

**ISO New England Inc.**  
**2019 Prior Year List of Projects Designated to the PTOs**  
**Attachment K, Section 4.1(j)(iii)**

**Changes from the 2018 list are indicated in red**

Key Study Area	Project ID	Solution Component (Project)	Transmission Owner Responsible for the Project	Need-By-Date	Actual In-service Date
Southeastern Massachusetts and Rhode Island	1714	New Grand Army 115 kV GIS switching station built to BPS standards, remote terminal station work (Brayton Point and Somerset) & loop E-183E, F-184, X3 and W4 lines (associated with RSP 1742) <sup>1</sup>	National Grid	Prior to 2016	TBD <sup>2</sup>
Southeastern Massachusetts and Rhode Island	1742	Remote terminal station work (Wampanoag and Pawtucket 115 kV) for new 115 kV Grand Army GIS switching station to tie the E-183E, F-184, X3 and W4 lines (Associated with RSP 1714)	National Grid	Prior to 2016	TBD
Southeastern Massachusetts and Rhode Island	1715	Upgrades at Brayton Point (new 115 kV breaker, new 345/115 kV transformer and upgrades to E183E, F184 station equipment)	National Grid	Prior to 2016	TBD
Southeastern Massachusetts and Rhode Island	1716	Increase clearances on E-183E & F-184 lines between Brayton Point & Grand Army (~1.5 miles each)	National Grid	Prior to 2016	November 2019
Southeastern Massachusetts and Rhode Island	1717	Separate X3/W4 DCT and reconductor X3, W4 lines between Somerset and Grand Army (~2.7 miles each). Reconfigure Y2 and Z1	National Grid	Prior to 2016	November 2019
Southeastern Massachusetts and Rhode Island	1718	Robinson Ave 115 kV circuit breaker addition and reterminate Q10 line	National Grid	Prior to 2016	TBD
Southeastern Massachusetts and Rhode Island	1719	Install 45.0 MVAR capacitor bank at Berry Street	National Grid	Prior to 2016	TBD
Southeastern Massachusetts and Rhode Island	1720	Separate N12/M13 DCT & reconductor N12 & M13 between Somerset and Bell Rock (~3.5 miles)	National Grid	Prior to 2016	TBD
Southeastern Massachusetts and Rhode Island	1721	Reconfigure Bell Rock to breaker and a half station, split M13 line at Bell Rock and terminate 114 line at Bell Rock. Install new breaker in series with N12/D21 tie breaker, upgrade D21 line switch and install 37.5 MVAR capacitor.	National Grid	Prior to 2016	TBD
Southeastern Massachusetts and Rhode Island	1722	Extend Line 114 - Dartmouth town line (Eversource- NGRID border) to Bell Rock (~4.2 miles)	National Grid	Prior to 2016	TBD

<sup>1</sup> Project names are listed as they appear in the ISO New England Regional System Project List.

<sup>2</sup> "TBD" or "To be determined" indicates that the project has not yet been placed into service.

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Southeastern Massachusetts and Rhode Island	1730	Extend the 115 kV 114 line from Eversource/National Grid border to Industrial Park Tap	Eversource	Prior to 2016	TBD
Southeastern Massachusetts and Rhode Island	1731	Install 35.3 MVAR 115kV capacitors at High Hill Substation #644 and Wing Lane Substation #624	Eversource	Prior to 2016	TBD
Southeastern Massachusetts and Rhode Island	1736	Reconductor the 108 line from Bourne Substation #917 to Horse Pond Tap	Eversource	2016	October 2018
Southeastern Massachusetts and Rhode Island	1723	Reconductor L14 and M13 from Bell Rock to Bates Tap (8.3 miles each)	National Grid	Prior to 2016	TBD
Southeastern Massachusetts and Rhode Island	1735	Replace wave trap on 114 line at Tremont Substation #713	Eversource	Prior to 2016	TBD
Southeastern Massachusetts and Rhode Island	1732	Loop 201-502 line into Medway #65 Substation to form the 201-502N and 201-502S lines	Eversource	Prior to 2016	TBD
Southeastern Massachusetts and Rhode Island	1737	Replace disconnect switches 107A, 107B, 108A and 108B on Line 323 at West Medway Substation #446. Replace 8 line structures with taller structures.	Eversource	2018	TBD
Southeastern Massachusetts and Rhode Island	1728	Build a new Carver to Kingston 115 kV line and Carver terminal	Eversource	2016	TBD
Southeastern Massachusetts and Rhode Island	1729	Install a new bay position at Kingston for Carver line	Eversource	2016	TBD
Southeastern Massachusetts and Rhode Island	1734	Reconductor/Upgrade 112 Line Tremont Substation #713 to Industrial Tap and terminal equipment	Eversource	2016	June 2018
Southeastern Massachusetts and Rhode Island	1726	Separate the 135/122 DCT lines - West Barnstable to Barnstable	Eversource	Prior to 2018 <sup>3</sup>	TBD
Southeastern Massachusetts and Rhode Island	1727	Retire Barnstable SPS	Eversource	Prior to 2018 <sup>3</sup>	TBD

