

LOCAL SYSTEM PLAN 2017

Planning Advisory Committee Meeting

October 18, 2017

Update to Eversource LSP for 2017

- The Eversource Local System Plan (LSP) has been revised to incorporate the latest proposed changes to the Eversource Local transmission system for Connecticut, Massachusetts, and New Hampshire.
- The LSP Project List is a cumulative listing of proposed transmission solutions intended to meet local needs.
- This LSP-2017 supersedes Eversource's LSP-2016.

Purpose of the Local System Plan

Per Attachment K – Local, the LSP:

- Describes projected improvements to Non-PTF (Non-Pool Transmission Facilities) that are needed to maintain system reliability
- Reflects:
 - Local Needs Assessments
 - Public Policy Requirements (State, Federal, or Local)
 - Corresponding transmission system plans and future studies
 - Maps indicating project locations
- Identifies:
 - Local Planning Process
 - Criteria, Data, and Assumptions used in the Local System Planning Process

LSP Communication

- ISO-NE posts the materials on the PAC web page prior to the meeting.
- PAC, Transmission Customers, and other Stakeholders have 30 days after the meeting to provide any written comments for consideration by Eversource.
 - Comments to be directed to

George P. Wegh

Director, System Planning

Eversource

56 Prospect Street

Hartford, CT 06103

Phone: (860) 728-6179

email: george.wegh@eversource.com

LSP Communication (cont.)

- Each PTO (Participating Transmission Owner) is individually responsible for publicly posting and updating the status of its respective LSP and transmission project list on their website in a format similar to the ISO-NE Regional System Plan (RSP) Project List .
- Eversource's project lists are located at:

<https://www.eversource.com/Content/ct-c/about/major-projects-infrastructure/transmission-rates-tariffs-interconnections/ferc-order-890-posting-and-676-e-requirements>

Local System Planning Process

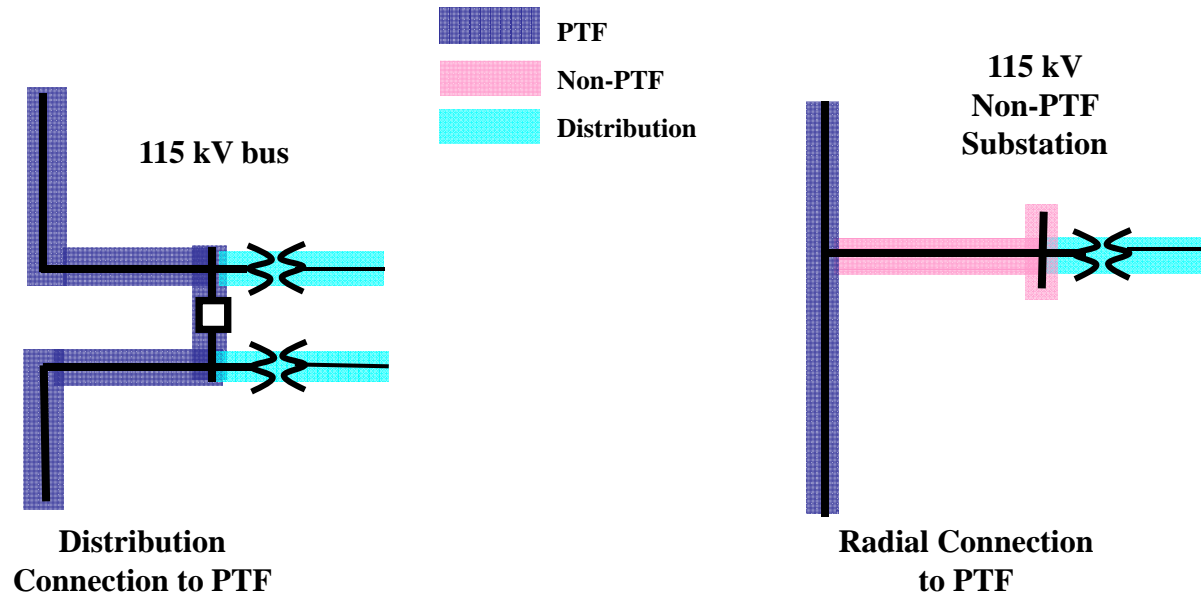
- Local studies can result from:
 - Load growth
 - Area reliability assessments
 - Point of Delivery Requests from customers
 - Public Policy Requirements (State, Federal, or Local)
 - Other efforts that may impact local facilities (*e.g.*, elective transmission upgrades, reliability transmission upgrades, generator interconnections, short circuit or temporary overvoltage studies)
- The Local System Plan:
 - Summarizes the needs
 - Summarizes the selection of preferred solution
 - Includes Local Projects that are related to projects listed in the RSP

Criteria and Assumptions

- All Eversource local transmission facilities (69 kV and above) are part of the interconnected Eversource system and shall be designed in accordance with criteria described in the Eversource transmission reliability guidelines.
- Eversource complies with NERC, NPCC, and ISO-NE planning criteria.
- The annual ISO-NE CELT Report forecasts for the New England area (90/10) load, with appropriate municipal customer forecasts and/or sub-area forecasts, are used.
 - When local area loads peak at times that are different from the ISO-NE System Peak (basis of CELT Report forecast loads), local substation peak loads may be substituted for the ISO-NE CELT forecast loads.
- Studies use the ISO-NE provided base cases and the ISO-NE short circuit database.

This Local System Plan includes the following types of Transmission System connections

(illustrative examples)



- Eversource has distribution connections and radial transmission connections.

NH, MA, and CT Projects in Regional System Plan

Large-scale reliability assessments may ultimately have Local ramifications. Assessment studies are described in the ISO-NE RSP. Several longer-term assessments have been completed, and others are being conducted. Information about studies being conducted that may affect the local system can be found in the ISO-NE 2017 RSP:

- New Hampshire, RSP sections 5.4 and 5.5.7
- Connecticut, RSP sections 5.5.1, 5.5.2, and 5.5.8
- Eastern Massachusetts, RSP sections 5.5.4, and 5.5.5
- Western Massachusetts, RSP section 5.5.3

Public Policy Requirements

- On May 1, 2017, NESCOE communicated its decision not to request that ISO-NE initiate a Public Policy Transmission Study in the current planning cycle and determined that, at this time, there are no State or Federal Public Policy Requirements “driving transmission needs relating to the New England Transmission System.”
- On June 21, 2017, ISO-NE communicated that it reviewed and agreed with NESCOE’s position. ISO-NE also communicated that it was not aware of any local Public Policy Requirements driving the need for transmission and thus will not be conducting a Public Policy Transmission Study.
- On September 18, 2017, Eversource communicated that it has reviewed ISO-NE’s and NESCOE’s responses and determined that there are no Public Policy Requirements identified in the ISO-NE Public Policy Transmission Upgrade process that are potentially driving transmission needs on Eversource’s Non-PTF systems.

