PUBLIC VERSION

Certain Schedules Attached to this Testimony Contain "Confidential or "Confidential-Restricted" Information and Have Been Removed.

BEFORE THE STATE CORPORATION COMMISSION OF THE STATE OF KANSAS

DIRECT TESTIMONY OF

FORREST ARCHIBALD

ON BEHALF OF KANSAS CITY POWER & LIGHT COMPANY

IN THE MATTER OF THE PETITION OF
KANSAS CITY POWER & LIGHT COMPANY ("KCP&L")
FOR DETERMINATION OF THE RATEMAKING PRINCIPLES
AND TREATMENT THAT WILL APPLY TO THE RECOVERY
IN RATES OF THE COST TO BE INCURRED BY KCP&L FOR
CERTAIN ELECTRIC GENERATION FACILITIES
UNDER K.S.A. 66-1239

DOCKET NO. 11-KCPE-581-PRE

- 1 Q: Please state your name and business address.
- 2 A: My name is Forrest Archibald. My business address is 1200 Main Street, 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" or the "Company")
- 6 as Senior Manager of Cost.
- 7 Q: What are your responsibilities?
- 8 A: I am responsible for managing the team that processes and maintains the actual and
- 9 budget cost records for KCP&L's major construction projects. I will be responsible for

all of the various cost reports that are generated on the La Cygne Project and reporting
the La Cygne Project's cost trends, including the velocity of certain costs over time, to
the Project's senior leadership team, KCP&L's Senior Management, and Westar.

4 Q: Could you please describe your work history?

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Yes. I have over 13 years experience in managing various aspects of cost control systems, including technical teams associated with controlling and reporting on costs. My experience in cost control on construction projects includes: (1) development and implementation of cost tracking systems; (2) forecasting and estimating project costs; (3) contract negotiation, interpretation, and management; and (4) execution of general cost engineering responsibilities. In addition, I have field construction experience at various organizational levels including management. My first construction experience was in 1994 as an iron worker for Wichita Steel and Precast Erection Company. Between 1995 and 2000, Wichita Steel promoted me from Lead Estimator to Contract Administrator. In 2004, my focus shifted exclusively to cost engineering. Prior to joining KCP&L, from 2004 to 2006, I was a Cost Supervisor for American Electric Power Company ("AEP") where I was responsible for tracking and reporting costs for projects ranging in size from \$25 million to \$600 million. During my time at KCP&L, I have been responsible for all cost tracking, forecasting, and reporting for the Iatan projects and the Spearville II project.

Q: Have you previously testified in a proceeding before the Kansas Corporation
Commission ("Commission" or "KCC") or before any other utility regulatory
agency?

- 1 A: I have not previously testified before the KCC, but I have testified before the Missouri
- 2 Public Service Commission in Case Nos. ER-2010-0355 and ER-2010-0356.

3 Q: What is the purpose of your testimony?

- 4 A: I will describe the process the Company used to determine the La Cygne Project cost
- 5 estimate. The components of the cost estimate are shown in Confidential Schedule
- 6 FA2011-1.
- 7 Q: Please describe the major components that make up the cost estimate.
- 8 A: The engineer, procure, and construct ("EPC") contract, described in the Direct Testimony
- 9 of Company witness Robert Bell, comprises the bulk of the estimate. Other cost
- 10 components include remaining direct costs (specific direct project costs that are not
- included in the EPC contract), indirect costs, and contingency. I will address each of
- these cost components in turn.

13 I. <u>EPC CONTRACT COST COMPONENT</u>

- 14 Q: Please describe the process you used to develop the EPC contract cost component.
- 15 A: In response to its RFP, KCP&L received bids from five potential vendors. The first step
- was to analyze the bids for completeness and adherence to the bid specification prepared
- by Black & Veatch ("B&V"), KCP&L, and Westar. Exceptions, non-responsiveness or
- alternative proposals to bid specifications were then analyzed and categorized. This
- process was a joint effort with B&V, KCP&L, Westar, and B&V. Once this analysis was
- complete, my department developed revised EPC estimates by adding or subtracting costs
- 21 to/from each bid depending on each individual bidder's compliance with the
- specification. This resulted in a levelized or apples-to-apples comparison of what each
- bid likely would have been if each bidder had met the bid specification on a consistent

basis. Examples of these items are contained in Mr. Bell's testimony. This first step allowed KCP&L and Westar to narrow their focus to three bidders.

