


System Operating Procedures

SOP-OUTSCH.0050.0010

Determine Study Requirements

Effective Date: February 7, 2011
Revision No. 7

	© ISO New England Inc. 2011	Procedure: Determine Study Requirements
	Process Name: Perform Complex Studies	Revision Number: 7
	Procedure Number: OUTSCH.0050.0010	Effective Date: February 7, 2011
	Procedure Owner: Dean LaForest	Valid Through: February 7, 2013
	Approved By: Director, Operations Support Services	

SOP-OUTSCH.0050.0010


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1. Objective


The objective of this procedure is to evaluate the need to perform a special complex study of the New England power system. This procedure documents the responsibilities of ISO New England (ISO) staff.

Compliance with this procedure is necessary to ensure the reliable operation of the New England power system in accordance with ISO New England Operating Procedure No. 3 – Transmission Outage Scheduling (OP-3), ISO New England Operating Procedure No. 5 - Generator and Dispatchable Asset Related Demand Maintenance and Outage Scheduling (OP-5), and ISO New England Operating Procedure No. 19 - Transmission Operations (OP-19). This procedure does not in any way change the intent of OP-3, OP-5, or OP-19 but rather is intended to clarify some of the responsibilities delegated to ISO staff by those procedures. This procedure also supports the cost-effective operation of the power system. This procedure can affect Market operation and settlements.

2. Background

Many things including system demand, Generator / Dispatchable Asset Related Demand (DARD) outages, transmission outages, generation and load patterns, new facilities, and unusual operating configurations affect the reliability of the power system. These same issues can also affect the cost-effective operation of the power system.

Transmission Operating Guides (TOGs), SPS devices and thermal analysis of the power system adequately address a broad range of operating conditions. However, when actual or planned operating conditions are determined to potentially exceed the scope of operating guides and thermal analysis, a special complex study should be performed. This procedure establishes the process for determining the need for such a complex study. If it is determined that a complex study is needed the study is conducted according to SOP-OUTSCH.0050.0020 - Perform Complex Studies.


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3. Responsibilities

1. When assigned by the Director, Operations Support Services (or designee), Operations Support Services personnel are responsible for performing this procedure.

4. Controls


None.

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5. Instructions


5.1 When to Consider the Need for a Complex Study

1. When assigned by the Director, Operations Support Services (or designee) Operations Support Services personnel shall perform the following:
 - A. Monitor on an ongoing basis:
 - Transmission Outages
 - Resource additions / retirements and reconfigurations
 - B. Consider the need for a complex study in the case of:
 - Notification by a Local Control Center, Transmission Owner, or external entity of a perceived need to perform a complex study
 - Notification by the ISO Outage Coordination personnel or System Operators during outage evaluations
 - Request for an economic evaluation of a system configuration or outage
 - Conflicting, interacting, or related outages that might significantly impact the New England power system
 - Outages potentially impacting IROL limits or occur in a previously recognized sensitive area as identified by:
 - Operating experience
 - TOGs
 - Unusual system configurations
 - Unusual system dispatch conditions
 - Significant changes to New England power system topology
 - The addition or retirement of a Generator or Dispatchable Asset Related Demand

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5.2 Determining the Need for a Complex Study

1. When assigned by the Director, Operations Support Services (or designee) Operations Support Services personnel shall perform the following:
 - A. Review the Outage Request Form and /or other relevant documentation such as the Long Term Transmission Outage Plan.
 - B. When considering the need for a complex study, consider the following issues:
 - The applicability of existing TOGs under the current or planned circumstances
 - The results of previous studies
 - The extent to which the actual or planned conditions are non-typical
 - The suitability of normal contingency analysis for evaluating the current or planned circumstances
 - Unusual or unmodeled contingencies
 - Voltage issues
 - Stability issues
 - System protection issues
 - Excessive fault current duty
 - Effects on nuclear power plants
 - C. Determine the need for a complex study and:
 - (1) If a complex study is not needed:
 - a. Notify the requester and inform them of the reason that further study is not warranted.
 - b. Indicate the applicable TOG or tool for appropriately addressing the actual or planned system condition.
 - (2) If a complex study is needed, assign the complex study to a staff person, conduct according to SOP-OUTSCH.0050.0020 - Perform Complex Studies and:
 - a. Forward all relevant information to the assigned staff person.
 - b. Provide study recommendations as deemed appropriate.

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6. Performance Measures

None.

7. References

ISO New England Operating Procedure No. 3 - Transmission Outage Scheduling (OP-3)


ISO New England Operating Procedure No. 5 - Generator and Dispatchable Asset Related Demand Maintenance and Outage Scheduling (OP-5)

ISO New England Operating Procedure No. 19 - Transmission Operations (OP-19)

SOP-OUTSCH.0050.0020 - Perform Complex Studies

8. Revision History

Rev. No.	Date	Reason	Contact
A	05/24/02	Initial draft procedure	
B	07/18/02	Revised to incorporate sign off comments	
0	02/13/03	Initial procedure for SMD	Tom Dutkiewicz
1	6/5/03	Update Procedure to current practice	Tad Witowski
2	11/14/03	Modified Controls and Performance Measures to align with ISO 9001 standards	Tad Witowski
3	02/01/05	Updated SOP for RTO terminology	Tad Witowski
4	09/20/06	Revised for ASM Phase 2	Ed Rappold
5	10/05/07	Clerical revisions made as part of annual review	Ed Rappold
6	03/17/09	Periodic review performed	Ed Rappold
7	02/07/11	Biennial review by procedure owner; Updated Header copyright date; Replace Procedure Owner with Dean LaForest; Replaced Footer page numbers with Page X of Y format; Section 2 defined acronym DARD, minor punctuation change and corrected typo; 3.1 reworded and clarified the responsibility statement; Step 5.1.1, reworded to clarify the directed action; Step 5.2.1 added step to clarify the directed action	Dean LaForest

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9. Attachments

None.