

Updates to the Boston Import and Southeast New England Import Transfer Capabilities for Capacity Commitment Periods 10 and 11



Pradip Vijayan

PVIJAYAN@ISO-NE.COM | 413-540-4655



Objective of this Presentation

- Present updated* transfer capabilities for the Boston Import interface and Southeast New England (SENE) Import interface for Capacity Commitment Periods (CCPs) 10 and 11 (2019-2020 and 2020-2021 respectively)
 - The updated transfer capabilities account for the delay in the Wakefield-Woburn 345 kV Project

*FCA-13 transfer capabilities were presented at the Planning Advisory Committee (PAC) meeting on April 26, 2018:

https://www.iso-ne.com/static-assets/documents/2018/04/a9_fca13_zonal_development.pdf



BACKGROUND



Status of the Wakefield-Woburn Project

- The Wakefield-Woburn Project, which is part of the Greater Boston upgrades, consists of installing:
 - A new 345 kV underground cable between Wakefield and Woburn, approximately 8.5 miles long
 - A 160 MVAR shunt reactor in addition to termination facilities at both Wakefield and Woburn
- The Project was approved by the Massachusetts Electric Facilities Siting Board in February 2018
 - However, this decision has been appealed by two towns to the MA Supreme Judicial Court
- The appeals process, coupled with lengthy local permitting approval processes, has delayed the expected in-service date for the 345 kV underground cable from May 2019 to May 2021
- The expected in-service dates for the shunt reactors are:
 - Wakefield – May 2019
 - Woburn – September 2019



Geographic Map



IMPACT ON TRANSFER CAPABILITIES



Transfer Capabilities

- With the entire Greater Boston project in service, the Boston and SENE Import capabilities will be as follows:
 - Boston Import
 - N-1 = 5,700 MW
 - N-1-1 = 4,600 MW
 - SENE Import
 - N-1 = 5,700 MW
 - N-1-1 = 4,600 MW
- Without the new Wakefield – Woburn 345 kV line, the Boston and SENE Import capabilities are reduced by 300 MW for N-1 and by 100 MW for N-1-1
 - Boston Import
 - N-1 = 5,400 MW
 - N-1-1 = 4,500 MW
 - SENE Import
 - N-1 = 5,400 MW
 - N-1-1 = 4,500 MW
- The transfer capabilities without the Wakefield – Woburn 345 kV line are applicable to the 2019-20 and 2020-21 CCPs



Updated Internal Interface Transfer Capabilities

Single-Value, Summer Peak, ^a Non-Firm, Transmission Interface Limits for Use in Subarea Transportation Models										
Interface	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Orrington South Export	1325	1325	1325	1325	1325	1325	1325	1325	1325	1325
Surowiec South	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Maine-New Hampshire	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Northern New England-Scobie + 394	3100	3450 ^b	3450	3450	3450	3450	3450	3450	3450	3450
North-South	2100	2725 ^b	2725	2725	2725	2725	2725	2725	2725	2725
East-West	3500	3500	3500	3500	3500	3500	3500	3500	3500	3500
West-East	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
Boston Import (N-1)	4850	5400 ^b	5400	5700 ^c	5700	5700	5700	5700	5700	5700
Boston Import (N-1-1)	4175	4500 ^b	4500	4600 ^c	4600	4600	4600	4600	4600	4600
SEMA/RI Export	3400	3400	3400	3400	3400	3400	3400	3400	3400	3400
SEMA/RI Import (N-1)	1280	1280	1280	1280	1280	1280	1280	1280	1280	1280
SEMA/RI Import (N-1-1)	720	720	720	720	720	720	720	720	720	720
Southeast New England Import (N-1)	-	5400 ^b	5400	5700 ^c	5700	5700	5700	5700	5700	5700
Southeast New England Import (N-1-1)	-	4500 ^b	4500	4600 ^c	4600	4600	4600	4600	4600	4600
Connecticut Import (N-1)	2950	2950	3400 ^d	3400	3400	3400	3400	3400	3400	3400
Connecticut Import (N-1-1)	1750	1750	2200 ^d	2200	2200	2200	2200	2200	2200	2200
SW Connecticut Import (N-1)	2500	2500	2500	2800 ^e	2800	2800	2800	2800	2800	2800
SW Connecticut Import (N-1-1)	1750	1750	1750	1900 ^e	1900	1900	1900	1900	1900	1900

Notes are discussed on the following page

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Updated Internal Interface Transfer Capabilities (Notes)

- a) Limits are for the summer period, except where noted to be winter
 - The limits may not include possible simultaneous impacts, and should not be considered as “firm”
 - For the years within the FCM horizon (CCP 2022-2023 and earlier), only accepted certified transmission projects are included when identifying transfer limits
 - For the years beyond the FCM horizon (CCP 2023-2024 and later), proposed plan approved transmission upgrades are included according to their expected in-service dates
- b) Increase associated with the Greater Boston upgrades, without the Wakefield – Woburn 345 kV line (CCPs 2019-2020 and 2020-2021)
- c) Increase associated with the Greater Boston upgrades, with the Wakefield – Woburn 345 kV line in service (CCP 2021-2022 and later)
- d) Increase associated with the Greater Hartford/Central Connecticut upgrades
- e) Increase associated with the Southwest Connecticut upgrades



Next Steps

- The revisions to the transfer capabilities will also be discussed at the September 2018 PAC meeting
- The revisions to the transfer capabilities will be incorporated in the appropriate requirements calculations for the 2019-2020 and 2020-2021 Capacity Commitment Periods



Questions

