Exhibit No.:
Issue: CIP/Cyber Compliance Efforts and Costs
Witness: Joshua F. Phelps-Roper
Type of Exhibit: Rebuttal Testimony
Sponsoring Party: Kansas City Power & Light Company
Case No.: ER-2014-0370
Date Testimony Prepared: May 7, 2015

**MISSOURI PUBLIC SERVICE COMMISSION**

**CASE NO.: ER-2014-0370**

# REBUTTAL TESTIMONY

**OF**

**JOSHUA F. PHELPS-ROPER**

**ON BEHALF OF**

**KANSAS CITY POWER & LIGHT COMPANY**

**Kansas City, Missouri**
**May 2015**

**"** [redacted] **" Designates "Highly Confidential" Information Has Been Removed.**
**Certain Schedules Attached To This Testimony Designated "(Highly Confidential)" Have Been Removed Pursuant To 4 CSR 240-2.135.**

**REBUTTAL TESTIMONY**

**OF**

**JOSHUA F. PHELPS-ROPER**

**Case No. ER-2014-0370**

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

A: My name is Joshua F. Phelps-Roper. My business address is 1200 Main, Kansas City, Missouri 64105.

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

A: I am employed by Kansas City Power & Light Company ("KCP&L" or "Company") as Senior Manager – CIP Program Management.

**Q: On whose behalf are you testifying?**

A: I am testifying on behalf of KCP&L.

**Q: What are your responsibilities?**

A: I am responsible for implementing projects that will ensure KCP&L's companywide compliance with the North American Electric Reliability Corporation ("NERC") Critical Infrastructure Protection ("CIP") version 5 Cyber Security Standards. Once the NERC CIP version 5 projects are completed, I will be responsible for maintaining KCP&L's ongoing compliance with those standards. I will also be responsible for ensuring KCP&L's compliance with any future NERC CIP Cyber Security Standards that are approved, such as the NERC CIP version 6 Cyber Security Standards which are currently moving towards approval through the NERC and Federal Energy Regulatory Commission ("FERC") regulatory processes.

**Q: Please describe your education, experience and employment history.**

A: I hold a Bachelors of Arts Degree in Computer Information Systems as well as a Masters of Business Administration Degree. I also hold a NERC certification as a System Operator at the Reliability Coordinator level. I have been employed by KCP&L since 2006, during which time I have held a variety of positions in Information Technology ("IT"), Generation Operations, and Project Management. Most recently, I was a project manager on KCP&L's Southwest Power Pool Integrated Marketplace implementation.

**Q: Have you previously testified in a proceeding before the Missouri Public Service Commission ("Commission" or "MPSC") or before any other utility regulatory agency?**

A: No.

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

A: I will respond to certain portions of the Direct Testimony of Missouri Energy Consumers' Group ("MECG") witness Brosch regarding KCP&L's CIP and Cyber Security Programs (collectively CIP/Cyber costs).

**Q: On page 30 of his Direct Testimony MECG witness Brosch asserts that the Company has not defined with specificity what incremental costs would be covered by the CIP/Cyber tracker. Do you agree with that assertion?**

A: No. In response to MECG Data Request 2-20 (Schedule JFR-1)[1], the Company provided historical CIP/Cyber costs for the years 2009-2014 as well as forecasted CIP/Cyber costs for the years 2015-2017. The table below depicts this information (excluding capital expenditures for which tracker treatment has not been requested):

**
[redacted]
**

The difference between 2014 CIP/Cyber costs and the forecasted CIP/Cyber expenses for 2015-2017 represent estimated incremental CIP/Cyber expenses amounts to **[redacted]**, respectively.

In response to MECG Data Request 2-20, KCP&L stated:

> For CIP/Cyber, these costs include Contractors (Outside Services), Internal Labor, Software, Hardware, Software Maintenance, Software Subscriptions, etc. These costs are incurred to meet the CIP and Governmental standards mentioned above. These costs span the following

[1] Schedule JFR-1, attachments to Data Request 2-20S only contains the Excel files referenced in the Attachments portion of the response. The policy directives/reviews and executive orders referenced in the same Data Request response can be found at: Presidential Policy Directive 28-Signals Intelligence Activities.pdf (https://www.whitehouse.gov/the-press-office/2014/01/17/presidential-policy-directive-signals-intelligence-activities); Executive Order 13636-Improving Critical Infrastructure Cybersecurity.pdf (https://www.whitehouse.gov/the-press-office/2013/02/12/executive-order-improving-critical-infrastructure-cybersecurity); Presidential Policy Directive 21-Critical Infrastructure Security and Resilience.pdf (https://www.whitehouse.gov/the-press-office/2013/02/12/presidential-policy-directive-critical-infrastructure-security-and-resil); Executive Order 13587-Structural Reforms to Improve the Security of Classified Networks and the Responsible Sharing and Safeguarding of Classified Information.pdf (https://www.whitehouse.gov/the-press-office/2011/10/07/executive-order-13587-structural-reforms-improve-security-classified-net); Cyberspace Policy Review.pdf (https://www.whitehouse.gov/assets/documents/Cyberspace_Policy_Review_final.pdf); Cyberspace Policy Review Supporting Documents.pdf ( https://www.whitehouse.gov/cyberreview/documents/).

functional areas: Information Technology, Generation, Transmission and Distribution, and Physical Security

Additionally, in response to MECG Data Request 11-2 (Schedule JFR-2), the Company provided: a list of Operations and Maintenance ("O&M") Non-Labor service contracts with descriptions of activities from 2013 to date, a list of employees charging to CIP/Cyber projects with a description of what work they were accomplishing, and a list of CIP/Cyber projects and what work is being done under those projects. Finally, in response to MPSC Data Request 465 (Schedule JFR-3), KCP&L provided a general milestone timeline for work required to comply with NERC CIP version 5 Standards including:

**General CIP Milestone Schedule**

1. Now - 4/1/2016 – KCP&L will have ongoing activities to comply with CIP version 3;

2. Now – 4/1/2016 – KCP&L will have project activities to prepare to comply with CIP version 5 high and medium requirements;

   a. By 3/13/2015 at least 4 of 20 CIP version 5 project teams will have kicked off;

   b. By 4/30/2015 all CIP version 5 project teams are forecasted to kick off;

   c. By 1/1/16 KCP&L expects to have the necessary infrastructure to be in place to be compliant with CIP version 5 high and medium requirements;

   d. By 1/30/16 KCP&L expects to perform an independent readiness evaluation of the CIP version 5 program; and

e. By 3/31/16 KCP&L expects to be fully compliant with CIP version 5 high and medium requirements;

3. 4/1/2016 – CIP version 5 High and Medium requirements become enforceable and CIP version 3 requirements are retired;

4. 4/1/2016- 4/1/2017 – KCP&L will have ongoing activities to comply with CIP version 5 high and medium requirements;

5. 4/1/2016 – 4/1/2017 – KCP&L will have project activities to prepare to comply with CIP version 5 low requirements;

6. 4/1/2017 – CIP version 5 low requirements become enforceable; and

7. 4/1/2017 and beyond – KCP&L will have ongoing activities to comply with all CIP version 5 requirements.

**Q: MECG witness Brosch suggests (on pp. 31-33 of his Direct Testimony) that because the Company has incurred CIP/Cyber costs in the normal course of business in the past and because this rate case presents the Company with an opportunity to recover CIP/Cyber costs incurred through the true-up (May 31, 2015), the CIP/Cyber cost tracker requested by the Company is inappropriate. Do you agree?**

A: No. Although KCP&L has incurred CIP/Cyber costs in the past, those historical cost levels are not representative of the Company's future CIP/Cyber costs which will be significantly higher than in the past because the CIP/Cyber standards with which KCP&L must comply in the future are becoming more rigorous.

