

Exhibit No.:
Issue: Rock Creek and Osborn Wind
Witness: Burton L. Crawford
Type of Exhibit: Direct Testimony
Sponsoring Party: Kansas City Power & Light Company and
KCP&L Greater Missouri Operations Company
Case No.: EO-2019-0067 (lead)
EO-2019-0068 (consolidated)
ER-2019-0199 (consolidated)
Date Testimony Prepared: April 23, 2019

MISSOURI PUBLIC SERVICE COMMISSION

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EO-2019-0067 (lead)
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DIRECT TESTIMONY

OF

BURTON L. CRAWFORD

ON BEHALF OF

**KANSAS CITY POWER & LIGHT COMPANY and
KCP&L GREATER MISSOURI OPERATIONS COMPANY**

**Kansas City, Missouri
April 2019**

DIRECT TESTIMONY
OF
BURTON L. CRAWFORD

Case Nos.
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1 **Q: Please state your name and business address.**

2 A: My name is Burton L. Crawford. My business address is 1200 Main, Kansas City,
3 Missouri 64105.

4 **Q: By whom and in what capacity are you employed?**

5 A: I am employed by Kansas City Power & Light Company (“KCP&L”) and serve as
6 Director, Energy Resource Management for KCP&L and KCP&L Greater Missouri
7 Operations Company (“GMO”).

8 **Q: On whose behalf are you testifying?**

9 A: I am testifying on behalf of KCP&L and GMO.

10 **Q: What are your responsibilities?**

11 A: My responsibilities include managing the Energy Resource Management (“ERM”)
12 department. Activities of ERM include integrated resource planning, wholesale energy
13 purchase and sales evaluations, fuel budgeting, renewable energy standards compliance,
14 and capital project evaluations.

15 **Q: Please describe your education, experience and employment history.**

16 A: I hold a Master of Business Administration from Rockhurst College and a Bachelor of
17 Science in Mechanical Engineering from the University of Missouri. Within KCP&L, I

1 have served in various areas including regulatory, economic research, and power
2 engineering starting in 1988.

3 **Q: Have you previously testified in a proceeding at the Missouri Public Service**
4 **Commission (“MPSC” or “Commission”) or before any other utility regulatory**
5 **agency?**

6 A: Yes, I have. I provided testimony to the Commission in prior KCP&L and GMO rate
7 cases and in a variety of other proceedings. I have also appeared before the Kansas
8 Corporation Commission (“KCC”) on behalf of KCP&L.

9 **Q: What is the purpose of your testimony?**

10 A: The Office of the Public Counsel (“OPC”) has challenged the prudence of decisions
11 made by KCP&L and GMO to enter into certain purchased power agreements (“PPAs”)
12 for wind energy. Specifically, OPC claims that KCP&L’s and GMO’s decisions to enter
13 into the Osborn Wind Energy (“Osborn”) and Rock Creek Wind Project (“Rock Creek”)
14 PPAs were imprudent, alleging that both PPAs create significant amounts of costs in
15 excess of revenues.¹ I will explain the basis of the decisions made by KCP&L and GMO
16 for entering into the Osborn and Rock Creek PPAs, and why those decisions are
17 reasonable.

18 **Q: Please provide background information on the Osborn and Rock Creek PPAs.**

19 A: PPAs for the 200 MW Osborn wind project were executed in May 2015. Osborn reached
20 commercial operation in December 2016. PPAs for the 300 MW Rock Creek wind
21 project were executed in April 2015. Rock Creek reached commercial operation in

¹ See Paragraph 8 of the Response to Staff’s Eighth Prudence Review Report filed by OPC, and Request for Evidentiary Hearing filed by OPC on March 11, 2019 in Case No. EO-2019-0067 and Paragraph 4 of the Response to Staff’s Second Prudence Review Report, and Request for Evidentiary Hearing filed by OPC on March 11, 2019 in Case Nos. EO-2019-0068

1 November 2017. Both wind projects are located in northwest Missouri, Osborn in
2 DeKalb County, and Rock Creek in Atchison County, Missouri. KCP&L takes 60% of
3 the energy from each wind facility and GMO takes the remaining 40%.

4 Several factors were considered in the decision to procure Missouri-based wind
5 projects including the Missouri Renewable Energy Standard (“RES”), economic benefits
6 to the area, the pending elimination of the federal Production Tax Credit (“PTC”), the
7 Environmental Protection Agency (“EPA”) proposed Clean Power Plan, projected
8 revenue requirement reduction over twenty years, and the relatively low transmission
9 risk.

