SOP-OUTSCH.0040.0020
Create Seven-Day Capacity Margin Forecast

Contents

1. Objective

The objective of this procedure is to define the process for the daily development of the Seven-Day Capacity Forecast.

2. Background

The Seven-Day Capacity Forecast was developed to provide ISO and the Market Participants (MPs) with the anticipated capacity state of the New England Bulk Electric System (BES). It is used by ISO to identify capacity deficiencies several days in advance and triggers the commitment of long lead-time Generators (Start times > 24 hours). It also provides similar information to MPs.

3. Responsibilities

1. The Demand and Resource Forecaster ("Forecaster") is responsible for executing all aspects of this procedure to include the preparation, review and publication of the Seven-Day Capacity Forecast daily by 1000.

2. The Energy Security Analyst is responsible for providing input to the Forecaster regarding MWs of unplanned outages noted in the 21 Day Energy Security Assessment.

3. The Manager, Forecast & Scheduling is responsible for providing additional oversight during extreme weather conditions and when capacity problems are expected within the next seven-day period.

4. The Senior Manager, Control Room Operations is responsible for verifying:

    - Necessary business units are notified of upcoming capacity problems
    - Necessary transmission and Resource outages are rescheduled
    - Communications with other ISO business units occur in a timely manner

4. Controls

- The Forecaster uses the Seven_Day_Forecast application as described in this procedure

5. Instructions

5.1 Verify Seven-Day-Ahead Forecast Initial Conditions

1. The Forecaster shall perform this procedure to publish the Seven-Day Capacity Forecast daily by 1000.

2. The Forecaster shall verify the following:

   A. Initial load forecast has been developed per SOP-OUTSCH.0040.0010 - Create Demand Forecast.

   B. Resource outage schedules have been developed per SOP-OUTSCH.0030.0010 - Evaluate Resource Outage Requests.

   C. Interchange Schedules have been developed per SOP-OUTSCH.0030.0020 - Perform Short-Term Outage Coordination.

   D. The 21-Day Energy Security Assessment has been developed per SOP-OUTSCH.0060.0001 Perform 21 Day Energy Security Assessment

5.2 Complete Seven-Day-Ahead Forecast Initial Data

1. The Forecaster shall access the Seven_Day_Forecast application from the MCC Shortcuts Folder and perform the following:

   A. Create a New Case

   B. Import Data

   C. Verify the following information:

      (1) Correct weather data has been imported.

      (2) Correct Load Forecast data has been imported.

      (3) Correct Seasonal Claimed Capability (SCC), Capacity Supply Obligation (CSO), and Demand Response Resource (DRR) values have been imported

      (4) Correct outage data has been imported from ISO Outage Scheduling software

   D. As necessary, manually override any imported data that is **not** correct.

   E. Save All

NOTE
The Seven-Day Capacity Forecast calculation is explained in Attachment A

2. Using the above information, the Forecaster shall verify the "Preview Report" in the "External Report" tab correctly calculates the Projected Surplus or Deficiency

5.3 Project Seven-Day-Ahead Forecast Conditions

1. On a daily basis, the Forecaster shall use the ISO Outage Scheduling Software to:

   A. Review transmission outages in the next seven days that have indicated an impact on generation Resources.

   B. Enter the Transmission Constrained Down (TCD) value for each day for any Resource that will be restricted by ≥ 50 MW

2. The Forecaster shall trend the "Unplanned Outage Allowances" from the value calculated for the current day up to 2,000 MW on the seventh day plus any energy-related generation Resource outages as determined by the Energy Security Analyst during the performance of the 21 Day Energy Security Assessment.

3. Based on the Control Room Interchange Scheduling software information and current interchange scheduling trends, the Forecaster shall enter the peak hour external interchange values for each external interface for each day in the Data Sheet.

4. Based on the requirements of ISO New England Operating Procedure No. 8 - Operating Reserve and Regulation (OP-8), the Forecaster shall enter the anticipated Required Reserve for each day in the Data Sheet.

