

**Balancing Authority/Transmission Operator
Reliability Readiness Evaluation Report**

**Kansas City Power and Light
Kansas City, Missouri**

April 16–19, 2007

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Introduction and Evaluation Process

The North American Electric Reliability Corporation (NERC) Reliability Readiness Evaluation and Improvement Program is one of the commitments of NERC and the industry to strengthen the reliability of the North American bulk power system. The program conducts independent evaluations of balancing authorities, transmission operators, reliability coordinators, and other key entities that support the reliable operation of the bulk power system to assess their preparedness to meet their assigned reliability responsibilities. The evaluations identify strengths and areas for improvement in an effort to promote excellence in operations among these organizations.

Since its inception in 2004, NERC and the industry have been working together to enhance the program. The current process is based on fundamental aspects of reliability: culture, operations, maintenance, planning, and training. The document *NERC Readiness Evaluation Procedure* describes and defines the process used for reliability readiness evaluations. This document and other documents related to the program are available at <http://www.nerc.com/~rap/>.

The reliability readiness evaluation teams, each led by a NERC staff member and a regional co-leader, include industry volunteers with considerable expertise selected to provide representation from other interconnections, other regions, and neighboring operating entities. The teams also typically include representatives from the Federal Energy Regulatory Commission (FERC) staff.

The public version of the reliability readiness evaluation report contains the majority of the evaluation team's findings. Any discussion of findings pertaining to critical infrastructure will be contained in Appendix 1, a confidential appendix to the report that is sent privately to the organization evaluated and is not included in the public version of the report.

An evaluation team met on-site with Kansas City Power and Light (KCPL) representatives on April 16–19, 2007. This report reflects the views and recommendations of the evaluation team regarding the readiness of the KCPL to meet its responsibilities as a balancing authority/transmission operator.

Evaluation Team

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Organization Profile

Kansas City Power and Light (KCPL), headquartered in Kansas City, Missouri, delivers power to over 500,000 customers in western Missouri and eastern Kansas. KCPL is registered with NERC as a distribution provider, transmission owner, transmission operator, and transmission planner. KCPL is separately registered with NERC as a generator owner, purchasing-selling entity, generator operator, resource planner, load-serving entity, and balancing authority. Serving Kansas City and much of the Missouri metropolitan area, KCPL operates 300 miles of 345 kV, 1,000 miles of 161 kV, and 75 miles of 69 kV transmission lines. KCPL maintains interconnection ties at the 345, 161, and 69 kV levels.

KCPL has a generation capacity of 4,151 MW: 55% coal, 13% nuclear, 19% gas, 11% oil, and 2% wind. All-time peak demands hit approximately 3,721 MW in the summer and 2,563 MW in the winter.

KCPL is a member of the SPP regional transmission organization and uses the SPP Open Access Transmission Tariff to provide non-discriminatory transmission services. KCPL also participates in the SPP Energy Imbalance Services market.

Executive Summary

The evaluation team found no significant operational problems and concluded that KCPL has adequate facilities, processes, plans, procedures, tools, and trained personnel to perform the balancing authority/transmission operator functions necessary to maintain the reliable operation of the bulk power system.

KCPL exhibits a corporate culture focused on safety, reliability, and preparedness as indicated by the large number of positive observations identified by the evaluation team. KCPL's decision to have and maintain NERC certifications held by several management and support staff exemplifies a commitment to readiness. Throughout the interview process, the evaluation team sensed that KCPL includes this same focus in all of its employees' performance goals and, in fact, bases a percentage of every employee's compensation on those criteria.

In cooperation with KCPL representatives, the NERC co-leader identified two key recommendations: 1) increase the dedicated resources to develop, support and execute a more systematic approach to training and 2) expedite acquisition of a dispatcher training simulator and support its development/implementation.

Overall, the evaluation team identified 25 positive observations. KCPL operators are fully trained, experienced, and all are certified with the reliability operator credential. The control room is well designed, with both a complete energy management system and a mapboard. Operations is supported by a planning group that evaluates outages to develop contingency plans for potential operations that could impact the system.

In addition, the team offers 12 recommendations that, if implemented, will enhance KCPL's readiness to operate reliably and maintain the reliability of the bulk power system. While the training meets standards, the evaluation team made several recommendations that it feels will improve the training program. The evaluation team also made suggestions to improve the communications between management and operating personnel. The recommendations are listed in order of importance according to the ranking method used by the evaluation team.