See Appendix – Public Policy Statement for details

LSP Project List

- The LSP Project List is a cumulative listing of proposed transmission solutions intended to meet LSP needs.
- The LSP Project List includes the status of each Local Pool Transmission Facility (PTF) project and Non-Pool Transmission Facility (Non-PTF) project. Costs are provided for Proposed, Planned, Under Construction, and In Service categories of projects, using the same guidelines as the various stages of RSP projects. Some projects may have costs yet to be determined.
 - **Concept** - Project is under consideration as a possible solution to a need, for which there is little to no analysis available.
 - **Proposed** – Eversource has determined that the project is an appropriate solution to the need, but a Proposed Plan Application (PPA) is not yet filed.
 - **Planned** - PPA has been filed and approved by ISO-NE.
 - **Under Construction** - Final engineering and internal approvals completed and project being implemented.
 - **In Service** - Project completed.

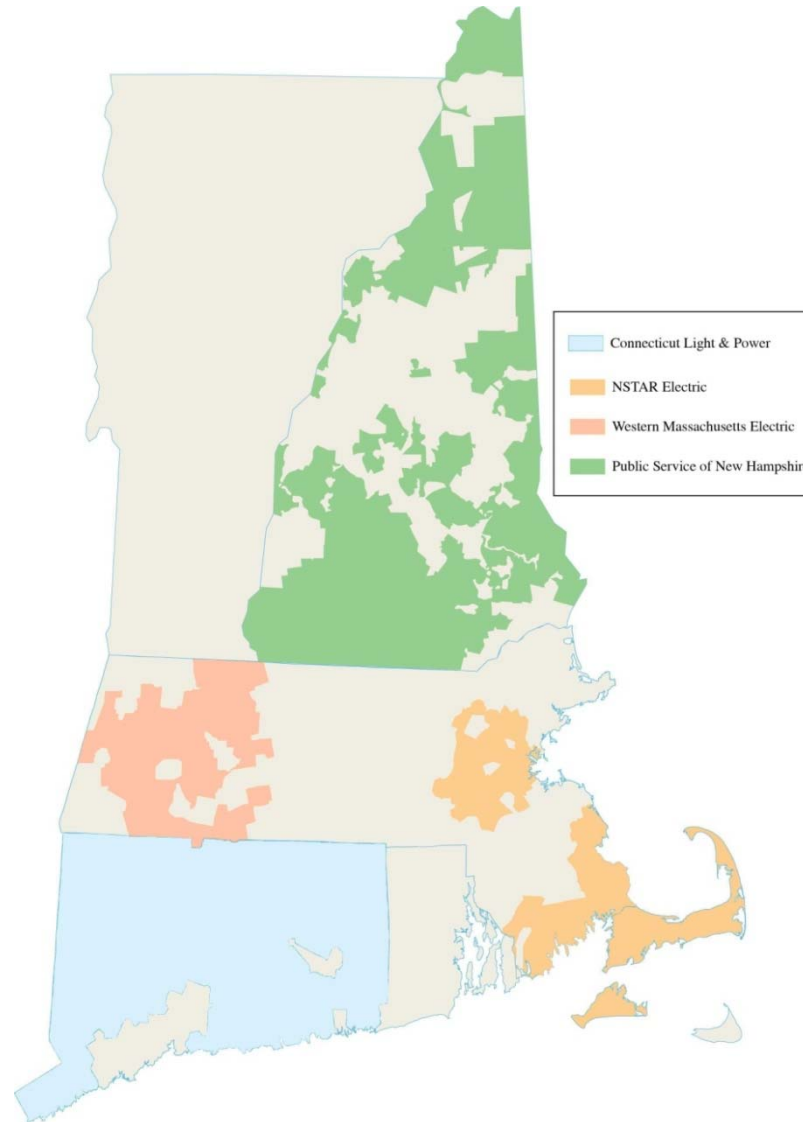
Eversource Service Territories

Eversource operates in three states:

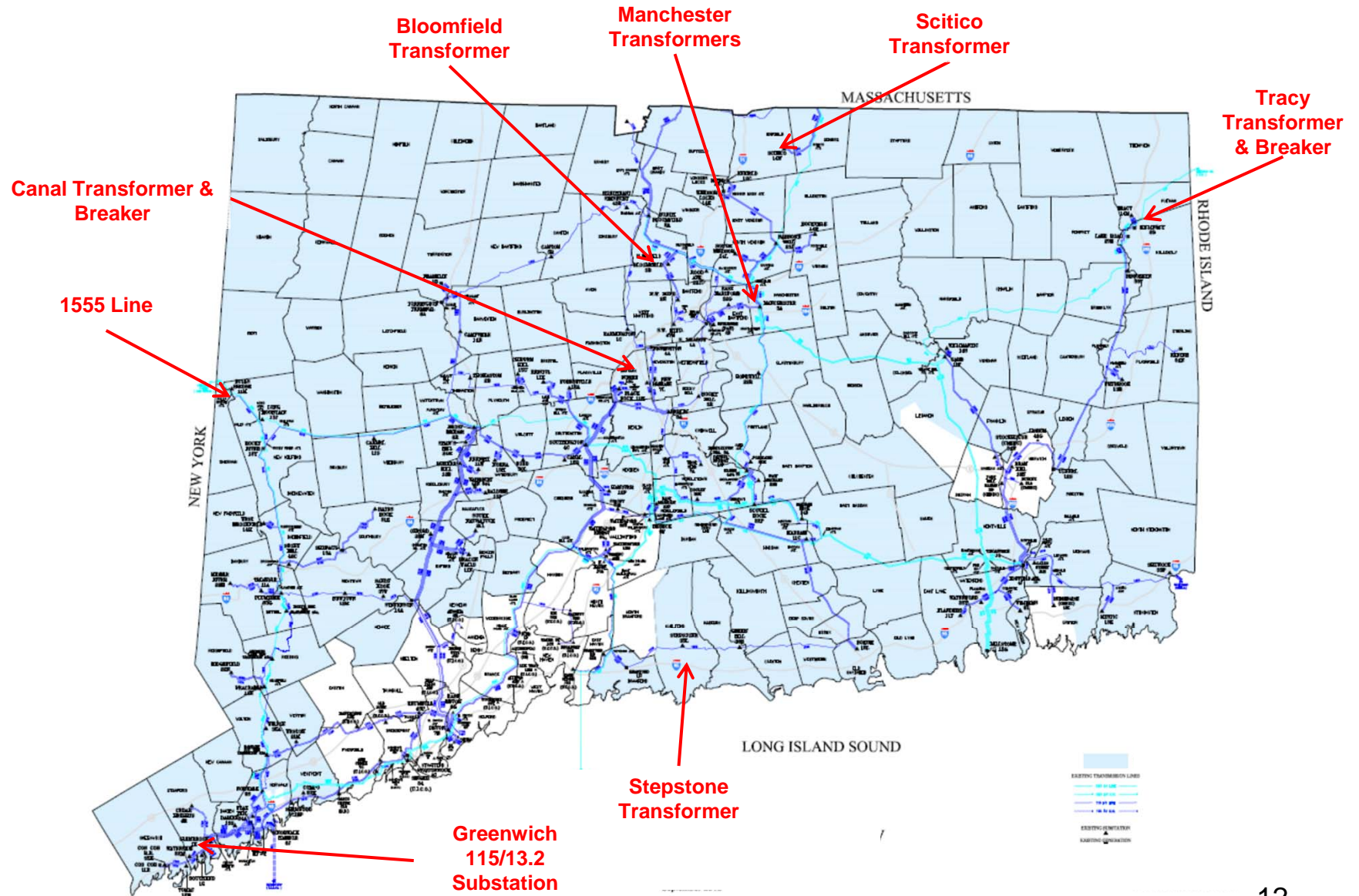
Connecticut

Massachusetts

New Hampshire



Connecticut Projects



Local System Plan – Connecticut

Status of project descriptors in blue have changed from previous LSP or are newly listed

Eversource Local Area Projects - Connecticut					
Need	Projected ISD Month/Year	Project Area	Project	Status	Solutions
Local Reliability	Dec-16	Southwest	Canal substation - add 115/23-kV transformer and add a 115-kV breaker (Southington)	In Service	Add a second 115/23-kV, 47 MVA transformer and a 115-kV breaker
Local Reliability	Dec-16	Greater Hartford	Manchester - replace aging 3A-3X transformer (Manchester)	In Service	Replacement of aging 3A-3X 115/23-kV, 45 MVA transformer with a new 115/23-kV, 60 MVA transformer
Local Reliability	May-17	Eastern	Tracy substation - add 115/23-kV transformer and add two 115-kV circuit breakers (Putnam)	In Service	Expand substation to a full ring bus, including two 115-kV circuit breakers; also adding a third 115/23-kV, 47 MVA transformer.
Local Reliability	May-19 \$18.3M	Northwest	Rocky River to Bulls Bridge 115-kV 1555 Line Rebuild	Planned	Rebuild the entire line with 556 kcmil ACSS conductor.
Local Reliability	Dec-18 \$64.8M	Norwalk/ Stamford	Greenwich 115/13.2-kV Substation Project (Greenwich)	Proposed	Add a new 115/13.2-kV bulk power substation in the Greenwich area with two 60 MVA transformers and one breaker. Also, two new 115-kV circuits from Cos Cob to Greenwich.
Local Reliability	May-18	Greater Hartford	Bloomfield - replace aging 3B-2X transformer (Bloomfield)	Proposed	Replacement of aging 3B-2X 115/23-kV, 45 MVA transformer with a new 115/23-kV, 60 MVA transformer
Local Reliability	2019	Eastern	Stepstone - add second transformer to increase capacity and improve reliability (Guilford)	Proposed	Install a second 115/23-kV, 60 MVA, transformer
Local Reliability	2019	Springfield (MA)	Scitico Substation - add a third transformer to provide additional capacity (Enfield)	Proposed	Add a third 115/23-kV, 60 MVA transformer and one 115-kV circuit breaker

Local System Plan – Connecticut

(continued)

Status of project descriptors in blue have changed from previous LSP or are newly listed

Eversource Local Area Projects - Connecticut					
Need	Projected ISD Month/Year	Project Area	Project	Status	Solutions
Local Reliability	2019	Southwest	Newtown Substation - increase 13.8-kV transformer capacity (Newtown)	Concept	Replace two existing 115/13.8-kV transformers (28 & 30 MVA) with two 115/13.8-kV, 60 MVA transformers.
Local Reliability	2019	Southwest	Sandy Hook substation - Add 2nd transformer (Newtown)	Concept	Add a second transformer (60 MVA) to the substation.
Local Reliability	2019	Southwest	Sasco Creek - Metro North to replace existing 51R-1X and 51R-2X transformers (Westport)	Concept	Replacement of aging 51R-1X and 51R-2X with new 115/27.6-kV transformers.
Local Reliability	2019	Greater Hartford	Newington- replace aging transformers (Newington)	Concept	Replacement of aging 4A-1X and 4A-3X 115/23-kV, 45 MVA transformers with new 115/23-kV, 60 MVA transformer
Local Reliability	2019	Greater Hartford	Rood Avenue - add 2nd 115/23-kV transformer to improve reliability (Windsor)	Concept	Install a 2nd 115/23-kV, 60 MVA, transformer
Local Reliability	2019	Greater Hartford	NE Simsbury - add 2nd 115/23-kV transformer to improve reliability (Simsbury)	Concept	Install a 2nd 115/23-kV, 60 MVA, transformer
Local Reliability	2020	Northwest	Franklin Dr - replace aging 1B-4X and 1B-5X transformers (Torrington)	Concept	Replacement of aging 1B-4X and 1B-5X 115/13.2-kV, 25 MVA transformers with two new 115/13.2-kV, 60 MVA transformers
Local Reliability	2020	Greater Hartford	Westside - replace aging 7A-3X transformer (Middletown)	Concept	Replacement of aging 7A-3X 115/13.2-kV, 41.7 MVA transformer with a new 115/13.2-kV, 60 MVA transformer
Local Reliability	2020	Eastern	Mansfield Phase 1 - create a 23-kV source and eliminate the 27.6-kV source, which will no longer be needed (Mansfield)	Concept	Install the first of two 60 MVA, 115/23-kV transformers and eliminate the single 27.6-kV transformer