Additionally, although it is known for certain that KCP&L's CIP/Cyber costs will rise above current levels and above levels incurred as of May 31, 2015, the CIP/Cyber standards with which the Company must comply by April of 2016 continue to evolve;

this makes forecasts of CIP/Cyber costs uncertain. The Company also has no choice but to comply with CIP/Cyber standards as failure to do so could result in civil penalties, not to mention the possibility of significant customer disruption. Consequently, the Company does not have the ability to significantly control CIP/Cyber costs.

**Q: Please describe how CIP/Cyber standards with which KCP&L must comply in the future are becoming more rigorous compared to previous CIP/Cyber standards.**

A: Understanding the FERC and NERC paradigm is important to understanding how and why the CIP standards were established and why they are changing. FERC was granted legal authority to implement mandatory reliability standards in 2005. FERC delegated that authority to NERC, which has subsequently issued reliability standards in a variety of areas, including Cyber Security, which NERC has labeled CIP. As the Cyber Security landscape evolves, FERC issues Orders to NERC to address those changes with additional or modified CIP Standards. CIP versions 5 Standards are the latest set of approved standards meant to address the expanding Cyber Security needs of our nation's critical electric infrastructure.

Under the NERC CIP version 5 bright line criteria, all facilities connected to or controlling the Bulk Electric System will fall under the NERC CIP version 5 Standards. This would include generating stations, substations, control centers, and other critical infrastructure. Based on where the assets fit into the bright line criteria, and also taking into account other factors NERC has defined, the assets will require varying amounts of protection, but all in-scope assets will require protection. These assets will require a variety of protective measures including physical and electronic access controls, other physical security protections, personnel training, and other protective measures.

In comparison, the NERC CIP version 3 Cyber Security Standards were focused primarily in KCP&L's Control Centers supported by the IT division, with some work required in Transmission and Distribution ("T&D"). The number of in-scope facilities and Cyber Assets requiring protection are drastically expanded in CIP version 5 versus CIP version 3. The types of required protective measures have also expanded in CIP version 5. CIP version 5 requirements are both more broad, as seen is the CIP version 5 areas of configuration management and access management, as well as more stringent, as seen in the physical and electronic access control requirements. In sum, the CIP version 5 Standards affect a much larger number of assets, include more types of protection, and require more stringent protections than the CIP version 3 Standards required.

**Q: Please describe how the CIP/Cyber standards with which KCP&L must comply by April of 2016 continue to evolve and why that continuing evolution makes the Company's forecasts of CIP/Cyber compliance costs uncertain.**

A: The costs to meet NERC CIP requirements are evolving in several ways that make forecasting KCP&L's CIP/Cyber compliance costs difficult. First, FERC and NERC have increased the CIP Standards rate of change. The CIP version 3 standards were approved in 2008, became enforceable in 2010, and will remain in place until April 1, 2016. In that time, the CIP version 4 standards were approved in 2012, but were retired in 2014 due to the CIP version 5 overhaul of the CIP standards. The CIP version 5 standards are scheduled to become enforceable on April 1, 2016. However, there is a high likelihood that before April 1, 2016, the CIP version 6 standards, which expand the CIP version 5 standards, will be approved and will supplant CIP version 5 and become enforceable on April 1, 2016. CIP version 7 is being discussed within the NERC

Standards Drafting Team to address outstanding issues from FERC Orders 706, 761, and 791. CIP version 3 Standards will be applicable for about 6 years when they are retired, while CIP version 4 didn't make it to enforcement. It is difficult to forecast costs when the CIP Standards are being changed so quickly.

Another difficulty in forecasting CIP version 5 costs is in interpretation of the CIP version 5 Standards. NERC is publishing CIP version 5 Lessons Learned and CIP version 5 Frequently Asked Questions to clarify the scope of the NERC CIP version 5 Standards. The clarifications released so far have resulted in an expansion of KCP&L's CIP version 5 asset list and scope versus the Company's internal evaluation of the CIP version 5 Standards. The industry is expecting many more CIP version 5 Lessons Learned to be published by NERC before April 1, 2016.

Finally, it is important to remember that the CIP version 5 standards are expanding into areas of KCP&L that have never had to comply with NERC CIP Standards before. The compliance workload is also increasing for areas of the Company that have complied with CIP version 3 Standards. Forecasting costs is difficult when the Company must implement technologies we have never employed before, hire positions we have never needed before – especially when those positions are in demand across the country - and modify existing and create new business practices in multiple divisions simultaneously.

The Company stated in its response to MECG Data Request 2-20, and other data request responses, that the forecast data provided was based only on currently approved CIP version 5 Standards, that project costs were still being defined, and the forecast provided was based on our current understanding of the CIP version 5 Standards. NERC

CIP version 6 was not included in the forecast data, nor was any future expansion of the NERC CIP Standards. NERC CIP version 6, being an expansion of NERC CIP version 5, will result in more costs than were forecast for NERC CIP version 5. Additionally, any further expansions of scope by NERC, through Lessons Learned or Frequently Asked Questions, will also increase company costs to comply with CIP version 5 Standards.

**Q: On page 32, lines 14-19 of his Direct Testimony, Mr. Brosch suggests that securing base rate recovery of CIP/Cyber expenses incurred through May 31, 2015 (the true-up in this case) is a more reasonable alternative to the CIP/Cyber tracker. How do you respond?**

A: Calendar year 2014 CIP/Cyber costs totaled **[redacted]**, which is approximately **[redacted]** less than the forecast for 2015. CIP/Cyber costs for the twelve-month period ending March 31, 2015 (the most recent twelve-month period available) totaled **[redacted]**, or **[redacted]** less than the forecast for 2015. Based on activity since the end of March, I do not expect CIP/Cyber expenses for the twelve-month period ending May 31, 2015 to be more than **[redacted]**, which would leave the Company approximately **[redacted]** short of recovering its forecasted 2015 CIP/Cyber expenses.

**Q: Please describe some of the potential consequences of a failure by KCP&L to comply with CIP/Cyber standards?**

A: There are two potential consequences of a failure to comply with CIP/Cyber standards. The first, and most important, is a cyber-security incident at a critical facility or involving critical cyber infrastructure. Preventing the destruction of physical and electronic assets from a cyber-security attack is what the CIP Standards were created to prevent. Second,

and still very important, are fines and penalties from FERC. As noted above, FERC has the legal authority to implement mandatory reliability standards. A utility can receive fines and/or a civil penalty, or could be required to implement above-and-beyond compliance measures, if found not in compliance.

**Q: On pages 34-35 of his Direct Testimony, MECG witness Brosch suggests that use of a tracker for CIP/Cyber costs would eliminate management incentives to implement cost effective solutions to achieve compliance. Please describe the cost control procedures in place that will govern KCP&L's CIP/Cyber compliance efforts.**

A: KCP&L has in place numerous governance, project management, and cost control procedures to ensure that CIP/Cyber Security efforts are efficient and cost effective. KCP&L's response to MPSC Data Request 461 (Schedule JFR-4) provides an overview of the Company's CIP governance structure, including details regarding the CIP Steering Committee which is led by KCP&L's Chief Operating Officer. The CIP Steering Committee provides executive oversight of the project managers implementing the CIP version 5 Standards. I lead the CIP version 5 implementation for KCP&L with the assistance of a project management organization. The Company has divided the CIP version 5 Standards into many subprojects which will ensure companywide compliance with CIP version 5 standards. KCP&L's response to MPSC Data Request 463 (Schedule JFR-5) outlines how the KCP&L CIP Projects will be verified both internally and externally. KCP&L's response to MPSC Data Request 466.1 (Schedule JFR-6) includes an attachment with specific project documentation including a change request form which will be used to control project cost and scope changes after the CIP Project timelines and budget are approved by the CIP Steering Committee.

