ISO new england

System Operating Procedures

SOP-RTMKTS.0080.0030

Determine Regulation Requirements

Effective Date: February 4, 2011
Revision No. 3

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Contents

1. Objective

The intent of this procedure is to define the process for determining hourly Regulation requirements, based on historical analysis of seasonal load changes and past Regulation performance.

2. Background

ISO New England (ISO) is required to maintain a portion of the Synchronized Capability on Regulation in accordance with ISO New England Manual for Market Operations, Manual M-11 (Manual 11). Setting Regulation is based on ISO forecast of demand and historical analysis of seasonal load changes and past Regulation performance. ISO is given authority to deviate from the recommended quantities of Regulation provided that NERC and NPCC performance criteria are met.

3. Responsibilities

The Principal Engineer, Operations is responsible for determining the proper amount of regulation to meet NERC and NPCC control performance standards.

4. Controls

Principal Engineer, Operations will use Excel spreadsheets designed to assist in evaluating Regulation Requirements.

5. Instructions

1. The Principal Engineer, Operations shall determine the amount of Regulation needed to satisfy the NPCC and NERC Control Performance Criteria.

2. Obtain and copy the previous Regulation requirements for the same period. This process involves a comparison of "seasonal" values, with the seasons being broken into four periods: Nov-Mar, Apr-May, Jun-Aug, and Sep-Oct.

   A. Input the seasonal values into an Excel spreadsheet (agcrqtsxx_smd_only_worksheet), displaying different hourly Regulation requirements for weekdays, Saturdays, Sundays (NERC scheduled holidays are treated as Sunday day types.)

   B. Analyze previous results based on the percentages of CPS2 compliance.

      (1) If results of compliance per hour are < 90%, Regulation requirement may be increased.

      (2) If results of compliance per hour are > 95%, Regulation requirement may be reduced.

      (3) Compare similar periods if applicable (e.g., Spring – Fall) to determine the success of particular amounts of regulation as a function of day-type and hour.

      (4) Check if a reduction in off peak regulation requirements could result in improved performance because low regulating limits are often higher than low economic limits (Eco Min).

   C. After evaluating the hourly updated data, establish new requirements that will aim to maintain annual performance in the range of 92%-97% of NERC Control Performance Standard 2 (CPS2) compliance for all hours with the least amount of regulation.

   D. Input the results of the analysis into the Excel spreadsheet (agcrqtsxx_smd_only).

3. After the new requirements have been established, forward the results to the IT department for uploading into the EMS.

4. Develop Ad Hoc spreadsheets to illustrate the old and new values for the months when requirements change.

5. Greater than 5 days prior to the date the changes take effect inform the ISO representative to the Markets Committee (MC) of the pending changes.

6. Forward a copy of the new requirements along with the Ad Hoc spreadsheets, developed in a prior step, to the ISO MC representative for dissemination to the MC.

7. Provide a copy of the new requirements along with the Ad Hoc spreadsheets to the Market Support Services representative to be posted on the ISO website, along with the effective date of the change.

6. Performance Measures

- ISO shall achieve at least 90% compliance with NERC Control Performance Standard 2 (CPS2)

7. References

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

8. Revision History

Rev. No.	Date	Reason	Contact
0	09/30/05	Original	Mike Potishnak
1	04/04/06	Revised to include added steps for Ad Hoc spreadsheets and dissemination to MC and MSS (web)	Mike Potishnak
2	03/16/09	Revised process of obtaining regulation requirements	Mike Potishnak
3	02/04/11	Biennial review by procedure owner; Updated copyright date in Headers, replaced page numbers with Page X of Y format, Section defined acronym ISO, corrected Manual 11 title; Various replaced "Operations Principal Engineer" with "Principal Engineer, Operations"; Step 5.2.B.(4) Corrected acronym Eco Min; Step 5.2.C corrected acronym CPS2; Section 6 deleted 1st bullet; Section 7 Corrected Manual 11 title, deleted OP-8, NERC Standards, & NPCC A-8	Mike Potishnak

9. Attachments

None.