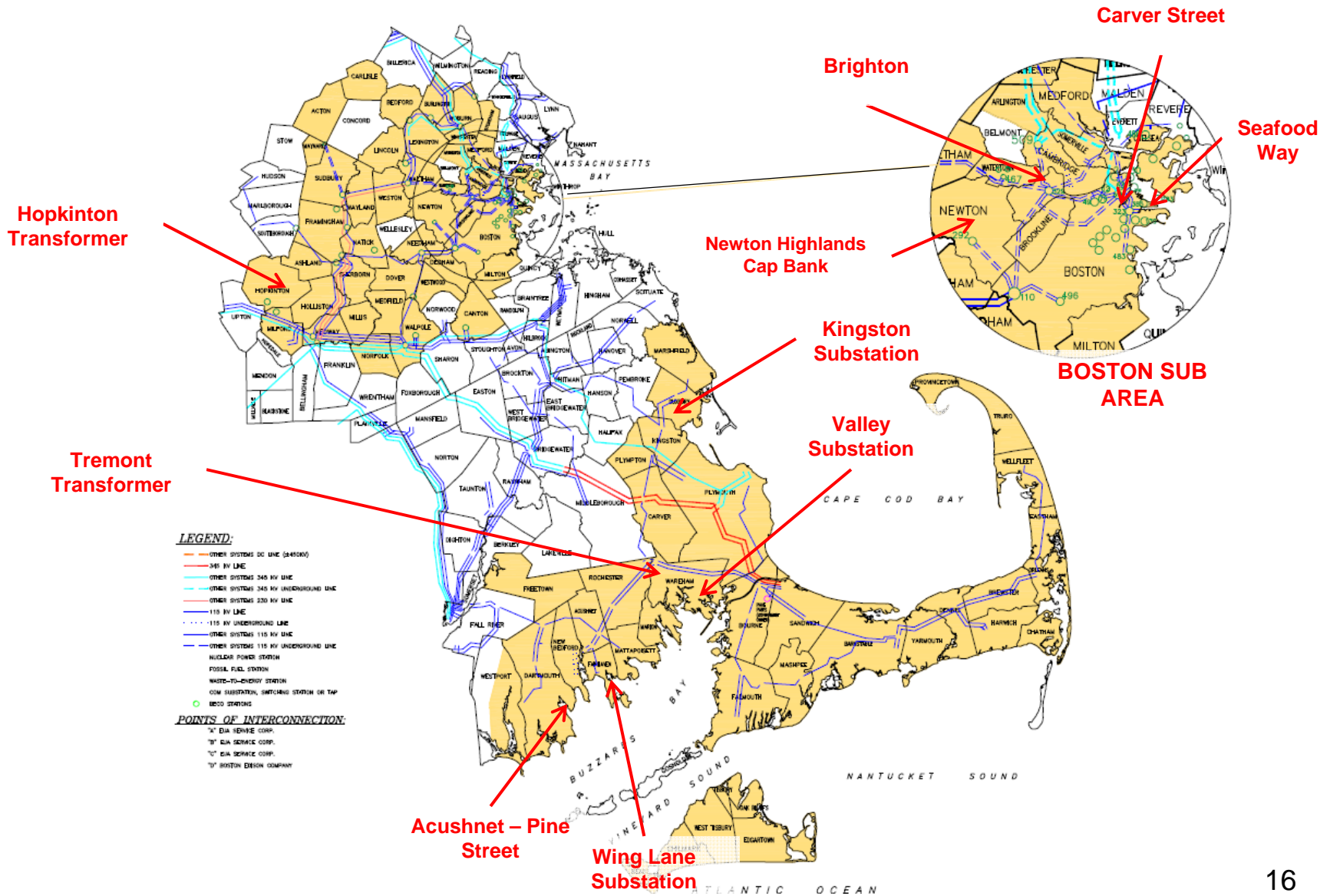
Local System Plan – Connecticut

(continued)

Status of project descriptors in blue have changed from previous LSP or are newly listed

Eversource Local Area Projects - Connecticut					
Need	Projected ISD Month/Year	Project Area	Project	Status	Solutions
Local Reliability	2020	Southwest	West Brookfield increase transformer capacity (Brookfield)	Concept	Add third 115/13.8-kV, 25 MVA transformer or replace existing transformation with larger units
Local Reliability	2020	Northwest	Carmel Hill - add 2nd 115/23-kV transformer to increase capacity and improve reliability (Woodbury)	Concept	Add a second transformer (60 MVA) to the substation.
Local Reliability	2021	Eastern	Mansfield Phase 2 - continue 23-kV source improvements.	Concept	Install the second of two 60 MVA, 115/23-kV transformer and eliminate the single 27.6-kV transformer
Local Reliability	2021	Northwest	Canton - replace aging 5R-2X transformer (Canton)	Concept	Replacement of aging 5R-2X new 115/23-kV, 60 MVA transformer

Eastern Massachusetts Projects



Local System Plan – Eastern Massachusetts



Status of project descriptors in blue have changed from previous LSP or are newly listed

Eversource Local Area Projects - Eastern Massachusetts					
Need	Projected ISD Month/Year	Project Area	Project	Status	Solutions
Local Reliability	Jun-16 \$15.9M	SEMA	Acushnet - Pine St Upgrades	In Service	Add 115-kV breakers and reconfigure both Acushnet and Pine Street Substations.
Local Reliability	Oct-16 \$16M	NEMA/ Boston	Carver St. Station upgrade, Phase 1	In Service	Upgrade Carver St. Station by installing six 115-kV circuit breakers and upgrading the protection and control system.
Local Reliability	Dec-16	NEMA/ Boston	Add a 115-kV capacitor bank at Newton Highlands Substation	In Service	Add 54 Mvar 115-kV capacitor bank at Newton Highlands Substation
Local Reliability	Dec-16	SEMA	Pine St. upgrade	In Service	Add two 9.5 Mvar reactors at Pine St.
Local Reliability	Jun-17	SEMA	Install third transformer at Hopkinton Station 126	In Service	Add 115-kV breaker and third transformer
Local Reliability	Sep-17	SEMA	Valley Substation Upgrade	In Service	Upgrade Valley Substation to 115/23-kV 30/40/50 MVA transformer bank.
Local Reliability	Oct-17 \$7M	SEMA	Wing Lane Substation double-ending	Under Construction	Double-End Wing Lane Substation with 2nd 24/32/40 MVA 115/13.2-kV bank. Reconfigure lateral #112 line to Arsene Street with a ABB Pass MO two-breaker auto throw over scheme.
Local Reliability	Dec-17	SEMA	Tremont Substation - Transformer upgrade	Under Construction	Replacing the #114 transformer with a spare 15/20/25 MVA bank in 2017, large customer load addition.

