



Registration Standards Applicability List for Joint Registration Organization (JRO) JRO00001

(Will be called Coordinated Functional Registration (CFR) when the proposed revision to the rules of procedure are passed.)

Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

| Member Entities | JRO Effective Registration Date |
|---|---------------------------------|
| NCR01175 - Ameren Services Company | 9/11/2009 |
| NCR01196 - City of Columbia, MO | 9/11/2009 |
| NCR01328 - City of Springfield, IL - CWLP | 9/11/2009 |
| NCR00826 - Midwest Independent Transmission System Operator, Inc. | 9/11/2009 |
| NCR01321 - Southern Illinois Power Cooperative | 9/11/2009 |



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: BAL-001-0.1a

Requirements:

R1. Each Balancing Authority shall operate such that, on a rolling 12-month basis, the average of the clock-minute averages of the Balancing Authority's Area Control Error (ACE) divided by 10B (B is the clock-minute average of the Balancing Authority Area's Frequency Bias) times the corresponding clock-minute averages of the Interconnection's Frequency Error is less than a specific limit. This limit ??? is a constant derived from a targeted frequency bound (separately calculated for each Interconnection) that is reviewed and set as necessary by the NERC Operating Committee.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R2. Each Balancing Authority shall operate such that its average ACE for at least 90% of clock-ten-minute periods (6 non-overlapping periods per hour) during a calendar month is within a specific limit, referred to as L10. ?10 is a constant derived from the targeted frequency bound. It is the targeted root-mean-square (RMS) value of ten-minute average Frequency Error based on frequency performance over a given year. The bound, ?10, is the same for every Balancing Authority Area within an Interconnection, and Bs is the sum of the Frequency Bias Settings of the Balancing Authority Areas in the respective Interconnection. For Balancing Authority Areas with variable bias, this is equal to the sum of the minimum Frequency Bias Settings.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R3. Each Balancing Authority providing Overlap Regulation Service shall evaluate Requirement R1 (i.e., Control Performance Standard 1 or CPS1) and Requirement R2 (i.e., Control Performance Standard 2 or CPS2) using the characteristics of the combined ACE and combined Frequency Bias Settings.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R4. Any Balancing Authority receiving Overlap Regulation Service shall not have its control performance evaluated (i.e. from a control performance perspective, the Balancing Authority has shifted all control requirements to the Balancing Authority providing Overlap Regulation Service).

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: BAL-002-0

Requirements:

- R1. Each Balancing Authority shall have access to and/or operate Contingency Reserve to respond to Disturbances. Contingency Reserve may be supplied from generation, controllable load resources, or coordinated adjustments to Interchange Schedules.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

- R1.1. A Balancing Authority may elect to fulfill its Contingency Reserve obligations by participating as a member of a Reserve Sharing Group. In such cases, the Reserve Sharing Group shall have the same responsibilities and obligations as each Balancing Authority with respect to monitoring and meeting the requirements of Standard BAL-002.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

- R3. Each Balancing Authority or Reserve Sharing Group shall activate sufficient Contingency Reserve to comply with the DCS.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

- R3.1. As a minimum, the Balancing Authority or Reserve Sharing Group shall carry at least enough Contingency Reserve to cover the most severe single contingency. All Balancing Authorities and Reserve Sharing Groups shall review, no less frequently than annually, their probable contingencies to determine their prospective most severe single contingencies.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

- R4. A Balancing Authority or Reserve Sharing Group shall meet the Disturbance Recovery Criterion within the Disturbance Recovery Period for 100% of Reportable Disturbances. The Disturbance Recovery Criterion is:

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

- R4.1. A Balancing Authority shall return its ACE to zero if its ACE just prior to the Reportable Disturbance was positive or equal to zero. For negative initial ACE values just prior to the Disturbance, the Balancing Authority shall return ACE to its pre-Disturbance value.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

- R4.2. The default Disturbance Recovery Period is 15 minutes after the start of a Reportable Disturbance. This period may be adjusted to better suit the needs of an Interconnection based on analysis approved by the NERC Operating Committee.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: BAL-002-0

Requirements:

R5. Each Reserve Sharing Group shall comply with the DCS. A Reserve Sharing Group shall be considered in a Reportable Disturbance condition whenever a group member has experienced a Reportable Disturbance and calls for the activation of Contingency Reserves from one or more other group members. (If a group member has experienced a Reportable Disturbance but does not call for reserve activation from other members of the Reserve Sharing Group, then that member shall report as a single Balancing Authority.) Compliance may be demonstrated by either of the following two methods:

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R5.1. The Reserve Sharing Group reviews group ACE (or equivalent) and demonstrates compliance to the DCS. To be in compliance, the group ACE (or its equivalent) must meet the Disturbance Recovery Criterion after the schedule change(s) related to reserve sharing have been fully implemented, and within the Disturbance Recovery Period. Or

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R5.2. The Reserve Sharing Group reviews each member's ACE in response to the activation of reserves. To be in compliance, a member's ACE (or its equivalent) must meet the Disturbance Recovery Criterion after the schedule change(s) related to reserve sharing have been fully implemented, and within the Disturbance Recovery Period.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R6. A Balancing Authority or Reserve Sharing Group shall fully restore its Contingency Reserves within the Contingency Reserve Restoration Period for its Interconnection.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R6.1. The Contingency Reserve Restoration Period begins at the end of the Disturbance Recovery Period.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R6.2. The default Contingency Reserve Restoration Period is 90 minutes. This period may be adjusted to better suit the reliability targets of the Interconnection based on analysis approved by the NERC Operating Committee.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: BAL-003-0.1b

Requirements:

R1. Each Balancing Authority shall review its Frequency Bias Settings by January 1 of each year and recalculate its setting to reflect any change in the Frequency Response of the Balancing Authority Area.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R1.1. The Balancing Authority may change its Frequency Bias Setting, and the method used to determine the setting, whenever any of the factors used to determine the current bias value change.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R1.2. Each Balancing Authority shall report its Frequency Bias Setting, and method for determining that setting, to the NERC Operating Committee.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R2. Each Balancing Authority shall establish and maintain a Frequency Bias Setting that is as close as practical to, or greater than, the Balancing Authority's Frequency Response. Frequency Bias may be calculated several ways:

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R2.1. The Balancing Authority may use a fixed Frequency Bias value which is based on a fixed, straight-line function of Tie Line deviation versus Frequency Deviation. The Balancing Authority shall determine the fixed value by observing and averaging the Frequency Response for several Disturbances during on-peak hours.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R2.2. The Balancing Authority may use a variable (linear or non-linear) bias value, which is based on a variable function of Tie Line deviation to Frequency Deviation. The Balancing Authority shall determine the variable frequency bias value by analyzing Frequency Response as it varies with factors such as load, generation, governor characteristics, and frequency.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R3. Each Balancing Authority shall operate its Automatic Generation Control (AGC) on Tie Line Frequency Bias, unless such operation is adverse to system or Interconnection reliability.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: BAL-003-0.1b

Requirements:

R4. Balancing Authorities that use Dynamic Scheduling or Pseudo-ties for jointly owned units shall reflect their respective share of the unit governor droop response in their respective Frequency Bias Setting.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R4.1. Fixed schedules for Jointly Owned Units mandate that Balancing Authority (A) that contains the Jointly Owned Unit must incorporate the respective share of the unit governor droop response for any Balancing Authorities that have fixed schedules (B and C). See the diagram below.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R4.2. The Balancing Authorities that have a fixed schedule (B and C) but do not contain the Jointly Owned Unit shall not include their share of the governor droop response in their Frequency Bias Setting.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R5. Balancing Authorities that serve native load shall have a monthly average Frequency Bias Setting that is at least 1% of the Balancing Authority's estimated yearly peak demand per 0.1 Hz change.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R5.1. Balancing Authorities that do not serve native load shall have a monthly average Frequency Bias Setting that is at least 1% of its estimated maximum generation level in the coming year per 0.1 Hz change.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R6. A Balancing Authority that is performing Overlap Regulation Service shall increase its Frequency Bias Setting to match the frequency response of the entire area being controlled. A Balancing Authority shall not change its Frequency Bias Setting when performing Supplemental Regulation Service.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: BAL-004-0

Requirements:

R3. Each Balancing Authority, when requested, shall participate in a Time Error Correction by one of the following methods:

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R3.1. The Balancing Authority shall offset its frequency schedule by 0.02 Hertz, leaving the Frequency Bias Setting normal; or

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R3.2. The Balancing Authority shall offset its Net Interchange Schedule (MW) by an amount equal to the computed bias contribution during a 0.02 Hertz Frequency Deviation (i.e. 20% of the Frequency Bias Setting).

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R4. Any Reliability Coordinator in an Interconnection shall have the authority to request the Interconnection Time Monitor to terminate a Time Error Correction in progress, or a scheduled Time Error Correction that has not begun, for reliability considerations.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R4.1. Balancing Authorities that have reliability concerns with the execution of a Time Error Correction shall notify their Reliability Coordinator and request the termination of a Time Error Correction in progress.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: BAL-005-0.1b

Requirements:

R10. The Balancing Authority shall include all Dynamic Schedules in the calculation of Net Scheduled Interchange for the ACE equation.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R11. Balancing Authorities shall include the effect of ramp rates, which shall be identical and agreed to between affected Balancing Authorities, in the Scheduled Interchange values to calculate ACE.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R12. Each Balancing Authority shall include all Tie Line flows with Adjacent Balancing Authority Areas in the ACE calculation.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R12.1. Balancing Authorities that share a tie shall ensure Tie Line MW metering is telemetered to both control centers, and emanates from a common, agreed-upon source using common primary metering equipment. Balancing Authorities shall ensure that megawatt-hour data is telemetered or reported at the end of each hour.

Responsible Members:

NCR01328 City of Springfield, IL - CWLP
NCR01196 City of Columbia, MO
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01321 Southern Illinois Power Cooperative
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R12.2. Balancing Authorities shall ensure the power flow and ACE signals that are utilized for calculating Balancing Authority performance or that are transmitted for Regulation Service are not filtered prior to transmission, except for the Anti-aliasing Filters of Tie Lines.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: BAL-005-0.1b

Requirements:

R12.3. Balancing Authorities shall install common metering equipment where Dynamic Schedules or Pseudo-Ties are implemented between two or more Balancing Authorities to deliver the output of Jointly Owned Units or to serve remote load.