<sup>3</sup> These contingency scenarios in the Cape Cod subarea were non-convergent in at least one study case for projected 2018 system conditions; as such, their Year of Need for the Cape Cod subarea needs were set to coincide with that study year and respective projected New England net load. Since non-converged solutions are an indication of severe system performance concerns, the actual year of need is likely to be before 2018.

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Southeastern Massachusetts and Rhode Island	1725	Build a new Bourne #917 to West Barnstable #921 115 kV line and associated terminal work	Eversource	Prior to 2018 <sup>3</sup>	TBD
Southeastern Massachusetts and Rhode Island	1733	Separate the 325/344 DCT lines - West Medway to West Walpole	Eversource	Prior to 2016	TBD
Southeastern Massachusetts and Rhode Island	1724	Kent County T3 345/115 kV transformer replacement	National Grid	Prior to 2016	TBD
Southeastern Massachusetts and Rhode Island	1741	Rebuild the Middleborough Gas and Electric (MGED) portion of the E1 line from Bridgewater to Middleborough (2.5 miles)	Middleborough Gas and Electric Department	2017	April 2019
Southeastern Massachusetts and Rhode Island	1782	Reconductor the J16S line	National Grid	Prior to 2016	TBD
Southeastern Massachusetts and Rhode Island	1789	West Medway 345 kV Circuit Breaker Upgrades	Eversource	Prior to 2016 <sup>4</sup>	TBD
Southeastern Massachusetts and Rhode Island	1790	Medway 115 kV Circuit Breaker Replacements	Eversource	Prior to 2016 <sup>4</sup>	TBD
Boston	Not yet assigned	Install a 160 MVAR reactor at Golden Hills 345 kV	National Grid	June 2019 <sup>5</sup>	TBD
Boston	Not yet assigned	Install a 115 kV breaker in series with breaker 4 at Mystic to eliminate the breaker failure contingency	Eversource	June 2019 <sup>5</sup>	TBD

<sup>4</sup> These projects to upgrade and replace circuit breakers were identified and developed as a result of the Proposed Plan Application (PPA) studies completed for the Southeastern Massachusetts and Rhode Island (SEMA/RI) projects in April 2018. The SEMA/RI projects increase the available short circuit levels at West Medway and Medway over the current short circuit duties of the breakers there. Since the SEMA/RI projects caused the need to replace the circuit breakers at West Medway and Medway, the need-by-date (NBD) of the circuit breaker projects at West Medway and Medway is the same as the SEMA/RI projects (Prior to 2016).

<sup>5</sup> The needs identified at off peak load levels are deemed to be time-sensitive because the off-peak load levels are possible under current day system conditions. The Need By Date for steady-state needs observed at off peak load levels is defined as the date of publishing the final Needs Assessment report, June 10, 2019. See Section 4.1.4.3 of the Transmission Planning Technical Guide, [https://www.iso-ne.com/static-assets/documents/2017/03/transmission\\_planning\\_technical\\_guide\\_rev6.pdf](https://www.iso-ne.com/static-assets/documents/2017/03/transmission_planning_technical_guide_rev6.pdf).