It should also be noted the CIP/Cyber tracker is envisioned to provide future recovery of O&M costs and does not include Capital, which provides an incentive for the Company to manage costs. Labor O&M, as described in KCP&L's response to MECG Data Request 11-1 (Schedule JFR-7), would function as follows:

> As part of the true-up process in this rate case, staffing levels as of May 31, 2015 will be included in the revenue requirement calculation. The staffing level at that time will be a known and measureable amount and clearly identified in the payroll annualization calculation. The CIP/Cyber tracker requests that incremental positions hired after May 31, 2015, in order to support the CIP/Cyber compliance process, should be included in the proposed tracker. These positions will be incremental to the staffing levels included in base rates as part of the true-up process.

KCP&L has also considered ways to enable the MPSC Staff to understand and be involved in the ongoing CIP/Cyber efforts in order to provide transparency where CIP/Cyber dollars are being spent and how related efforts are progressing. Periodic operations meetings between MPSC Staff and KCP&L CIP/Cyber management could be scheduled which would include: a review of project and operational milestones, a review of actual and forecasted costs and what are driving those costs, and walkthroughs of CIP/Cyber requirements and how the Company is meeting those requirements. Due to the sensitive nature of the topics and the CIP requirements themselves, Staff personnel may be subject to a NERC-required background screening before attending review meetings. However, KCP&L will request the data needed and provide for the screenings to be done to ensure compliance.

**Q: On pages 35-36 of his Direct Testimony, MECG witness Brosch suggests that segregating incremental CIP/Cyber expenses from baseline historical CIP/Cyber expenses is not simple, straightforward or readily auditable. Please respond.**

A: As KCP&L stated in response to MECG Data Request 11-1 part B regarding cost definition and tracking:

> Going forward, KCP&L will utilize a common set of code block mechanisms, which include "Project IDs" combined with other unique code block mechanisms, to identify CIP and Cyber work so that all divisions will track their work with the same code block processes. KCP&L will continue to use the same definition to identify in scope CIP and Cyber work that has been used historically (included below).
>
> Definition of CIP and Cyber in scope work:
>
> The CIP/Cyber Tracker is for incremental O&M dollars, labor & non-labor, spent to meet regulatory requirements for protection of critical infrastructure, inclusive of NERC, DOE, NRC, etc., or Cyber Security needs. These regulatory obligations, such as NERC CIP Standards, are publicly available, and subject to federal audits with potential civil penalties assessed or mandated actions ordered to achieve compliance. Cyber Security needs are driven by many government entities as well as industry best practices.
>
> For CIP/Cyber, these costs include Contractors (Outside Services), Internal Labor, Software, Hardware, Software Maintenance, Software Subscriptions, etc. These costs are incurred to meet the CIP and Governmental standards mentioned above. These costs span the following functional areas: Information Technology, Generation, Transmission and Distribution, and Physical Security.

Since KCP&L's response to MECG Data Request 11-1 was submitted, KCP&L has made further progress in defining how CIP/Cyber costs will be tracked. The Company is creating both a project-based as well as ongoing charges (non-project) based structure to track CIP/Cyber costs. Because there are multiple Company divisions involved in the projects, and those divisions are accomplishing work at a variety of locations with

different allocation needs, we are establishing several variations of the same code block to be used across KCP&L.

- The Corporate Services divisions (IT, Corporate Security, and Compliance) will utilize 20 codes specific to individual CIP v5 projects, 1 code for support work that benefits all of the CIP v5 projects, and then 3 codes to track ongoing (non-project) CIP/Cyber costs. Capital projects are not included in the tracker request.
- This same process is replicated across T&D and Generation based on our current understanding of their needs. We will establish 20 codes for specific CIP v5 projects, 1 code for support work that will benefit all of the CIP v5 projects, and 3 codes to track ongoing (non-project) CIP/Cyber costs. Based on our understanding of CIP v5 requirements for generating and substation resources, we are establishing code block for our Medium Asset sites (based on CIP bright line criteria the Company has many medium assets) as well as code block for low asset sites (based on CIP bright line criteria the Company has many low CIP asset sites). The low assets do not require as much work to secure as the medium assets, but some work will be required.

**Q: On page 37 of his Direct Testimony, MECG witness Brosch suggests that the CIP/Cyber compliance project is similar to other major IT upgrades KCP&L has undertaken historically. Please respond.**

A: Complying with NERC CIP requirements is unlike a major IT system upgrade for many reasons. First, NERC CIP requirements do not affect IT operations alone, rather CIP compliance efforts broadly affect many divisions within the Company, most prominently

Generation, T&D, IT, Corporate Security, and Compliance. Second, failures related to IT system upgrades are not accompanied by fines from regulators, NERC CIP failures are accompanied by fines. Third, NERC CIP isn't just about changing or adding systems, although that will be a part of the program costs. NERC CIP requirements mandate changes to the fundamental way we do business. The Company must heavily modify work practices, change procedures and policies, create and update documentation for all of the new work we are doing and all the old work we are expanding, create and update asset and configuration inventories, as well as many other tasks. An IT system upgrade might entail a change in a process, perhaps create efficiencies, it might result in new revenues, and when the IT upgrade is complete employees would go back to their normal jobs. NERC CIP is a cost, it entails a lot of new work that KCP&L has not engaged in before, it will require substantial effort to implement and then maintain, and when the implementation is over the employees' normal jobs will have changed and we will need new employees to handle the increased work load.

**Q: Does that conclude your Rebuttal Testimony?**

A: Yes, it does.

**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-2014-0370 |

**AFFIDAVIT OF JOSHUA F. PHELPS-ROPER**

**STATE OF MISSOURI** )
) **ss**
**COUNTY OF JACKSON** )

Joshua F. Phelps-Roper, being first duly sworn on his oath, states:

1. My name is Joshua F. Phelps-Roper. I work in Kansas City, Missouri, and I am employed by Kansas City Power & Light Company as Senior Manager – CIP Program Management.

2. Attached hereto and made a part hereof for all purposes is my Rebuttal Testimony on behalf of Kansas City Power & Light Company consisting of fourteen (14) 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.

Joshua F. Phelps-Roper

Subscribed and sworn before me this 7th day of May, 2015.

Nicole A. Wehry
Notary Public

My commission expires: Feb. 4 2019

NICOLE A. WEHRY
Notary Public - Notary Seal
State of Missouri
Commissioned for Jackson County
My Commission Expires: February 04, 2019
Commission Number: 14391200

KCP&L
Case Name: 2014 KCPL Rate Case
Case Number: ER-2014-0370

Response to Woodsmall David Interrogatories - MECG_20141201
Date of Response: 03/31/2015

Question:2-20

**[Critical Infrastructure Protection/Cybersecurity Tracker] Ref: Direct Testimony of Mr. Rush, pages 31-33**. Mr. Rush states, The Company requests that a CIP tracking mechanism be authorized in this case to ensure recovery of costs necessary to address the government mandated requirements regarding security of cyber assets essential to the reliable operation of the electric grid." Please provide the following additional information:

a. State with specificity the definitions for each type of cost that would be eligible for tracking under this proposal and the criteria that would be applied to ensure that ongoing costs being incurred for protection of the Company's assets are not commingled with incremental new CIP spending.

b. Provide a detailed itemization, for each of the years 2009 through 2013 and in 2014 to date, of all spending by KCPL on security of the infrastructure supporting reliability of the Bulk Electric System ("BES"), indicating which of the itemizes costs historically would fall within or outside of the definitions stated in your response to part (a).

c. At page 33, Mr. Rush states, "The standards to be implemented in 2016 are much more aggressive in broader coverage of the Company's assets supporting the BES. These cyber systems, as they are referenced in the

V5, will require additional actions as well as resources for both physical and logical protection in support of reliability of the BES." Please provide complete copies of all studies, reports, analyses, workpapers, cost projections and other documents that were relied upon by Mr. Rush in making these statements.

d. Provide the most detailed available projection by month of the charges by FERC Account and by cost type (labor, contractor, materials, etc.) and payee that would be deferred for later recovery under the proposed CIP tracker, with a statement of any assumptions made in developing such projections.

e. What amount of test year recorded and adjusted expense and rate base investment has been included for BES security infrastructure? Provide a breakdown by FERC account, with reference to supporting workpapers if applicable.