5. The Forecaster shall enter the correct Replacement Reserve requirement.

   A. 160MW during Daylight Savings Time

   B. 180MW during Standard Time

6. As necessary, based on the forecast ambient temperatures, the Forecaster shall adjust the Anticipated De-Listed Capacity Offered in the Data Sheet.

7. The Forecaster shall verify the calculations in the Specific Outages section of the Seven_Day_Forecast application for gas unavailability due to cold weather conditions are accurate by comparing the Anticipated Cold Weather Outages displayed on the Data Sheet section of the report to the Reduction curve in the EDD Outages tab.

8. Save All

NOTE

Cold Weather Watches, Warnings, and Events are declared based on the conditions provided in SOP-RTMKTS.0050.0007 - Perform Cold Weather Condition Operations.

9. When declaring a Cold Weather Watch, Cold Weather Warning, or a Cold Weather Event, and with approval from the Manager, Forecast & Scheduling, the Forecaster shall verify a check mark is present in the appropriate column for the day the cold weather conditions are declared.

10. If, on any day, a forecast is used to initiate ISO New England Operating Procedure No. 4 - Action During a Capacity Deficiency (OP-4) Action 4 per CROP.10002 Implement Capacity Remedial Actions, the Forecaster shall enter a check mark into the "Power Watch" column for that day.

11. If on any day, a forecast is used to initiate OP-4 Action 10 per CROP.10002, the Forecaster shall enter a check mark into the "Power Warning" column for that day.

5.4 Verify Seven-Day Capacity Forecast Calculations

1. The Forecaster shall verify all data transferred properly to the Seven_Day_Forecast application Data Sheet after executing the "Import Data" function.

2. When either a capacity deficiency or a surplus of less than the amount directed by the Operations Shift Supervisor is forecast for the next day, the Forecaster shall notify the Operations Shift Supervisor and Manager, Forecast & Scheduling (or designees).

5.5 Communicate Seven-Day Capacity Forecast

1. The Forecaster shall perform the following actions:

> **NOTE**
>
> Clicking on the "Upload External Report" button posts the Seven-Day Capacity Forecast to the ISO Website at:
> http://www.iso-ne.com/sys_ops/op_frcstng/7day_frcst/index.html

   A. Click on the "Upload External Report" button in the Seven_Day_Forecast application

   B. Click on the "Approve Case" button in the Seven_Day_Forecast application

   C. Verify report posted to external website accurately reflects data from the approved case

6. Performance Measures

None.

7. References

ISO New England Operating Procedure No. 4 - Action During A Capacity Deficiency (OP-4)

ISO New England Operating Procedure No. 8 - Operating Reserve and Regulation (OP-8)

SOP-OUTSCH.0030.0010 - Evaluate Resource Outage Requests

SOP-OUTSCH.0030.0020 - Perform Short-Term Outage Coordination

SOP-OUTSCH.0040.0010 - Create Demand Forecast

SOP-RTMKTS.0050.0007 - Perform Cold Weather Condition Operations

SOP-RTMKTS.0120.0025 - Implement Energy Emergency Actions

SOP-OUTSCH.0060.0001 – Perform 21 Day Energy Security Assessment

CROP.10002 Implement Capacity Remedial Actions

8. Revision History

Rev. No.	Date	Reason	Contact
---		For previous revision history, refer to Rev 21 available through Ask ISO	
22	5/23/24	Biennial Review. Reworded NOTE in Section 5.to be consistant with Attachment A title	Michael Fontaine
23	5/13/26	Biennial Review. Updated to reflect that the process is performed by the Demand and Resource Forecaster. Updated nomenclature to be consistent with the Seven-Day Capacity Forecast web page and the Seven_Day_Forecast application.	Maya Ault/Thomas Knowland

9. Attachments

Attachment A - Seven-Day Capacity Forecast calculation

Attachment A - Seven-Day Capacity Forecast calculation

+ / -	Description
(+)	Total Capacity Supply Obligation
(-)	Anticipated Cold Weather Outages
(-)	Other Generation Outages
(+)	Anticipated De-List MW Offered
(+)	Import at Time of Peak
(-)	Projected Peak Load
(-)	Replacement Reserve Requirement
(-)	Required Reserve
(+)	Available Demand Response
=	Projected Surplus or Deficiency