Responsible Members:

NCR01328 City of Springfield, IL - CWLP
NCR01196 City of Columbia, MO
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01321 Southern Illinois Power Cooperative
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R13. Each Balancing Authority shall perform hourly error checks using Tie Line megawatt-hour meters with common time synchronization to determine the accuracy of its control equipment. The Balancing Authority shall adjust the component (e.g., Tie Line meter) of ACE that is in error (if known) or use the interchange meter error (IME) term of the ACE equation to compensate for any equipment error until repairs can be made.

Responsible Members:

NCR01328 City of Springfield, IL - CWLP
NCR01196 City of Columbia, MO
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01321 Southern Illinois Power Cooperative
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R14. The Balancing Authority shall provide its operating personnel with sufficient instrumentation and data recording equipment to facilitate monitoring of control performance, generation response, and after-the-fact analysis of area performance. As a minimum, the Balancing Authority shall provide its operating personnel with real-time values for ACE, Interconnection frequency and Net Actual Interchange with each Adjacent Balancing Authority Area.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: BAL-005-0.1b

Requirements:

R15. The Balancing Authority shall provide adequate and reliable backup power supplies and shall periodically test these supplies at the Balancing Authority's control center and other critical locations to ensure continuous operation of AGC and vital data recording equipment during loss of the normal power supply.

Responsible Members:

NCR01196 City of Columbia, MO
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01328 City of Springfield, IL - CWLP
NCR01321 Southern Illinois Power Cooperative
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R16. The Balancing Authority shall sample data at least at the same periodicity with which ACE is calculated. The Balancing Authority shall flag missing or bad data for operator display and archival purposes. The Balancing Authority shall collect coincident data to the greatest practical extent, i.e., ACE, Interconnection frequency, Net Actual Interchange, and other data shall all be sampled at the same time.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R17. Each Balancing Authority shall at least annually check and calibrate its time error and frequency devices against a common reference. The Balancing Authority shall adhere to the minimum values for measuring devices as listed below: See Standard for Values

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R2. Each Balancing Authority shall maintain Regulating Reserve that can be controlled by AGC to meet the Control Performance Standard.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R3. A Balancing Authority providing Regulation Service shall ensure that adequate metering, communications, and control equipment are employed to prevent such service from becoming a Burden on the Interconnection or other Balancing Authority Areas.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R4. A Balancing Authority providing Regulation Service shall notify the Host Balancing Authority for whom it is controlling if it is unable to provide the service, as well as any Intermediate Balancing Authorities.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: BAL-005-0.1b

Requirements:

R5. A Balancing Authority receiving Regulation Service shall ensure that backup plans are in place to provide replacement Regulation Service should the supplying Balancing Authority no longer be able to provide this service.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R6. The Balancing Authority's AGC shall compare total Net Actual Interchange to total Net Scheduled Interchange plus Frequency Bias obligation to determine the Balancing Authority's ACE. Single Balancing Authorities operating asynchronously may employ alternative ACE calculations such as (but not limited to) flat frequency control. If a Balancing Authority is unable to calculate ACE for more than 30 minutes it shall notify its Reliability Coordinator.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R7. The Balancing Authority shall operate AGC continuously unless such operation adversely impacts the reliability of the Interconnection. If AGC has become inoperative, the Balancing Authority shall use manual control to adjust generation to maintain the Net Scheduled Interchange.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R8. The Balancing Authority shall ensure that data acquisition for and calculation of ACE occur at least every six seconds.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R8.1. Each Balancing Authority shall provide redundant and independent frequency metering equipment that shall automatically activate upon detection of failure of the primary source. This overall installation shall provide a minimum availability of 99.95%.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R9. The Balancing Authority shall include all Interchange Schedules with Adjacent Balancing Authorities in the calculation of Net Scheduled Interchange for the ACE equation.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R9.1. Balancing Authorities with a high voltage direct current (HVDC) link to another Balancing Authority connected asynchronously to their Interconnection may choose to omit the Interchange Schedule related to the HVDC link from the ACE equation if it is modeled as internal generation or load.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: BAL-006-1.1

Requirements:

R1. Each Balancing Authority shall calculate and record hourly Inadvertent Interchange.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R2. Each Balancing Authority shall include all AC tie lines that connect to its Adjacent Balancing Authority Areas in its Inadvertent Interchange account. The Balancing Authority shall take into account interchange served by jointly owned generators.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R3. Each Balancing Authority shall ensure all of its Balancing Authority Area interconnection points are equipped with common megawatt-hour meters, with readings provided hourly to the control centers of Adjacent Balancing Authorities.

Responsible Members:

NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R4. Adjacent Balancing Authority Areas shall operate to a common Net Interchange Schedule and Actual Net Interchange value and shall record these hourly quantities, with like values but opposite sign. Each Balancing Authority shall compute its Inadvertent Interchange based on the following:

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R4.1. Each Balancing Authority, by the end of the next business day, shall agree with its Adjacent Balancing Authorities to:

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R4.1.1. The hourly values of Net Interchange Schedule.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: BAL-006-1.1

Requirements:

R4.1.2. The hourly integrated megawatt-hour values of Net Actual Interchange.

Responsible Members:

NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R4.2. Each Balancing Authority shall use the agreed-to daily and monthly accounting data to compile its monthly accumulated Inadvertent Interchange for the On-Peak and Off-Peak hours of the month.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R4.3. A Balancing Authority shall make after-the-fact corrections to the agreed-to daily and monthly accounting data only as needed to reflect actual operating conditions (e.g. a meter being used for control was sending bad data). Changes or corrections based on non-reliability considerations shall not be reflected in the Balancing Authority's Inadvertent Interchange. After-the-fact corrections to scheduled or actual values will not be accepted without agreement of the Adjacent Balancing Authority(ies).

Responsible Members:

NCR01196 City of Columbia, MO
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R5. Adjacent Balancing Authorities that cannot mutually agree upon their respective Net Actual Interchange or Net Scheduled Interchange quantities by the 15th calendar day of the following month shall, for the purposes of dispute resolution, submit a report to their respective Regional Reliability Organization Survey Contact. The report shall describe the nature and the cause of the dispute as well as a process for correcting the discrepancy.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-001-1

Requirements:

- R1. Each Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator, and Load-Serving Entity shall have procedures for the recognition of and for making their operating personnel aware of sabotage events on its facilities and multi-site sabotage affecting larger portions of the Interconnection.

Responsible Members:

NCR01196 City of Columbia, MO
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

- R2. Each Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator, and Load-Serving Entity shall have procedures for the communication of information concerning sabotage events to appropriate parties in the Interconnection.

Responsible Members:

NCR01196 City of Columbia, MO
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

- R3. Each Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator, and Load-Serving Entity shall provide its operating personnel with sabotage response guidelines, including personnel to contact, for reporting disturbances due to sabotage events.

Responsible Members:

NCR01196 City of Columbia, MO
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-001-1

Requirements:

- R4. Each Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator, and Load-Serving Entity shall establish communications contacts, as applicable, with local Federal Bureau of Investigation (FBI) or Royal Canadian Mounted Police (RCMP) officials and develop reporting procedures as appropriate to their circumstances.

Responsible Members:

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|----------|--|
| NCR01196 | City of Columbia, MO |
| NCR00826 | Midwest Independent Transmission System Operator, Inc. |
| NCR01321 | Southern Illinois Power Cooperative |
| NCR01328 | City of Springfield, IL - CWLP |
| NCR01175 | Ameren Services Company |
| NCR01175 | Ameren Services Company |



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-002-1

Requirements:

R1. Critical Asset Identification Method — The Responsible Entity shall identify and document a risk-based assessment methodology to use to identify its Critical Assets.

Responsible Members:

NCR01196 City of Columbia, MO
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.1. The Responsible Entity shall maintain documentation describing its risk-based assessment methodology that includes procedures and evaluation criteria.

Responsible Members:

NCR01196 City of Columbia, MO
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.2. The risk-based assessment shall consider the following assets:

Responsible Members:

NCR01196 City of Columbia, MO
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-002-1

Requirements:

R1.2.1. Control centers and backup control centers performing the functions of the entities listed in the Applicability section of this standard.

Responsible Members:

NCR01196 City of Columbia, MO
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.2.3. Generation resources that support the reliable operation of the Bulk Electric System.

Responsible Members:

NCR01196 City of Columbia, MO
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.2.4. Systems and facilities critical to system restoration, including blackstart generators and substations in the electrical path of transmission lines used for initial system restoration.

Responsible Members:

NCR01196 City of Columbia, MO
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-002-1

Requirements:

R1.2.5. Systems and facilities critical to automatic load shedding under a common control system capable of shedding 300 MW or more.

Responsible Members:

NCR01196 City of Columbia, MO
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.2.6. Special Protection Systems that support the reliable operation of the Bulk Electric System.

Responsible Members:

NCR01196 City of Columbia, MO
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.2.7. Any additional assets that support the reliable operation of the Bulk Electric System that the Responsible Entity deems appropriate to include in its assessment.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-002-1

Requirements:

R2. Critical Asset Identification - The Responsible Entity shall develop a list of its identified Critical Assets determined through an annual application of the risk-based assessment methodology required in R1. The Responsible Entity shall review this list at least annually, and update it as necessary.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R3. Critical Cyber Asset Identification - Using the list of Critical Assets developed pursuant to Requirement R2, the Responsible Entity shall develop a list of associated Critical Cyber Assets essential to the operation of the Critical Asset. Examples at control centers and backup control centers include systems and facilities at master and remote sites that provide monitoring and control, automatic generation control, real-time power system modeling, and real-time inter-utility data exchange. The Responsible Entity shall review this list at least annually, and update it as necessary. For the purpose of Standard CIP-002, Critical Cyber Assets are further qualified to be those having at least one of the following characteristics:

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R3.1. The Cyber Asset uses a routable protocol to communicate outside the Electronic Security Perimeter; or,

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-002-1

Requirements:

R3.2. The Cyber Asset uses a routable protocol within a control center; or,

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R3.3. The Cyber Asset is dial-up accessible.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R4. Annual Approval - A senior manager or delegate(s) shall approve annually the list of Critical Assets and the list of Critical Cyber Assets. Based on Requirements R1, R2, and R3 the Responsible Entity may determine that it has no Critical Assets or Critical Cyber Assets. The Responsible Entity shall keep a signed and dated record of the senior manager or delegate(s)'s approval of the list of Critical Assets and the list of Critical Cyber Assets (even if such lists are null.)