Number of Attachments:

Response:

The information will not be available until the end of January.

**Information Provided By:**
Gary Turner

**Attachment:** Q2-20_Verification.pdf

# *Verification of Response*

**Kansas City Power & Light Company**
**AND**
**KCP&L Greater Missouri Operations**

**Docket No.** ER-2014-0370

The response to Data Request #____2-20_____ is true and accurate to the best of my knowledge and belief.

Signed: Tim Rush

Date: December 21, 2014

KCP&L
Case Name: 2014 KCPL Rate Case
Case Number: ER-2014-0370

Response to Woodsmall David Interrogatories - MECG_20141201
Date of Response: 02/02/2015

Question:2-20S

*SUPPLEMENTAL*

**[Critical Infrastructure Protection/Cybersecurity Tracker] Ref: Direct Testimony of Mr. Rush, pages 31-33**. Mr. Rush states, The Company requests that a CIP tracking mechanism be authorized in this case to ensure recovery of costs necessary to address the government mandated requirements regarding security of cyber assets essential to the reliable operation of the electric grid." Please provide the following additional information:

a. State with specificity the definitions for each type of cost that would be eligible for tracking under this proposal and the criteria that would be applied to ensure that ongoing costs being incurred for protection of the Companyâ€™s assets are not commingled with incremental new CIP spending.

b. Provide a detailed itemization, for each of the years 2009 through 2013 and in 2014 to date, of all spending by KCPL on security of the infrastructure supporting reliability of the Bulk Electric System ("BES"), indicating which of the itemizes costs historically would fall within or outside of the definitions stated in your response to part (a).

c. At page 33, Mr. Rush states, "The standards to be implemented in 2016 are much more aggressive in broader coverage of the Companyâ€™s assets supporting the BES. These cyber systems, as they are referenced in the

V5, will require additional actions as well as resources for both physical and logical protection in support of reliability of the BES." Please provide complete copies of all studies, reports, analyses, workpapers, cost projections and other documents that were relied upon by Mr. Rush in making these statements.

d. Provide the most detailed available projection by month of the charges by FERC Account and by cost type (labor, contractor, materials, etc.) and payee that would be deferred for later recovery under the proposed CIP tracker, with a statement of any assumptions made in developing such projections.

e. What amount of test year recorded and adjusted expense and rate base investment has been included for BES security infrastructure? Provide a breakdown by FERC account, with reference to supporting workpapers if applicable.

Response:

**A**

The CIP/Cyber Tracker is for incremental O&M dollars, labor & non-labor, spent to meet regulatory requirements for protection of critical infrastructure, inclusive of NERC, DOE, NRC, etc., or Cyber Security needs. These regulatory obligations, such as NERC CIP Standards, are publicly available, and subject to federal audits with potential civil penalties assessed or mandated actions ordered to achieve compliance. Cyber Security needs are driven by many government entities as well as industry best practices.

For CIP/Cyber, these costs include Contractors (Outside Services), Internal Labor, Software, Hardware, Software Maintenance, Software Subscriptions, etc. These costs are incurred to meet the CIP and Governmental standards mentioned above. These costs span the following functional areas: Information Technology, Generation, Transmission and Distribution, and Physical Security.

KCP&L will be utilizing accounting codeblock within our accounting system to mark CIP and Cyber activities as such for ongoing tracking purposes, both O&M and Capital. Going forward, CIP and Cyber activities will be reviewed periodically to ensure the activities meet the definition above and are tracked appropriately.

**B**

The attached Excel file "Q2-20S KCPL CIP-Cyber historical costs 2009-2014.xls" provides costs by Category (CIP, Cyber), type (Non-Labor O&M, Labor O&M, Capital), and company division (IT, T&D, Generation, Physical Security). All of the costs included in the Historical Excel sheet are within the definition in Question A; there would not be a CIP or Cyber cost outside of the definition.

**C**

Mr. Rush's statement was based on a number of considerations. Due to emerging threats to the Nation's Critical Infrastructure, the Federal Executive Branch has issued several policy directives and orders to the utility sector for protection of this infrastructure. Those directives include but are not limited to the following: Presidential Policy Directive 28 (PPD-28) "Signals Intelligence Activities," 2014; Executive Order (E.o.) 13636 "Improving Critical Infrastructure Cybersecurity," 2013; Presidential Policy Directive 21 (PPD-21) "Critical Infrastructure Security and Resilience," 2013; Executive Order 13587 "Structural Reforms to Improve the Security of Classified Networks and the Responsible Sharing and Safeguarding of Classified Information," 2011; Cyberspace Policy Review, 2009; Cyberspace Policy Review Supporting Documents.

In addition to these items, the Federal Energy Regulatory Commission (FERC), through their delegation to the North American Electric Reliability Corporation (NERC), has issued Reliability Standards that require additional protections of the nation's critical infrastructure. The standards are written to provide cyber and physical protection of the Bulk Power System and its supporting systems. These standards are mandatory and enforceable. A utility can receive fines and/or a civil penalty if found not in compliance or could be required to implement above-and-beyond compliance measures. KCP&L has reviewed the NERC Critical Infrastructure Protection standards to determine those assets that must be protected due to these NERC compliance obligations. With the additional

bright line criteria included in the newer version standards that designates assets that must be protected, KCP&L is now required to protect a larger number of assets that aren't currently required for specific protections. These include such assets as generating stations and other critical infrastructure.

The continuously evolving threat scenarios and efforts to protect the Nation's critical infrastructure, of which KCP&L is the custodian of some of that infrastructure, additional resources and expenses are necessary to comply with regulatory obligations as well as manage cyber and physical security risks for the company.

See the attached pdf files for the standards, policy directives and executive orders.

**D**
The attached Excel file "Q2-20S KCPLCIP-Cyber Projections 2015-2017.xls" provides costs by FERC Account, cost type, and company division (IT, T&D, Generation, and Physical Security). Payee for Non-Labor O&M and Capital has not been identified yet for the projected costs. This is primarily due to the early stages of CIP version 5/6 project planning and the large impact the transition to CIP version 5/6 will have on KCP&L processes.

Assumptions

- No CIP standard changes were assumed beyond the currently approved CIP standards
- Project planning is underway for approved CIP standards, assumptions were made based on past projections and current knowledge of approved standards

**E**
The attached Excel file "Q2-20S KCPL CIP-Cyber Test Year costs.xls" provides costs by category (CIP and Cyber) and FERC Account by month (April 2013 to March 2014). All of the costs included in the Historical Excel sheet are within the definition in Question A.

