COMMONWEALTH OF MASSACHUSETTS ENERGY FACILITIES SITING BOARD

	_)	
In the Matter of the Initial Petition and)	
Application of NSTAR Electric Company d/b/a)	EFSB 22-01
Eversource Energy for a Certificate of)	
Environmental Impact and Public Interest)	
•)	

FINAL DECISION

Donna C. Sharkey, Esq. Presiding Officer November 30, 2022

On the Decision:

Andrew Greene Wayne Wang Joan Foster Evans, Esq.

The Siting Board translates materials into other languages to assist people with limited English proficiency. The Siting Board has reasonably attempted to provide an accurate translation of the original material, but due to the nuances in translating to a foreign language, slight differences may exist. While the Siting Board has provided translated versions, the English version is the official version of the Siting Board's decision.

APPEARANCES:

David S. Rosenzweig, Esq. Catherine J. Keuthen, Esq. Cheryl A. Blaine, Esq. Barry P. Fogel, Esq. Keegan Werlin LLP 99 High Street, Suite 2900 Boston, MA 02110

FOR: NSTAR Electric Company d/b/a Eversource Energy Petitioner

Sander A. Rikleen, Esq. Sherin and Lodgen LLP 101 Federal Street Boston, MA 02110

> FOR: Anne R. Jacobs, Trustee Verhunt Realty Trust Intervenor

Kenneth N. Thayer Esq. Lisa C. Goodheart, Esq. Sugarman, Rogers, Barshak & Cohen, P.C. 101 Merrimac Street Boston, MA 02114

and

Nicholas J. Scobbo, Jr., Esq.
Ferriter Scobbo, Rodophele, P.C.
125 High Street, Suite 2611
Boston MA 02110
FOR: Channel Fish Company, Inc.
Intervenor

Staci Rubin, Esq.
Phelps Turner, Esq.
Anxhela Mile, Esq.
Conservation Law Foundation
62 Summer Street
Boston, MA 02110

FOR: Conservations Law Foundation GreenRoots, Inc.
Intervenor Francis E. O'Brien 43 Mendum Street Boston, MA 02131

and

Gail C. Miller 232 Orient Avenue East Boston, MA 02128

FOR: Boston Residents Group
Pro Se Intervenor

Bruce E. Hopper, Esq. C. David Bragg, Esq. Massachusetts Department of Environmental Protection 1 Winter Street, 3rd Floor Boston, MA 02108

FOR: Massachusetts Department of Environmental Protection Intervenor

State Senator Lydia Edwards, Esq. 186 London St., Apt. 1 Boston, MA 02128 FOR: State Senator Lydia Edwards Intervenor

Robert. S. Arcangeli, Esq. City of Boston Law Department Boston City Hall, Room 615 Boston, MA 02201

FOR: City of Boston
<u>Limited Participant</u>

Manuel Lopez 370 East Eagle Street East Boston, MA 02128

FOR: The 60-Employee Group Limited Participant

Damali Vidot 140 Highland Street #2 Chelsea, MA 02150

FOR: Damali Vidot

Limited Participant

Mary C. Beringer 156 Saint Andrew Road East Boston, MA 02128

> FOR: Mary C. Beringer <u>Limited Participant</u>

Emilio N. Favorito 454 Saratoga Street East Boston, MA 02128

FOR: Emilio N. Favorito
Limited Participant

Gail C. Miller 232 Orient Avenue East Boston, MA 02128

> FOR: Gail C. Miller Limited Participant

John Walkey 63 Putnam Street #1 East Boston, MA 02128

FOR: John Walkey

Limited Participant

Roseann Bongiovanni Executive Director Chelsea Collaborative, Inc. 7 Bell Street Chelsea, MA 02150

