

“**[REDACTED]**” *Designates Confidential Information Has Been Removed.*

**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 MODIFY ITS TARIFFS TO CONTINUE THE
IMPLEMENTATION OF ITS REGULATORY PLAN**

DOCKET NO. 10-KCPE-415-RTS

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

2 A: My name is Robert N. Bell. 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 Director of Construction for the Iatan Unit 2 Project.

7 **Q: Please summarize your role with respect to the construction of Iatan Unit 2?**

8 A: As the Senior Director of Construction, since the time I joined the Iatan Unit 2 Project, I
9 have been responsible for overseeing the construction work by the major contractors,
10 ALSTOM Power, Inc. (“ALSTOM”) and Kiewit Power Constructors Co. (“Kiewit”) as
11 well as the other contractors on site. I am also responsible for managing the KCP&L

1 Construction Team and I work closely with the Project's engineering and start-up and
2 commissioning teams.

3 **Q: Have you ever testified before the Kansas Corporation Commission ("KCC")?**

4 A: No, I have not.

5 **Q: Could you please describe your education and work history?**

6 A: Yes. I received my Bachelor of Science degree in Electrical Engineering from the
7 University of Kentucky in 1981. Since that time, I have worked in numerous positions
8 related to utility construction. From May 1981 to September 1982, I was a field engineer
9 at the Tennessee Valley Authority, where my responsibilities included testing and
10 troubleshooting nuclear, coal and hydro generation, transmission and distribution
11 equipment. From 1982 to 1997, I held the positions of Construction Manager, Start-up
12 Manager, and Senior Controls Specialist for General Electric International ("GE").
13 During my 15 years with GE, I managed the construction and start-up support of eight
14 Frame 5 gas turbines, three heat recovery steam generators ("HRSGs") and a
15 70 megawatt ("MW") steam turbine in Fayetteville, North Carolina. I also managed craft
16 labor for the construction of the first GE 7F combined cycle power plant and performed
17 the electrical start-up in Richmond, Virginia; managed electrical craft for retrofit of
18 twenty Frame 5N and 7B combustion turbines; and performed the MK 4 start-up in
19 Memphis, Tennessee. Also while with GE, I was a Team Leader in the Turbine Controls
20 and Combustion Services for development of MK 6 Integrated Control System ("ICS")
21 power plant control system as well as performed performance tuning and start-up of
22 multiple fossil units worldwide.

1 In 1997, I started work with Black & Veatch in its Power Division as the Project
2 Manager for Y2K Projects, which we implemented for nine different utilities. In 1999, I
3 was promoted to Vice President of Strategic Initiatives, where I worked to reorganize the
4 Power Division within the company. From 2004 until my arrival at KCP&L in March of
5 2009, I was Vice President and Director of Programs for Black & Veatch's Special
6 Projects Corp. During this time, I was Program Director of the energy projects that were
7 part of the \$1.4 billion USAID Afghanistan Infrastructure and Rehabilitation Program.
8 My duties included responsibility for all home office support and in-country engineer-
9 procure-construct ("EPC") activities. The projects included as part of the program were
10 power plants, transmission and distribution, hydro-electric dams, and establishing power
11 purchase agreements. I was also Project Manager of the U.S. Army Corp of Engineers
12 Transatlantic Programs Center ("CETAC 1") reconstruction contract in Iraq with
13 responsibility for the installation and start-up of two new combustion turbine power
14 plants. In addition, it was my responsibility to budget and manage all business-unit
15 overhead costs as well as interface with and manage the costs from Corporate Shared
16 Services (Finance, CIO/IT, Procurement, Insurance/Risk Management and Human
17 Resources). I was the business unit representative for the Corporate Services Board, the
18 group that develops and implements all budgets, processes and procedures for Black &
19 Veatch Corporation.

20 **Q: Did you replace anyone when you were hired in March of 2009 to work on the Iatan**
21 **Unit 2 project?**

22 **A:** No. At the time I was hired by KCP&L, the Iatan Unit 1 project was nearing completion
23 and KCP&L was aware that the work on the Iatan Unit 2 Project in 2009-2010 would

1 require additional management personnel. Prior to my arrival, Carl Churchman had been
2 functioning as the Iatan Unit 2 Project Manager in addition to his other duties. In
3 addition, I understood that my expertise in start-up and commissioning would be of
4 particular importance in the completion of the remaining project work. While Mr.
5 Churchman continues to have a day-to-day presence on the Iatan Unit 2 Project, I have
6 supplemented the Project Team with my construction and start-up experience.

