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KCP&L Greater Missouri Operations CompanyCase No.:EO-2019-0067 (lead)
EO-2019-0068 (consolidated)
ER-2019-0199 (consolidated)Date Testimony Prepared:April 23, 2019

FILED

MISSOURI PUBLIC SERVICE COMMISSION

CASE NOS.: EO-2019-0067 (lead) EO-2019-0068 (consolidated) ER-2019-0199 (consolidated)

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

KCPL Exhibit No. 5 Date 8-27-19 Reporter Bjb File No. E0-2019-0067 E0-2019-0068 ER-2019-019

DIRECT TESTIMONY

OF

BURTON L. CRAWFORD

Case Nos. EO-2019-0067 (lead) EO-2019-0068 (consolidated) ER-2019-0199 (consolidated)

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:	Ay 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		

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have served in various areas including regulatory, economic research, and power
 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?

- A: Yes, I have. I provided testimony to the Commission in prior KCP&L and GMO rate
 cases and in a variety of other proceedings. I have also appeared before the Kansas
 Corporation Commission ("KCC") on behalf of KCP&L.
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Q: What is the purpose of your testimony?

10 The Office of the Public Counsel ("OPC") has challenged the prudence of decisions A: 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.

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

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

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

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

Yes, Missouri law^2 and a related MPSC rule concerning the state renewable energy 11 A: 12 standards provide for an incentive to locate renewable generation in Missouri. The 13 Missouri RES rule promotes Missouri-based renewable development by providing additional credit for renewable energy generated in Missouri. 4 CSR 240-20.100 (2)(B)1 14 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.

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

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

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higher PPA contract prices occurred was a factor in the decision to add additional wind
 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?

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

² 393.1030.1 RSMo.

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

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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.

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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?

A: Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of the Eighth Prudence Review of Costs Subject to the Commission-Approved Fuel Adjustment Clause of KCP&L Greater Missouri Operations Company)))	<u>Case No. EO-2019-0067</u> (Lead Case)
In the Matter of the Second Prudence Review of Costs Subject to the Commission-Approved Fuel Adjustment Clause of Kansas City Power and Light Company))))	Case No. EO-2019-0068 (Consolidated)
In the Matter of the Application of KCP&L Greater Missouri Operations Company Containing its Semi-Annual Fuel Adjustment Clause True-Up)))	Case No. ER-2019-0199 (Consolidated)

AFFIDAVIT OF BURTON L. CRAWFORD

STATE OF MISSOURI)) ss COUNTY OF JACKSON)

Burton L. Crawford, being first duly sworn on his oath, states:

1. My name is Burton L. Crawford. I work in Kansas City, Missouri, and I am employed by Kansas City Power & Light Company as Director, Energy Resource Management.

2. Attached hereto and made a part hereof for all purposes is my Direct Testimony on behalf of Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company consisting of <u>six</u> (<u>6</u>) pages, having been prepared in written form for introduction into evidence in the above-captioned docket.

3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including

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

ZZC/ Burton L. Crawford

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

Haty K. Notary Public / My commission expires: $\frac{4/26}{2021}$ ANTHONY R WESTENKIRCHNER Notary Public, Notary Seal State of Missouri Platte County Commission # 17279952 My Commission Expires April 26, 2021

Exhibit No.:

Issue: Renewable Energy Credits Witness: Jeff Martin Type of Exhibit: Direct Testimony Sponsoring Party: Kansas City Power & Light 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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DIRECT TESTIMONY

OF

JEFF MARTIN

ON BEHALF OF

KANSAS CITY POWER & LIGHT COMPANY

Kansas City, Missouri April 2019