10 **Q: Is the State of Missouri supportive of Missouri-based renewable energy?**

11 A: Yes, Missouri law² and a related MPSC rule concerning the state renewable energy
12 standards provide for an incentive to locate renewable generation in Missouri. The
13 Missouri RES rule promotes Missouri-based renewable development by providing
14 additional credit for renewable energy generated in Missouri. 4 CSR 240-20.100 (2)(B)1
15 provides: “If the facility generating the renewable energy resource is located in Missouri,
16 the allowed amount is the kilowatt-hours (kWhs) generated by the applicable generating
17 facility, multiplied by one and twenty-five hundredths (1.25) to effectuate the credit
18 pursuant to section 393.1030.1, RSMo and subsection (3)(G) of this rule.” Both Osborn
19 and Rock Creek qualify for this RES incentive.

20 **Q: How does the timing of the PTC affect wind projects?**

21 A: The PTC significantly reduces the cost of new wind generation. At the time Osborn and
22 Rock Creek wind projects were under consideration, the PTC was set to end for projects
23 beginning construction after 2014. Therefore, procuring wind before the PTC ended and

1 higher PPA contract prices occurred was a factor in the decision to add additional wind
2 generation to the KCP&L and GMO supply portfolios.

3 **Q: What effect did the proposed Clean Power Plan have on selection of Missouri-based**
4 **wind projects?**

5 A: The EPA proposed the Clean Power Plan (“CPP”) in June 2014. If enacted, KCP&L-
6 Missouri, KCP&L-Kansas, and GMO would have each been required to reduce CO₂
7 output beginning in 2020 and reach final targets in 2030. The addition of both the
8 Osborn Wind and Rock Creek wind facilities provided KCP&L additional CO₂-free
9 energy that would have been used to comply with the CPP. In addition, the proposed
10 CPP set state reduction targets based on existing renewable energy resources in the state
11 and requested comments on allowing states to take into account only renewable
12 generation occurring in-state in their compliance. Given that future CPP compliance had
13 the potential to be based on state-specific renewable sources, diversifying KCP&L and
14 GMO’s wind portfolio to include Missouri-based resources was a factor in the Osborn
15 and Rock Creek additions.

16 **Q: What effect did these two wind facilities have with respect to 20-year net present**
17 **value revenue requirement (NPVRR) for retail customers?**

18 A: Prior to entering the PPAs for these wind facilities in 2015, both projects were evaluated
19 with respect to their projected impact on long-term retail revenue requirements over nine
20 different scenarios. These nine scenarios included various combinations of projected
21 natural gas prices and future CO₂ restrictions, consistent with the Company’s IRP
22 planning process. Both wind projects were shown to reduce NPVRR under eight of nine

² 393.1030.1 RSMo.

1 scenarios modeled. The one scenario that increased NPVRR was based on low natural
2 gas prices and no future CO₂ restrictions.

3 These evaluations were based on the projected SPP wholesale market energy
4 prices used in the KCP&L and GMO 2014 Integrated Resource Plan analysis.

5 **Q: How else do these wind projects provide economic benefits?**

6 A: The Osborn wind project was estimated to provide \$2.5 Million for road and bridge
7 improvements in the local community, \$21.7 Million to support Clinton and DeKalb
8 county schools, \$2.4 million to support local emergency services, and six to ten full time
9 operations jobs. Additionally, it is expected that over \$35 million in property taxes and
10 over \$26 million in landowner payments will be paid during the first 30 years of
11 Osborn's life.

12 The Rock Creek wind project anticipated economic impact to Atchison County
13 and the surrounding area to reach over \$100 million during the first 20 years of operation
14 through the creation of new jobs, increased county tax revenues and landowner royalties.
15 Note that the Rock Creek facility currently employs 16 people full time and is working to
16 fill 4 additional full-time positions.

17 **Q: What are the benefits of the wind facilities locations with respect to transmission?**

18 A: Both Osborn and Rock Creek connected directly to the recently constructed Midwest
19 Transmission Project transmission line, which allows for delivery of renewable electricity
20 within the region and reduced transmission congestion risk as the projects are within the
21 GMO load zone. KCP&L and GMO were able to obtain firm transmission service to the
22 combined KCP&L/GMO load.

1 Q: Does that conclude your testimony?

2 A: Yes, it does.

any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

22 April
Burton L. Crawford

Subscribed and sworn before me this 23rd day of April 2019.

Anthony R. Westenkirchner
Notary Public

My commission expires: 4/26/2021