FOR: Chelsea Collaborative Limited Participant

Julia Ivy 296 Lexington Street East Boston, MA 02128 FOR: Julia Ivy

Limited Participant

Joseph Aponte 294 Lexington Street East Boston, MA 02128 FOR: Joseph Aponte

Limited Participant

Eric Burkman 294 Lexington Street East Boston, MA

FOR: Eric Burkman
Limited Participant

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Summary of Final Decision

Following the Siting Board's approvals of the Mystic-East Eagle-Chelsea Reliability Project in Eversource 2017, and a 190-foot relocation of the East Boston Substation ("Substation") in Eversource 2021, Eversource requested that the Siting Board grant all state and local approvals (a "Certificate") necessary to construct the Substation. Eversource alleges that the Boston Public Improvement Commission and the Boston Parks and Recreation Department have unduly delayed and inappropriately conditioned necessary permits, thereby prompting Eversource to request a Certificate containing 14 state and local permits and approvals necessary for construction of the Substation. The Final Decision ("Final Decision") approves the requested Certificate to ensure that the Substation can be built to serve an immediate need for additional electric resources to maintain reliable service in the Chelsea/East Boston area.

This proceeding includes an extensive review of the records in the previous two proceedings and new evidence and arguments presented by Eversource, and intervenors Conservation Law Foundation/GreenRoots, the Boston Resident's Group, and the Massachusetts Department of Environmental Protection, on whether the Certificate Request is: (1) supported by a finding of need for the Substation, and justified in comparison with local project alternatives such as energy efficiency, photovoltaic generation, and battery energy storage systems; (2) compatible with environmental protection, public health and public safety considerations; (3) in conformance with state and local laws and that any exemptions are reasonable; (4) consistent with the public interest, convenience and necessity; and (5) consistent with a good faith effort by Eversource to obtain the requested permits from state and local agencies that ordinarily issue these permits. The Final Decision finds that the Certificate request meets all necessary requirements for approval by the Siting Board.

Based on statutory requirements for Certificates, the Siting Board took a fresh look in this proceeding at whether the Substation is needed. The Final Decision finds that under contingency conditions involving the potential loss of a transformer at Chelsea Substation, the Chelsea/East Boston area will have insufficient capacity to serve peak summer loads by 2024, with increasing severity through 2031 and beyond, given anticipated load growth, including the proposed redevelopment of Suffolk Downs in East Boston/Revere. The Siting Board elected to also take a fresh look at alternatives to the Substation and found that none of them, alone or in combination, would meet the energy need in Chelsea/East Boston in a reliable manner, with a minimum impact on the environment, at the lowest possible cost.

The Final Decision reviewed Environmental Justice ("EJ") and language access requirements in recently enacted legislation, regulations, and policies and determined that the Siting Board followed all applicable requirements in reviewing the Certificate Request involving the EJ communities of Chelsea and East Boston. The Final Decision finds that the environmental and energy benefits of the Substation outweigh the burdens, and that the Certificate meets the public need and convenience and recommends that it be granted by the Siting Board, with conditions.

The Massachusetts Energy Facilities Siting Board ("Siting Board" or "Board") hereby grants (1) the Initial Petition, and (2) the Application of NSTAR Electric Company d/b/a Eversource Energy ("Eversource" or "Company") for a Certificate of Environmental Impact and Public Interest to construct a new electric substation on a Company-owned lot in East Boston, Massachusetts (the "East Eagle Substation" or the "Substation").

I. INTRODUCTION

Pursuant to G.L. c. 164, §§ 69K - 69O (the "Certificate Statute") and 980 CMR §§ 6.00 et seq., ¹ Eversource filed with the Siting Board an Initial Petition and Application seeking a Certificate of Environmental Impact and Public Interest (the "Certificate") that would include all state and local permits, approvals, licenses, certificates, and other forms of authorization that are necessary to construct a new electric substation on a Company-owned lot in East Boston previously approved by the Siting Board. The Certificate, appended to this Decision as Exhibit A, has the effect of granting the requested permits and approvals, subject to conditions as discussed herein.²