Positive Observations

The evaluation team noted the following positive observations during the reliability readiness evaluation process:

1. The transmission system operations control room and mapboard are well designed (Section 2.1).
2. All transmission system operators are NERC certified with the reliability operator credential (Section 5.1).
3. Several operations support personnel are NERC certified (Section 5.1).
4. Predetermined contingency analysis studies are available to transmission system operators (Section 2.2.2).
5. See discussion in Appendix 1.
6. See discussion in Appendix 1.
7. See discussion in Appendix 1.
8. See discussion in Appendix 1.
9. See discussion in Appendix 1.
10. System operator meetings are held bimonthly (Section 1.2.1).
11. KCPL monitors reliability performance and training as a factor for employee compensation (Section 1.2.1).
12. KCPL applies corporate rewards for performance through all employee ranks (Section 1.2.1).
13. Shift supervisors and transmission system operators jointly develop personal training plans, review the plans semiannually, and adjust training as necessary (Section 5.1).
14. KCPL has a well-organized document control system (Section 2.2.3).
15. The comprehensive *Transmission System Indices Report* details KCPL's investigation of transmission equipment outages and their causes (Section 4).
16. KCPL added tension line monitoring of its two interconnection reliability operating limit (IROL) flowgates to improve visibility (Section 2.1).
17. KCPL ensures good communication and understanding of authority between the transmission and system operations groups (Section 2.2.3).
18. The operator shift schedules include a training week in each rotation (Section 5.1).
19. KCPL's daily operations summary helps all levels of the company stay informed of the upcoming conditions (Section 2.2.3).
20. Well-documented shift change logs provide an awareness of system conditions (Section 2.2.1).
21. Policy changes are summarized and distributed to the operators in a timely manner (Section 2.2.3).
22. KCPL created a single tabular display of real-time reactive resources (Section 2.1).
23. KCPL maintains a list of lines and transformers deemed critical facilities in an SPP software package for outage scheduling and coordination (Section 4).
24. KCPL staff created an energy management system (EMS) equipment rating overlay screen for operators to use to compare data during high-load days (Section 2.1).
25. KCPL corporate information technology and transmission EMS group provide continuous support to the control centers (Section 3.1)

Recommendations

The evaluation team recommends that KCPL take the following actions to address issues discovered during the evaluation process:

1. Expedite the hiring of dedicated resources to develop, support, and execute a more systematic approach to training (Section 5.1).
2. Expedite dispatcher training simulator development and implementation to enable operators to train on system-specific scenarios (Section 2.4).
3. Predetermine load shed blocks and display on a single EMS screen to reduce the real-time decision-making and provide increased operator visibility (section 2.4).
4. Improve operator awareness of which monitored flowgates could impact KCPL's system (Section 2.1)
5. Determine if manual load shed should be available at the transmission system operator console because of the time consumed in the communications process from the operator to the dispatchers (Section 2.4)
6. Develop a program to allow transmission system operators to execute an area-wide voltage reduction during an emergency reactive issue (Section 2.3).
7. See discussion in Appendix 1.
8. Review current timeline requirements for initial operator training to ensure new system operators are ready to assume shift duties (Section 5.1).
9. Ensure the daily morning debrief is communicated to the transmission system operators so operators and managers have identical system condition information (Section 1.2.5).
10. Review OL-4 for deploying active reserves to ensure the order for calling upon reserves is correct (Section 4).
11. See discussion in Appendix 1.
12. Implement a procedure in the power systems operations group to verify new policies have been reviewed and understood by operators (Section 1.2.5).

Discussion

The reliability readiness evaluation team examined the following key areas during the evaluation. The detailed discussion that follows provides the foundation for the recommendations and positive observations that the team identified. The report uses the generic term “system operator” to refer to all on-shift operating personnel responsible for executing the functions necessary to operate reliably and maintain the reliable operation of the bulk power system. This term will be used for the discussions unless additional specificity is required, such as the *balancing* system operator, or *transmission* system operator.

1. Culture

1.1 General

The corporate organization provides the necessary leadership and management for system operations to sustain high levels of safe, reliable operation.

The KCPL operators have the experience and systems to effectively monitor the electrical system. The control room is organized to help the operators achieve this task.