Local System Plan – Eastern Massachusetts (continued)

Status of project descriptors in blue have changed from previous LSP or are newly listed

Eversource Local Area Projects - Eastern Massachusetts					
Need	Projected ISD Month/Year	Project Area	Project	Status	Solutions
Local Reliability	Dec-18	NEMA	New Seafood Way Substation in South Boston *	Under Construction	New 115-kV GIS substation with three 64 MVA transformers. Substation to become Non-PTF upon completion of the Greater Boston project.
Local Reliability	Nov-18	NEMA/Boston	Brighton Station #329 Replace Transformer	Proposed	Replace the aging 110B transformer with a new 90 MVA 115/14-kV transformer.
Local Reliability	Nov-19	NEMA/Boston	Carver St. Station upgrade, Phase 2	Proposed	Upgrade Carver St. Station. Replace transformers 110A (Fall 2018) and 110B (Fall 2019).
Local Reliability	2020 \$23M	SEMA	Complete Kingston Substation #735 local reliability expansion	Proposed	Mitigate the loss of Marshfield, Duxbury, and Kingston Substations following a failure of the 19152 breaker at Kingston Station.
Local Reliability	2019	SEMA	Rochester Substation - Transformer upgrade	Concept	Replace #114 10/12.5 MVA transformer with 12/16/20 MVA transformer using spare transformer
Local Reliability	2020	SEMA	Wellfleet - Transformer upgrades	Concept	Replace 16/21/26 MVA transformers with 30/40/50 MVA transformers
Local Reliability	2020	SEMA	Fisher Road Supply Upgrade, 115-kV 4.4 miles line from Cross Road to Fisher Road.	Concept	1) Install a 2nd 115-kV transmission line. 2) Construct additional distribution circuit backup.
Local Reliability	2020	SEMA	230/115-kV Autotransformer at Medway Substation	Concept	Add a 230/115-kV Autotransformer at Medway Substation.

* The Seafood Way Substation project is also listed in the Regional System Plan (ID #1739) until completion of Greater Boston projects, at which time the assets become Non-PTF assets.

Local System Plan – Eastern Massachusetts (continued)



Status of project descriptors in blue have changed from previous LSP or are newly listed

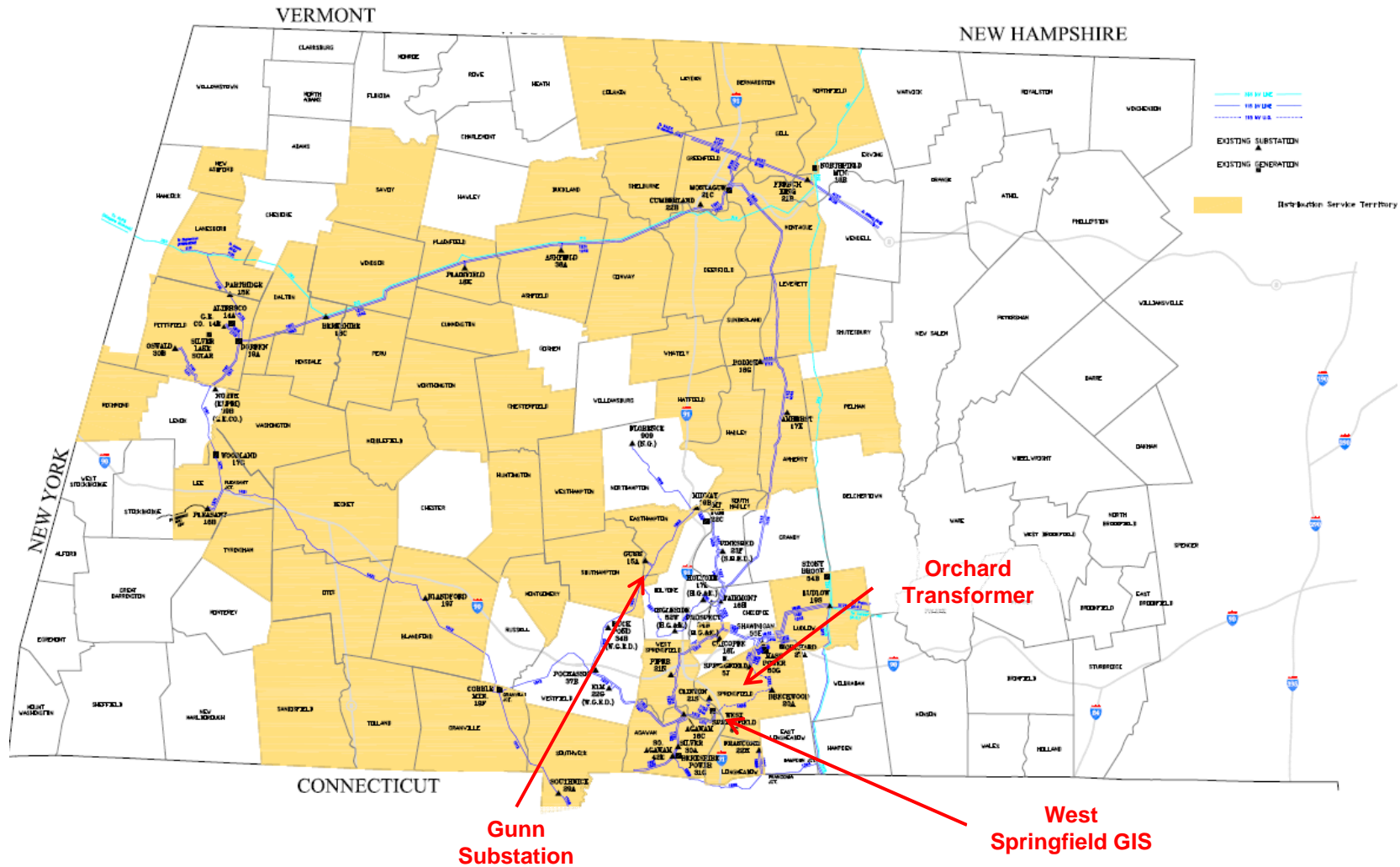
Eversource Local Area Projects - Eastern Massachusetts					
Need	Projected ISD Month/Year	Project Area	Project	Status	Solutions
Local Reliability	2020	SEMA	115-kV line from Orleans to Wellfleet	Concept	1) Install a 2nd 115-kV transmission line. 2) Construct additional distribution circuit backup. 3) Construct 2nd 115-kV line and new substation at Bracket Road
Local Reliability	2020	NEMA	New Substation proposed to improve Amtrak capacity	Concept	New GIS 4 breaker ring bus substation with two new 37/50/65.4 MVA transformers, to be supplied by new transmission line
Local Reliability	2021	SEMA	Falmouth Tap Switching Station Upgrade	Concept	Upgrade Falmouth Tap Switching Station from a 1-breaker series bus arrangement to a 115-kV breaker and a half scheme. Install a 115/23-kV bulk distribution station with one 30/40/50 MVA transformer to address area load growth
Local Reliability	2022	NEMA	New Substation in East Cambridge	Concept	There is significant load growth in the East Cambridge area. This area is presently supplied from East Cambridge Station. In 2017, with the loss of one of the East Cambridge transformers (115/14-kV), East Cambridge Station would exceed its firm capacity. The primary need is to implement necessary upgrades to reliably supply the new load.
Local Reliability	2023	NEMA/ Boston	Carver St. Station upgrade, Phase 3	Concept	Add a 3rd transformer to Carver Station and migrate to a 115-kV breaker and a half arrangement.