A. <u>Summary of the Proceeding</u>

1. Project Description/Original Proceeding

On December 1, 2017, the Siting Board issued a final decision approving, with conditions, the petition of Eversource to construct an electric transmission project ("Project") with two primary components: (1) a new 115 kilovolt ("kV") underground transmission line comprised of two segments: an approximately 3.2-mile line from the Company's Mystic Substation in Everett to a Company-owned parcel on East Eagle Street in East Boston ("East Eagle-Mystic Line"), and an

Pursuant to the Siting Board's statutory and regulatory provisions governing certificate requests, any electric, gas, or oil company that proposes to construct or operate a Siting Board-approved jurisdictional energy facility in Massachusetts may seek a certificate from the Siting Board if, inter alia, the applicant is prevented or delayed from building the facility because of an adverse state or local agency permitting decision or undue agency delay. See G.L. c. 164, § 69K; 980 CMR 6.02(2)(b). The certificate, if granted, has the legal effect of granting the permit in question. G.L. c. 164, § 69K.

Record and brief citations are to the record developed in this Certificate Proceeding, unless otherwise noted.

approximately 1.5-mile line from the East Eagle Street parcel to the Company's Chelsea Substation in Chelsea ("East Eagle-Chelsea Line") (together, the "New Lines"); and (2) a new 115/14 kV substation that would be located in the Eagle Hill neighborhood of East Boston. The East Eagle Substation, as originally approved, would have been located on a Company-owned lot at 338 East Eagle Street in East Boston ("Original Site"), a 16,800 square-foot subdivided portion of a larger City of Boston-owned parcel ("City Parcel").

The New Lines would connect at the proposed East Eagle Substation in East Boston, and effectively provide a new transmission link between the Mystic Substation and the Chelsea Substation to serve the Chelsea/East Boston/Lynn Load Area. NSTAR Electric Company d/b/a Eversource Energy, EFSB 14-04/D.P.U. 14-153/14-154, at 3 (2017) ("Eversource 2017") (the Siting Board proceeding in which the Board approved the Project is referred to herein as the "Original Proceeding"). The New Lines would also provide a transmission supply for 3.6 miles of new 14 kV distribution feeders from the East Eagle Substation to serve customers in East Boston. Id. at 34.

One of the conditions the Board imposed on the Project in the Original Proceeding was to require Eversource "to enter into discussions with the City of Boston, focusing on the ability of the Company to relocate the East Eagle Substation on the City Parcel." Eversource 2017 at 91-92, 167.

2. <u>Project Change Proceeding</u>

On November 15, 2018, Eversource submitted to the Siting Board a notice of project change filing ("Project Change Proceeding") in which the Company requested a change to the location of the East Eagle Substation, from the east side to the west side of the City Parcel at 400 Condor Street, a 27,389 square-foot lot, 190 feet to the west of the Original Site ("New Site") (Exh. EV-1, at 6-7). The New Site, like the Original Site, would be located entirely within the City Parcel (id.). The proposed Substation on the New Site would contain the same components as were proposed for the Original Site (id. at 6). However, given that an existing duct bank crossing under Chelsea Creek ("Chelsea Creek Crossing") is located directly beneath the New Site after

The Company has already built the New Lines in Chelsea and Everett, connected them in Chelsea, and they are now in service (Exh. EV-2, at 4).

making landfall, the New Lines would be able to connect directly into the Substation instead of being routed beneath East Eagle Street and Condor Street to the Original Site (<u>id.</u> at 8). On February 26, 2021, the Siting Board approved the relocation of the East Eagle Substation from the Original Site to the New Site, with conditions. <u>NSTAR Electric Company d/b/a Eversource Energy</u>, EFSB 14-04A/D.P.U. 14-153A/14-154A (2021) ("<u>Eversource 2021</u>").

Figure 1: Substation Site Overview.

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Source: Notice of Adjudication and Adjudicatory Hearing.