The KCPL system operators stated that they have sufficient resources available to support safe, reliable system operations. The team appreciated the high level of communication available to the operators noting quick reviews with management on any emergent needs. The system operators said that they are looking forward to working with the new dispatcher training simulator and the EMS upgrades that are in progress.

1.2 Organizational Effectiveness

1.2.1 Foundation for System Reliability

The organization’s values and behaviors—modeled by its leaders and practiced by its members—serve to make system reliability a top priority.

KCPL’s system operators are very confident that the organization is committed to improving system reliability. One example shared as a key indicator was the pending hiring of a full-time trainer for operations. The team was impressed to observe that performance and training are monitored and factored into employee compensation. Corporate rewards for performance are applied through all employee ranks. Bimonthly transmission operators meetings indicate a strong organization value is applied to system knowledge and reliability.

KCPL system operators and management meet bimonthly to discuss pertinent operating information as well as learn of any changes to procedures or plans of which they might otherwise be unaware. Information from these meetings is then shared monthly with the vice president. The evaluation team considers this continued exchange of reliability-focused information as a value to operational excellence. The system operator bimonthly meetings are considered a positive observation.

1.2.2 Leadership and Management

Managers, by leadership, commitment, and example, establish and reinforce high standards of performance and align the organization to achieve safe, reliable system operation.

KCPL encourages an openness of communications between its management staff and its system operators. Management discussions seemed to reveal that upper-level management routinely visits the control room, maintaining an interest in the condition of the system. The control room supervisor remains fully engaged in the operations and is located among the group instead of a separate office. Also noteworthy is the support of the planning group to real-time operations.

KCPL management demonstrated its commitment to NERC standards compliance by inviting its Internal Audit department to assess its NERC compliance work process and structure.

1.2.3 Corporate Oversight and Monitoring

Line management is used to strengthen reliability and improve performance. System reliability is kept under constant scrutiny through techniques such as self-assessments, performance indicators, and periodic management meetings.

KCPL line management meets every day to discuss the condition of the system, the events of the previous day, and any unusual situations or expected conditions. Information from this daily meeting is passed on to the duty system operators. To reinforce their efforts, a monthly meeting with the vice president of operations is held to share information that affects the organization.

For personnel oversight, KCPL establishes individual operator goals annually and follows up with reviews every six months. Alterations to the original plan are commonly made to adjust to new and higher priorities. System reliability is monitored and, as stated earlier, plays a part in each employee's compensation. Corporate goals are well communicated to each employee.

1.2.4 Human Resources

Personnel resource needs are anticipated and individuals are systematically recruited, developed, and assigned positions in the system operations organization.

Succession planning for operators, engineers, and management does not really seem to be a factor in KCPL's business plan. When interviewed, management responded with confidence that there is a sufficient number of qualified operators in rotation already, and those operators would provide advance notice before leaving. For management, the team understood that a plan exists, but it is not formalized.

Further information to capturing the knowledge of experienced management personnel can be found in Section 4: Fundamentals of Training.

1.2.5 Corporate Communications

System operations communications inform and engage both corporate and system operations employees so they can contribute to the strategic priorities of the organization.

KCPL believes that one key to operational excellence is a communications plan that ensures operators understand corporate information and changes to policies. The team determined that KCPL has the thought process and many of the pieces in place but could benefit in overall communications effectiveness by considering and implementing the following recommendations. The team recommends that the transmission system operations management include an operator in the daily morning debriefing with the expectation that the operator will share the information with his/her peers, or ensure that a priority is placed on the manager sharing the information from those meetings each day with the operators. The team sensed a slight disconnect between what operations management knew and what the operators knew, but overall the normal communications were very good and the transmission system operator plan for information exchange was available.

An additional recommendation came after interviewing the power system operators regarding the communications of corporate information and policies and procedures. Similar to the transmission operations area, a disconnect between management and the operators seemed to exist, with the added lack of operator knowledge that a plan existed for sharing this information. The team recommends that the power system operations group implement a procedure similar to that used by transmission system operations for verifying new policies issued have been communicated and understood by the operators.

2. Fundamentals of Operations

2.1 General

Operations personnel monitor and control the system in a manner that ensures safe, reliable operation.

KCPL has two identified IROL flowgates within its footprint. These flowgates are located at both ends of one transmission corridor. To provide the transmission operator with real-time critical line condition monitoring and visibility, KCPL has installed tension-line monitoring equipment on the monitored element of these flowgates. The evaluation team cites KCPL's decision to provide this added reliability tool as a positive observation.