7 **Q: What is your reporting relationship to Carl Churchman?**

8 A: I report directly to Mr. Churchman.

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

10 A: The purpose of my testimony is to: (1) describe the safety record of the Iatan Unit 2
11 Project; (2) identify the preparation that the Iatan Unit 2 Project Team is currently
12 undertaking for the start-up and commissioning of the Iatan Unit 2 Project; and (3)
13 identify how the Iatan Unit 2 Project compares with others I have worked on during my
14 career.

15 **PROJECT SAFETY**

16 **Q: Please describe the ways in which the Iatan Unit 2 Project measures the contractors'**
17 **safety performance.**

18 A: There are a number of industry metrics for tracking safety that are used by KCP&L on
19 the Iatan Unit 2 Project. One metric is through an index of Days Away Restricted
20 Transfer, or "DART," which measures the rate of cases involving days away from work,
21 restricted work activity, and transfers to another job. It is a ratio of the lost man-hours a
22 project experiences as compared to the total number of hours worked. Another index that
23 KCP&L utilizes is known as Total Cases Incident Rate ("TCIR"). TCIR is defined by the

Occupational Safety and Health Administration (“OSHA”) as the number of recordable incidents in a year, multiplied by 200,000 and divided by the total hours worked that year. KCP&L also tracks the aggregate number of first aid cases for internal use.

Q: How does the Iatan Unit 2 Project compare to industry averages for safety performance?

A: The Iatan Unit 2 Project has a very favorable record when compared to industry averages. The following chart illustrates the Iatan Unit 2 Project’s safety performance to date when compared to the industry.

STATISTICS as of November 8, 2009	YEAR <u>To-date</u>	PROJECT <u>To-date</u>	INDUSTRY ¹ <u>Average</u>
Days Away, Restricted, Transfer (DART)	0.7	1.8	2.2
Total Case Incident Rate (TCIR)	2.2	3.5	4.2
First Aid Cases	385	796	
Total Work Hours (millions)	5.7	12.2	
Avg. Personnel On-Site/Day (Estimate) ²	3,100	2,000	

¹ Industry Average Source: U.S. Bureau of Labor Statistics (2008 Preliminary Data)
² Peaked at ~4,000 on November 19, 2008

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

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

1 good safety record brings the overall cost down through higher productivity, reduced
2 claims and fewer interruptions to the work.

3 **Q: How has the KCP&L Project Team managed safety issues such as those you**
4 **describe since you arrived on the Iatan Unit 2 Project?**

5 A: KCP&L responded very appropriately any time significant safety events occurred. The
6 owner, though not responsible for the implementation of each contractor's safety
7 program, should instill the safety culture site-wide. I believe that we are doing that
8 through our on-site safety team and daily reminders that safety has to be a primary
9 consideration.

10 **Q: Overall, what is your opinion as to how KCP&L has managed the safety program**
11 **on the Iatan Unit 2 Project?**

12 A: The safety program and the Iatan Unit 2 Project's safety record are very consistent with
13 good practices I have seen in the industry.

14 **START-UP AND COMMISSIONING**

15 **Q: Who is responsible for start-up and commissioning of the Iatan Unit 2 Project?**

16 A: Start-up and commissioning is a joint effort primarily between KCP&L and ALSTOM,
17 though Kiewit provides labor to support KCP&L's start-up. ALSTOM has responsibility
18 to start-up its equipment, whether it is the boiler or the Air Quality Control System
19 ("AQCS"), and begin its operation up to Provisional Acceptance of the Unit. In addition,
20 KCP&L's start-up and commissioning team is responsible for checking out the
21 equipment as it is being turned over by the contractors and verifying that it has met the
22 conditions required under the applicable contract.

1 **Q: What has your involvement been with start-up and commissioning on the Iatan**
2 **Unit 2 Project?**

3 A: I have regular interface with the start-up teams from KCP&L and ALSTOM, and have
4 participated in numerous reviews of the start-up schedule, including the meetings in
5 which the Construction Turn-Over (“CTO”) dates were worked out with the contractors.
6 I have daily contact with KCP&L start-up team leaders and with KCP&L operations and
7 maintenance personnel. I also have been asked by Carl Churchman to provide as much
8 support to the start-up team as they require, and I have done so.