3. Relief Requested

On February 16, 2022, Eversource filed an Initial Petition and Application with the Siting Board pursuant to the Certificate Statute. In its Application, Eversource argues that the exercise of the Siting Board's certificate authority is necessary because, despite the Company's good-faith efforts, the processing and granting of state and local approvals necessary to construct the Substation have been unduly delayed and inappropriately conditioned (Exh. EV-2 at 1). Eversource seeks a comprehensive Certificate from the Siting Board, representing a composite of

all remaining state and local permits, approvals, licenses, certificates or other forms of authorizations that would otherwise apply to the Project in the Cities of Boston and Chelsea that have been applied for, but have not yet been obtained in final and non-appealable form by Eversource (Exh. EV-2 at 28).

The following permits and approvals requested in the Initial Petition and Application, ordinarily issued by the agencies identified below, are the subject of this Certificate Proceeding:

- 1. **City of Boston Parks and Recreation Department** ("BPRD") (the "Boston Parks and Recreation Approval") An approval for buildings and structures that are constructed or altered within 100 feet of a park or parkway pursuant to Boston Municipal Code Section 7-4.11 (Exh. EV-1, at 12-13);
- 2. **City of Boston Public Improvement Commission** ("PIC") (collectively, with the approvals listed as 3 and 4 below, the "Boston PIC Approvals") An approval of a Condor Street pedestrian easement, which authorizes public access along portions of a sidewalk that extends onto private property (Exhs. EV-1, at 13; EFSB-P-11, at 5);
- 3. **City of Boston PIC** An approval of grants of location for new duct banks, conduits and manholes in a public way (Condor Street, East Eagle Street, Glendon Street, Lexington Street, Shelby Street, and Chelsea Street), which authorize the installation of utility infrastructure in a particular location in a public way (Exhs. EV-1, at 13; EFSB-P-11, at 5);
- 4. **City of Boston PIC** An approval of a Specific Repair Plan for Condor Street, which authorizes work/repair of a public sidewalk including a curb-cut for vehicle access, installation of proposed street trees, relocation of a streetlight and fire hydrants and sidewalk restoration (Exhs. EV-1, at 13; EFSB-P-11, at 5);
- 5. **City of Boston Inspectional Services Department** ("Boston ISD") An approval of a Foundation Permit, which authorizes the construction of building and structure foundations; and a Building Permit, which authorizes the construction of buildings and structures (Exhs. EV-1, at 19-20; EFSB-P-11, at 7);
- 6. **City of Boston Department of Public Works** ("Boston DPW") An approval of a Street Excavation Permit (Condor Street, East Eagle Street, Glendon Street, Lexington Street, Shelby Street, Saratoga Street and Chelsea Street), which allows the Company to open up the street by excavation and to obtain police details for traffic control (Exhs. EV-1, at 21; EFSB-P-11, at 8);
- 7. **Boston DPW** An approval of a Street/Manhole Occupancy Permit (Condor Street, East Eagle Street, Glendon Street, Lexington Street, Shelby Street, and Chelsea Street), which allows for duct bank installation and connection to sewer and storm drains (Exhs. EV-1, at 13; EFSB-P-11, at 8);
- 8. **Boston DPW** An approval of a Sidewalk Occupancy Permit (Condor Street); which allows for duct bank installation and connection to sewer and storm drains within sidewalk areas (Exhs. EV-1, at 21-22; EFSB-P-11, at 8);

9. **City of Boston Water & Sewer Commission** ("BWSC") An approval of a Construction Stormwater Permit, which approves discharge of stormwater from a construction site to waters of the U.S. within the City of Boston (Exhs. EV-1, at 21-22; EFSB-P-11, at 9);

