

**BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS**

DIRECT TESTIMONY OF

ROBERT N. BELL

**ON BEHALF OF
KANSAS CITY POWER & LIGHT COMPANY**

**IN THE MATTER OF THE APPLICATION OF
KANSAS CITY POWER & LIGHT COMPANY
TO MAKE CERTAIN CHANGES IN
ITS CHARGES FOR ELECTRIC SERVICE**

DOCKET NO. 17-KCPE-____-RTS

1 **I. INTRODUCTION AND PURPOSE**

2 **Q: Please state your name and business address.**

3 A: My name is Robert N. Bell. My business address is 1200 Main Street, Kansas City,
4 Missouri 64105.

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

6 A: I am employed by Kansas City Power & Light Company (“KCP&L” or the “Company”)
7 as Senior Director – Construction.

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

9 A: My responsibilities include oversight of all aspects of the Company’s large generation
10 construction projects. Currently, my primary responsibility is oversight of the installation
11 of certain environmental equipment at the La Cygne Generating Station (“La Cygne”)
12 needed to comply with state and federal environmental obligations.

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

2 A: The purpose of my testimony is to describe the construction at La Cygne known as the
3 “La Cygne Environmental Project” or the “Project” and provide a status update of the
4 Project as it nears completion. I will also provide a brief overview of the safety record of
5 the Project. The relevant accounting adjustments and cost of service impact of this plant
6 addition are discussed in the Direct Testimony of KCP&L witness Ms. Linda J. Nunn.

7 **II. EDUCATION AND EXPERIENCE**

8 **Q: Before we get into your discussion of the La Cygne Environmental Project, please**
9 **describe your education, experience and employment history.**

10 A: I received my Bachelor of Science degree in Electrical Engineering from the University
11 of Kentucky in 1981. Since that time, I have worked in numerous positions related to
12 utility construction with the Tennessee Valley Authority, General Electric International,
13 and Black & Veatch (“B&V”). I was hired by KCP&L in 2009 to manage the start-up of
14 a new 850 MW coal plant, Iatan Unit 2. I was named Senior Director – Construction in
15 2010. My credentials are attached as Schedule RNB-1.

16 **Q: Have you previously testified in a proceeding before the Kansas Corporation**
17 **Commission (“Commission” or “KCC”), or before any other utility regulatory**
18 **agency?**

19 A: Yes. I previously testified before the Commission in Docket Nos. 10-KCPE-415-RTS
20 regarding the construction of the Iatan Unit 2 power plant, and 11-KCPE-581-PRE (the
21 “11-581 Docket”) in which the Commission granted the Company’s request for
22 predetermination of the La Cygne Environmental Project finding it to be prudent and
23 approving the costs associated with the Project up to the budget level of \$1.23 billion. I

1 also provided written testimony in rate case Docket Nos. 12-KCPE-764-RTS, 14-KCPE-
2 272-RTS and 15-KCPE-116-RTS (“15-116 Docket”) in which the Commission granted
3 recovery of incurred Project costs. I have also testified before the Missouri Public
4 Service Commission on the same matters.

5 **III. LA CYGNE ENVIRONMENTAL PROJECT DESCRIPTION**

6 **Q: Before you discuss the Project, please provide a brief overview of the La Cygne**
7 **generating station.**

8 A: La Cygne is comprised of two coal-fired units. Unit 1, a once through supercritical
9 cyclone coal-fired boiler, is rated at 812 MW gross / 736 MW net. It was constructed in
10 the early 1970s and was placed in commercial operation in 1973. Unit 2, a pulverized
11 coal-fired boiler, is rated at 717 MW gross / 682 MW net. It was constructed in the mid-
12 1970s and placed in commercial service in 1977. KCP&L owns 50% of La Cygne.
13 Kansas Gas and Electric Company, a wholly owned subsidiary of Westar Energy, Inc.
14 (“Westar”) controls the other 50% share of La Cygne. Pursuant to the two companies’
15 ownership agreement, KCP&L is responsible for operating both La Cygne Units.

16 **Q: What is the La Cygne Environmental Project?**

17 A: The Project includes installation of wet scrubbers, baghouses and a common dual-flue
18 chimney for both La Cygne Units 1 and 2, and a selective catalytic reduction (“SCR”)
19 system, low-nitrogen oxide (“NOx”) burners (“LNBS”) and an over-fire air (“OFA”)
20 system for Unit 2.¹ Following Commission approval of the Project in the 11-581 Docket,
21 construction began in September 2011. This Project was described at length to the
22 Commission in the 11-581 Docket.