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-003-1

Requirements:

R1. Cyber Security Policy - The Responsible Entity shall document and implement a cyber security policy that represents management's commitment and ability to secure its Critical Cyber Assets. The Responsible Entity shall, at minimum, ensure the following:

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.1. The cyber security policy addresses the requirements in Standards CIP-002 through CIP-009, including provision for emergency situations.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.2. The cyber security policy is readily available to all personnel who have access to, or are responsible for, Critical Cyber Assets.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-003-1

Requirements:

R1.3. Annual review and approval of the cyber security policy by the senior manager assigned pursuant to R2.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R2. Leadership - The Responsible Entity shall assign a senior manager with overall responsibility for leading and managing the entity's implementation of, and adherence to, Standards CIP-002 through CIP-009

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R2.1. The senior manager shall be identified by name, title, business phone, business address, and date of designation.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R2.2. Changes to the senior manager must be documented within thirty calendar days of the effective date.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-003-1

Requirements:

R2.3. The senior manager or delegate(s), shall authorize and document any exception from the requirements of the cyber security policy.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R3. Exceptions - Instances where the Responsible Entity cannot conform to its cyber security policy must be documented as exceptions and authorized by the senior manager or delegate(s).

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R3.1. Exceptions to the Responsible Entity's cyber security policy must be documented within thirty days of being approved by the senior manager or delegate(s).

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-003-1

Requirements:

R3.2. Documented exceptions to the cyber security policy must include an explanation as to why the exception is necessary and any compensating measures, or a statement accepting risk.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R3.3. Authorized exceptions to the cyber security policy must be reviewed and approved annually by the senior manager or delegate(s) to ensure the exceptions are still required and valid. Such review and approval shall be documented.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R4. Information Protection - The Responsible Entity shall implement and document a program to identify, classify, and protect information associated with Critical Cyber Assets.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-003-1

Requirements:

R4.1. The Critical Cyber Asset information to be protected shall include, at a minimum and regardless of media type, operational procedures, lists as required in Standard CIP-002, network topology or similar diagrams, floor plans of computing centers that contain Critical Cyber Assets, equipment layouts of Critical Cyber Assets, disaster recovery plans, incident response plans, and security configuration information.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R4.2. The Responsible Entity shall classify information to be protected under this program based on the sensitivity of the Critical Cyber Asset information.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R4.3. The Responsible Entity shall, at least annually, assess adherence to its Critical Cyber Asset information protection program, document the assessment results, and implement an action plan to remediate deficiencies identified during the assessment.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-003-1

Requirements:

R5. Access Control — The Responsible Entity shall document and implement a program for managing access to protected Critical Cyber Asset information.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R5.1. The Responsible Entity shall maintain a list of designated personnel who are responsible for authorizing logical or physical access to protected information.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R5.1.1. Personnel shall be identified by name, title, business phone and the information for which they are responsible for authorizing access.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-003-1

Requirements:

R5.1.2. The list of personnel responsible for authorizing access to protected information shall be verified at least annually.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R5.2. The Responsible Entity shall review at least annually the access privileges to protected information to confirm that access privileges are correct and that they correspond with the Responsible Entity's needs and appropriate personnel roles and responsibilities.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R5.3. The Responsible Entity shall assess and document at least annually the processes for controlling access privileges to protected information.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-003-1

Requirements:

-
- R6. Change Control and Configuration Management — The Responsible Entity shall establish and document a process of change control and configuration management for adding, modifying, replacing, or removing Critical Cyber Asset hardware or software, and implement supporting configuration management activities to identify, control and document all entity or vendorrelated changes to hardware and software components of Critical Cyber Assets pursuant to the change control process.

Responsible Members:

| | |
|----------|--|
| NCR00826 | Midwest Independent Transmission System Operator, Inc. |
| NCR01196 | City of Columbia, MO |
| NCR01321 | Southern Illinois Power Cooperative |
| NCR01328 | City of Springfield, IL - CWLP |
| NCR01175 | Ameren Services Company |
| NCR01175 | Ameren Services Company |



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-004-1

Requirements:

R1. Awareness — The Responsible Entity shall establish, maintain, and document a security awareness program to ensure personnel having authorized cyber or authorized unescorted physical access receive on-going reinforcement in sound security practices. The program shall include security awareness reinforcement on at least a quarterly basis using mechanisms such as: Direct communications (e.g., emails, memos, computer based training, etc.); Indirect communications (e.g., posters, intranet, brochures, etc.); Management support and reinforcement (e.g., presentations, meetings, etc.).

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R2. Training — The Responsible Entity shall establish, maintain, and document an annual cyber security training program for personnel having authorized cyber or authorized unescorted physical access to Critical Cyber Assets, and review the program annually and update as necessary.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R2.1. This program will ensure that all personnel having such access to Critical Cyber Assets, including contractors and service vendors, are trained within ninety calendar days of such authorization.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-004-1

Requirements:

R2.2. Training shall cover the policies, access controls, and procedures as developed for the Critical Cyber Assets covered by CIP-004, and include, at a minimum, the following required items appropriate to personnel roles and responsibilities:

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
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NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
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R2.2.1. The proper use of Critical Cyber Assets;

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R2.2.2. Physical and electronic access controls to Critical Cyber Assets;

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
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R2.2.3. The proper handling of Critical Cyber Asset information; and,

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
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Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-004-1

Requirements:

R2.2.4. Action plans and procedures to recover or re-establish Critical Cyber Assets and access thereto following a Cyber Security Incident.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R2.3. The Responsible Entity shall maintain documentation that training is conducted at least annually, including the date the training was completed and attendance records.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R3. Personnel Risk Assessment —The Responsible Entity shall have a documented personnel risk assessment program, in accordance with federal, state, provincial, and local laws, and subject to existing collective bargaining unit agreements, for personnel having authorized cyber or authorized unescorted physical access. A personnel risk assessment shall be conducted pursuant to that program within thirty days of such personnel being granted such access. Such program shall at a minimum include:

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-004-1

Requirements:

R3.1. The Responsible Entity shall ensure that each assessment conducted include, at least, identity verification (e.g., Social Security Number verification in the U.S.) and seven-year criminal check. The Responsible Entity may conduct more detailed reviews, as permitted by law and subject to existing collective bargaining unit agreements, depending upon the criticality of the position.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
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NCR01175 Ameren Services Company

R3.2. The Responsible Entity shall update each personnel risk assessment at least every seven years after the initial personnel risk assessment or for cause.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R3.3. The Responsible Entity shall document the results of personnel risk assessments of its personnel having authorized cyber or authorized unescorted physical access to Critical Cyber Assets, and that personnel risk assessments of contractor and service vendor personnel with such access are conducted pursuant to Standard CIP-004.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-004-1

Requirements:

R4. Access — The Responsible Entity shall maintain list(s) of personnel with authorized cyber or authorized unescorted physical access to Critical Cyber Assets, including their specific electronic and physical access rights to Critical Cyber Assets.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R4.1. The Responsible Entity shall review the list(s) of its personnel who have such access to Critical Cyber Assets quarterly, and update the list(s) within seven calendar days of any change of personnel with such access to Critical Cyber Assets, or any change in the access rights of such personnel. The Responsible Entity shall ensure access list(s) for contractors and service vendors are properly maintained.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R4.2. The Responsible Entity shall revoke such access to Critical Cyber Assets within 24 hours for personnel terminated for cause and within seven calendar days for personnel who no longer require such access to Critical Cyber Assets.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-005-1

Requirements:

R1. Electronic Security Perimeter — The Responsible Entity shall ensure that every Critical Cyber Asset resides within an Electronic Security Perimeter. The Responsible Entity shall identify and document the Electronic Security Perimeter(s) and all access points to the perimeter(s).

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.1. Access points to the Electronic Security Perimeter(s) shall include any externally connected communication end point (for example, dial-up modems) terminating at any device within the Electronic Security Perimeter(s).

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.2. For a dial-up accessible Critical Cyber Asset that uses a non-routable protocol, the Responsible Entity shall define an Electronic Security Perimeter for that single access point at the dial-up device.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-005-1

Requirements:

R1.3. Communication links connecting discrete Electronic Security Perimeters shall not be considered part of the Electronic Security Perimeter. However, end points of these communication links within the Electronic Security Perimeter(s) shall be considered access points to the Electronic Security Perimeter(s).

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.4. Any non-critical Cyber Asset within a defined Electronic Security Perimeter shall be identified and protected pursuant to the requirements of Standard CIP-005.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.5. Cyber Assets used in the access control and monitoring of the Electronic Security Perimeter(s) shall be afforded the protective measures as a specified in Standard CIP-003, Standard CIP-004 Requirement R3, Standard CIP-005 Requirements R2 and R3, Standard CIP-006 Requirements R2 and R3, Standard CIP-007, Requirements R1 and R3 through R9, Standard CIP-008, and Standard CIP-009.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-005-1

Requirements:

R1.6. The Responsible Entity shall maintain documentation of Electronic Security Perimeter(s), all interconnected Critical and non-critical Cyber Assets within the Electronic Security Perimeter(s), all electronic access points to the Electronic Security Perimeter(s) and the Cyber Assets deployed for the access control and monitoring of these access points.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
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R2. Electronic Access Controls — The Responsible Entity shall implement and document the organizational processes and technical and procedural mechanisms for control of electronic access at all electronic access points to the Electronic Security Perimeter(s).

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R2.1. These processes and mechanisms shall use an access control model that denies access by default, such that explicit access permissions must be specified.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-005-1

Requirements:

R2.2. At all access points to the Electronic Security Perimeter(s), the Responsible Entity shall enable only ports and services required for operations and for monitoring Cyber Assets within the Electronic Security Perimeter, and shall document, individually or by specified grouping, the configuration of those ports and services.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R2.3. The Responsible Entity shall maintain a procedure for securing dial-up access to the Electronic Security Perimeter(s).