Coinciding with the observation regarding tools to monitor specific flowgates is a team recommendation that KCPL improve operator awareness of its monitored flowgates. During interviews, the team members did not feel that the operators had a clear understanding of which flowgates could have a significant impact on the KCPL system and how they should be monitoring those areas. KCPL expects the reliability coordinator at SPP to notify them of rising flowgate levels, but KCPL does not receive any alarm nor do the operators take any actions until the flowgates reach 100 percent of their rated capacity. The EMS contingency analysis function will alert the operator to any potential contingent overload, and the operator will develop a post-contingent action plan to mitigate that condition. Flowgates are identified and monitored on the mapboard.

KCPL personnel created an EMS equipment rating overlay screen that "shadows" real-time operating values with a "max limit" value, enabling the operator to quickly compare data during high load days. The team cites this overlay tool as a positive observation.

KCPL's transmission control room and mapboard are well designed and provide good system visibility in a comfortable environment. The team identifies this as a positive observation. This mapboard provides a clean view of the transmission system with some real-time information incorporated. KCPL plans to add more real-time values to the mapboard to further enhance system situational awareness.

To alert operators, the EMS alarms are prioritized using a color-code system and supplemented by audible alarms.

KCPL created a screen titled "Tabular Display Reactive Resource" to display all dynamic reserves available to the operator, including the reserves that would be available after a loss of its most severe contingency. The evaluation team considers this display a positive observation for providing a single real-time overview of reactive reserves.

2.2 Operational Focus

2.2.1 Operational Safety

System operation activities are conducted in a manner that maintains high levels of safety and reliability for all system conditions.

KCPL has made operational safety a part of its culture at all levels of the business. Human error prevention techniques, such as multiple sign offs for electrical switching, providing information on lessons learned to multiple areas of the business, and an overall attitude supporting professional behavior, are indicators of this culture. EMS support and the immediate response to failures and equipment needs were well noted. The team considers KCPL's well-documented shift log as a positive observation for its error prevention technique emphasizing awareness of system conditions and passing observations from one shift to the next. An additional key component is the professional manner in which the control center is operated. Good working relationships were witnessed throughout the majority of interviews. Finally, safety goals and performance targets are included as contributing factors for employee compensation.

2.2.2 Operational Decision-Making

Operational decisions are reached using a systematic and thorough approach that supports safe, reliable, and efficient system operations.

KCPL studies system contingencies on a regular basis, and current studies reflecting the more likely scenarios for real-time operations are kept in a binder at the transmission system operator desk. The evaluation team was impressed with the number of contingency analysis studies readily available to the transmission system operators. These studies help inform the transmission system operators of expected conditions and remedial actions during line failures, overloads, etc. Because of the specificity to the probable KCPL operating concerns, the team considers the easy access to these studies as positive observation.

2.2.3 Operational Alignment

Organizational structure supports safe and reliable system operation.

Organization and availability of policies, procedures, and documents further define a company's commitment to operator awareness and to reliability. KCPL maintains a well-organized document control system. Whether it was the information supplied to the readiness team ahead of time and on-site, or what the team found throughout the primary and backup facilities, the documents were informative and easy to access for the operators. The evaluation team considers KCPL's document control system a positive observation.

Another area critical to being an excellent organization is the ability to communicate on regular intervals throughout the organization. Three positive examples of great communication were noted by the evaluation team.

- The power and transmission system operations daily summary provides "today's look" at what is happening in KCPL operations. An operator, manager, or vice president could view this daily report and stay informed of operating conditions and expectations.
- A real-time system operations environment depends on good communications and an understanding of where the authority rests for system reliability. KCPL ensures quality communications between the transmission system operators and power system operators and has clearly identified the transmission system operators as the final authority when decisions are made or conflict occurs.
- Policy changes occur frequently in system operations. KCPL has done a very good job of ensuring that any changes to procedures are summarized and distributed to each of the operators.

2.3 Managing System Configuration

Power system configuration is carefully designed, analyzed, maintained, and controlled throughout the life of the infrastructure, ensuring that system and equipment margins are understood, considered in decision-making, and managed consistent with design and system requirements.

KCPL's EMS is an ABB EMSYS version 12.0, which went into service in 1994 and was upgraded in 2003. EMS critical functionality, including scheduled outage or downtime, was above 99.95 percent in 2006. The current EMS includes functionality such as the ability to view major subsystems, data acquisition and control, automatic generation control, alarming, network applications, reporting, and energy accounting. The EMS provides a good view of the KCPL system. It has the needed security applications and control functions for KCPL to operate the system reliably.