¹ In May 2007, a selective catalytic reduction (“SCR”) system for nitrogen oxide (“NOx”) removal was installed on La Cygne Unit 1.

1 **Q: Please describe KCP&L’s involvement with the Project.**

2 A: KCP&L, as the operating partner of La Cygne, is responsible for establishing and
3 managing the schedule and budget for the Project. This is being accomplished through
4 significant oversight and monitoring of activities for all scopes of work on the Project.

5 The scopes of work for the following vendors (“Contractors”) include:

Contractor	Scope of Work
La Cygne Environmental Partners (“LEP”), a joint venture formed by Kiewit Industrial Contractors and Sargent and Lundy	AQCS
International Chimney Corporation (“ICC”)	Demolition of Unit 1 and Unit 2 chimneys
Brandenburg	Balance of plant (“BOP”)
Enerfab	Gypsum handling improvements
Electrical Corporation of America (“ECA”)	Pre-demolition work, including disconnection of power to equipment and buildings being demolished
Black and Veatch (“B&V”)	Microwave tower relocation
Kissick Construction	Site finishing

6 **IV. LA CYGNE ENVIRONMENTAL PROJECT STATUS UPDATE**

7 **Q: Does KCP&L provide the Commission with regular status updates of the Project?**

8 A: Yes. KCP&L submits a monthly status report (“La Cygne Report”) on the Project to the
9 Commission in Compliance Docket No. 12-KCPE-258-CPL (the “12-258 Docket”).
10 Each report covers actual cost data for the La Cygne Environmental Project, as well as
11 schedule and metric data. Each monthly report also includes a written narrative that
12 describes overall progress on the Project. This provides the Commission with ongoing
13 visibility of the progress being made on the Project.

14 In addition, KCP&L and Westar, La Cygne’s co-owners, met with the Staff of the
15 Commission each month subsequent to the filing of each monthly report to review cost,

1 performance metrics, provide an update on activities since the report was filed, and to
2 walk through the site to view construction progress. These monthly meetings continued
3 through October 2015 at which point Commission Staff determined they were no longer
4 necessary; and were replaced with conference calls with Staff on an as needed basis.

5 **Q: When was the most recent status update report filed?**

6 A: The most recent status update report on the La Cygne Environmental Project was filed in
7 the 12-258 Docket on October 14, 2016. The next status report is scheduled to be filed
8 on November 15, 2016. KCP&L anticipates continuing to file these reports through
9 February or March 2017.²

10 **Q: Please briefly describe the progress on the Project to date as reported in the status
11 update filings.**

12 A: Following are some of the highlights from the filed La Cygne Environmental Project
13 monthly status reports. Schedule and metric data is through late September 2016:

- 14 ▪ The Project has an exceptional safety record.
- 15 ▪ The Project remains on schedule.
- 16 ▪ The Project is expected to complete at \$1.155 billion, which is \$75 million below
17 the budget approved in the 11-581 Docket of \$1.23 billion.

² Pursuant to the Commission's Order in the 11-581 Docket, *Order Granting KCP&L Petition for Predetermination of Rate-Making Principles and Treatment, issued Aug. 19, 2011*, p. 50, ¶ 93, the monthly reporting on the Project status is to continue through "the life of the La Cygne Project." Specifically, it states, "The monthly reporting requirement will begin on the first day of October, 2011, and continue during the life of the La Cygne Project." The Project is anticipated to be complete in December 2016. The February 2017 La Cygne Report will report out on activity through December 31, 2016.

- 1 ▪ The AQCS equipment for both Units 1 and 2 met the in-service criteria and was
2 declared in-service as of April 18, 2015.³ Work on punch list items continues.
- 3 ▪ Final Completion of the Project, including all remaining items related to the
4 AQCS and the associated decommissioning and demolition work⁴, is scheduled to
5 be met in December 2016. The actual/forecasted finish dates for Final
6 Completion by Project scope, as reported in the October 2016 La Cygne Report,
7 is as follows:

Scope of Work	Finish Date
Microwave tower	07/14/2016
Gypsum handling improvements	11/03/2016
Site finishing	11/07/2016
AQCS	12/01/2016
Balance of plant	12/05/2016
Pre-demolition	12/15/2016
Chimney demolition	12/28/2016

- 8 ▪ KCP&L has an excellent working relationship with the Contractors and all
9 entities are diligently working together to ensure a safe and successful completion
10 of the Project on time and under budget.