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R2.4. Where external interactive access into the Electronic Security Perimeter has been enabled, the Responsible Entity shall implement strong procedural or technical controls at the access points to ensure authenticity of the accessing party, where technically feasible.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-005-1

Requirements:

R2.5. The required documentation shall, at least, identify and describe:

Responsible Members:

| | |
|----------|--|
| NCR01321 | Southern Illinois Power Cooperative |
| NCR00826 | Midwest Independent Transmission System Operator, Inc. |
| NCR01196 | City of Columbia, MO |
| NCR01328 | City of Springfield, IL - CWLP |
| NCR01175 | Ameren Services Company |
| NCR01175 | Ameren Services Company |

R2.5.1. The processes for access request and authorization.

Responsible Members:

| | |
|----------|--|
| NCR01321 | Southern Illinois Power Cooperative |
| NCR00826 | Midwest Independent Transmission System Operator, Inc. |
| NCR01196 | City of Columbia, MO |
| NCR01328 | City of Springfield, IL - CWLP |
| NCR01175 | Ameren Services Company |
| NCR01175 | Ameren Services Company |

R2.5.2. The authentication methods.

Responsible Members:

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| NCR01321 | Southern Illinois Power Cooperative |
| NCR00826 | Midwest Independent Transmission System Operator, Inc. |
| NCR01196 | City of Columbia, MO |
| NCR01328 | City of Springfield, IL - CWLP |
| NCR01175 | Ameren Services Company |
| NCR01175 | Ameren Services Company |

R2.5.3. The review process for authorization rights, in accordance with Standard CIP-004 Requirement R4.

Responsible Members:

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|----------|--|
| NCR01321 | Southern Illinois Power Cooperative |
| NCR00826 | Midwest Independent Transmission System Operator, Inc. |
| NCR01196 | City of Columbia, MO |
| NCR01328 | City of Springfield, IL - CWLP |
| NCR01175 | Ameren Services Company |
| NCR01175 | Ameren Services Company |



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-005-1

Requirements:

R2.5.4. The controls used to secure dial-up accessible connections.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R2.6. Appropriate Use Banner — Where technically feasible, electronic access control devices shall display an appropriate use banner on the user screen upon all interactive access attempts. The Responsible Entity shall maintain a document identifying the content of the banner.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R3. Monitoring Electronic Access — The Responsible Entity shall implement and document an electronic or manual process(es) for monitoring and logging access at access points to the Electronic Security Perimeter(s) twenty-four hours a day, seven days a week.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-005-1

Requirements:

R3.1. For dial-up accessible Critical Cyber Assets that use non-routable protocols, the Responsible Entity shall implement and document monitoring process(es) at each access point to the dial-up device, where technically feasible.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R3.2. Where technically feasible, the security monitoring process(es) shall detect and alert for attempts at or actual unauthorized accesses. These alerts shall provide for appropriate notification to designated response personnel. Where alerting is not technically feasible, the Responsible Entity shall review or otherwise assess access logs for attempts at or actual unauthorized accesses at least every ninety calendar days.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R4. Cyber Vulnerability Assessment — The Responsible Entity shall perform a cyber vulnerability assessment of the electronic access points to the Electronic Security Perimeter(s) at least annually. The vulnerability assessment shall include, at a minimum, the following:

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-005-1

Requirements:

R4.1. A document identifying the vulnerability assessment process;

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R4.2. A review to verify that only ports and services required for operations at these access points are enabled;

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R4.3. The discovery of all access points to the Electronic Security Perimeter;

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R4.4. A review of controls for default accounts, passwords, and network management community strings; and,

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-005-1

Requirements:

R4.5. Documentation of the results of the assessment, the action plan to remediate or mitigate vulnerabilities identified in the assessment, and the execution status of that action plan.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R5. Documentation Review and Maintenance — The Responsible Entity shall review, update, and maintain all documentation to support compliance with the requirements of Standard CIP-005.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R5.1. The Responsible Entity shall ensure that all documentation required by Standard CIP-005 reflect current configurations and processes and shall review the documents and procedures referenced in Standard CIP-005 at least annually.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-005-1

Requirements:

R5.2. The Responsible Entity shall update the documentation to reflect the modification of the network or controls within ninety calendar days of the change.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R5.3. The Responsible Entity shall retain electronic access logs for at least ninety calendar days. Logs related to reportable incidents shall be kept in accordance with the requirements of Standard CIP-008.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-006-1

Requirements:

R1. Physical Security Plan — The Responsible Entity shall create and maintain a physical security plan, approved by a senior manager or delegate(s) that shall address, at a minimum, the following:

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.1. Processes to ensure and document that all Cyber Assets within an Electronic Security Perimeter also reside within an identified Physical Security Perimeter. Where a completely enclosed (“six-wall”) border cannot be established, the Responsible Entity shall deploy and document alternative measures to control physical access to the Critical Cyber Assets.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.2. Processes to identify all access points through each Physical Security Perimeter and measures to control entry at those access points.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-006-1

Requirements:

R1.3. Processes, tools, and procedures to monitor physical access to the perimeter(s).

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.4. Procedures for the appropriate use of physical access controls as described in Requirement R3 including visitor pass management, response to loss, and prohibition of inappropriate use of physical access controls.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.5. Procedures for reviewing access authorization requests and revocation of access authorization, in accordance with CIP-004 Requirement R4.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-006-1

Requirements:

R1.6. Procedures for escorted access within the physical security perimeter of personnel not authorized for unescorted access.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.7. Process for updating the physical security plan within ninety calendar days of any physical security system redesign or reconfiguration, including, but not limited to, addition or removal of access points through the physical security perimeter, physical access controls, monitoring controls, or logging controls.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.8. Cyber Assets used in the access control and monitoring of the Physical Security Perimeter(s) shall be afforded the protective measures specified in Standard CIP-003, Standard CIP-004 Requirement R3, Standard CIP-005 Requirements R2 and R3, Standard CIP-006 Requirement R2 and R3, Standard CIP-007, Standard CIP-008 and Standard CIP-009.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-006-1

Requirements:

R1.9. Process for ensuring that the physical security plan is reviewed at least annually.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R2. Physical Access Controls — The Responsible Entity shall document and implement the operational and procedural controls to manage physical access at all access points to the Physical Security Perimeter(s) twenty-four hours a day, seven days a week. The Responsible Entity shall implement one or more of the following physical access methods:

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R2.1. Card Key: A means of electronic access where the access rights of the card holder are predefined in a computer database. Access rights may differ from one perimeter to another.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-006-1

Requirements:

R2.2. Special Locks: These include, but are not limited to, locks with “restricted key” systems, magnetic locks that can be operated remotely, and “man-trap” systems.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R2.3. Security Personnel: Personnel responsible for controlling physical access who may reside on-site or at a monitoring station.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R2.4. Other Authentication Devices: Biometric, keypad, token, or other equivalent devices that control physical access to the Critical Cyber Assets.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-006-1

Requirements:

R3. Monitoring Physical Access — The Responsible Entity shall document and implement the technical and procedural controls for monitoring physical access at all access points to the Physical Security Perimeter(s) twenty-four hours a day, seven days a week. Unauthorized access attempts shall be reviewed immediately and handled in accordance with the procedures specified in Requirement CIP-008. One or more of the following monitoring methods shall be used:

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R3.1. Alarm Systems: Systems that alarm to indicate a door, gate or window has been pene d without authorization. These alarms must provide for immediate notification to personnel responsible for response.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R3.2. Human Observation of Access Points: Monitoring of physical access points by authorized personnel as specified in Requirement R2.3.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-006-1

Requirements:

R4. Logging Physical Access — Logging shall record sufficient information to uniquely identify individuals and the time of access twenty-four hours a day, seven days a week. The Responsible Entity shall implement and document the technical and procedural mechanisms for logging physical entry at all access points to the Physical Security Perimeter(s) using one or more of the following logging methods or their equivalent:

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R4.1. Computerized Logging: Electronic logs produced by the Responsible Entity's selected access control and monitoring method.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R4.2. Video Recording: Electronic capture of video images of sufficient quality to determine identity.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-006-1

Requirements:

R4.3. Manual Logging: A log book or sign-in sheet, or other record of physical access maintained by security or other personnel authorized to control and monitor physical access as specified in Requirement R2.3.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R5. Access Log Retention — The Responsible Entity shall retain physical access logs for at least ninety calendar days. Logs related to reportable incidents shall be kept in accordance with the requirements of Standard CIP-008.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R6. Maintenance and Testing — The Responsible Entity shall implement a maintenance and testing program to ensure that all physical security systems under Requirements R2, R3, and R4 function properly. The program must include, at a minimum, the following:

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-006-1

Requirements:

R6.1. Testing and maintenance of all physical security mechanisms on a cycle no longer than three years.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R6.2. Retention of testing and maintenance records for the cycle determined by the Responsible Entity in Requirement R6.1.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R6.3. Retention of outage records regarding access controls, logging, and monitoring for a minimum of one calendar year.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-007-1

Requirements:

- R1. Test Procedures — The Responsible Entity shall ensure that new Cyber Assets and significant changes to existing Cyber Assets within the Electronic Security Perimeter do not adversely affect existing cyber security controls. For purposes of Standard CIP-007, a significant change shall, at a minimum, include implementation of security patches, cumulative service packs, vendor releases, and version upgrades of operating systems, applications, database platforms, or other third-party software or firmware.

Responsible Members:

- NCR00826 Midwest Independent Transmission System Operator, Inc.
- NCR01196 City of Columbia, MO
- NCR01321 Southern Illinois Power Cooperative
- NCR01328 City of Springfield, IL - CWLP
- NCR01175 Ameren Services Company
- NCR01175 Ameren Services Company

-
- R1.1. The Responsible Entity shall create, implement, and maintain cyber security test procedures in a manner that minimizes adverse effects on the production system or its operation.

