

Exhibit No.:
Issue: *Fuel Model*
Witness: *Charles T. Poston*
Sponsoring Party: *MoPSC Staff*
Type of Exhibit: *Rebuttal Testimony*
Case No.: *ER-2016-0285*
Date Testimony Prepared: *December 30, 2016*

MISSOURI PUBLIC SERVICE COMMISSION

COMMISSION STAFF DIVISION

ENGINEERING ANALYSIS UNIT

REBUTTAL TESTIMONY

OF

CHARLES T. POSTON

KANSAS CITY POWER & LIGHT COMPANY

CASE NO. ER-2016-0285

Jefferson City, Missouri
December 2016

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1 **REBUTTAL TESTIMONY**

2 **OF**

3 **CHARLES T. POSTON**

4 **KANSAS CITY POWER & LIGHT COMPANY**

5 **CASE NO. ER-2016-0285**

6 Q. Please state your name and business address.

7 A. My name is Charles T. Poston and my business address is Missouri Public
8 Service Commission, 200 Madison Street P.O. Box 360, Jefferson City, MO 65102

9 Q. By whom are you employed and in what capacity?

10 A. I am employed by the Missouri Public Service Commission as a Utility
11 Regulatory Engineer I.

12 Q. Are you the same Charles T. Poston who, on November 30, 2016, filed direct
13 testimony as a part of Staff's Revenue Requirement Cost of Service Report?

14 A. Yes, I am.

15 Q. What is the purpose of your rebuttal testimony?

16 A. The purpose of my rebuttal testimony is to discuss power plant dispatching
17 methods used in the production cost models created by the Missouri Public Service
18 Commission's Staff ("Staff") and KCPL.

19 Q. What does Staff mean by the term "dispatch" when discussing the operation of
20 power plants?

21 A. Staff uses the term "dispatch" as a general term for the decision to turn on a
22 power plant and make it available to generate energy above its minimum stable level and
23 below its maximum rated capacity.

1 **DISPATCHING WITHIN STAFF'S PRODUCTION COST MODEL**

2 Q. How are power plants dispatched by Staff's production cost model?

3 A. Within Staff's production cost model, power plants are dispatched against
4 market prices. The hourly market prices input into the production cost model are compared
5 against the generation cost at each power plant. Dispatching is based on the difference in
6 market price and generating cost, subject to the physical and operational limitations of each
7 power plant. If market prices are high enough to justify the economic operation of a power
8 plant, it is assumed that there is demand within the integrated marketplace for the energy that
9 power plant can produce, and so it would be dispatched to help serve the load of the entire
10 energy market.

11 This market-based dispatch method is not tied to native load requirements. Instead,
12 the dispatching of power plants is dependent on the load behavior of the larger energy market
13 that is communicated through the price of energy within the integrated marketplace. Higher
14 prices are broadly indicative of a greater demand for energy within the market while lower
15 prices are broadly indicative of a lesser demand for energy.

16 **DISPATCHING WITHIN KCPL'S PRODUCTION COST MODEL**

17 Q. How are power plants dispatched by KCPL's production cost model?

18 A. KCPL stated that the production cost model that was included as a part of their
19 direct testimony performed an economic dispatch of generating units and available market
20 purchases in order to serve load in a least cost manner and to make off-system sales when
21 economic.¹

¹ ER-2016-0285, Direct Testimony of Burton L. Crawford, Page 6, Lines 13-15.

1 **DIFFERENCES IN DISPATCHING METHODS**

2 Q. How does the dispatching method used by KCPL in their direct testimony
3 differ from the dispatching method used by Staff?

4 A. Within Staff's production cost model, all power plants are available to be
5 dispatched to meet the energy needs of the integrated marketplace that are communicated
6 through energy prices. Staff's dispatch method can commit power plants to make sales within
7 the integrated marketplace when it is economic to do so without regard to native load
8 requirements. KCPL stated that their production cost model, "generally does not commit
9 resources to make off system sales."² The dispatching method that KCPL had chosen to use
10 in its production cost model was tied to meeting native load.

11 **CURRENT STATUS**

12 Q. Has Staff contacted KCPL in regard to the issue discussed above?

13 A. Yes. On December 19, 2016, Staff contacted KCPL to discuss differences in
14 production cost model dispatching methods. During that phone conversation KCPL indicated
15 that they had plans to adopt a market price-based power plant dispatching method for their
16 true-up testimony.

17 Q. Does this conclude your testimony?

18 A. Yes.

² ER-2016-0285, KCPL Response to Staff Data Request 0283, Response to Items 1-3.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Kansas City Power & Light)
Company's Request for Authority to)
Implement A General Rate Increase for)
Electric Service)

Case No. ER-2016-0285

AFFIDAVIT OF CHARLES T. POSTON, PE

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW CHARLES T. POSTON, PE and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing Rebuttal; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

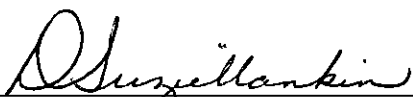


CHARLES T. POSTON, PE

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 29th day of December, 2016.

D. SUZIE MANKIN Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: December 12, 2020 Commission Number: 12412070
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Notary Public