**Information Provided By:** Josh Roper

Attachments:
Q2-20S KCPL CIP-Cyber historical costs 2009-2014.xls
Q2-20S KCPLCIP-Cyber Projections 2015-2017.xls
Q2-20S KCPL CIP-Cyber Test Year costs.xls
Q2-20S Presidential Policy Directive 28-Signals Intelligence Activities.pdf
Q2-20S Executive Order 13636-Improving Critical Infrastructure Cybersecurity.pdf
Q2-20S Presidential Policy Directive 21-Critical Infrastructure Security and Resilience.pdf
Q2-20S Executive Order 13587-Structural Reforms to Improve the Security of Classified Networks and the Responsible Sharing and Safeguarding of Classified Information.pdf
Q2-20S Cyberspace Policy Review.pdf
Q2-20S Cyberspace Policy Review Supporting Documents.pdf
Q2-20S CIP-002-3.pdf

Q2-20S CIP-002-5_1.pdf
Q2-20S CIP-003-3.pdf
Q2-20S CIP-003-5.pdf
Q2-20S CIP-004-3a.pdf
Q2-20S CIP-004-5_1.pdf
Q2-20S CIP-005-3a.pdf
Q2-20S CIP-005-5.pdf
Q2-20S CIP-006-3c.pdf
Q2-20S CIP-006-5.pdf
Q2-20S CIP-007-3a.pdf
Q2-20S CIP-007-5.pdf
Q2-20S CIP-008-3.pdf
Q2-20S CIP-008-5.pdf
Q2-20S CIP-009-3.pdf
Q2-20S CIP-009-5.pdf
Q2-20S CIP-010-1.pdf
Q2-20S CIP-011-1.pdf
Q2-20S CIP-014-1.pdf
Q2-20S_Verification.pdf

# *Verification of Response*

**Kansas City Power & Light Company**
**AND**
**KCP&L Greater Missouri Operations**

**Docket No.** ER-2014-0370

The response to Data Request # 2-20S is true and accurate to the best of my knowledge and belief.

Signed: Tim Rush

Date: January 30, 2015

# SCHEDULE JFR-1, PAGES 9-12

# THIS DOCUMENT CONTAINS HIGHLY CONFIDENTIAL INFORMATION NOT AVAILABLE TO THE PUBLIC

# SCHEDULE JFR-2

# THIS DOCUMENT CONTAINS HIGHLY CONFIDENTIAL INFORMATION NOT AVAILABLE TO THE PUBLIC

KCP&L
Case Name: 2014 KCPL Rate Case
Case Number: ER-2014-0370

Response to Williams Nathan Interrogatories - MPSC_20150302
Date of Response: 04/13/2015

Question:0465

Please provide a general milestone schedule or timeframe for performing this work required to comply with NERC CIP. Please indicate how long KCPL expects this proposed tracker to be in place; for one year or until the next rate case? DR requested by Randy Gross (Randy.Gross@psc.mo.gov).

Number of Attachments:

Response:

**General CIP Milestone Schedule**

1. Now - 4/1/2016 – KCP&L will have ongoing activities to comply with CIP version 3
2. Now – 4/1/2016 – KCP&L will have project activities to prepare to comply with CIP version 5 high and medium requirements
    1. By 3/13/2015 at least 4 of 20 CIP version 5 project teams will have kicked off
    2. By 4/30/2015 all CIP version 5 project teams are forecasted to kick off
    3. By 1/1/16 KCP&L expects to have the necessary infrastructure to be in place to be compliant with CIP version 5 high and medium requirements
    4. By 2/15/16 KCP&L expects to complete an independent readiness evaluation of the CIP version 5 program
    5. By 3/31/16 KCP&L expects to be fully compliant with CIP version 5 high and medium requirements
3. 4/1/2016 – CIP version 5 High and Medium requirements become enforceable and CIP version 3 requirements are retired
4. 4/1/2016- 4/1/2017 – KCP&L will have ongoing activities to comply with CIP version 5 high and medium requirements
5. 4/1/2016 – 4/1/2017 – KCP&L will have project activities to prepare to comply with CIP version 5 low requirements
6. 4/1/2017 – CIP version 5 low requirements become enforceable
7. 4/1/2017 and beyond – KCP&L will have ongoing activities to comply with all CIP version 5 requirements

2) KCP&L expects the CIP/Cyber tracker, if approved, to be in place until at least the next rate case filing.

**Information Provided By:** Josh Roper

Attachment: Q0465_Verification.pdf

# *Verification of Response*

**Kansas City Power & Light Company**
**AND**
**KCP&L Greater Missouri Operations**

**Docket No.** ER-2014-0370

The response to Data Request # 0465 is true and accurate to the best of my knowledge and belief.

Signed: Tim Rush

Date: March 19, 2015

KCP&L
Case Name: 2014 KCPL Rate Case
Case Number: ER-2014-0370

Response to Williams Nathan Interrogatories - MPSC_20150302
Date of Response: 04/13/2015

Question:0461

1. Please provide an organization chart that indicates by title and name all the personnel that are directly involved in performing this work to include both KCPL personnel and assigned contractor personnel. This chart should include all IT personnel, programmers, project managers and supervisors, executive project sponsor, quality assurance personnel, software verification and validation engineer, and configuration management personnel. For the quality assurance personnel and verification and validation engineer, please indicate who each reports to and explain how this arrangement provides independence from the project team. DR requested by Randy Gross (Randy.Gross@psc.mo.gov).

Number of Attachments:

Response:

The CIP version 5 implementation is a dramatic increase in the scope of CIP at KCP&L. KCP&L is currently planning approximately twenty CIP version 5 projects involving Generation, IT, Transmission & Distribution, and Physical Security. These projects are still in a planning phase; the initial list of included employees and contractors supporting the projects will not be available until after the planning phase is completed. When the projects are completed, CIP version 5 will be operationalized and the list of employees and contractors will continue to shift and change over time. Included in the supporting excel file is a tab called 461 Support which has supporting data for this question; this data is based on a current point in time snapshot of the CIP Program and Projects.

Scott Heidtbrink, Chief Operating Officer, is the executive project sponsor and the CIP Senior Manager (an official NERC designation). Joshua Roper, Senior Manager – CIP Program, is the owner of CIP Compliance efforts across KCP&L for CIP version 5. Working jointly with the Senior Manager – CIP Program is a CIP Project Management Office Leadership Team composed of internal and external project management experts and division leaders. The CIP Project Management Office Leadership Team reports to a Steering Committee composed of the COO, vice presidents from affected divisions, and other appropriate support personnel. Each affected division is contributing personnel to serve as team leads and members for CIP projects. These team leads will manage project work and employees from across KCP&L to complete tasks necessary for CIP version 5 compliance.

The KCP&L Compliance division, through Ellen Fairchild, Vice-President and Chief Compliance Officer (CCO), has responsibility to provide assurance for all compliance obligations on behalf of KCP&L management to the KCP&L Board of Directors. In addition, she reports directly to the President and CEO with an independent reporting relationship to the Audit Committee of the KCP&L Board of Directors. Compliance personnel providing assurance to the officers of the Corporation and to the CCO are directed by Rene Nix, Senior Manager – FERC Compliance Assurance. The FERC Compliance

Assurance team will provide assurance to the Steering Committee, through participation in the implementation projects, as well as the KCP&L Board via the CCO that the CIP version 5 projects and program meet the NERC CIP version 5 Standards. Audit personnel providing assurance to the officers of the Corporation and to the CCO are directed by Tony Jackson, Director of Audit Services. The Audit Services team will provide audit oversight to the Steering Committee, through participation in the implementation projects, as well as the KCP&L Board via the CCO.

A listing of employees working on CIP for the last several years, as well as vendors supporting this effort, can be found in the supporting excel file on the tab 460 Support.