Responsible Members:

- NCR00826 Midwest Independent Transmission System Operator, Inc.
- NCR01196 City of Columbia, MO
- NCR01321 Southern Illinois Power Cooperative
- NCR01328 City of Springfield, IL - CWLP
- NCR01175 Ameren Services Company
- NCR01175 Ameren Services Company

-
- R1.2. The Responsible Entity shall document that testing is performed in a manner that reflects the production environment.

Responsible Members:

- NCR00826 Midwest Independent Transmission System Operator, Inc.
- NCR01196 City of Columbia, MO
- NCR01321 Southern Illinois Power Cooperative
- NCR01328 City of Springfield, IL - CWLP
- NCR01175 Ameren Services Company
- NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-007-1

Requirements:

R1.3. The Responsible Entity shall document test results.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R2. Ports and Services — The Responsible Entity shall establish and document a process to ensure that only those ports and services required for normal and emergency operations are enabled.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R2.1. The Responsible Entity shall enable only those ports and services required for normal and emergency operations.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R2.2. The Responsible Entity shall disable other ports and services, including those used for testing purposes, prior to production use of all Cyber Assets inside the Electronic Security Perimeter(s).

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-007-1

Requirements:

R2.3. In the case where unused ports and services cannot be disabled due to technical limitations, the Responsible Entity shall document compensating measure(s) applied to mitigate risk exposure or an acceptance of risk.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R3. Security Patch Management — The Responsible Entity, either separately or as a component of the documented configuration management process specified in CIP-003 Requirement R6, shall establish and document a security patch management program for tracking, evaluating, testing, and installing applicable cyber security software patches for all Cyber Assets within the Electronic Security Perimeter(s).

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R3.1. The Responsible Entity shall document the assessment of security patches and security upgrades for applicability within thirty calendar days of availability of the patches or upgrades.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-007-1

Requirements:

R3.2. The Responsible Entity shall document the implementation of security patches. In any case where the patch is not installed, the Responsible Entity shall document compensating measure(s) applied to mitigate risk exposure or an acceptance of risk.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R4. Malicious Software Prevention — The Responsible Entity shall use anti-virus software and other malicious software (“malware”) prevention tools, where technically feasible, to detect, prevent, deter, and mitigate the introduction, exposure, and propagation of malware on all Cyber Assets within the Electronic Security Perimeter(s).

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R4.1. The Responsible Entity shall document and implement anti-virus and malware prevention tools. In the case where anti-virus software and malware prevention tools are not installed, the Responsible Entity shall document compensating measure(s) applied to mitigate risk exposure or an acceptance of risk.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-007-1

Requirements:

R4.2. The Responsible Entity shall document and implement a process for the update of anti-virus and malware prevention “signatures.” The process must address testing and installing the signatures.

Responsible Members:

- NCR00826 Midwest Independent Transmission System Operator, Inc.
- NCR01196 City of Columbia, MO
- NCR01321 Southern Illinois Power Cooperative
- NCR01328 City of Springfield, IL - CWLP
- NCR01175 Ameren Services Company
- NCR01175 Ameren Services Company

R5. Account Management — The Responsible Entity shall establish, implement, and document technical and procedural controls that enforce access authentication of, and accountability for, all user activity, and that minimize the risk of unauthorized system access.

Responsible Members:

- NCR00826 Midwest Independent Transmission System Operator, Inc.
- NCR01196 City of Columbia, MO
- NCR01321 Southern Illinois Power Cooperative
- NCR01328 City of Springfield, IL - CWLP
- NCR01175 Ameren Services Company
- NCR01175 Ameren Services Company

R5.1. The Responsible Entity shall ensure that individual and shared system accounts and authorized access permissions are consistent with the concept of “need to know” with respect to work functions performed.

Responsible Members:

- NCR00826 Midwest Independent Transmission System Operator, Inc.
- NCR01196 City of Columbia, MO
- NCR01321 Southern Illinois Power Cooperative
- NCR01328 City of Springfield, IL - CWLP
- NCR01175 Ameren Services Company
- NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-007-1

Requirements:

R5.1.1. The Responsible Entity shall ensure that user accounts are implemented as approved by designated personnel. Refer to Standard CIP-003 Requirement R5.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R5.1.2. The Responsible Entity shall establish methods, processes, and procedures that generate logs of sufficient detail to create historical audit trails of individual user account access activity for a minimum of ninety days.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R5.1.3. The Responsible Entity shall review, at least annually, user accounts to verify access privileges are in accordance with Standard CIP-003 Requirement R5 and Standard CIP-004 Requirement R4.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-007-1

Requirements:

R5.2. The Responsible Entity shall implement a policy to minimize and manage the scope and acceptable use of administrator, shared, and other generic account privileges including factory default accounts.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R5.2.1. The policy shall include the removal, disabling, or renaming of such accounts where possible. For such accounts that must remain enabled, passwords shall be changed prior to putting any system into service.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R5.2.2. The Responsible Entity shall identify those individuals with access to shared accounts.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-007-1

Requirements:

R5.2.3. Where such accounts must be shared, the Responsible Entity shall have a policy for managing the use of such accounts that limits access to only those with authorization, an audit trail of the account use (automated or manual), and steps for securing the account in the event of personnel changes (for example, change in assignment or termination).

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R5.3. At a minimum, the Responsible Entity shall require and use passwords, subject to the following, as technically feasible:

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R5.3.1. Each password shall be a minimum of six characters.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-007-1

Requirements:

R5.3.2. Each password shall consist of a combination of alpha, numeric, and “special” characters.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R5.3.3. Each password shall be changed at least annually, or more frequently based on risk.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R6. Security Status Monitoring — The Responsible Entity shall ensure that all Cyber Assets within the Electronic Security Perimeter, as technically feasible, implement automated tools or organizational process controls to monitor system events that are related to cyber security.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-007-1

Requirements:

R6.1. The Responsible Entity shall implement and document the organizational processes and technical and procedural mechanisms for monitoring for security events on all Cyber Assets within the Electronic Security Perimeter.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R6.2. The security monitoring controls shall issue automated or manual alerts for detected Cyber Security Incidents.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R6.3. The Responsible Entity shall maintain logs of system events related to cyber security, where technically feasible, to support incident response as required in Standard CIP-008.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R6.4. The Responsible Entity shall retain all logs specified in Requirement R6 for ninety calendar days.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-007-1

Requirements:

R6.5. The Responsible Entity shall review logs of system events related to cyber security and maintain records documenting review of logs.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R7. Disposal or Redeployment — The Responsible Entity shall establish formal methods, processes, and procedures for disposal or redeployment of Cyber Assets within the Electronic Security Perimeter(s) as identified and documented in Standard CIP-005.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R7.1. Prior to the disposal of such assets, the Responsible Entity shall destroy or erase the data storage media to prevent unauthorized retrieval of sensitive cyber security or reliability data.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-007-1

Requirements:

R7.2. Prior to redeployment of such assets, the Responsible Entity shall, at a minimum, erase the data storage media to prevent unauthorized retrieval of sensitive cyber security or reliability data.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R7.3. The Responsible Entity shall maintain records that such assets were disposed of or redeployed in accordance with documented procedures.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R8. Cyber Vulnerability Assessment — The Responsible Entity shall perform a cyber vulnerability assessment of all Cyber Assets within the Electronic Security Perimeter at least annually. The vulnerability assessment shall include, at a minimum, the following:

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-007-1

Requirements:

R8.1. A document identifying the vulnerability assessment process;

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R8.2. A review to verify that only ports and services required for operation of the Cyber Assets within the Electronic Security Perimeter are enabled;

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R8.3. A review of controls for default accounts; and,

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R8.4. Documentation of the results of the assessment, the action plan to remediate or mitigate vulnerabilities identified in the assessment, and the execution status of that action plan.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-007-1

Requirements:

- R9. Documentation Review and Maintenance — The Responsible Entity shall review and update the documentation specified in Standard CIP-007 at least annually. Changes resulting from modifications to the systems or controls shall be documented within ninety calendar days of the change.

Responsible Members:

| | |
|----------|--|
| NCR00826 | Midwest Independent Transmission System Operator, Inc. |
| NCR01196 | City of Columbia, MO |
| NCR01321 | Southern Illinois Power Cooperative |
| NCR01328 | City of Springfield, IL - CWLP |
| NCR01175 | Ameren Services Company |
| NCR01175 | Ameren Services Company |



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-008-1

Requirements:

R1. Cyber Security Incident Response Plan — The Responsible Entity shall develop and maintain a Cyber Security Incident response plan. The Cyber Security Incident Response plan shall address, at a minimum, the following:

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.1. Procedures to characterize and classify events as reportable Cyber Security Incidents.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.2. Response actions, including roles and responsibilities of incident response teams, incident handling procedures, and communication plans.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-008-1

Requirements:

R1.3. Process for reporting Cyber Security Incidents to the Electricity Sector Information Sharing and Analysis Center (ES ISAC). The Responsible Entity must ensure that all reportable Cyber Security Incidents are reported to the ES ISAC either directly or through an intermediary.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.4. Process for updating the Cyber Security Incident response plan within ninety calendar days of any changes.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.5. Process for ensuring that the Cyber Security Incident response plan is reviewed at least annually.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-008-1

Requirements:

R1.6. Process for ensuring the Cyber Security Incident response plan is tested at least annually. A test of the incident response plan can range from a paper drill, to a full operational exercise, to the response to an actual incident.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R2. Cyber Security Incident Documentation — The Responsible Entity shall keep relevant documentation related to Cyber Security Incidents reportable per Requirement R1.1 for three calendar years.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-009-1

Requirements:

R1. Recovery Plans — The Responsible Entity shall create and annually review recovery plan(s) for Critical Cyber Assets. The recovery plan(s) shall address at a minimum the following:

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.1. Specify the required actions in response to events or conditions of varying duration and severity that would activate the recovery plan(s).

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.2. Define the roles and responsibilities of responders.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-009-1

Requirements:

R2. Exercises — The recovery plan(s) shall be exercised at least annually. An exercise of the recovery plan(s) can range from a paper drill, to a full operational exercise, to recovery from an actual incident.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R3. Change Control — Recovery plan(s) shall be updated to reflect any changes or lessons learned as a result of an exercise or the recovery from an actual incident. Updates shall be communicated to personnel responsible for the activation and implementation of the recovery plan(s) within ninety calendar days of the change.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R4. Backup and Restore — The recovery plan(s) shall include processes and procedures for the backup and storage of information required to successfully restore Critical Cyber Assets. For example, backups may include spare electronic components or equipment, written documentation of configuration settings, tape backup, etc.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: CIP-009-1

Requirements:

-
- R5. Testing Backup Media — Information essential to recovery that is stored on backup media shall be tested at least annually to ensure that the information is available. Testing can be completed off site.

