Reliability Review of Permanent and Retirement De-List Bids for the 2023-2024 Capacity Commitment Period

Reliability Committee Meeting

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Topics

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- FCA 14 Permanent and Retirement De-List Bids
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Background

- The submission window for Permanent and Retirement De-List Bids for the fourteenth Forward Capacity Auction (FCA 14), which is associated with the 2023-2024 Capacity Commitment Period, closed on March 15, 2019
- Permanent and Retirement De-List Bids may be subject to a cost review by the Internal Market Monitor (IMM) as well as a transmission operability reliability review by the ISO
- This presentation provides the results of the transmission operability analysis and meets the requirement of Section 7.6.2 of Planning Procedure 10 (PP-10) - Planning Procedure to Support the Forward Capacity Market (FCM) for a Reliability Committee advisory vote

Reliability Review

- In accordance with Section III.13.1.2.3.1.5.1 of the Tariff, during the qualification process the ISO reviews with the Reliability Committee the following de-list bids
  - IMM-accepted Permanent and Retirement De-List Bids with prices at or above the FCA Starting Price
  - Permanent and Retirement De-List Bids for which the Lead Market Participant has opted to have the resource reviewed for reliability

FCA 14 Permanent and Retirement De-List Bids

- A summary of all FCA 14 Permanent and Retirement De-List Bids, aggregated by Load Zone, was posted on the ISO-NE website on March 20, 2019
  - Permanent, approximately 21 MW
  - Retirement, approximately 258 MW
- The Permanent and Retirement De-List Bids with prices at or above the FCA Starting Price or that opted-in for reliability review are listed below in study order

Resource ID	Resource Name	De-List Type	Resource Type	Load Zone	De-List MW	Partial/Full
448	IPSWICH DIESELS	Retirement	Generator	NEMA	9.307	Full
640	YARMOUTH 2	Retirement	Generator	MAINE	48.133	Full
639	YARMOUTH 1	Retirement	Generator	MAINE	50.065	Full
538	PINETREE POWER	*Permanent*	Generator	WCMASS	16.919	Full
407	EASTPORT DIESELS 1-3	Retirement	Generator	MAINE	1.800	Full
812	BEEBE HOLBROOK	Retirement	Generator	WCMA	0.029	Full
834	COMTU FALLS	Retirement	Generator	VERMONT	0.120	Full
1059	BARRE LANDFILL	Retirement	Generator	WCMA	0.462	Full

Transmission Operability Analysis

Overview

- The reliability review for Permanent and Retirement De-List Bids is performed in accordance with Section III.13.2.5.2.5 of the ISO Tariff and PP-10
- The ISO analyzes the thermal, voltage and, if appropriate, the stability impacts of Permanent and Retirement De-List Bids
  - Assumptions for the analysis are specified in Appendix A of PP-10
  - No analysis is required to assess the individual impact of de-list bids less than 5 MW
    - Eastport Diesels 1-3, Beebe Holbrook, Comtu Falls, and Barre Landfill were not reviewed for reliability accordingly
- When addressing a local transmission reliability issue, the capacity associated with the Permanent or Retirement De-List Bid would be deemed needed for reliability

Transmission Operability Analysis

Overview (Cont.)

- ISO System Planning consults with the affected Transmission Owners and ISO System Operations on the results of the analysis
- If the resource is determined to be needed for reliability, then the requesting Lead Market Participant has the option to decline providing the associated capacity for reliability

Transmission Operability Analysis

Assumptions

- Transmission topology as prepared for the 2023-2024 Capacity Commitment Period
- Load modeled at the 2019 CELT 90/10 peak New England Control Area load for summer 2023 including the solar photovoltaic forecast
- All Existing Capacity Resources modeled at their summer Qualified Capacity for the 2023-2024 Capacity Commitment Period
  - Permanent and Retirement De-List Bids below the FCA Starting Price that elected unconditional treatment and did not opt for a reliability review, were assumed to be retired for this analysis
- 20% of peaking generation in the study area assumed unavailable
- One critical resource in the electrical vicinity of the respective de-list bid assumed out-of-service (OOS)

Transmission Operability Analysis

Assumptions (Cont.)