The EMS state estimator can model up to 2,500 busses. KCPL currently studies 1,148 busses in its model. The average solution time is approximately 10 seconds with a solution or convergence rate of greater than 99 percent. KCPL looks at least one bus out of its system and in some cases looks further.

KCPL is in the process of purchasing and installing a new version ABB EMS. This system will provide the operators with added visibility and capabilities. The current plan is to have this upgrade installed in 2008.

KCPL maintains a list of lines and transformers deemed critical facilities in OPS1. The operators have good knowledge and control of this tool. This is described later in Section 4.

Reactive resources and the ability to call on those resources are important parts of reliability. The evaluation team was concerned about the apparent lack of an operator-friendly plan or tool that would allow the transmission system operators to execute any sort of area-wide voltage reduction during an emergency reactive issue. The team recommends that KCPL develop a program for executing area- and/or system-wide voltage reduction. KCPL has plans to implement a system-wide voltage reduction function within its new EMS.

2.4 Emergency Preparedness

The organization is prepared to manage and mitigate the impact of system emergencies in order to preserve the reliability of the system and to protect the interests of the public.

KCPL has been pursuing a dispatcher training simulator for some time. The value of simulations and drills specific to the KCPL system are well understood, and so is the cost of purchasing, setting up, and maintaining the simulator. As a recommendation, the team encourages KCPL to expedite its pursuit of a dispatcher training simulator.

KCPL's load shedding program is usable but is far short of user friendly. Seemingly cumbersome for the operator, several windows must be opened, followed by real-time decision making of where each amount of load shed is going to be taken. The evaluation team recommends that KCPL predetermine load shedding blocks and provide a single screen capable of being quickly referenced by the operator. All load shedding responsibilities reside with the distribution system operators. When manual load shed actions are required, the transmission system operator verbally communicates the amount of load shed requirement needed to the distribution system operator. As an additional recommendation, the team believes that KCPL should determine whether or not manual load shedding should be available at the operator console as well as the dispatcher stations. This recommendation was made after discussing time consumed in the communications process from the transmission system operators to the dispatchers. KCPL's new EMS will be able to implement multiple control actions with a single operator command.

KCPL is joint owner of the Wolf Creek nuclear power plant, which is located in Burlington, Kansas, in the WESTAR control area. Wolf Creek operating letters dictate the required voltage levels and the terminal voltage range that must be maintained during operations. Loss of any line into Wolf Creek requires the unit to reduce output to 950 MW. The unit remains de-rated until such time as the line has been restored.

KCPL's capacity and energy emergency plan sufficiently describes the actions to be taken and who is to take the action. The evaluation team considers this plan acceptable and manageable in

case of an emergency. Also, the system restoration plan sufficiently describes how the KCPL operators are to manage the required steps necessary to restore the transmission system.

3. Fundamentals of Maintenance

3.1 General

Maintenance is conducted by skilled personnel to achieve safe, reliable control center equipment and system performance.

KCPL staff performs maintenance activities related to the control center and communications equipment. KCPL's corporate information technology and transmission EMS groups provide continuous support and necessary computer equipment maintenance for the control centers. Support personnel are available on a continuous basis and may be called upon by system operations personnel or alerted automatically if a need occurs.

3.2 Equipment Reliability

3.2.1 Equipment Performance

The organization achieves high levels of equipment reliability. Equipment problems that impact reliability are resolved in a thorough and timely manner.

KCPL routinely tests its backup generator at the control facilities and monitors the uninterruptible power supply capacity at each facility.

3.2.2 Work Management

Work activities, including corrective, elective, and preventive maintenance, surveillance testing, and modifications, are managed effectively to support safe, reliable operation during both outage and routine periods.

KCPL operators responded positively towards the EMS applications process. Work being performed that could affect system operations is scheduled and approved by the operations group prior to any failover-type activities. A good sense of teamwork and cooperation was observed and noted during the interview process.

4. Fundamentals of Operational Planning

Operational planning provides the technical information and support necessary for safe, reliable system operation.

