Master/Local Control Center Procedure No. 10

(M/LCC 10)

Generator Governor Control and Operation

1. References

NERC Reliability Standard BAL-003 - Frequency Response and Bias

ISO New England Manual for Market Operations, Manual M-11 (Manual-11)

ISO New England Operating Procedure No. 1 - Central Dispatch Responsibilities and Authority of ISO New England, the Local Control Centers and Market Participants (OP-1)

ISO New England Operating Procedure No. 14 - Technical Requirements for Generators, Demand Resources and Asset Related Demands (OP-14)

Master/Local Control Centers Procedure No. 2 - Abnormal Conditions Alert (M/LCC 2)

2. Purpose

This procedure establishes a methodology for each Generator Designated Entity (DE) and ISO New England (ISO) to communicate the status of a Generator governor by ensuring that a blocked or non-functioning governor is reported to ISO. This reporting will allow ISO to ensure the continued reliable operation of the Bulk Power System.

3. Introduction

NERC Reliability Standards require Generator governor performance characteristic reporting and tracking, specifically for the purposes of maintaining the capability of generators to aid control of system frequency during an electric system disturbance.

4. Definitions

Governors Free To Respond. Turbine governors and HVDC controls, where applicable, should be allowed to respond to system frequency deviation, unless there is a temporary operating problem.

5. Applicability

This procedure applies to all Generators of ten (10) megawatts net output or greater that are equipped with governors operational for frequency response per ISO New England Operating Procedure No. 14 - Technical Requirements for Generators, Demand Resources and Asset Related Demands (OP-14).

6. Procedure

NOTE

The following steps outline the responsibilities of each Generator DE and the ISO Control Room Staff:

1. When reporting a non-functioning or blocked Generator governor, the Generator DE shall perform the following:

   A. If applicable, submit a Redeclaration, per ISO New England Manual for Market Operations, Manual M-11 (Manual-11) indicating the Generator output is restricted, the level of restriction, and that this restriction is due to a non-functioning or blocked Generator governor control.

   B. If the non-functioning or blocked Generator governor does not impact Generator performance (i.e., no redeclaration to Eco Max or MRR is required), report simply on the Generator governor status to the ISO Control Room.

   C. If applicable, make a log entry of the Redeclaration date, time, reason, and Generator name. If the non-functioning or blocked Generator governor does not impact Generator performance (i.e., no redeclaration to Eco Max or MRR is required), the log entry should exclude the redeclared parameter and value.

   D. Project the expected return-to-service time and date.

2. When the Generator governor problem no longer exists, the Generator DE shall perform the following:

   A. If applicable, submit a Redeclaration, per Manual-11,, indicating that the Generator output is no longer restricted.

   B. If a non-functioning or blocked Generator governor does not impact Generator performance (i.e., no redeclaration to Eco Max or MRR is required), report to the ISO Control Room that the Generator governor is now functioning properly.

   C. If applicable, make a log entry of the Redeclaration date, time, reason, and Generator name. If a non-functioning or blocked Generator governor did not impact Generator performance (i.e., no redeclaration to Eco Max or MRR is required), the log entry should exclude the redeclared parameter and value.

3. When notified that a Generator governor problem that restricts the Generator performance capabilities, ISO Control Room Staff shall perform the following :

   A. Accept the Generator Redeclaration, per SOP-RTMKTS.0110.0010 - Maintain Real-Time Operational Data.

   B. Enter the Redeclaration in the Energy Management System (EMS→RTGEN→Unit Limits display) with a Reason Code of "GC" (Governor Control).

   C. Enter the date, time, reason, and Generator name in the Control Room Event Logserver (Logserver).

   D. Notify the applicable Local Control Center (LCC) of the non-functioning or blocked Generator governor.

4. When notified that the Generator governor condition no longer restricts Generator performance capabilities, ISO Control Room Staff shall perform the following :

   A. Accept a Generator Redeclaration indicating that the Generator output is no longer restricted, per SOP-RTMKTS.0110.0010 - Maintain Real-Time Operational Data.

   B. Enter the Redeclaration in the EMS→RTGEN→Unit Limits display.

   C. Enter the return-to-service date and time in the Logserver.

   D. Notify the applicable LCC that the Generator governor is now functional.

5. When notified that a non-functioning or blocked Generator governor does not restrict the Generator performance capabilities, ISO Control Room Staff shall perform the following:

   A. Upon notification that a Generator is operating with a blocked or non-functioning governor, but that the manual operation can be maintained in accordance with the as-bid Generator characteristics, log the date, time, reason, and Generator name in the Logserver.

   B. Upon notification that a Generator is no longer operating with a blocked or non-functioning governor, enter the return-to-service date and time in the Logserver.

7. Logging Requirements

All log entries, as defined in Section 6 of this procedure, shall be retained for a minimum period of 12 rolling months.

8. Revision History

Rev. No.	Date	Reason
1	09/07/01	
2	09/01/04	Standardize procedure format and incorporate RTO language changes, Updated for software and terminology used in Standard Market Design
3	11/16/06	Revised NERC Standard reference and added communications to LCC pertaining to governor status
4	03/12/09	Biennial review completed; Changed header Contact Title from Manager, Operations to Director, Operations; Changed header Review Due Date: to be 24 months from the Effective Date:; Added dashes to OP abbreviations in References Section
5	08/24/09	Changed as applicable to reflect the EMU project; Minor clarifying grammatical and editorial changes; In Reference Section, added NERC Reliability Standard & Manual-11 and corrected the OP 1 title;

9. Attachments

None.