Responsible Members:

| | |
|----------|--|
| NCR00826 | Midwest Independent Transmission System Operator, Inc. |
| NCR01196 | City of Columbia, MO |
| NCR01321 | Southern Illinois Power Cooperative |
| NCR01328 | City of Springfield, IL - CWLP |
| NCR01175 | Ameren Services Company |
| NCR01175 | Ameren Services Company |



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: COM-001-1.1

Requirements:

R1. Each Reliability Coordinator, Transmission Operator and Balancing Authority shall provide adequate and reliable telecommunications facilities for the exchange of Interconnection and operating information:

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.1. Internally.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.2. Between the Reliability Coordinator and its Transmission Operators and Balancing Authorities.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.3. With other Reliability Coordinators, Transmission Operators, and Balancing Authorities as necessary to maintain reliability.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: COM-001-1.1

Requirements:

R1.4. Where applicable, these facilities shall be redundant and diversely routed.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R2. Each Reliability Coordinator, Transmission Operator, and Balancing Authority shall manage, alarm, test and/or actively monitor vital telecommunications facilities. Special attention shall be given to emergency telecommunications facilities and equipment not used for routine communications.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R3. Each Reliability Coordinator, Transmission Operator and Balancing Authority shall provide a means to coordinate telecommunications among their respective areas. This coordination shall include the ability to investigate and recommend solutions to telecommunications problems within the area and with other areas.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: COM-001-1.1

Requirements:

- R4. Unless agreed to otherwise, each Reliability Coordinator, Transmission Operator, and Balancing Authority shall use English as the language for all communications between and among operating personnel responsible for the real-time generation control and operation of the interconnected Bulk Electric System. Transmission Operators and Balancing Authorities may use an alternate language for internal operations.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

-
- R5. Each Reliability Coordinator, Transmission Operator, and Balancing Authority shall have written operating instructions and procedures to enable continued operation of the system during the loss of telecommunications facilities.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: COM-002-2

Requirements:

R1. Each Transmission Operator, Balancing Authority, and Generator Operator shall have communications (voice and data links) with appropriate Reliability Coordinators, Balancing Authorities, and Transmission Operators. Such communications shall be staffed and available for addressing a real-time emergency condition.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.1. Each Balancing Authority and Transmission Operator shall notify its Reliability Coordinator, and all other potentially affected Balancing Authorities and Transmission Operators through predetermined communication paths of any condition that could threaten the reliability of its area or when firm load shedding is anticipated.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R2. Each Reliability Coordinator, Transmission Operator, and Balancing Authority shall issue directives in a clear, concise, and definitive manner; shall ensure the recipient of the directive repeats the information back correctly; and shall acknowledge the response as correct or repeat the original statement to resolve any misunderstandings.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: EOP-001-0

Requirements:

- R1. Balancing Authorities shall have operating agreements with adjacent Balancing Authorities that shall, at a minimum, contain provisions for emergency assistance, including provisions to obtain emergency assistance from remote Balancing Authorities.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

- R3. Each Transmission Operator and Balancing Authority shall:

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

NCR01196 City of Columbia, MO

NCR01321 Southern Illinois Power Cooperative

NCR01328 City of Springfield, IL - CWLP

NCR01175 Ameren Services Company

NCR01175 Ameren Services Company

- R3.1. Develop, maintain, and implement a set of plans to mitigate operating emergencies for insufficient generating capacity.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

- R3.2. Develop, maintain, and implement a set of plans to mitigate operating emergencies on the transmission system.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

- R3.3. Develop, maintain, and implement a set of plans for load shedding.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

NCR01196 City of Columbia, MO

NCR01321 Southern Illinois Power Cooperative

NCR01328 City of Springfield, IL - CWLP

NCR01175 Ameren Services Company

NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: EOP-001-0

Requirements:

R3.4. Develop, maintain, and implement a set of plans for system restoration.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R4. Each Transmission Operator and Balancing Authority shall have emergency plans that will enable it to mitigate operating emergencies. At a minimum, Transmission Operator and Balancing Authority emergency plans shall include:

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R4.1. Communications protocols to be used during emergencies.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: EOP-001-0

Requirements:

R4.2. A list of controlling actions to resolve the emergency. Load reduction, in sufficient quantity to resolve the emergency within NERC-established timelines, shall be one of the controlling actions.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R4.3. The tasks to be coordinated with and among adjacent Transmission Operators and Balancing Authorities.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R4.4. Staffing levels for the emergency.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R5. Each Transmission Operator and Balancing Authority shall include the applicable elements in Attachment 1-EOP-001-0 when developing an emergency plan.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: EOP-001-0

Requirements:

R6. The Transmission Operator and Balancing Authority shall annually review and update each emergency plan. The Transmission Operator and Balancing Authority shall provide a copy of its updated emergency plans to its Reliability Coordinator and to neighboring Transmission Operators and Balancing Authorities.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R7. The Transmission Operator and Balancing Authority shall coordinate its emergency plans with other Transmission Operators and Balancing Authorities as appropriate. This coordination includes the following steps, as applicable:

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R7.1. The Transmission Operator and Balancing Authority shall establish and maintain reliable communications between interconnected systems.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R7.2. The Transmission Operator and Balancing Authority shall arrange new interchange agreements to provide for emergency capacity or energy transfers if existing agreements cannot be used.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: EOP-001-0

Requirements:

R7.3. The Transmission Operator and Balancing Authority shall coordinate transmission and generator maintenance schedules to maximize capacity or conserve the fuel in short supply. (This includes water for hydro generators.)

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R7.4. The Transmission Operator and Balancing Authority shall arrange deliveries of electrical energy or fuel from remote systems through normal operating channels.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: EOP-002-2.1

Requirements:

- R1. Each Balancing Authority and Reliability Coordinator shall have the responsibility and clear decision-making authority to take whatever actions are needed to ensure the reliability of its respective area and shall exercise specific authority to alleviate capacity and energy emergencies.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

- R2. Each Balancing Authority shall implement its capacity and energy emergency plan, when required and as appropriate, to reduce risks to the interconnected system.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

- R3. A Balancing Authority that is experiencing an operating capacity or energy emergency shall communicate its current and future system conditions to its Reliability Coordinator and neighboring Balancing Authorities.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

- R4. A Balancing Authority anticipating an operating capacity or energy emergency shall perform all actions necessary including bringing on all available generation, postponing equipment maintenance, scheduling interchange purchases in advance, and being prepared to reduce firm load.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

- R5. A deficient Balancing Authority shall only use the assistance provided by the Interconnection's frequency bias for the time needed to implement corrective actions. The Balancing Authority shall not unilaterally adjust generation in an attempt to return Interconnection frequency to normal beyond that supplied through frequency bias action and Interchange Schedule changes. Such unilateral adjustment may overload transmission facilities.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

- R6. If the Balancing Authority cannot comply with the Control Performance and Disturbance Control Standards, then it shall immediately implement remedies to do so. These remedies include, but are not limited to:

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

- R6.1. Loading all available generating capacity.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

- R6.2. Deploying all available operating reserve.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: EOP-002-2.1

Requirements:

R6.3. Interrupting interruptible load and exports.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R6.4. Requesting emergency assistance from other Balancing Authorities.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R6.5. Declaring an Energy Emergency through its Reliability Coordinator; and

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R6.6. Reducing load, through procedures such as public appeals, voltage reductions, curtailing interruptible loads and firm loads.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R7. Once the Balancing Authority has exhausted the steps listed in Requirement 6, or if these steps cannot be completed in sufficient time to resolve the emergency condition, the Balancing Authority shall:

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R7.1. Manually shed firm load without delay to return its ACE to zero; and

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R7.2. Request the Reliability Coordinator to declare an Energy Emergency Alert in accordance with Attachment 1-EOP-002-0 "Energy Emergency Alert Levels."

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: EOP-003-1

Requirements:

- R1. After taking all other remedial steps, a Transmission Operator or Balancing Authority operating with insufficient generation or transmission capacity shall shed customer load rather than risk an uncontrolled failure of components or cascading outages of the Interconnection.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

- R2. Each Transmission Operator and Balancing Authority shall establish plans for automatic load shedding for underfrequency or undervoltage conditions.

Responsible Members:

NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

- R3. Each Transmission Operator and Balancing Authority shall coordinate load shedding plans among other interconnected Transmission Operators and Balancing Authorities.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

- R4. A Transmission Operator or Balancing Authority shall consider one or more of these factors in designing an automatic load shedding scheme: frequency, rate of frequency decay, voltage level, rate of voltage decay, or power flow levels.

Responsible Members:

NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

- R5. A Transmission Operator or Balancing Authority shall implement load shedding in steps established to minimize the risk of further uncontrolled separation, loss of generation, or system shutdown.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

- R6. After a Transmission Operator or Balancing Authority Area separates from the Interconnection, if there is insufficient generating capacity to restore system frequency following automatic underfrequency load shedding, the Transmission Operator or Balancing Authority shall shed additional load.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: EOP-003-1

Requirements:

R7. The Transmission Operator and Balancing Authority shall coordinate automatic load shedding throughout their areas with underfrequency isolation of generating units, tripping of shunt capacitors, and other automatic actions that will occur under abnormal frequency, voltage, or power flow conditions.

Responsible Members:

NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
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R8. Each Transmission Operator or Balancing Authority shall have plans for operator-controlled manual load shedding to respond to real-time emergencies. The Transmission Operator or Balancing Authority shall be capable of implementing the load shedding in a timeframe adequate for responding to the emergency.