How did you proceed after you narrowed the potential bidders?

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First, the additions and deletions of cost to the submitted bids were reviewed by KCP&L, Westar, and B&V. KCP&L, Westar, and B&V met separately with each of the remaining three bidders to obtain more information and to verify, to the extent practical at this stage of the process, the best apples-to-apples comparison of cost. These meetings included discussions of both technical and commercial issues contained in the bidders' respective proposals in order to help develop a levelized cost for comparison purposes. The second step of this two-step process allowed KCP&L and Westar to better define each bidder's proposal on an apples-to-apples basis. For example, in the first step of the process if a bidder did not include a minimum two-year warranty in its bid pursuant to the bid specification, then the project team would estimate the cost of a two-year warranty and include the estimate in each bid that excluded it. In the second step of the process, KCP&L and Westar were able to determine from a vendor the cost of a two-year warranty. This resulted in a more precise and comparative estimate for the three remaining bidders.

Without an EPC contract in place and with three bidders still in the running for the EPC contract, how did KCP&L determine the EPC cost component of the project cost estimate used in its petition for predetermination?

Because KCP&L's analysis of the EPC bidders' proposals generated a levelized comparison, based on the specifications given to the bidders in the RFP, KCP&L was able to leverage this information to generate a cost estimate, which in its aggregate,

would allow the selection of any of the remaining three bidders to complete the scope of work.

3 Q: Do you expect the EPC cost estimate to change once a final contract is executed?

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Yes, it will change; however, it is not expected to represent a material change. KCP&L and Westar are confident that the rigorous analysis conducted by KCP&L, Westar, and B&V, has resulted in a reliable estimate for this component of the total cost of the project. KCP&L and Westar believe the other components of the total cost estimate, which I describe later in my testimony, are equally reliable and thus the total project cost estimate shown in Confidential Schedule FA2011-1 should be approved as requested in the petition for predetermination.

If the EPC contract amount finally negotiated is more than the amount included in the Company's predetermination request, does the Company intend to change the overall cost estimate that the Commission is being requested to find reasonable and prudent?

No. As discussed in the Direct Testimony of KCP&L witness Chris Giles, the Company is requesting predetermination of the prudence of the project cost estimate included with its petition. To the extent that the total actual project cost (and therefore KCP&L's Kansas jurisdictional portion of that cost) is higher than the predetermined amount, the prudence of those additional costs will be determined during the proceeding when KCP&L requests recovery of those additional costs.

II. REMAINING DIRECT COSTS COMPONENT

Q: What does the "remaining direct costs" component represent in the total cost estimate?

plant communications, and other direct project costs that are not included in the EPC contract. The chimney and site development represent approximately 76 percent of these remaining direct costs. KCP&L has a separate contract for the chimney, although KCP&L expects to assign the chimney contract to the eventual EPC contractor. Mr. Bell

"Remaining direct costs" include items such as the chimney, site development, security,

- describes in his Direct Testimony why a separate contract was required for the chimney.
- Similar to the chimney, site development work must begin before an EPC contract is executed, thus it is also a separate contract.
- 9 Q: Please describe the process used to develop the "remaining direct cost" component 10 of the project cost estimate.
- As a by-product of the EPC evaluation, KCP&L, Westar, and B&V, identified additional direct scopes that were required as part of the environmental upgrades but not included in the EPC specification. Once these scopes were identified, the project team produced a cost estimate for each scope of work using standard industry methods.