KCPL's *Transmission System Indices Report* is a comprehensive package detailing the investigation of transmission equipment outages and their causes. These reports provide important historical information used to track the reliability of the KCPL transmission system over time and identify any negative trends affecting equipment reliability. The readiness evaluation team considers the effort and the quality of the finished indices report as a positive observation, showing commitment to future reliability.

KCPL performs an annual transmission study that includes peak studies for every five-year period for 20 years. KCPL has a five-year transmission construction budget, and its planning group participates in the SPP transmission expansion plan, known as STEP, process.

KCPL conducts daily studies for switching requirements and for checks against changes in projected current-day conditions. KCPL studies are occasionally checked against actual operating data. When unexpected system events occur, KCPL ensures that an analysis is performed to determine the cause and potential remedy where necessary.

The KCPL OL-4 document for deploying reactive reserves described the order in which the reserves would be called upon. The evaluation team identified a probable error in the order as written in the document and recommends that KCPL review OL-4 for accuracy.

KCPL maintains a list of lines and transformers deemed critical facilities in OPS1, which is SPP's software package for outage scheduling and coordination. The operators have very good knowledge, understanding, and operational control of this tool. The team considers the planned outage database a positive observation.

5. Fundamentals of Training

5.1 General

Training in both specific job-related skills and broader technical fundamentals is used to provide highly skilled, knowledgeable personnel for safe, reliable operations, and to achieve performance improvement.

KCPL requires all transmission system operators to be NERC certified with the reliability operator credential. Considering the added costs and training time required to maintain this certification, the evaluation team notes this as a positive observation. Also, the team considers KCPL's decision to allow and maintain NERC certification for several additional operations support personnel and management staff as a positive observation.

To provide time for each operator to receive the required training, the KCPL shift schedule was designed to ensure a training week is included in each rotation. The evaluation team notes this scheduling as a positive observation. However, KCPL does not have an established written training and development plan in place for new hires or for continuing education training. The KCPL training program for the transmission system operator includes reviewing the NERC standards, on-the-job training, reading and understanding KCPL procedures and SPP criteria, 32 hours of emergency operations training, and criteria review requirements. Training also includes Web-based FEREC, code of conduct, cyber security, and other available subjects that are updated annually. Because the program is not formalized, the team recommends that KCPL provide the necessary resources to develop, support, and execute a more systematic approach to training. Also, throughout the interview process, the team sensed a lack of comfort among the operators regarding the amount of training time provided to new trainees prior to taking shift. The team recommends that KCPL review the initial training timeline to determine whether it is sufficient for new operators to assume shift duties.

The team notes as a positive observation the personal training plans developed between the shift supervisor and each transmission system operator. These personal plans are reviewed semi-annually and modified as changes arise. Training efforts are revised accordingly. KCPL is a NERC-approved continuing education provider.

Training for power system operators includes reviews of NERC standards, KCPL operating procedures, and SPP procedures. System Operator Success International (SOS) online training is utilized for operator certification training. There is no dedicated trainer for the power system operator program. Trainers are the subject matter experts and the plan is well documented in the *Power Control Center Training Plan 2007*. New system operators work with certified operators for approximately seven months. Prior to operating alone, a skills review is performed that includes completing a check-off list as well as acquiring performance feedback from power plant personnel, marketers, and fellow operators. Ongoing training includes the 32 hours of emergency training, KCPL blackstart training, SPP regional blackstart drills, and reserve share group instruction. The evaluation team was satisfied with the coordination and training provided to the power system operators.

5.2 Organizational Effectiveness

5.2.1 Human Performance

Personnel select and apply appropriate human error prevention techniques commensurate with the importance of assigned tasks to minimize the frequency and consequences of events.

KCPL operators utilize second- and often third-party verification in the writing and issuance of switching orders. Prior to the issuance, the operator is expected to verify that the switching orders are complete and sufficient for the needed clearance. In addition, current conditions are reviewed against the expected conditions calculated when the switching orders were first written.

Discussed on-site was the need to incorporate a culture using human error prevention techniques as a part of how KCPL performs its operating functions. Incorporating lessons learned into a systematic approach to training and into daily operations is important. KCPL does a good job of using lessons learned but does not have a formal process in place.

APPENDIX 1: Critical Infrastructure

The following discussion will be presented under private letter to the evaluated entity only and will not be included within the public version of the report.

APPENDIX 2: Evaluation Participants

The following will be presented under private letter to the evaluated organization only and will not be included within the public version of the report.

APPENDIX 3: Documents Reviewed

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