Responsible Members:

NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: EOP-004-1

Requirements:

R2. A Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator or Load-Serving Entity shall promptly analyze Bulk Electric System disturbances on its system or facilities.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R3. A Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator or Load-Serving Entity experiencing a reportable incident shall provide a preliminary written report to its Regional Reliability Organization and NERC.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

NCR01196 City of Columbia, MO

NCR01321 Southern Illinois Power Cooperative

NCR01328 City of Springfield, IL - CWLP

NCR01175 Ameren Services Company

NCR01175 Ameren Services Company

R3.1. The affected Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator or Load-Serving Entity shall submit within 24 hours of the disturbance or unusual occurrence either a copy of the report submitted to DOE, or, if no DOE report is required, a copy of the NERC Interconnection Reliability Operating Limit and Preliminary Disturbance Report form. Events that are not identified until some time after they occur shall be reported within 24 hours of being recognized.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

NCR01196 City of Columbia, MO

NCR01321 Southern Illinois Power Cooperative

NCR01328 City of Springfield, IL - CWLP

NCR01175 Ameren Services Company

NCR01175 Ameren Services Company

R3.3. Under certain adverse conditions, e.g., severe weather, it may not be possible to assess the damage caused by a disturbance and issue a written Interconnection Reliability Operating Limit and Preliminary Disturbance Report within 24 hours. In such cases, the affected Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator, or Load-Serving Entity shall promptly notify its Regional Reliability Organization(s) and NERC, and verbally provide as much information as is available at that time. The affected Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator, or Load-Serving Entity shall then provide timely, periodic verbal updates until adequate information is available to issue a written Preliminary Disturbance Report.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: EOP-004-1

Requirements:

- R3.4. If, in the judgment of the Regional Reliability Organization, after consultation with the Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator, or Load-Serving Entity in which a disturbance occurred, a final report is required, the affected Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator, or Load-Serving Entity shall prepare this report within 60 days. As a minimum, the final report shall have a discussion of the events and its cause, the conclusions reached, and recommendations to prevent recurrence of this type of event. The report shall be subject to Regional Reliability Organization approval.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: EOP-005-1

Requirements:

R11. Following a disturbance in which one or more areas of the Bulk Electric System become isolated or blacked out, the affected Transmission Operators and Balancing Authorities shall begin immediately to return the Bulk Electric System to normal.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
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NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R11.1. The affected Transmission Operators and Balancing Authorities shall work in conjunction with their Reliability Coordinator(s) to determine the extent and condition of the isolated area(s).

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R11.2. The affected Transmission Operators and Balancing Authorities shall take the necessary actions to restore Bulk Electric System frequency to normal, including adjusting generation, placing additional generators on line, or load shedding.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R11.3. The affected Balancing Authorities, working with their Reliability Coordinator(s), shall immediately review the Interchange Schedules between those Balancing Authority Areas or fragments of those Balancing Authority Areas within the separated area and make adjustments as needed to facilitate the restoration. The affected Balancing Authorities shall make all attempts to maintain the adjusted Interchange Schedules, whether generation control is manual or automatic.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: EOP-005-1

Requirements:

R5. Each Transmission Operator and Balancing Authority shall periodically test its telecommunication facilities needed to implement the restoration plan.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R6. Each Transmission Operator and Balancing Authority shall train its operating personnel in the implementation of the restoration plan. Such training shall include simulated exercises, if practicable.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R7. Each Transmission Operator and Balancing Authority shall verify the restoration procedure by actual testing or by simulation.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: EOP-008-0

Requirements:

R1. Each Reliability Coordinator, Transmission Operator and Balancing Authority shall have a plan to continue reliability operations in the event its control center becomes inoperable. The contingency plan must meet the following requirements:

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.1. The contingency plan shall not rely on data or voice communication from the primary control facility to be viable.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.2. The plan shall include procedures and responsibilities for providing basic tie line control and procedures and for maintaining the status of all inter-area schedules, such that there is an hourly accounting of all schedules.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R1.3. The contingency plan must address monitoring and control of critical transmission facilities, generation control, voltage control, time and frequency control, control of critical substation devices, and logging of significant power system events. The plan shall list the critical facilities.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: EOP-008-0

Requirements:

R1.4. The plan shall include procedures and responsibilities for maintaining basic voice communication capabilities with other areas.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.5. The plan shall include procedures and responsibilities for conducting periodic tests, at least annually, to ensure viability of the plan.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.6. The plan shall include procedures and responsibilities for providing annual training to ensure that operating personnel are able to implement the contingency plans.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: EOP-008-0

Requirements:

R1.7. The plan shall be reviewed and updated annually.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.8. Interim provisions must be included if it is expected to take more than one hour to implement the contingency plan for loss of primary control facility.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01321 Southern Illinois Power Cooperative
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: INT-001-3

Requirements:

R2. The Sink Balancing Authority shall ensure that Arranged Interchange is submitted to the Interchange Authority:

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R2.1. If a Purchasing-Selling Entity is not involved in the Interchange, such as delivery from a jointly owned generator.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R2.2. For each bilateral Inadvertent Interchange payback.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: INT-003-2

Requirements:

R1. Each Receiving Balancing Authority shall confirm Interchange Schedules with the Sending Balancing Authority prior to implementation in the Balancing Authority's ACE equation.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R1.1. The Sending Balancing Authority and Receiving Balancing Authority shall agree on Interchange as received from the Interchange Authority, including:

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R1.1.1. Interchange Schedule start and end time.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R1.1.2. Energy profile.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R1.2. If a high voltage direct current (HVDC) tie is on the Scheduling Path, then the Sending Balancing Authorities and Receiving Balancing Authorities shall coordinate the Interchange Schedule with the Transmission Operator of the HVDC tie.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: INT-004-2

Requirements:

-
- R1. At such time as the reliability event allows for the reloading of the transaction, the entity that initiated the curtailment shall release the limit on the Interchange Transaction tag to allow reloading the transaction and shall communicate the release of the limit to the Sink Balancing Authority.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: INT-006-2

Requirements:

R1. Prior to the expiration of the reliability assessment period defined in the Timing Table, Column B, the Balancing Authority and Transmission Service Provider shall respond to a request from an Interchange Authority to transition an Arranged Interchange to a Confirmed Interchange.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R1.1. Each involved Balancing Authority shall evaluate the Arranged Interchange with respect to:

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R1.1.1. Energy profile (ability to support the magnitude of the Interchange).

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R1.1.2. Ramp (ability of generation maneuverability to accommodate).

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R1.1.3. Scheduling path (proper connectivity of Adjacent Balancing Authorities).

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: INT-009-1

Requirements:

R1. The Balancing Authority shall implement Confirmed Interchange as received from the Interchange Authority.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: INT-010-1

Requirements:

- R1. The Balancing Authority that experiences a loss of resources covered by an energy sharing agreement shall ensure that a request for an Arranged Interchange is submitted with a start time no more than 60 minutes beyond the resource loss. If the use of the energy sharing agreement does not exceed 60 minutes from the time of the resource loss, no request for Arranged Interchange is required.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: IRO-001-1.1

Requirements:

- R8. Transmission Operators, Balancing Authorities, Generator Operators, Transmission Service Providers, Load-Serving Entities, and Purchasing-Selling Entities shall comply with Reliability Coordinator directives unless such actions would violate safety, equipment, or regulatory or statutory requirements. Under these circumstances, the Transmission Operator, Balancing Authority, Generator Operator, Transmission Service Provider, Load-Serving Entity, or Purchasing-Selling Entity shall immediately inform the Reliability Coordinator of the inability to perform the directive so that the Reliability Coordinator may implement alternate remedial actions.

Responsible Members:

| | |
|----------|--|
| NCR01321 | Southern Illinois Power Cooperative |
| NCR00826 | Midwest Independent Transmission System Operator, Inc. |
| NCR01196 | City of Columbia, MO |
| NCR01328 | City of Springfield, IL - CWLP |
| NCR01175 | Ameren Services Company |
| NCR01175 | Ameren Services Company |



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: IRO-002-1

Requirements:

- R3. Each Reliability Coordinator - or its Transmission Operators and Balancing Authorities - shall provide, or arrange provisions for, data exchange to other Reliability Coordinators or Transmission Operators and Balancing Authorities via a secure network.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: IRO-004-1

Requirements:

- R3. Each Reliability Coordinator shall, in conjunction with its Transmission Operators and Balancing Authorities, develop action plans that may be required, including reconfiguration of the transmission system, re-dispatching of generation, reduction or curtailment of Interchange Transactions, or reducing load to return transmission loading to within acceptable SOLs or IROLs.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

- R4. Each Transmission Operator, Balancing Authority, Transmission Owner, Generator Owner, Generator Operator, and Load-Serving Entity in the Reliability Coordinator Area shall provide information required for system studies, such as critical facility status, Load, generation, operating reserve projections, and known Interchange Transactions. This information shall be available by 1200 Central Standard Time for the Eastern Interconnection and 1200 Pacific Standard Time for the Western Interconnection.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

- R7. Each Transmission Operator, Balancing Authority, and Transmission Service Provider shall comply with the directives of its Reliability Coordinator based on the next day assessments in the same manner in which it would comply during real time operating events.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: IRO-005-2

Requirements:

- R13. Each Reliability Coordinator shall ensure that all Transmission Operators, Balancing Authorities, Generator Operators, Transmission Service Providers, Load-Serving Entities, and Purchasing-Selling Entities operate to prevent the likelihood that a disturbance, action, or nonaction in its Reliability Coordinator Area will result in a SOL or IROL violation in another area of the Interconnection. In instances where there is a difference in derived limits, the Reliability Coordinator and its Transmission Operators, Balancing Authorities, Generator Operators, Transmission Service Providers, Load-Serving Entities, and Purchasing-Selling Entities shall always operate the Bulk Electric System to the most limiting parameter.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

-
- R8. Each Reliability Coordinator shall monitor system frequency and its Balancing Authorities' performance and direct any necessary rebalancing to return to CPS and DCS compliance. The Transmission Operators and Balancing Authorities shall utilize all resources, including firm load shedding, as directed by its Reliability Coordinator to relieve the emergent condition.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: IRO-006-3

Requirements:

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- R6. During the implementation of relief procedures, and up to the point that emergency action is necessary, Reliability Coordinators and Balancing Authorities shall comply with interchange scheduling standards INT-001 through INT-004.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: PER-001-0

Requirements:

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- R1. Each Transmission Operator and Balancing Authority shall provide operating personnel with the responsibility and authority to implement real-time actions to ensure the stable and reliable operation of the Bulk Electric System.