- Demand Resources modeled at their assumed availability factors
  - Active Demand Capacity Resources modeled via a load reduction spread across their respective Dispatch Zones
  - Passive demand resources modeled via a load reduction spread across their respective Load Zones
- The PV forecast was modeled as load reductions across the respective Dispatch Zones

Mystic 8 and 9 Assumption

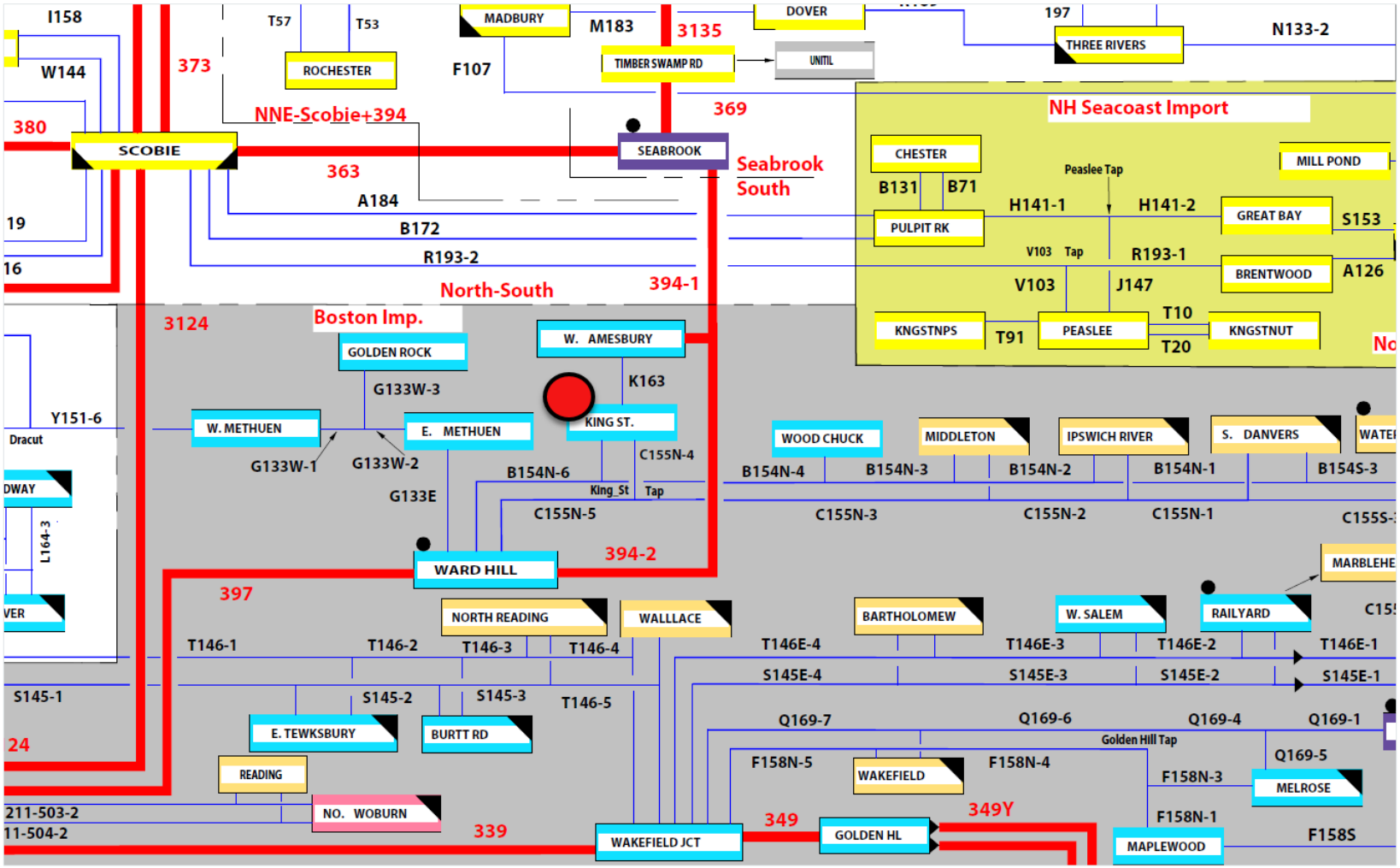
- PP-10 Section 7.2 specifies that "[a]ll Existing Capacity Resources will be modeled at their summer Qualified Capacity for the primary auction of the FCA"
- Since Mystic 8 and 9 have been retained for fuel security for FCA 14 under Section III.13.2.5.2.5A of the Tariff, they were modeled at their respective summer Qualified Capacity in the analysis of all Permanent and Retirement De-List Bids
- Considering that Ipswich was the only resource that could be impacted, ISO-NE analyzed scenarios with Ipswich, Mystic 8 and 9 assumed retired
  - No new violations were observed due the modeled retirement of Mystic 8 and 9 for which Ipswich was needed to maintain local reliability