9 **Q: What are CTOs?**

10 A: Company witness Carl Churchman testifies that CTOs are the key interface points
11 between Kiewit, ALSTOM and KCP&L related to the sequence of events for completing
12 construction and the start-up and commissioning activities for the Iatan Unit 2 Project.
13 Mr. Churchman also testifies that the “CTO dates” were the dates for those key interface
14 points, so for the schedule of the work to be fully coordinated, the CTO dates required
15 complete buy-in by all affected parties and needed to work to the Project’s key milestone
16 dates.

17 **Q: What was your involvement in the process of refining the Iatan Unit 2 CTO dates?**

18 A: Company witness Carl Churchman testifies as to the meetings that occurred with the
19 contractors, key members of the KCP&L Project Team and Schiff Hardin LLP to rework
20 the CTO dates so that those dates and associated milestones would have a high
21 probability of occurring. I attended all of the meetings and led many of the discussions.
22 When we started the process of reviewing the CTO dates on June 24, 2009, there were
23 thirty-two CTO dates that had conflicts that had to be resolved through logic or resource

1 changes. By July 7, 2009, the parties had resolved each of the conflicts, and the
2 contractors and KCP&L agreed to change the schedule to reflect these agreements.

3 **Q: Once the parties agreed to the CTO dates, what occurred next with respect to the**
4 **schedule?**

5 A: The contractors began working toward those agreed upon schedule dates and the KCP&L
6 Project Team has been actively monitoring their progress and transparently reporting any
7 issues that have occurred to the contractors' project management and to our management.

8 **Q: Do you believe that the agreement on the CTO dates has been beneficial to the start-**
9 **up and commissioning of the Iatan Unit 2 Project?**

10 A: Yes. I believe the CTO dates have been and will continue to be critical for the
11 contractors to maintain their accountability to meet the key Project milestones.

12 **Q: Did the Iatan Unit 2 Project's schedule change as a result of this process?**

13 A: Company witness Carl Churchman testifies that this process confirmed that, based on all
14 the relevant considerations, the optimal date for Provisional Acceptance is ** [REDACTED]
15 [REDACTED]**, and I agree with that testimony.

16 **Q: Do you believe that KCP&L's revision to the schedule for the Iatan Unit 2 Project**
17 **was appropriate?**

18 A: Yes.

19 **Q: Do you believe that KCP&L has appropriately managed the schedule for the Iatan**
20 **Unit 2 Project?**

21 A: I agree with Company witness Carl Churchman that optimizing the schedule was only
22 made possible by the active management techniques KCP&L employed with the
23 contractors.

1 **Q: What else have you observed relative to the preparation for start-up and**
2 **commissioning?**

3 A: KCP&L started early in training of the future operators utilizing dedicated operations
4 staff devoted to training the operators. There are four separate operations functions that
5 are the subject of training: control operators, plant equipment operators, plant equipment
6 attendants, and process attendants. Each of these categories requires its own training
7 regime. The operators-in-training have received classroom work, plant simulator time
8 and on-the-job training during the start-up operations. By the end of the scheduled
9 training, KCP&L targets having 50 operators fully trained to operate Iatan Unit 2. These
10 efforts should not only help during start-up but will also result in the operators
11 familiarizing themselves with the equipment long before it has to be operated.

12 **Q: How is KCP&L tracking its training efforts?**

13 A: There are weekly metrics being generated regarding training that are presented to
14 KCP&L's management on a weekly basis. A current example of the metrics is attached
15 to my testimony as Schedule RNB2010-1. This chart shows the hours budgeted for each
16 of the classifications of operations personnel and the status of their work on a weekly
17 basis. It also provides a percent complete with training over time against a planned
18 number of hours. As of the date of Schedule RNB2010-1, training was 24 percent
19 complete overall.

20 **Q: In your view, has KCP&L appropriately managed the start-up and commissioning**
21 **process to date?**

22 A: Yes. I believe that the CTO dates and the related detailed schedule for the work will
23 continue to be a very valuable tool for holding the contractors accountable. The effort

1 spent by KCP&L to obtain the contractors' agreement to those dates has resulted in the
2 work in the field proceeding more efficiently and effectively. In addition, the training
3 and preparation for start-up by KCP&L is consistent with what I have observed in the
4 industry. KCP&L is also transparently communicating the key dates needed through the
5 schedule and in the communications with the contractors, and is reporting the status to
6 our management every week.