Local System Plan – Eastern Massachusetts (continued)

Status of project descriptors in blue have changed from previous LSP or are newly listed

Eversource Local Area Projects - Eastern Massachusetts					
Need	Projected ISD Month/Year	Project Area	Project	Status	Solutions
Load Growth	2020-2023	SEMA	South Coast Rail Project	Concept	MBTA is planning on re-establishing commuter rail service from Boston to both New Bedford and Fall River, and is planning on extending the Amtrak 25x25 kV electrification scheme from Canton Jct. down both branches. MBTA will need 115-kV primary service via a new 115 / 25-kV bulk substation located in New Bedford.
Local Reliability	TBD	NEMA	Maynard - Transformer upgrades	Concept	Upgrade both transformers to 65.4 MVA
Local Reliability	TBD	NEMA	Framingham - Install 3rd Transformer	Concept	Install a 3rd 65.4 MVA transformer
Local Reliability	TBD	NEMA /Boston	Andrew Square to Dewar, new 115-kV Line	Concept	Install new 115-kV transmission line between Andrew Square and Dewar stations to provide alternative source to either station under N-1 contingencies
Local Reliability	n/a	SEMA	Industrial Park Substation - Upgrade Transformers and triple-end Station	Cancelled	Upgrade both transformers to 62.5 MVA, triple-end station with 3rd 37/50/65.4 MVA bank
Local Reliability	n/a	SEMA	2nd 115-kV Line from Duxbury to Marshfield	Cancelled	Install 2nd 115-kV transmission line from Duxbury substation to Marshfield Substation
Local Reliability	n/a	SEMA	Marshfield Substation double-ending	Cancelled	To be constructed with 2nd 115-kV line Duxbury to Marshfield
Local Reliability	n/a	NEMA /Boston	Maynard - Concord Supply Upgrade	Cancelled	1) Install a third cable from Sudbury to Maynard. 2) Install oil return piping and cooling equipment to increase the capacity of the existing cables.

Western Massachusetts Projects



Local System Plan – Western Massachusetts



Status of project descriptors in blue have changed from previous LSP or are newly listed

Eversource Local Area Projects - Western Massachusetts					
Need	Projected ISD Month/Year	Project Area	Project	Status	Solutions
Local Reliability	Nov-16	Springfield	Orchard Substation 3rd transformer (Springfield)	In Service	Install 3rd 115/13.8-kV 30 MVA transformer
Local Reliability	May-17 \$48.0M	Springfield	West Springfield 8C Substation transmission asset replacement (West Springfield)	In Service	Replace existing 115-kV substation with GIS
Local Reliability	2018	Hadley	Gunn Substation transformer upgrade (Easthampton)	Proposed	Replace existing 15A-2X 15/20/25 MVA transformer with a 60 MVA transformer
Local Reliability	2018	Greenfield	Montague Substation transformer upgrade (Montague)	Concept	Replace existing 21C-4X 15/23 MVA transformer with a 60 MVA transformer
Local Reliability	2019	Hadley	Gunn Substation transformer upgrade (Easthampton)	Concept	Replace existing 15A-1X 15/20/25 MVA transformer with a 60 MVA transformer
Local Reliability	2019	Pittsfield	Doreen Substation transformer upgrade (Pittsfield)	Concept	Replace existing 19A-1X 15/20/25 MVA transformer with a 60 MVA transformer
Obsolescence and Reliability	2019	Springfield	Breckwood Substation transformer upgrade (Springfield)	Concept	Replace existing 20A-3X 18/24/30 MVA transformer with a 60 MVA transformer
Local Reliability	2020	Greenfield	Cumberland Substation transformer upgrade (Greenfield)	Concept	Replace existing 22B-2X 18/24/30 MVA transformer with a 60 MVA transformer