IPSWICH DIESELS

Retirement De-List Bid

Area One Line Diagram

Ipswich Diesels



Transmission Operability Analysis Results

Ipswich Diesels

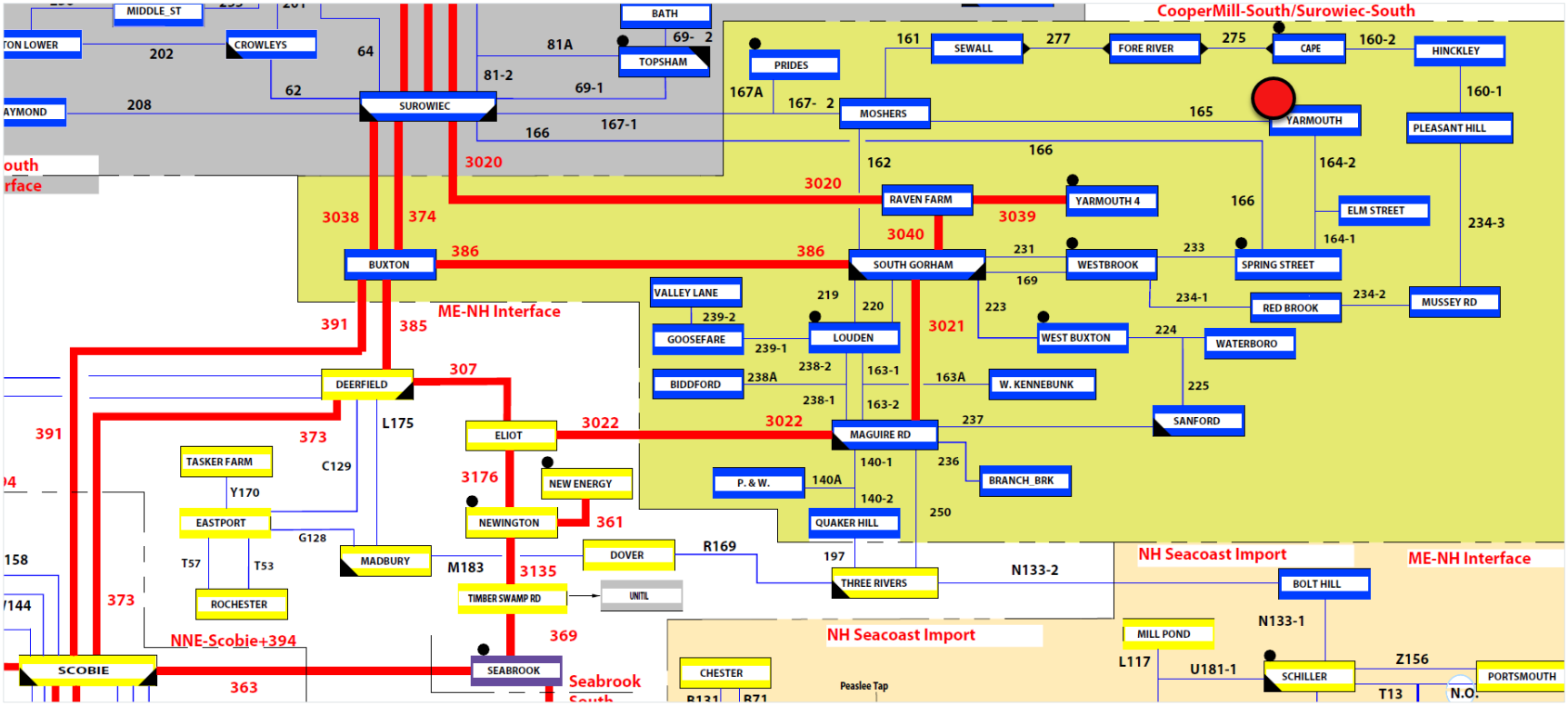
- Voltage Results
  - Results of the N-0, N-1 and N-1-1 voltage analyses indicate that there are no criteria voltage violations in the local study area caused by the retirement of Ipswich Diesels
- Thermal Results
  - Results of the N-0, N-1 and N-1-1 thermal analyses indicate that there are no criteria thermal violations in the local study area caused or worsened by the retirement of Ipswich Diesels