**Information Provided By:** Josh Roper

**Attachment:**
Q0461_CIP Tracker Data Requests March.xlsx
Q0461_Verification.pdf

# *Verification of Response*

**Kansas City Power & Light Company**
**AND**
**KCP&L Greater Missouri Operations**

**Docket No.** ER-2014-0370

The response to Data Request # 0461 is true and accurate to the best of my knowledge and belief.

Signed: Tim Rush

Date: March 19, 2015

# SCHEDULE JFR-4, PAGES 4-9

# THIS DOCUMENT CONTAINS HIGHLY CONFIDENTIAL INFORMATION NOT AVAILABLE TO THE PUBLIC

KCP&L
Case Name: 2014 KCPL Rate Case
Case Number: ER-2014-0370

Response to Williams Nathan Interrogatories - MPSC_20150302
Date of Response: 04/13/2015

Question:0463

Please provide an overall description of the cost and schedule control for the work required to comply with NERC CIP that indicates the personnel involved and any computer software programs that are used for this purpose. Is there any independent project oversight planned to protect the project, the project schedule and budget? DR requested by Randy Gross (Randy.Gross@psc.mo.gov).

Number of Attachments:

Response:

Data request MPSC_20150302 Question 461 describes the project management structure of the KCP&L CIP version 5 projects. Data request MPSC_20150302 Question 466 describes the forecasted CIP version 5 project and program, as well as the CIP version 3 program, costs. Data request MPSC_20150302 Question 460 part 1 describes the definition and mechanism for tracking CIP costs. The supporting excel files the data requests reference include the personnel involved.

Large KCP&L projects rely on a company established project management governance standard. KCP&L projects generally use Microsoft Project to track project scope, schedule, and resource utilization. We expect to do the same on the CIP version 5 projects. Project accounting will rely on KCP&L's internal accounting system. KCP&L will rely on its internal Audit department to audit the projects' schedule and risk, and will rely on its internal Compliance department to verify our efforts meet NERC CIP compliance requirements. The SPP Regional Entity, through its' delegated authority from NERC, performs compliance monitoring and oversight of KCP&L's adherence to federal regulations such as FERC and NERC, inclusive of the NERC Critical Infrastructure Protection (CIP) Standards.

**Information Provided By:** Josh Roper

Attachment: Q0463_Verification.pdf

# *Verification of Response*

**Kansas City Power & Light Company**
**AND**
**KCP&L Greater Missouri Operations**

**Docket No.** ER-2014-0370

The response to Data Request # 0463 is true and accurate to the best of my knowledge and belief.

Signed: Tim Rush

Date: March 19, 2015

KCP&L
Case Name: 2014 KCPL Rate Case
Case Number: ER-2014-0370

Response to Williams Nathan Interrogatories - MPSC_20150326
Date of Response: 04/15/2015

Question:0466.1

In Staff's DR 0466, Staff requested that the Company "Please provide any and all financial analysis performed by KCPL to quantify the impact of utilizing a tracker versus not using a tracker." Staff's review of the Company's response acknowledges that the Company has provided an overview of the type of costs and projected costs to 2017 to be included in the requested tracker. However, the financial analysis that identifies and quantifies the financial impact to the Company through the utilization of a tracker versus not utilizing a tracker was not provided. What is the impact on rates as a result of the proposed tracker? Please discuss how this tracker is expected to benefit ratepayers and by what amounts. Please discuss how this tracker is expected to benefit the shareholders and by what amounts. DR requested by Randy Gross (Randy.Gross@psc.mo.gov).

Number of Attachments:

Response:

Failure to comply with CIP/Cyber Security requirements will subject KCP&L to penalties and sanctions. Moreover, being compliant with CIP and Cyber Security requirements will increase the likelihood that KCP&L's customers will not be negatively affected by CIP or Cyber Security breaches or failures. It is therefore a reasonable and necessary element of providing electric service to the public for KCP&L to incur CIP/Cyber Security costs.

Because CIP/Cyber Security costs must be incurred and are steadily increasing, absent authorization to use a tracker for CIP/cybersecurity costs, KCP&L will experience permanent loss of recovery of a certain portion of these costs, even if it files rate cases every year. This is because under the traditional historical test year rate case model used in Missouri, KCP&L's rates are set prospectively and past under-recoveries are not included in the calculation of prospective rates. Because CIP/Cyber Security costs are steadily increasing, a tracker is necessary for such costs if KCP&L is to have a realistic opportunity to achieve its Commission-authorized return.

KCP&L is putting in place a number of governance, project management and cost control procedures to ensure that CIP/Cyber Security efforts are efficient and effective. For example, we have provided the CIP project's change request form which will be utilized to manage project scope, and the subsequent budget, changes. The Company intends to work with Staff to identify periodic reporting that would enable Staff to keep

apprised of the Company's CIP/Cyber Security efforts. The Company also expects that Staff will be able to directly observe and interact with the CIP compliance team through periodic meetings for the purpose of status updates.

Although authorization to use a tracker for CIP/Cyber Security costs will provide KCP&L with a more realistic opportunity to achieve its Commission-authorized return, it does not amount to a guarantee that KCP&L will achieve its Commission-authorized return. This is because many other cost of service items are not subject to a tracker and because tracked costs cannot be included in rates until a rate case is filed and the Commission permits rate recovery of tracked costs.

Consequently, tracked costs are subject to significant regulatory review which provides a substantial incentive for the Company to control such costs – where possible – to ensure recovery of the costs incurred. As with all cost of service items, tracked costs are subject to disallowance on the grounds that they were not necessary, reasonable or prudent.

If KCP&L experiences pervasive under-recovery of its cost of service – as would be the case if CIP/Cyber Security costs are not tracked – it would likely have no alternative but to file serial rate cases to reduce (although not eliminate) the gap between cost of service and revenues. Serial rate cases are expensive, to customers and the Company, and tend to distract effort that might otherwise be devoted to improving the effectiveness and efficiency of the operation. Similarly, pervasive under-recovery of its cost of service would also tend to increase KCP&L's cost of capital, with a resulting negative impact on both the Company and its customers, while also reducing the amount of capital available for deployment on customer service enhancements and other customer-focused initiatives.

In terms of rate impacts, a tracker approach would not affect customer rates until a subsequent rate case when costs deferred pursuant to the tracker mechanism would be eligible for recovery subject to review for reasonableness, necessity and prudence. The Company expects that at some point in the future, a steady state of CIP compliance efforts will be reached at which point base rate treatment will be sufficient and a tracker would no longer be necessary for such costs.

Two attachments are included; CIP Project Procedures Manual and CIP Project Change Requests form. The procedures manual is a work in progress and will be completed over the next few weeks.

Attachments:

Q0466.1_CIP Project Change Request.pdf
Q0466.1_CIP Project Procedures Manual Version 2.pdf

0466.1_Verification.pdf

# *Verification of Response*

**Kansas City Power & Light Company**
**AND**
**KCP&L Greater Missouri Operations**

**Docket No.** ER-2014-0370

The response to Data Request # 0466.1 is true and accurate to the best of my knowledge and belief.