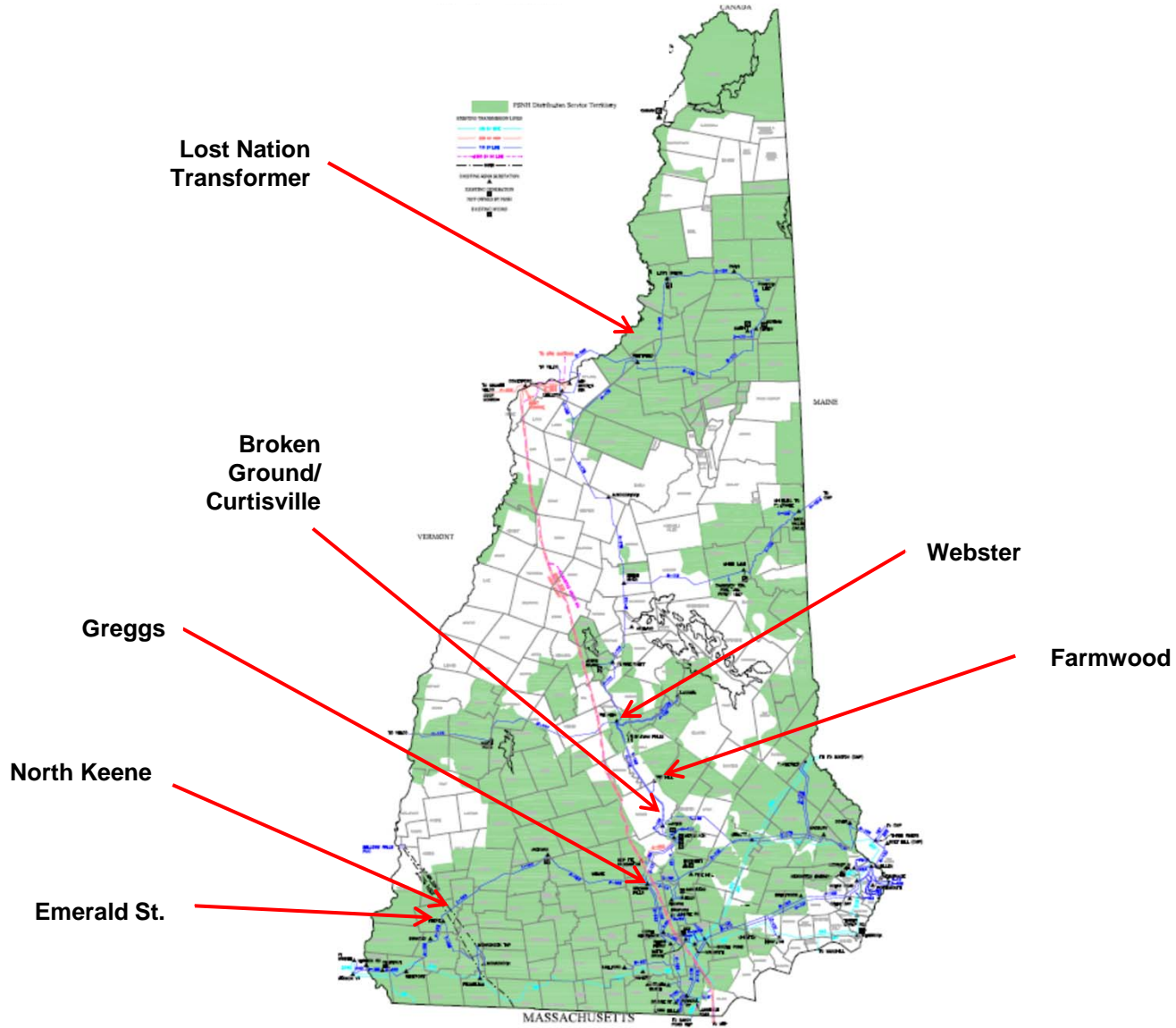
Local System Plan – Western Massachusetts (continued)



Status of project descriptors in blue have changed from previous LSP or are newly listed

Eversource Local Area Projects - Western Massachusetts					
Need	Projected ISD Month/Year	Project Area	Project	Status	Solutions
Obsolescence and Reliability	2020	Springfield	Breckwood Substation transformer upgrade (Springfield)	Concept	Replace existing 20A-2X 18/24/30 MVA transformer with a 60 MVA transformer
Obsolescence and Reliability	2021	Springfield	Clinton Substation transformer upgrade (Springfield)	Concept	Replace existing 21S-1X 18/24/30 MVA transformer with a 60 MVA transformer
Obsolescence and Reliability	2021	Springfield	Breckwood Substation transformer upgrade (Springfield)	Concept	Replace existing 20A-1X 18/24/30 MVA transformer with a 60 MVA transformer
Local Reliability	2022	Greenfield/ Springfield	Fairmont-Montague corridor transmission supply upgrade	Concept	Rebuild transmission lines supplying the Amherst, Tillson, Podick, and Five Corners load pocket. Remove existing Type III Special Protection System.
Obsolescence and Reliability	2022	Springfield	Clinton Substation transformer upgrade (Springfield)	Concept	Replace existing 21S-2X 18/24/30 MVA transformer with a 60 MVA transformer
Obsolescence and Reliability	2022	Springfield	Clinton Substation transformer upgrade (Springfield)	Concept	Replace existing 21S-3X 18/24/30 MVA transformer with a 60 MVA transformer

New Hampshire Projects



Local System Plan – New Hampshire

Status of project descriptors in blue have changed from previous LSP or are newly listed

Eversource Local Area Projects - New Hampshire					
Need	Projected ISD Month/Year	Project Area division	Project	Current Status	Solutions
Local Reliability	Dec-16	Western	Build a new distribution substation in the North Keene area which taps an existing transmission line. (Keene)	In Service	Install a 115/12.47-kV transformer at a new Distribution substation, to be supplied by an existing Transmission line. Distribution infrastructure upgrades will serve local load growth and provide reliability of service.
Local Reliability	May-17 \$12.8M	Central	Build a new Broken Ground/Curtisville Substation (Concord)	In Service	The new Unitol distribution substation (Broken Ground) will be supplied by a new substation, Curtisville, from the existing 115-kV Transmission line C189. The project will offload PSNH's Garvins and Oak Hill substations. Project includes a series breaker at Farnwood: ISD Dec-17.
Local Reliability	Jul-18	Northern	Webster Substation - replace all transformers with two 115/34.5-kV, 44.8 MVA transformers (Franklin)	Under Construction	Replace the existing three 115/34.5-kV, 20 MVA transformers at Webster substation with two 115/34.5-kV, 44.8 MVA transformers.
Local Reliability	Dec-18 \$23M	Central	Add Synchronous Condensers at Farnwood substation. (Concord)	Planned	Add two +25/-12.5 MVAR synchronous condensers at Farnwood Substation.
Local Reliability	Mar-18	Northern	Lost Nation Substation Transformer Addition (Northumberland)	Proposed	Add a second 115/34.5-kV transformer and one 115-kV breaker at Lost Nation substation
Obsolete Equipment/ Reliability	Dec-18	Western	Emerald St. Substation - Rebuild 115/12.47-kV substation with two 30 MVA transformers and associated switchgear. (Keene)	Proposed	Rebuild Keene Substation equipment with two new 30 MVA transformers and associated switchgear. The existing TB3 transformer (22.4 MVA) at Keene will remain.

