, while
21 congestion costs may be high at Sooner power plant, the net benefit to Customers is
22 bolstered by the congestion revenues received that go directly toward offsetting Customers
23 load expense. Sooner power plant congestion revenues have accounted for more than \$226
24 million in the past five years, which is approximately 45% of all congestion revenues
25 received for the Company.

Q. Mr. Norwood recommended that the Company be required to meet with the SPP and stakeholders regarding the causes and potential solutions to congestion costs and factors leading to reduced production and revenue from OG&E coal units.² Do you believe this is necessary?

No. In my capacity as a voting member on the SPP Market Working Group, I can state firsthand that the topic of congestion hedging and causes for congestion has been a daily, monthly, and annual focus of the SPP and its stakeholders since the Integrated Marketplace began, with an even more centralized focus over the past three years based on SPP board recommendations to review congestion hedging impacts across the SPP system. The SPP is continually focused on evaluating ways to mitigate congestion costs. Therefore, Mr. Norwood's recommendation to start looking into congestion is unnecessary, as congestion is of high interest to not only OG&E, but the entire SPP. While there may not be specific documentation related to Sooner coal units, the SPP reports regularly on congestion across the entire SPP footprint.

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RECOMMENDATIONS

- 17 Q. Do you have any Recommendations to the Commission?
- A. Yes. I recommend the Commission reject Mr. Norwood's recommendations to reduce coal inventory, and I recommend the Commission reject Mr. Norwood's recommendation require OG&E to initiate meetings with the SPP and stakeholders to address high congestion costs at Sooner.

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- 23 Q. Does this conclude your Rebuttal Testimony?
- 24 A. Yes.

² Id. at page 27, line 13 – 22. Rebuttal Testimony of Shawn McBroom Case No. PUD 2023-000087