YARMOUTH 1 AND 2

Retirement De-List Bid

Area One Line Diagram

Yarmouth 1 and 2



Transmission Operability Analysis Results

Yarmouth 1 and 2

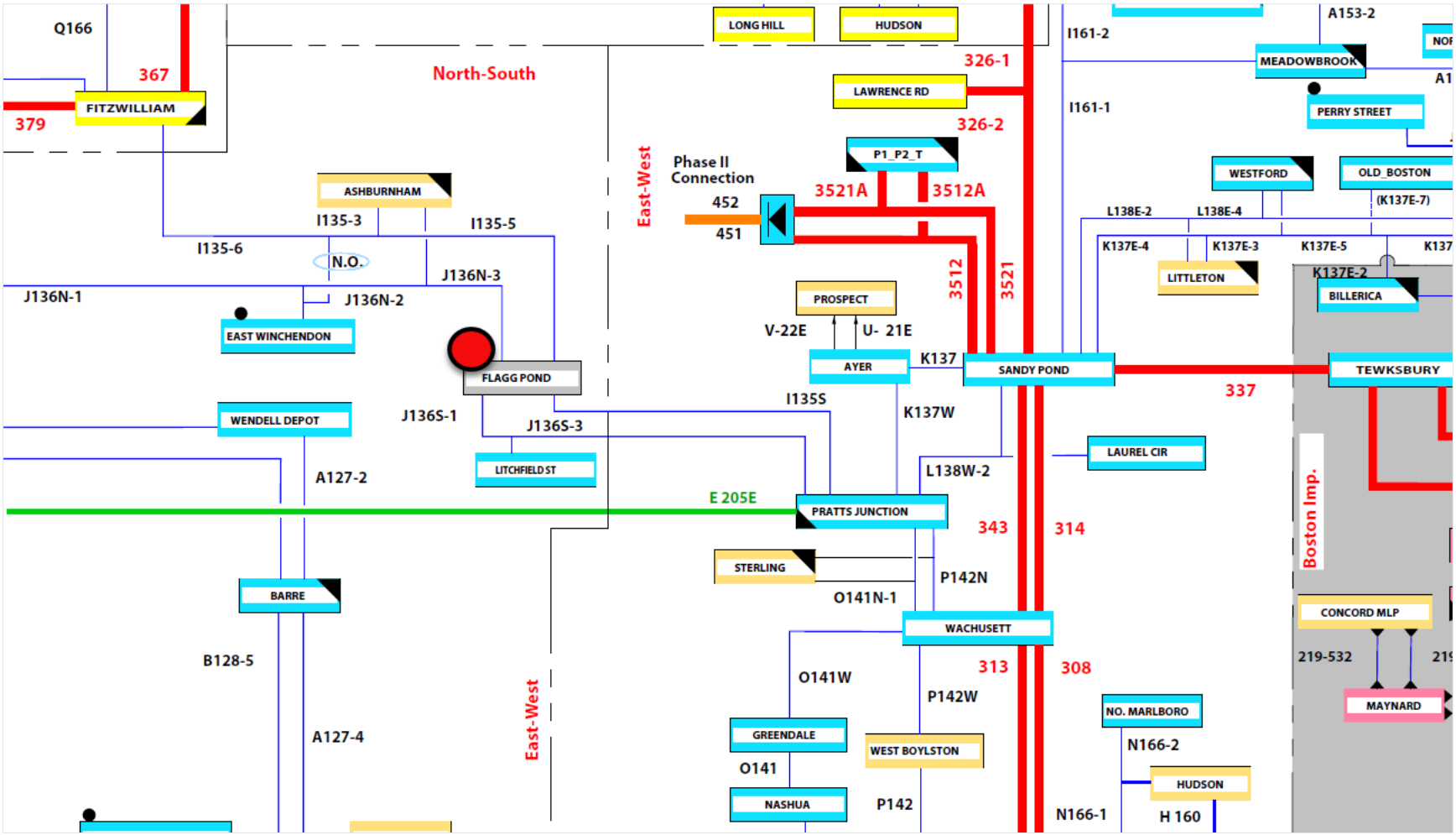
- Voltage Results
  - Results of the N-0, N-1 and N-1-1 voltage analyses indicate that there are no criteria voltage violations in the local study area caused by the retirement of Yarmouth 1 and 2
- Thermal Results
  - Results of the N-0, N-1 and N-1-1 thermal analyses indicate that there are no criteria thermal violations in the local study area caused or worsened by the retirement of Yarmouth 1 and 2

PINETREE POWER

Permanent De-List Bid

Area One Line Diagram

Pinetree Power



Transmission Operability Analysis Results

Pinetree Power

- Voltage Results
  - Results of the N-0, N-1 and N-1-1 voltage analyses indicate that there are no criteria voltage violations in the local study area caused by the retirement of Pinetree Power
- Thermal Results
  - Results of the N-0, N-1 and N-1-1 thermal analyses indicate that there are no criteria thermal violations in the local study area caused or worsened by the retirement of Pinetree Power

Advisory Vote

- Section 7.6.2 of PP-10 states that “the Reliability Committee shall provide formal input and advice to the ISO through an advisory vote regarding the review of
  - Permanent and Retirement De-List Bids at or above the FCA Starting Price
  - Permanent and Retirement De-List Bids where the Participant has opted into a reliability review”
- The ISO is seeking an advisory vote from the Reliability Committee today regarding the reliability review of the four resources presented

Questions