³ See 15-116 Docket, *In-Service Confirmation on La Cygne Unit 1 and Unit 2 Environmental Equipment and Related Common La Cygne Plant*, filed Jun. 16, 2015. Also see 15-116 Docket, *Order on KCP&L's Application for Rate Change*, issued Sep. 10, 2015, p. 35, Ordering ¶ B, and Attachment A to that Order, Partial Settlement Agreement on Revenue Requirement, p. 11, ¶ 21.

⁴ Demolition work includes complete removal of (1) the old Unit 1 and Unit 2 stacks, (2) the Unit 2 electrostatic precipitator, (3) the Unit 1 and Unit 2 induced draft fans, and (4) a portion of the obsolete Unit 1 wet scrubber.

1 **Q: Please summarize how KCP&L works with the co-owner, Westar, to monitor the**
2 **project.**

3 A: KCP&L and Westar have an excellent working relationship with the Contractors and the
4 entities are diligently working together to ensure successful completion of the Project.
5 Westar has had employees and senior management closely involved in the Project from
6 the beginning, including oversight personnel on-site daily and monthly on-site meetings
7 with senior management of both companies. This owner cooperation is important to
8 ensure that the interests of the customers of both companies are being represented.

9 **V. LA CYGNE ENVIRONMENTAL PROJECT SAFETY UPDATE**

10 **Q: Please describe the ways in which the La Cygne Environmental Project measures**
11 **the Contractors' safety performance.**

12 A: There are a number of industry metrics for tracking safety that are used by KCP&L. One
13 metric is known as Total Cases Incident Rate ("TCIR"). TCIR is defined by the
14 Occupational Safety and Health Administration as the number of recordable incidents in
15 a year, multiplied by 200,000 and divided by the total hours worked that year. KCP&L
16 also tracks Days Away, Restricted, Transferred ("DART") cases which are calculated
17 similar to TCIR and all safety incidents (first aid cases and near misses) are reported by
18 the Contractors.

19 **Q: How does the La Cygne Environmental Project compare to industry averages for**
20 **safety performance?**

21 A: The Project has an outstanding safety record as shown when compared to industry
22 averages. The following chart illustrates the Project's safety performance as of
23 October 31, 2016 compared to the industry.

SAFETY STATISTICS as of October 31, 2016	PROJECT To-date	INDUSTRY ^{1/} Average
Days Away, Restricted, Transfer (DART)	0.09	1.90
Total Case Incident Rate (TCIR)	0.22	3.50
First Aid Cases	62	
Total Work Hours (millions)	4.5	
Avg. Personnel On-Site/Day (estimate) ^{2/}	277	

^{1/} Industry Average Source: U.S. Bureau of Labor Statistics (2015 data)

^{2/} Peaked in November 2013 with 943 craft workers on-site

1 **Q: In your experience in the industry, what is the value to a project from having a good**
2 **safety record?**

3 A: Safety should always be the first consideration on any construction project because safety
4 permeates everything else. If a project has a good safety reputation, it can attract good
5 workers. If a project has low incident rates, it generally shows that the work is well
6 managed and that the contractors have planned their work before going to the field.

7 **Q: How has the KCP&L Project team managed safety issues such as those you**
8 **describe?**

9 A: KCP&L has responded appropriately any time significant safety events occurred. The
10 owners, though not responsible for the implementation of the Contractors' safety
11 programs, have instilled the Safety First culture for everyone working on the project. I
12 believe that we are doing that through our construction management team and daily
13 reminders that safety has to be the first consideration.

14 **Q: Overall, what is your opinion as to how KCP&L has managed the safety program**
15 **on the Project?**

16 A: The safety program and the Project's successful safety record speak for themselves and
17 are consistent with best practices in the industry. In October 2016, the La Cygne

1 Environmental Retrofit Project received an award for outstanding achievement in
2 construction safety at the National Maintenance Agreements Policy
3 Committee (“NMAPC”) Safety Gala in Washington, D.C, which is “the union
4 construction industry’s premier safety recognition event.”

5 **Q: Has this Project received other recognition for its safety record?**

6 A: Yes. In December 2015, at a convergence of five power generation conferences (*i.e.*,
7 POWER-GEN International, NUCLEAR POWER International, Renewable Energy
8 World Conference & Expo North America, COAL-GEN and GenForum) sponsored
9 annually by the PennWell Corporation, the Project was honored as a finalist for the 2015
10 Best Coal Project of the Year Award finishing second to an international project
11 consisting of two new 870 MW coal units in Yeonheung Island, South Korea.