15 III. INDIRECT COST COMPONENT

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- 16 Q: What does the "indirect cost" component represent in the total cost estimate?
- 17 A: These costs represent owners' and OE (B&V) costs and include categories of costs such 18 as, construction management, oversight, legal services, and start-up costs.
- 19 Q: Please describe in general how indirect cost estimates were determined.
- 20 A: The indirect cost estimate was developed by KCP&L, Westar, and, B&V, based on a
 21 two-part methodology: (1) as a result of the EPC evaluation, the project team was
 22 identified areas and scopes of work where the EPC vendor would require resource
 23 support from the owner; and (2) the project team then identified the level of resources it

- 1 would require to allow KCP&L to provide oversight and quality assurance for the project.
- Once these scopes were identified, the project team generated a cost estimate for each
- 3 scope of work using standard industry methods.

4 IV. CONTINGENCY COST COMPONENT

- 5 Q: What does the contingency cost component represent?
- 6 A: Contingency represents an allowance for items, conditions, or events for which the
- 7 occurrence is uncertain but experience dictates that it will likely result in additional costs.
- 8 Examples of these include, but are not limited to, design maturation, planning and
- 9 estimating errors or omissions, pricing volatility, constructability or equipment
- interfacing issues, environmental conditions or schedule impacts.
- 11 Q: How did the project team determine approximately 12 percent contingency was
- 12 appropriate for this project?

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The project team analyzed the base cost estimate and determined that it needed to segregate the contingency analysis into two separate calculations based on the existing data points. The first data point was the base direct cost amount. Several months and thousands of man-hours have been spent reviewing thousands of documents in the process of analyzing the direct cost scopes and understanding the specification requirements and estimating the subsequent potential gaps. The project team is confident that because these gaps were identified and estimated up front, the contingency for the direct scopes can be limited to 10 percent of the base direct costs. The second data point was the base indirect costs. Although the project team has spent months developing these estimates, the team acknowledges that there is the potential for significant risk on this portion of the estimate due to the contracting modality. An EPC structured contract

requires significant oversight and quality assurance to protect the owners' and customers
interests. Moreover, such oversight will develop the data to allow KCP&L and Westar to
accurately report project status to the Commission's Staff. The transparency of data in ar
EPC contract can be difficult to discern at times and as such carries an inherent risk that
must be managed properly. The project team believes that because of this factor
25 percent contingency is warranted on the base indirect costs. Taking these two
contingency percentages into account along with the dollars associated with each
category of costs, direct and indirect, the project team derived a 12 percent overall
contingency figure.

If you have included a contingency component for the project that is part of the amount KCP&L is asking the Commission to pre-approve as reasonable in this case, why is KCP&L also indicating that the Company should have the ability to later request recovery in rates of costs in excess of the amount approved in this docket?

The project costs requested are still estimates. Prudently incurred costs should be recoverable whether or not the cost estimate, including contingency, is exceeded. Similarly, the Commission would expect the Company to recover only the actual costs if

Q: Does that conclude your testimony?

those came in less than the cost estimate.

19 A: Yes, it does.

Q:

A:

BEFORE THE STATE CORPORATION COMMISSION OF THE STATE OF KANSAS

In the Matter of the Petition of Kansas City Power & Light Company ("KCP&L") for Determination of the Ratemaking Principles and Treatment that Will Apply to the Recovery in Rates of the Cost to be Incurred by KCP&L for Certain Electric Generation Facilities Under K.S.A. 2003 SUPP. 66-1239	Docket No. 11-KCPEPRE	
AFFIDAVIT OF FORREST B. ARCHIBALD		
STATE OF MISSOURI) ss COUNTY OF JACKSON)		
Forrest B. Archibald, being first duly sworn	on his oath, states:	
1. My name is Forrest B. Archibald.	I work in Kansas City, Missouri, and I am	
employed by Kansas City Power & Light Company	as Senior Manager of Costs.	
2. Attached hereto and made a part her	eof for all purposes is my Direct Testimony	
on behalf of Kansas City Power & Light Company of	consisting of $\underline{S} \cdot \underline{S} + \underline{S} \cdot \underline{S}$	
pages, having been prepared in written form for		
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 thereof, are true and accurate to	the best of my knowledge, information and	
belief.	meet white	
Subscribed and sworn before me this / day of	B. Archibald February 2011	
My commission expires: May 23, 2014	Public DONNA J. STOWAY Notary Public, Notary Seal State of Missouri Clay County Commission # 10889620 My Commission Expires May 23, 2014	

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