- 10. **BWSC** An approval of a Construction Dewatering Discharge Permit, which approves discharge of groundwater from a construction site to City of Boston infrastructure (Exhs. EV-1, at 21-22; EFSB-P-11, at 8);
- 11. **BWSC** An approval of a General Services Application, which is needed in order to connect water or sewer services to a site (Exhs. EV-1, at 21; EFSB-P-11, at 9);
- 12. **City of Chelsea Department of Public Works** ("Chelsea DPW") An approval of a Street Occupancy Permit (Willow Street), which allows the Company to occupy space in the street for a specific purpose and to obtain police details for traffic control (Exhs. EV-1, at 20-21; EFSB-P-11, at 7);
- 13. **Massachusetts Department of Environmental Protection** ("MassDEP") An approval of a G.L. c. 91 ("Chapter 91") Waterways License pursuant to Chapter 91 and its implementing regulations at 310 CMR 9.00. A Waterways License authorizes structures in filled and flowed tidelands of the Commonwealth (Exhs. EV-1, at 18; EFSB-P-11, at 1); and
- 14. **MassDEP** An approval of a Superseding Order of Conditions ("SOC") under the Massachusetts Wetlands Protection Act ("WPA"), G.L. c. 131, § 40, and 310 CMR 10.00, which authorizes work within jurisdictional wetland resource areas subject to the WPA (Exhs. EV-1, at 18; EFSB-P-11, at 3).⁴

B. Jurisdiction

Eversource filed its Initial Petition and Application for a certificate under G.L. c. 164, §§ 69K - 69O and 980 CMR 6.00 et seq. Pursuant to these provisions, any electric, gas, or oil company that proposes to construct or operate an approved jurisdictional energy facility in Massachusetts may seek a certificate from the Siting Board if the applicant is prevented or delayed from building the facility because of an adverse state or local agency permitting decision or undue agency delay. See G.L. c. 164, § 69K; see also, NSTAR Electric Company d/b/a Eversource Energy, EFSB 18-03, at 3-4 (2019) ("Woburn-Wakefield"); Colonial Gas Company d/b/a National Grid, EFSB 18-05, at 3-4 (2019) ("Sagamore"); Cape Wind Associates, LLC, EFSB 07-8, at 3

Eversource originally requested a Final Order of Conditions ("OOC") under the Boston Wetlands Ordinance, ordinarily issued by the City of Boston Conservation Commission (Exh. EV-2, at 7). On brief, the Company stated that following the exhaustion of all appeal rights in Massachusetts courts, it was withdrawing its request for the OOC (under the Boston Wetlands Ordinance) to be included in the Certificate (Company Brief at 63).

(2009) ("Cape Wind"). The certificate, if granted, has the legal effect of granting the permit in question, and may grant additional project permits as well. See Alliance to Protect Nantucket Sound, Inc. v. Energy Facilities Siting Board, 457 Mass. 663 ("Alliance II"); City Council of Agawam v. Energy Facilities Siting Board, 437 Mass. 821 (2002) ("Agawam"); see also Town of Winchester v. Energy Facilities Siting Board, 98 Mass. App. Ct. 1101 (Appeals Court 2020) ("Winchester").

The Siting Board makes a decision on a certificate application for a facility in accordance with governing law, including: (1) G.L. c. 164, § 69L (which requires that an Application contain certain information and representations); (2) G.L. c. 164, § 69O (which requires the Siting Board to include four specific findings and opinions in its decision on an Application); and (3) G.L. c. 164, § 69H (which requires the Siting Board to implement the energy policies in its statute to provide a reliable energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost).

C. Procedural History of the Certificate Proceeding

On February 16, 2022, the Company filed both an Initial Petition and Application with the Siting Board seeking a Certificate pursuant to G.L. c. 164, §§ 69K - 69O (Exhs. EV-1; EV-2). On February 23, 2022, pursuant to 980 CMR 6.02(4), the Chair of the Siting Board deferred the Board's decision on the Initial Petition for consideration and review concurrently with the Application (see Determination on Initial Petition). The consolidated proceeding, referred to hereafter as the "Certificate Proceeding," was designated as EFSB 22-01.