7 **PROJECT MANAGEMENT OVERVIEW**

8 **Q: Are you familiar with Company witness Carl Churchman's testimony regarding the**
9 **methods that are used by the KCP&L Project Team to manage the work of the**
10 **contractors?**

11 A: Yes. I am accountable for many of the meetings and contacts with the contractors that
12 Mr. Churchman testifies to.

13 **Q: Do you agree with Mr. Churchman's testimony?**

14 A: Yes. Mr. Churchman discusses the project meetings and the Project Team's methods for
15 managing the work. I agree with his assessment and believe that the level of active
16 management that we have employed has been effective in identifying and mitigating the
17 issues that have arisen.

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

19 A: Yes, it does.

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

In the Matter of the Application of Kansas City)
Power & Light Company to Modify Its Tariffs to) Docket No. 10-KCPE-__-RTS
Continue the Implementation of Its Regulatory Plan)

AFFIDAVIT OF ROBERT N. BELL

STATE OF MISSOURI)
) ss
COUNTY OF JACKSON)

Robert N. Bell, being first duly sworn on his oath, states:

1. My name is Robert N. Bell. I work in Kansas City, Missouri, and I am employed by Kansas City Power & Light Company as Director of Construction for the Iatan Unit 2 Project.

2. Attached hereto and made a part hereof for all purposes is my Direct Testimony on behalf of Kansas City Power & Light Company consisting of ten (10) pages, having been prepared in written form for introduction into evidence in the above-captioned docket.

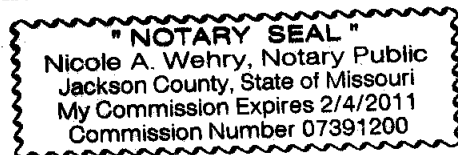
3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

Robert N. Bell

Subscribed and sworn before me this 17th day of December, 2009.

