

Wolverine Power Supply Cooperative, Inc.

Senior Transmission System Operator

I. OBJECTIVE

- A. The Senior Transmission System Operator is responsible for the reliable and safe operation of Wolverine's transmission system under both normal and emergency conditions. The Senior Transmission System Operator has authority over all personnel that affect the reliability of the Wolverine bulk transmission system.
- B. During normal and emergency operations, the Senior Transmission System Operator has the authority to take necessary actions to maintain the safety and reliability of the bulk transmission system, up to and including the shedding of firm load without obtaining approval from higher-level personnel. The Senior Transmission System Operator is responsible for complying with the North American Electric Reliability Corporation (NERC) Operating Standards, Reliability First Standards and following the direction of the Reliability Coordinator.

II. REPORTING RELATIONSHIPS

- A. Reports To: Energy Control Center Operations Supervisor

III. AUTHORITIES & RESPONSIBILITIES

- A. Transmission:
 - 1. Write, plan, and implement approved detailed switching procedures and issue clearances on transmission lines and associated equipment on the Wolverine transmission system. Review switching procedures written by Transmission System Operators.
 - 2. Develop line work and switching schedules with Wolverine's Operations group and interconnected systems. Enter schedule in Daily Outage Report and the Control Room Outage Window (CROW).
 - 3. Call on generation support as needed and operate the Transmission system in a manner that will not exceed thermal and voltage limits or cause System Operating Limits (SOL's).
 - 4. Responsible for the completion and accuracy of the data in the outage database ensuring that it is kept current.

5. Diagnose outage and fault locations utilizing available information, direct Wolverine and member cooperative personnel in outage situations, and maintain an accurate and detailed sequence of events for outage reports.
6. Utilize the Supervisory Control and Data Acquisition (SCADA) system for switching and control of the Wolverine transmission system, including transformer Load Tap Changer (LTC) control for maintenance of vars and voltage, and remote operation of circuit breakers, auto reclosers and peripheral equipment as appropriate.
7. Maintain a sound working knowledge of all available software and peripheral equipment such as Schweitzer fault locating relays, sequence of event recorders and lines database.
8. Ensure operational data in the Schweitzer is correct and the program database is up to date.
9. Work with the engineering department personnel on load flow studies and approve scheduled transmission system maintenance.

B. Training and Supervision

1. Provide documented formal simulation training scenarios and guidance to the Associate Transmission System Operators and Transmission System Operators.
2. Work with Associate Transmission System Operators to train and review their work and assist them in preparing for the NERC System Operator Certification testing.
3. Perform any task or special project that provides information that is critical for department and Energy Control Center operation as requested by Wolverine management.
4. Make recommendations to ECC management to streamline and automate the day-to-day operations of the Energy Control Center. Participate in the development and implementation of such changes.
5. Perform all other duties as assigned and is responsible for the daily operation of the Energy Control Center in the Absence of the ECC Operations Supervisor.

C. NERC Compliance:

1. Review, update and create procedures for the Energy Control Center to ensure compliance with all NERC requirements.

2. Review and update Wolverine Audit Guides (WAG's) and Reliability Standard Audit Worksheets (RSAW's) as needed.
3. Comply with all Wolverine procedures and NERC requirements.

IV. RELATIONSHIPS

A. Internal:

1. Must have a good working relationship with the line crews and operators at the generation plants to ensure reliable and safe operation of the bulk transmission system.
2. Must interact effectively with all other Wolverine personnel to provide necessary information and data.
3. Must have a very good working relationship with all System Operators.

B. External:

1. Must have a good working relationship with personnel from other utilities with respect to scheduling and coordinating transmission requests.
2. Must have a good working relationship with distribution cooperative operations personnel.
3. Must be able to represent Wolverine in a professional manner during tours of the facility, meetings, and training seminars.

V. QUALIFICATIONS

A. Education and Experience:

1. Must have obtained the required NERC certification and worked a minimum of 5 years as a Transmission System Operator at the Wolverine Energy Control Center.
2. Must successfully complete the Senior Transmission System Operator examination.
3. Must maintain required certification as directed by Wolverine management and NERC continuing educational standards.

B. Abilities:

1. Must have a demonstrated ability to effectively communicate via the telephone and radio in both emergency and non-emergency situations.
2. Must have a demonstrated ability to precisely and legibly communicate in writing.
3. Must have a demonstrated ability to direct field personnel on a daily basis as well as in emergency work situations in a safe and reliable manner.
4. Must have a demonstrated ability to make critical decisions under pressure of schedules and other critical incidents.
5. Must have a demonstrated ability to coordinate the entire restoration process in an isolated outage situation.
6. Must have a demonstrated ability to supervise and assist other Transmission System Operators during emergency situations.

C. Knowledge:

1. Must demonstrate knowledge and proficiency of the operation of Wolverine's transmission system including how scheduled outages can affect the remainder of the system providing for contingency plans as appropriate.
2. During system disturbances, demonstrate the ability to diagnose, isolate and restore the transmission system.
3. Understand NERC and Reliability First standards and be able to apply these to the daily operations of the Energy Control Center.
4. Must have a strong understanding of the operations of Wolverine's generation capabilities and how they can be utilized to provide voltage and reactive support for the transmission system.
5. A strong familiarity with the operations of personal computers, including electronic spreadsheets, databases, corporate email and Internet.
6. Sound mathematical skills in basic algebra.
7. Must demonstrate an understanding of the processes involved with creating a transmission outage request in the CROW.

D. Physical Requirements:

1. General normal office environment.
2. Duties require minimal lifting and carrying.
3. Requires visual acuity necessary to distinguish color differentiation, read charts, diagrams and data from a computer terminal.
4. Work schedules are rotating shifts including weekends, holidays and overtime.
5. Will be subject to 24-hour call-in.