Signed: Tim Rush

Date: April 14, 2015

# Project Change Request

## Critical Infrastructure Protection (CIP)

## [Insert Project Name]

**Created by:** [Insert Author Name]

## Table of Contents

# Document Control

## Document Information

| | Information |
|---|---|
| File Name | *<INSERT FILE NAME HERE>* |
| Document Owner | *<INSERT OWNER HERE>* |
| Issue Date | *<INSERT DATE HERE>* |
| Last Saved Date | *<INSERT DATE HERE>* |
| SOW ID | *<INSERT SOW ID HERE>* |
| Request ID / ITRT | *<INSERT REQUEST ID HERE>* |

## Document History

| Version | Issue Date | Changes |
|---|---|---|
| *[1.0]* | *MM/DD/YY* | *<INSERT DESCRIPTION OF CHANGE HERE>* |
| | | |
| | | |
| | | |

## Project Initiation Team

| Role | Name |
|---|---|
| Business VP Sponsor | Scott Heidtbrink |
| Business Requester | Josh Roper |
| Business Relationship Manager | Kim Fuller |
| Team Lead / Sub Team Lead | |
| Architect | Richard Gray |
| Project Manager | |
| Program Manager | Tom Mitchell |
| Quality Assurance Lead | |
| Procurement Lead | Rob Funk |

## SECTION 1: Change Description

| | | | |
|---|---|---|---|
| **Impacted Sub-Projects:** | e.g., CIP-00X R1 R2 - Where CIP -00X refers to the sub-project(s) that are impacted. List as many as apply | **ISSUE #:** | e.g., CIP-00X -R1-nn where CIP-00X R1 ties to the project issue log, nn is a unique issue number on that Log |
| | | **DATE:** | |
| | | **PCR #:** | |

**DESCRIPTION OF CHANGE:**

Is this requirement driven by Compliance? ☐ Yes (explain) ☐ No

Does any delivered functionality address this requirement? ☐ Yes (explain) ☐ No ☐ NA

**BUSINESS BENEFIT** (be very descriptive; attach support as necessary)

**BUSINESS IMPACT** (quantify the business impact, if this change is not implemented)

**PRIORITY:**

☐ 1 – High (Business Impact with no existing workaround)

☐ 2 – Low (*Workaround exists, but is not optimal)*

**ALTERNATIVES/WORKAROUND:**

Provide details of work around and/or alternatives. Provide Business Case/cost of alternatives.

**INVOLVES MODIFICATION OR DEVELOPMENT**: (more than 1 can be selected*)*

| | | |
|---|---|---|
| ☐ Conversion | ☐ Enhance – Delivered Fields | ☐ Enhance – Create Fields |
| ☐ Workflow | ☐ Enhance – Delivered Pages, Menus, Component, Pcode | ☐ Enhance – Create Pages or Menus |
| ☐ Security | ☐ Enhance – Delivered Tables or Views or Pcode | ☐ Enhance – Create Tables or Views |
| ☐ Infrastructure | ☐ Enhance – Delivered Programs | ☐ Enhance – Create Programs |
| ☐ Customization | ☐ Enhance – Delivered Other Object | ☐ Enhance – Delivered Other Object |

**OTHER COMMENTS / EXPLANATIONS:**

## SECTION 2: Change Analysis

**ESTIMATED COMPLEXITY ( TECHNICAL AND FUNCTIONAL HOURS): TO BE COMPLETED BY IT AND FUNCTIONAL LEADS**

☐ High (>40 hours) ☐ Medium (16-39 hours) ☐ Low (1-15 hours)

**Breakdown Analysis of Change**

| IT / Functional | | IT | | Functional / IT Support | |
|---|---|---|---|---|---|
| **ANALYSIS** | **DESIGN** | **BUILD** | **UNIT TEST** | **TEST** | **IMPLEMENT** |
| | | | | | |
| | | | | **TOTAL:** | |

| **MUST BE CONSIDERED DURING UPGRADE:** | ☐ **Yes** | ☐ No |
|---|---|---|

*Business Lead* Date *IT Lead* Date

**AUTHORIZATION:**

After review, make a notation below indicating approval to move this change into the Project/Program. Proper evidence of approval must be maintained to support this form.

| | | |
|---|---|---|
| **Approved by Stakeholders***? | ☐ Yes | ☐ No |
| **Approved by PMO**? | ☐ Yes | ☐ No |
| **Approved by Steering Committee**? | ☐ Yes | ☐ No |

*Indicates approval of segment of project leadership

## SECTION 3: Change Impact

**To be completed by PMO**

**Legal/Regulatory**

- ☐ Compliance Requirement as detailed above
- ☐ Matches current functionality, but not required by law or Commission Order
- ☐ Potential future requirement

**Cost**

- ☐ Hard benefits > $50,000/year can be demonstrated
- ☐ Cost Avoidance
- ☐ No hard or soft benefits

**Time-Based upon Level of Effort above. How does this affect the overall project timeline?**

- ☐ Improves project timeline
- ☐ No impact to project timeline
- ☐ Jeopardizes implementation date

**Quality**

- ☐ Can be adequately tested & trained prior to cutover/implementation. Maintains current data integrity
- ☐ Potential risk; may not be able to adequately test, train & communicate
- ☐ Cannot be adequately tested, trained, or communicated. Jeopardizes data integrity

**Customization Impact to Future Upgrades:**

- ☐ Easy to modify & bring forward
- ☐ Moderate customization
- ☐ Difficult to implement (requires complex programming modifications)

**Non Customization Alternative:**

(If a customization alternative is listed above, how reasonable is the proposed solution?)

- ☐ The alternative solution meets the needs for this requirement
- ☐ There is value in the workaround. Indifferent alternatives
- ☐ Alternative is not an adequate solution

# CIP v5 Project

Procedures Manual

**Revision History**

| Rev # | Modified By | Description | Date |
|---|---|---|---|
| 1.0 | Tom Mitchell | Initial version | 3/21/2015 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**TABLE OF CONTENTS**

**ACRONYMS**

| | |
|---|---|
| BES | Bulk Electric System |
| CAR | Compliance Analysis Report |
| CCA | Critical Cyber Asset |
| CIP | Critical Infrastructure Protection |
| DMZ | Demilitarized Zone |
| EACM | Electronic Access Control and/or Monitoring |
| EAP | Electronic Access Point |
| EMS | Energy Management System |
| ESP | Electronic Security Perimeter |
| FERC | Federal Energy Regulatory Commission |
| KCP&L | Kansas City Power & Light Company |
| LSOC | Lee Summit Control Center |
| MCDL | Master CIP Device List |
| NIST | National Institute of Standards and Technology |
| NERC | North American Electric Reliability Corporation |
| PACS | Physical Access Control System |
| PCA | Protected Cyber Asset |
| PIP | Process Improvement Plan |
| PSP | Physical Security Perimeter |
| SAN | Storage Area Network |
| SIEM | Security Information & Event Monitoring |
| SME | Subject Matter Expert |
| SOC/NOC | Security Operations Center / Network Operations Center |
| SPP | Southwest Power Pool |
| TFE | Technical Feasibility Exception |
| VLAN | Virtual Local Area Network |

**CONTACTS**

| Position | Name | Email | Telephone |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**PROJECT OVERVIEW**

The KCP&L CIP v5 project was initiated to bring the current CIP v3 standards and requirements obligations into compliance with the CIP v5 standards and requirements obligations in time for the 4/1/2016 CIP v5 compliance go live.

This goal will be achieved by:

1) Identifying affected business units and processes at KCP&L; (Both those under CIP v3 obligations now and those that will fall under CIP v5 obligations in 2016)
2) Assigning qualified and available resources to project teams according to the affected business units and processes;
3) Analyzing existing CIP v3 processes at KCP&L;
4) Comparing those processes with the requirements as imposed by CIP v5;
5) Identifying divergences between existing processes and CIP v5 requirements;
6) Developing and implementing plans to incorporate new business processes that will converge with the CIP v5 requirements;
7) Testing the new business processes internally and via the CIP v5 readiness reviews (3rd party hosted);
8) Working closely with and participating in CIP v5 working groups/peer groups etc; and
9) Sharing knowledge between project members and the relevant KCP&L audience (determined as part of a formal change communications process).