12 **Q: Does that conclude your testimony?**

13 A: Yes it does.

Robert N. Bell

SUMMARY

Successfully manage the installation, startup and operation of power plants utilizing over 30 years of hands-on experience.

EXPERIENCE

03/09 to Present

Kansas City Power & Light, Kansas City, MO
Senior Director, Construction

- Project Director for the construction completion and startup of the Iatan 2 Coal Fired Supercritical 930MW Plant. Record 42 day completion from synchronization to completing in-service testing.
- Project Director for the construction and startup of the LaCygne Environmental Retrofit of two 800MW Coal Fired units. Retrofit includes SCR, Baghouse and Scrubbers.
- Project Director for the construction and startup of the Sibley Unit 3 Environmental Retrofit of a 360MW Coal Fired unit. Retrofit includes Baghouse and Scrubber.
- Department Director for all large Construction projects.

01/04 to 03/09

Black and Veatch Special Projects Corp, Overland Park, KS
Vice President and Director of Programs

- Program Director of the energy projects for the \$1.4 billion USAID Afghanistan Infrastructure and Rehabilitation Program. Responsible for all Home Office support and in-country EPC activities. Projects include Power Plants, T&D, Hydro, Power Purchase Agreements and Capacity Building.
- Project Manager of the US Army Corp of Engineers CETAC 1 reconstruction contract in Iraq with responsibility for the installation and startup of two new combustion turbine power plants.
- Responsible to budget and manage all business unit overhead costs. Interface with and manage the costs from Corporate Shared Services (Finance, CIO/IT, Procurement, Insurance/Risk Mgmt, HR). Business unit rep for the Corporate Services Board where all budgets, processes and procedures for our Corporation are developed and implemented.

01/99 to 01/04

Black and Veatch, Corporate and Power Divisions, Overland Park, KS
Vice President, Strategic Initiatives

Strategic realignment of AP/AR processes.

- Moved from check payment platform to electronic platform.
- Used P-Card payment methodology to improve retained cash by 15 days.
- Permanent cash impact improvements to the firm of \$5.5 MM.
- Collected outstanding 180+ day receivables on 127 projects.
- Achieved a 25-day DSO improvement in A/R.
- Implemented GE Six Sigma program.
- Team Leader for centralization of company's \$1.3 Billion procurement.

- Renegotiated \$22 MM airline spend for \$1.5 MM savings.
- Implemented T&E corporate card program with annual rebate of \$250,000.
- Developed and managed the corporate world-wide Y2K program.
- Reorganized Construction Equipment and Fleet Services business through consolidation of four regional operation centers into three for net savings of \$1.5 MM.

09/97 to 01/99

Black and Veatch, Power Division, Overland Park, KS
Project Manager, Year 2000 Projects

Developed and managed a Y2K Remediation program and sold to nine major utility clients.

09/82 to 09/97

General Electric International, Schenectady, NY
Construction Manager / Startup Manager / Senior Controls Specialist

Construction / Startup Manager.

- Abu Sultan Steam Turbine Power Plant, Egypt.
- Misr Spinning and Weaving Steam Turbine Power Plant, Egypt.
- Six CT Power Plants, Saudi Arabia and Oman.
- Yokkaichi Combined Cycle Power Plant, Japan
- TEPCO Combined Cycle Power Plant, Japan
- EPON Combined Cycle Power Plant, Netherlands
- PWC Combined Cycle Power Plant, Fayetteville, NC.
- Virginia Power Combined Cycle Power Plant, Richmond, VA.
- TVA CT Power Plant, Memphis, TN.
- FPL Martin Power Plant, Indiantown, FL.
- Crockett Cogeneration Power Plant, Crockett, CA
- WWP CT Power Plant, Rathdrum, ID
- Nevada Power Harry Allen CT Power Plant, Las Vegas, NV

05/81 to 09/82

TVA, Power System Operations, Chattanooga, TN
Field Engineer

Testing and troubleshooting Nuclear, Coal and Hydro generation, transmission and distribution equipment.

EDUCATION

University of Kentucky, Lexington, KY
Bachelor of Science Electrical Engineering, 05/81

REFERENCES

Provided Upon Request