

Lesson Learned

Backup Control Center Operation and Training

Primary Interest Groups

Reliability Coordinator
Balancing Authority
Transmission Owners
Transmission Operators

Problem Statement

Evacuation of an entity's Primary Control Center (PCC) was required due to a fire on the second floor of the Operations Building. System Operators promptly evacuated the PCC and activated the Backup Control Center (BCC). Incorrect contact information in the contingency plans and the inability of support tools to connect to the corporate network impeded a timely and efficient transfer of operations.

Details

The PCC, which is the center for transmission operations, is located at the lower level (basement) of the building. Smoke from the fire began to enter surrounding office areas, as well as the PCC space, forcing System Operators to evacuate. All control room personnel relocated to the BCC and re-established command and control of the Transmission and Distribution (T&D) System.

The Transmission Operator had detailed contingency plans and procedures in place for continued reliable operations of the T&D System in the event the PCC became inoperable. These plans were implemented.

Some of the issues operators encountered when they implemented the contingency plans and procedures are as follows:

- Personnel and contact phone numbers listed in the contingency plan were incorrect and outdated.
- Operators could not log into or connect one of the personal computers (PCs) to the corporate network because the computer had not accessed the corporate computer network in a while. The time between the last logon onto the corporate network for the PC and this evacuation logon exceeded company mandated time limits.

- The cable television utilized by the operators for weather and news broadcasts did not work. The cable company recently mandated that a cable box be used for the installation.

Corrective Action

The entity immediately added personnel on the site who provided current contact lists. The evacuation contingency plan was updated with this information. Later, a schedule was developed for more frequent reviews of these lists.

Additional personnel also resolved the computer logon issue. The operator training schedule was changed to allow more opportunities for operating personnel to practice activating the backup control center and checking the tools. This schedule ensured that the PCs' login credentials were active and current.

A cable box from the cable company was obtained that allowed operators to view weather and news broadcasts.

Lesson Learned

Entities should have processes in place to insure their contingency plans are up-to-date; that all tools that support operation functions can be accessed and work correctly; and that any tools that are dependent on outside service that the entity cannot provide, such as cable television, are up-to-date and working correctly.

Simulation exercises should be used not only for training but also to judge the ability of the entity to be able to evacuate the PCC and establish BCC operation quickly, without additional help required by other personnel. To completely test an entity's contingency plan, simulation scenarios should exercise all functions required for operation at the BCC. One of the goals of these simulations should be for the entity to have contingency plans and tools that ensure operators encounter no issues in establishing operation quickly at the BCC.

BCC operation scenarios should often include the actual evacuation of a group of operators from the PCC and the establishment of operations being run from the BCC just as would incur if an evacuation were needed. The scenario should include operation from the BCC for a period of time to really judge the effectiveness of the tools and plans.

Operators can play a significant role in testing an entity's evacuation and contingency plans as well as the needed operator tools. All operators should have the opportunity to participate in scenarios that include PCC evacuation and operation at the BCC. Operation from the BCC provides a double benefit in that the tools are tested and operators are afforded training. Providing this training to all operators allows more opportunities to test the plans and the tools.

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Source of Lesson Learned: Northeast Power Coordinating Council

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