Notary Public

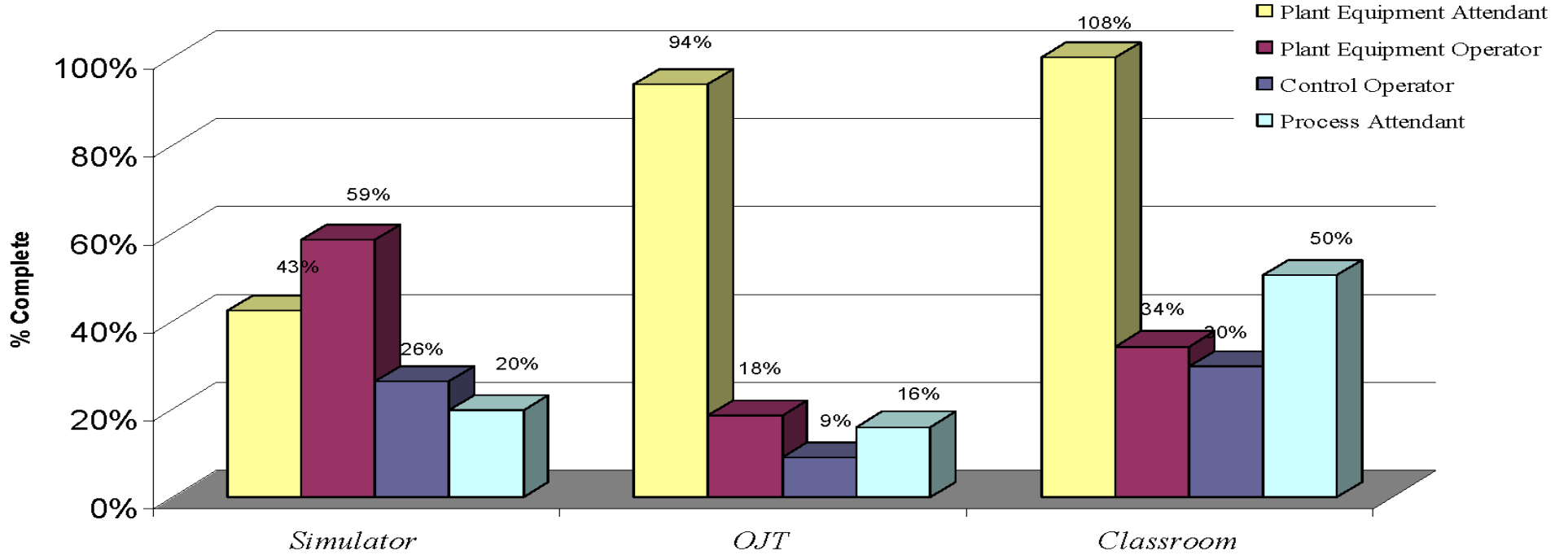
My commission expires: Feb. 4, 2011



IATAN UNIT 2 START-UP & OPERATION STATUS AS OF 11/29/09

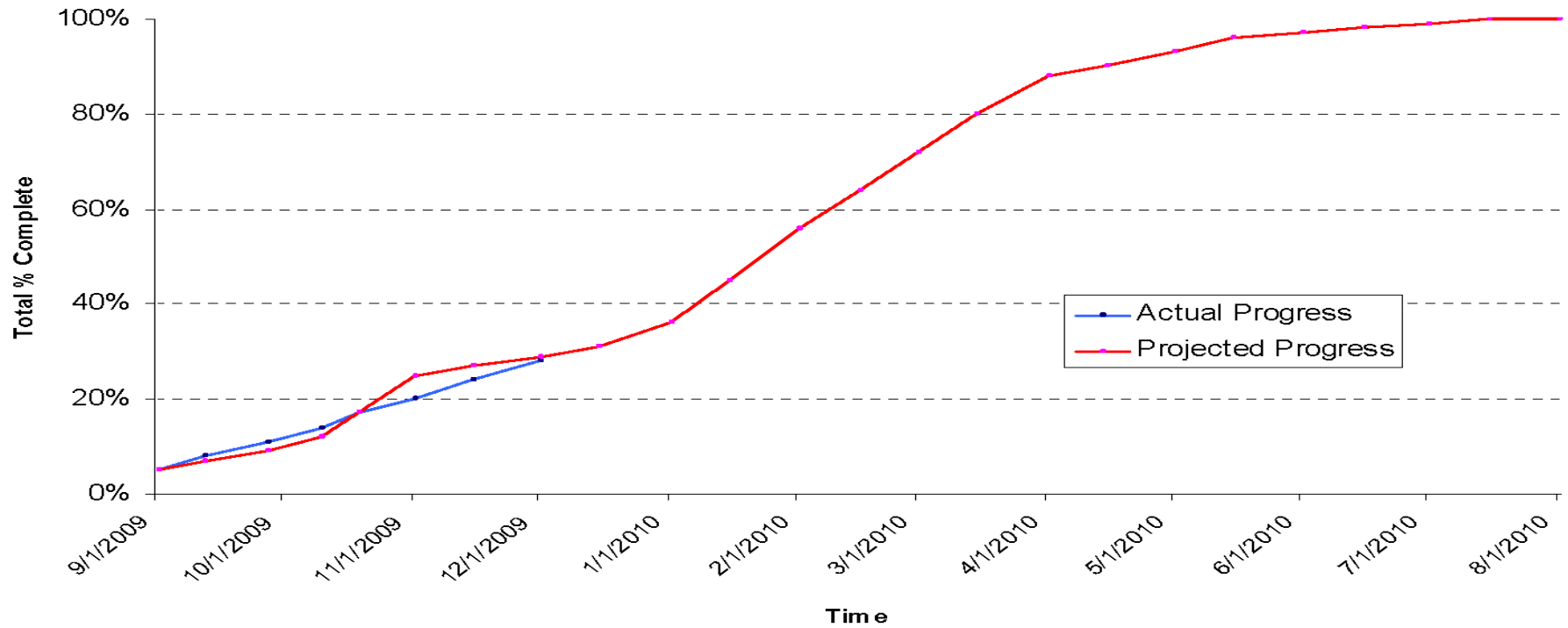
System Code	System Description	Baseline Turnover Date	Actual % Complete	System Weighting Total	Activity Weight
Percentage Total Startup			42.9%	100.0%	

Current Training Status
(Analysis of Training Platforms)



PEA		PEO		CO		PA	
Baseline Hours Estimate	Percent Complete	Baseline Hours Estimate	Percent Complete	Baseline Hours Estimate	Percent Complete	Baseline Hours Estimate	Percent Complete
1377.0	82%	4321.8	37%	14427.9	20%	5372.0	28%

Projected vs. Actual Progress



Overall Status: 28% Complete

Critical Calculation Variables

of Operators to be trained:

PEA	9
PEO	9
CO	17
PA	15
Total	50

(Includes 5 Shift Foremen)