Responsible Members:

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| NCR01321 | Southern Illinois Power Cooperative |
| NCR00826 | Midwest Independent Transmission System Operator, Inc. |
| NCR01196 | City of Columbia, MO |
| NCR01328 | City of Springfield, IL - CWLP |
| NCR01175 | Ameren Services Company |
| NCR01175 | Ameren Services Company |



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: PER-002-0

Requirements:

R1. Each Transmission Operator and Balancing Authority shall be staffed with adequately trained operating personnel.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R2. Each Transmission Operator and Balancing Authority shall have a training program for all operating personnel that are in:

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R2.1. Positions that have the primary responsibility, either directly or through communications with others, for the real-time operation of the interconnected Bulk Electric System.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R2.2. Positions directly responsible for complying with NERC standards.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: PER-002-0

Requirements:

R3. For personnel identified in Requirement R2, the Transmission Operator and Balancing Authority shall provide a training program meeting the following criteria:

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R3.1. A set of training program objectives must be defined, based on NERC and Regional Reliability Organization standards, entity operating procedures, and applicable regulatory requirements. These objectives shall reference the knowledge and competencies needed to apply those standards, procedures, and requirements to normal, emergency, and restoration conditions for the Transmission Operator and Balancing Authority operating positions.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R3.2. The training program must include a plan for the initial and continuing training of Transmission Operator and Balancing Authority operating personnel. That plan shall address knowledge and competencies required for reliable system operations.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: PER-002-0

Requirements:

R3.3. The training program must include training time for all Transmission Operator and Balancing Authority operating personnel to ensure their operating proficiency.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R3.4. Training staff must be identified, and the staff must be competent in both knowledge of system operations and instructional capabilities.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R4. For personnel identified in Requirement R2, each Transmission Operator and Balancing Authority shall provide its operating personnel at least five days per year of training and drills using realistic simulations of system emergencies, in addition to other training required to maintain qualified operating personnel.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: PER-003-0

Requirements:

R1. Each Transmission Operator, Balancing Authority, and Reliability Coordinator shall staff all operating positions that meet both of the following criteria with personnel that are NERC-certified for the applicable functions:

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.1. Positions that have the primary responsibility, either directly or through communications with others, for the real-time operation of the interconnected Bulk Electric System.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.2. Positions directly responsible for complying with NERC standards.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: PRC-001-1

Requirements:

R1. Each Transmission Operator, Balancing Authority, and Generator Operator shall be familiar with the purpose and limitations of protection system schemes applied in its area.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R6. Each Transmission Operator and Balancing Authority shall monitor the status of each Special Protection System in their area, and shall notify affected Transmission Operators and Balancing Authorities of each change in status.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: TOP-001-1

Requirements:

R3. Each Transmission Operator, Balancing Authority, and Generator Operator shall comply with reliability directives issued by the Reliability Coordinator, and each Balancing Authority and Generator Operator shall comply with reliability directives issued by the Transmission Operator, unless such actions would violate safety, equipment, regulatory or statutory requirements. Under these circumstances the Transmission Operator, Balancing Authority, or Generator Operator shall immediately inform the Reliability Coordinator or Transmission Operator of the inability to perform the directive so that the Reliability Coordinator or Transmission Operator can implement alternate remedial actions.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R6. Each Transmission Operator, Balancing Authority, and Generator Operator shall render all available emergency assistance to others as requested, provided that the requesting entity has implemented its comparable emergency procedures, unless such actions would violate safety, equipment, or regulatory or statutory requirements.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R8. During a system emergency, the Balancing Authority and Transmission Operator shall immediately take action to restore the Real and Reactive Power Balance. If the Balancing Authority or Transmission Operator is unable to restore Real and Reactive Power Balance it shall request emergency assistance from the Reliability Coordinator. If corrective action or emergency assistance is not adequate to mitigate the Real and Reactive Power Balance, then the Reliability Coordinator, Balancing Authority, and Transmission Operator shall implement firm load shedding.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: TOP-002-2

Requirements:

R1. Each Balancing Authority and Transmission Operator shall maintain a set of current plans that are designed to evaluate options and set procedures for reliable operation through a reasonable future time period. In addition, each Balancing Authority and Transmission Operator shall be responsible for using available personnel and system equipment to implement these plans to ensure that interconnected system reliability will be maintained.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R10. Each Balancing Authority and Transmission Operator shall plan to meet all System Operating Limits (SOLs) and Interconnection Reliability Operating Limits (IROLs).

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R17. Balancing Authorities and Transmission Operators shall, without any intentional time delay, communicate the information described in the requirements R1 to R16 above to their Reliability Coordinator.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R18. Neighboring Balancing Authorities, Transmission Operators, Generator Operators, Transmission Service Providers, and Load-Serving Entities shall use uniform line identifiers when referring to transmission facilities of an interconnected network.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R19. Each Balancing Authority and Transmission Operator shall maintain accurate computer models utilized for analyzing and planning system operations.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R2. Each Balancing Authority and Transmission Operator shall ensure its operating personnel participate in the system planning and design study processes, so that these studies contain the operating personnel perspective and system operating personnel are aware of the planning purpose.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: TOP-002-2

Requirements:

R3. Each Load-Serving Entity and Generator Operator shall coordinate (where confidentiality agreements allow) its current-day, next-day, and seasonal operations with its Host Balancing Authority and Transmission Service Provider. Each Balancing Authority and Transmission Service Provider shall coordinate its current-day, next-day, and seasonal operations with its Transmission Operator.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R4. Each Balancing Authority and Transmission Operator shall coordinate (where confidentiality agreements allow) its current-day, next-day, and seasonal planning and operations with neighboring Balancing Authorities and Transmission Operators and with its Reliability Coordinator, so that normal Interconnection operation will proceed in an orderly and consistent manner.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R5. Each Balancing Authority and Transmission Operator shall plan to meet scheduled system configuration, generation dispatch, interchange scheduling and demand patterns.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R6. Each Balancing Authority and Transmission Operator shall plan to meet unscheduled changes in system configuration and generation dispatch (at a minimum N-1 Contingency planning) in accordance with NERC, Regional Reliability Organization, subregional, and local reliability requirements.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R7. Each Balancing Authority shall plan to meet capacity and energy reserve requirements, including the deliverability/capability for any single Contingency.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R8. Each Balancing Authority shall plan to meet voltage and/or reactive limits, including the deliverability/capability for any single contingency.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R9. Each Balancing Authority shall plan to meet Interchange Schedules and Ramps.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: TOP-003-0

Requirements:

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- R2. Each Transmission Operator, Balancing Authority, and Generator Operator shall plan and coordinate scheduled outages of system voltage regulating equipment, such as automatic voltage regulators on generators, supplementary excitation control, synchronous condensers, shunt and series capacitors, reactors, etc., among affected Balancing Authorities and Transmission Operators as required.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

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- R3. Each Transmission Operator, Balancing Authority, and Generator Operator shall plan and coordinate scheduled outages of telemetering and control equipment and associated communication channels between the affected areas.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: TOP-005-1.1

Requirements:

- R1. Each Transmission Operator and Balancing Authority shall provide its Reliability Coordinator with the operating data that the Reliability Coordinator requires to perform operational reliability assessments and to coordinate reliable operations within the Reliability Coordinator Area.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

- R3. Upon request, each Balancing Authority and Transmission Operator shall provide to other Balancing Authorities and Transmission Operators with immediate responsibility for operational reliability, the operating data that are necessary to allow these Balancing Authorities and Transmission Operators to perform operational reliability assessments and to coordinate reliable operations. Balancing Authorities and Transmission Operators shall provide the types of data as listed in Attachment 1-TOP-005-0 "Electric System Reliability Data," unless otherwise agreed to by the Balancing Authorities and Transmission Operators with immediate responsibility for operational reliability.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: TOP-006-1

Requirements:

R1. Each Transmission Operator and Balancing Authority shall know the status of all generation and transmission resources available for use.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R1.2. Each Transmission Operator and Balancing Authority shall inform the Reliability Coordinator and other affected Balancing Authorities and Transmission Operators of all generation and transmission resources available for use.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R2. Each Reliability Coordinator, Transmission Operator, and Balancing Authority shall monitor applicable transmission line status, real and reactive power flows, voltage, load-tap-changer settings, and status of rotating and static reactive resources.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: TOP-006-1

Requirements:

R3. Each Reliability Coordinator, Transmission Operator, and Balancing Authority shall provide appropriate technical information concerning protective relays to their operating personnel.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R4. Each Reliability Coordinator, Transmission Operator, and Balancing Authority shall have information, including weather forecasts and past load patterns, available to predict the system's near-term load pattern.

Responsible Members:

NCR00826 Midwest Independent Transmission System Operator, Inc.

R5. Each Reliability Coordinator, Transmission Operator, and Balancing Authority shall use monitoring equipment to bring to the attention of operating personnel important deviations in operating conditions and to indicate, if appropriate, the need for corrective action.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company

R6. Each Balancing Authority and Transmission Operator shall use sufficient metering of suitable range, accuracy and sampling rate (if applicable) to ensure accurate and timely monitoring of operating conditions under both normal and emergency situations.

Responsible Members:

NCR01321 Southern Illinois Power Cooperative
NCR00826 Midwest Independent Transmission System Operator, Inc.
NCR01196 City of Columbia, MO
NCR01328 City of Springfield, IL - CWLP
NCR01175 Ameren Services Company
NCR01175 Ameren Services Company



Registration Status as of 7/26/2010

Applicable Regional Entity: SERC

Applicable Function: BA

Standard: TOP-006-1

Requirements:

R7. Each Reliability Coordinator, Transmission Operator, and Balancing Authority shall monitor system frequency.

Responsible Members:

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| NCR01321 | Southern Illinois Power Cooperative |
| NCR00826 | Midwest Independent Transmission System Operator, Inc. |
| NCR01196 | City of Columbia, MO |
| NCR01328 | City of Springfield, IL - CWLP |
| NCR01175 | Ameren Services Company |
| NCR01175 | Ameren Services Company |