Local System Plan – New Hampshire (continued)

Status of project descriptors in blue have changed from previous LSP or are newly listed

Eversource Local Area Projects - New Hampshire					
Need	Projected ISD Month/Year	Project Area division	Project	Current Status	Solutions
Obsolete Equipment/Reliability	Dec-18	Central	Retire existing 115/34.5-kV Greggs Substation (Goffstown)	Concept	Remove the 115/34.5-kV transformer and associated 34.5-kV equipment at the existing Greggs substation. The 115-kV substation will remain.
Reliability/Operational	Dec-18	Eastern	Eastport 115-kV Breaker Addition	Concept	Add 115-kV breaker(s) to breaker-and-a-half bus configuration.
Local Reliability	Dec-18	Northern	North Road Breaker Additions	Concept	Replace existing 115-kV Circuit Switchers with 115-kV Breakers
Local Reliability	Dec-18	Northern	Pemigewasset Substation - replace existing 20 MVA transformer with a 44.8 MVA transformer	Concept	Replace 20 MVA transformer with 44.8 MVA to address overload condition.
Obsolete Equipment/Reliability	Dec-19	Eastern	Portsmouth Substation Transformer Addition	Concept	Replace the existing 44.8 MVA transformer with a 62.5 MVA transformer and add a second 62.5 MVA transformer: includes retirement of the Resistance Substation.
Obsolete Equipment/Reliability	2020	Eastern	Dover Substation - Replace existing 44.8 MVA transformers with 62.5 MVA transformers (Dover)	Concept	Replace the existing 115/34.5-kV, 44.8 MVA transformers at Dover substation with new 115/34.5-kV, 62.5 MVA transformers.
Local Reliability	2021	Northern	White Lake Substation - Replace existing 28 MVA transformers with 44.8 MVA transformers (Tamworth)	Concept	Replace both of the existing 115/34.5-kV, 28 MVA transformers at White Lake substation with new 115/34.5-kV, 44.8 MVA transformers.

Local Projects Included in the Regional System Plan

The projects listed below are grandfathered LSP projects listed in the ISO-NE RSP project list. The RSP Project ID is shown in parentheses.

Eversource Local Area Project Listing - Projects in Regional System Plan						
Need	Projected ISD Month/Year	Project Area	Project	Status	Needs Assessment	Solutions
Reliability	Oct-16 \$12.5M PTF	Southern (NH)	New substation to replace the existing distribution Rimmon substation	In Service	115/34.5 kV transformation is needed in the Manchester, New Hampshire area to address thermal loading violations on the existing Rimmon Substation 115/34.5 kV transformer .	Rebuild Rimmon substation and add three 115 kV breakers, install a 2nd 115/34.5 kV transformer and two 115 kV 13.3 Mvar capacitors, connect the Rimmon substation to the J114 line. This project is now a PTF project listed in the ISO-NE RSP project list. (1661)
Load Growth Reliability	Dec-16 \$7.7M PTF	SEMA	Mashpee Substation Double Ending	In Service	Contingency outage of the #115 Falmouth to Barnstable line interrupts 133.9 MW of forecasted peak load and 35 Mvar of reactive support	Double-End Mashpee Substation with 2nd 30/40/50 MVA 115/23-kV transformer bank. Install two 115-kV sectionalizing breakers. This project is associated with a PTF project listed in the ISO-NE RSP project list. (1393).
Reliability	Dec-16 \$10M PTF	Western (NH)	New North Keene 115-kV Substation.	In Service	Needed to relieve potential distribution overloads and short circuit issues in the Keene area of New Hampshire.	Construct a new substation, loop in the L163 line with two 115-kV breakers, install one 115/12.47-kV 30 MVA transformer. This project is now a PTF project listed in the ISO-NE RSP project list. (1660)

Comments

Please provide any written comments for consideration by November 21, 2017 (as defined in the ISO-NE Open Access Transmission Tariff Section II – Attachment K Appendix 1 [Attachment K – Local], section 1.4).

George P. Wegh
Director, System Planning
Eversource
56 Prospect Street
Hartford, CT 06103
Phone: (860) 728-6179
email: george.wegh@eversource.com

*Thank you for participating in the
Eversource LSP Presentation.*

Questions?

Appendix – Public Policy Statement



To: Planning Advisory Committee

From: Eversource, Transmission Planning

Date: September 18, 2017

Subject: Notification re Public Policy Local Transmission Planning

Pursuant to Sections 1.2 and 1.6 of Appendix 1 “Attachment K – Local – Local System Planning Process” of Attachment K of the ISO New England Inc. (“ISO-NE”) Open Access Transmission Tariff (the “OATT”), Eversource Energy Service Company on behalf of its affiliate Participating Transmission Owners, The Connecticut Light and Power Company, NSTAR Electric Company, Public Service Company of New Hampshire and Western Massachusetts Electric Company (“Eversource”) hereby posts this notice and explanation regarding transmission needs driven by Public Policy Requirements (“PPRs”) in Eversource’s Local System Plan (“LSP”).

Section 1.2 requires each PTO to post, not less than every three years, a notice as part of its LSP process indicating that members of the ISO-NE Planning Advisory Committee (“Stakeholders”), New England States Committee on Electricity (“NESCOE”), or any state may provide the PTO with input regarding state and federal Public Policy Requirements identified as driving transmission needs relating to the Non-PTF and regarding particular local transmission needs driven by Public Policy Requirements. The PTO is required to provide a written explanation, to

Public Policy Statement - continued

be posted on the ISO-NE website, of why suggested transmission needs driven by Public Policy Requirements will or will not be evaluated for potential solutions in the LSP planning process. Section 1.6 requires each PTO to evaluate potential transmission solutions on its Non-PTF system that are likely to be both efficient and cost-effective for meeting Public Policy Requirements. Section 1.6A requires the PTOs to review the ISO-NE's Public Policy Transmission Upgrade process and determination regarding the need to proceed with a Public Policy Transmission Study. Eversource has carefully evaluated the input already requested of and provided by the Stakeholders as well as NESCOE regarding Public Policy-driven transmissions needs. On May 1, 2017, NESCOE communicated its decision not to request that ISO-NE initiate a Public Policy Transmission Study in the current planning cycle and determined that, at this time, there are no state or federal Public Policy Requirements "driving transmission needs relating to the New England Transmission System." On June 21, 2017, ISO-NE communicated that it reviewed and agreed with NESCOE's position. ISO-NE also communicated that it was not aware of any local Public Policy Requirements driving the need for transmission and thus will not be conducting a Public Policy Transmission Study. Eversource likewise hereby communicates that it has reviewed ISO-NE's and NESCOE's responses and determined that there are no Public Policy Requirements identified in the ISO-NE Public Policy Transmission Upgrade process that are potentially driving transmission needs on Eversource's Non-PTF systems.

Communications pursuant to this notification must be sent within 30 days to George P. Wegh Director, System Planning, Transmission Eversource 56 Prospect Street Hartford, CT 06103, (860) 728-6179, george.wegh@eversource.com.