In order to facilitate the automation of as many processes as is practical, there may be instances where the project shows compliance on day 1 (4/1/2016) but reaches fully functional automation of the compliance obligation later in the Q3/Q4 timeframe of 2016. (i.e. the project may not end until later in 2016)

## TIMELINE

Project timelines, deliverables, and budget are still being constructed. This section will be updated when the project planning is completed (estimated June 1, 2015).

# SCHEDULE JFR-6, PAGES 17-18

# THIS DOCUMENT CONTAINS HIGHLY CONFIDENTIAL INFORMATION NOT AVAILABLE TO THE PUBLIC

**ROLES & RESPONSIBILITIES**

**Team Members**:
- act in a collaborative fashion with the Team Lead to develop the team's project plan;
- are responsible for undertaking and completing tasks that are required to successfully meet the goals of the project; and
- provide the results of their efforts to the Team Lead. This includes documentation, task status, and issues.

**Team Leads**:
- act in a collaborative fashion with the Team Members to develop the team's project plan;
- make decisions regarding the most effective and efficient use of Team Members in undertaking and completing tasks that are required to successfully complete the goals of the project;
- determine the most effective course of action to resolve issues;
- monitor the team project schedule, complete status reports and maintain an issue management list;
- ensure information regarding the project and the team is disseminated to the Team Members;
- maintain communication with project management and other Team Leads to share information; and
- those that also serve as CIP Liaisons are responsible for disseminating information to all affected project teams and for providing feedback to CIP working groups from KCP&L regarding information related to the liaison role

**Project management**:
- is responsible for the planning and definition of the scope of the KCP&L CIP project;
- identifies and analyzes risks that may affect the project;
- implements plans to mitigate risks to the project;
- monitors the teams that comprise the project;
- provides training and resources to facilitate projects at the team level;
- facilitates communication among project teams;
- works with Team Leads to resolve issues that affect the project; and
- maintains communication with the program manager regarding the status of the CIP IM project.

**Program management**:
- monitors the status of the KCP&L CIP IM project;
- approves the project plans;
- provides direction to project management regarding the overall project and/or the team projects; and
- communicates details of the KCP&L CIP IM project to the CIP IM Steering Committee.
- approves changes to CIP program budget and scope not exceeding designated approval levels

**Stakeholders:**
- monitor the project to ensure items related to their organizations within KCP&L are considered
- provide guidance to project management relative to the expertise of the stakeholder

**CIP IM Steering Committee**:
- ensures adequate resources are assigned to project teams.

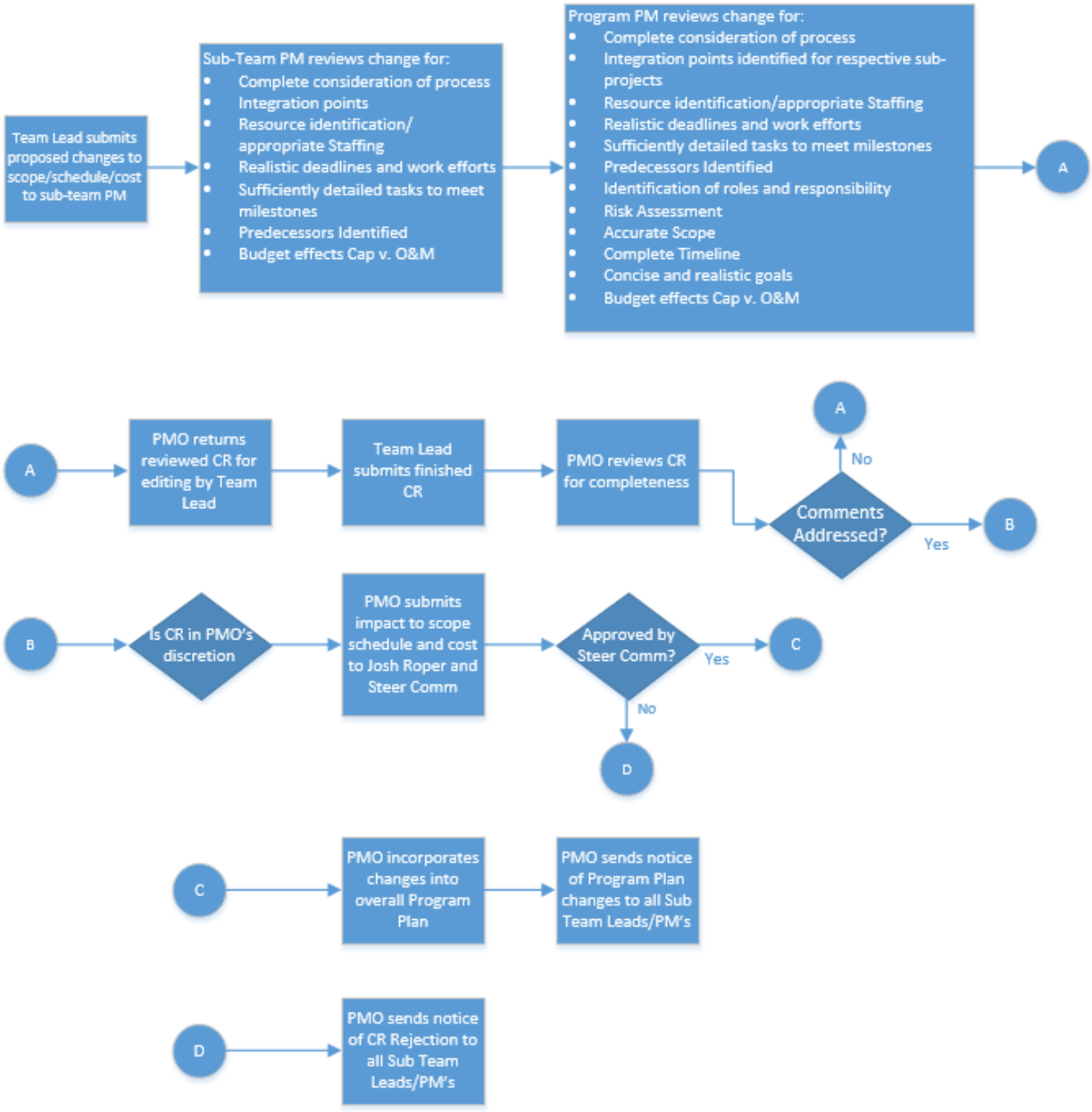
- ensures that software selection and process definition is based on value provided to the enterprise vs. a divisional view.
- governs over any software customizations.
- provides direction regarding organizational structure optimization to fully leverage system functionality and realize benefits of standardization.
- provides direction when project teams are unable to reach consensus.
- monitors progress and provides direction and guidance regarding overall scope and program management.
- provides guidance regarding strategy, compliance and risk considerations.
- approves changes to CIP program budget and scope which exceed Program Management approval levels

**Team Staffing**

Team membership changes must be communicated to Project Management by the relevant Team Lead. The details of the proposed change must be sent in an email to Paul Schnitger with the affected team member copied on the message. Paul will update the organization chart in this document with the change. Additionally, each Team Lead must identify a back-up who will be available to fill in for the Team Lead when he or she is unavailable. The back-up to the Team Leads are identified in the rosters as those names that are bolded, italicized, and underlined.

PROJECT CHANGE REQUESTS

Team Lead will Fill out and submit a CIP Project Change Request (CR) and follow the process below.



ISSUES/RISKS

IMPACT of CIP on employees (per team)

STATUS REPORTING

TEMPLATES

# SCHEDULE JFR-7

# THIS DOCUMENT CONTAINS HIGHLY CONFIDENTIAL INFORMATION NOT AVAILABLE TO THE PUBLIC