On March 8, 2022, the Siting Board issued a Notice of Adjudication and Adjudicatory Hearing (the "Notice") announcing that a remote public comment hearing would be conducted on March 30, 2022, and if necessary, resuming on March 31, 2022. The Notice also established April 19, 2022, as the deadline for individuals or organizations seeking to participate in the Certificate Proceeding as an intervenor or limited participant to file a petition with the Siting

The Certificate Statute and the Siting Board regulations require that the Siting Board allow for public comment on a certificate request and conduct an evidentiary hearing, but the Siting Board is not required to conduct a public comment hearing in a certificate proceeding. See G.L. c. 164, § 69M; 980 CMR 6.04; see also Winchester at 3-4.

Board, and also for the submission of written comments on the Company's Initial Petition and Application.

As directed by the Presiding Officer, the Company caused the Notice to be published: (1) in English in the March 16, 2022, edition of the East Boston Times-Free Press; (2) in Spanish in the March 17, 2022, edition of El Mundo; and (3) and in Spanish in the March 18, 2022 edition of El Planeta. See G.L. c. 164, § 69L; 980 CMR 6.03(2). On March 11, 2022, copies of the Notice in English, Spanish, Portuguese, and Arabic were sent by first-class mail to: (1) all owners of property within one quarter mile of the Substation site boundary, including individual owners of residential condominiums, as determined based on the most recent applicable assessor tax lists; and (2) all U.S. Mail addresses within one quarter mile of the Substation site boundary, developed from the City of Boston tax parcel viewer and City of Chelsea Geographic Information System database (together, the "Abutters List") (Exh. EV-4). On March 11, 2022, copies of the Notice in English, Spanish, Portuguese, and Arabic were also sent by the Company by first-class mail to: (1) the service lists for the Original and Project Change Proceedings; (2) each state and local agency with authority over the permits the Company is seeking; (3) the Mayor of the City of Boston, the Chelsea City Manager, the President and all City Councilors in Boston and Chelsea; (4) the Secretary of each Executive Office of the Commonwealth; (5) the Office of the Attorney General; and (6) the Office of the Secretary of State. See G.L. c. 164, § 69L; 980CMR 6.03(2). Copies of the Company's Initial Petition and Application were also provided electronically to these same individuals and entities (Exh. EV-4). The Siting Board separately provided notice to each state and local agency with authority over the permits the Company is seeking in the Certificate Proceeding and community-based organizations..

On March 11, 2022, copies of the Notice in English, Spanish, Portuguese and Arabic and the Certificate filing were hand delivered to the Boston City Clerk's Office, the East Boston Public Library, and the Chelsea Public Library, and on March 14, 2022, to the Chelsea City Clerk's Office, with requests to post the Notice until April 19, 2022, and to make the Initial Petition and Application available for public viewing during regular business hours until the Siting Board issues a Final Decision in this Certificate Proceeding (Exh. EV-4). On March 14, 2022, the

Company also posted the Initial Petition and Application on its website for the Mystic-East Eagle Chelsea Reliability Project (Exh. EV-4).^{6,7}

The Board conducted a remote public comment hearing on March 30, 2022. The public comment hearing included simultaneous interpretation to Spanish. The Siting Board posted recordings of the public comment hearing and the transcript in both English and Spanish to the Siting Board's website and Electronic Fileroom after the hearing. At the public comment hearing, the Siting Board heard comments from State Senator Lydia Edwards, staff to State Representative Adrian Madaro and Massachusetts congresswoman Ayanna Pressley, and the BPRD. The Siting Board also heard from members of community organizations such as the Eagle Hill Civic Association, GreenRoots, the Unitarian Universalist MassAction, Community Action Works, Mutual Aid Network East Boston, East Boston Utility Network, Mass Interfaith Power and Light, and numerous residents in the Project area. Residents who spoke at the hearing raised various concerns regarding: the location of the Substation site in an environmental justice neighborhood; the burdens other existing commercial and industrial facilities impose on the community; skepticism regarding the past forecasts of the need for the Substation; the lack of green space in the area; the need for a cumulative baseline analysis of the existing environmental impacts in the community; the lack of responsiveness by the Company and past local officials to community input regarding the Project; the language services and notice regarding the Project provided by the Siting Board and the Company; a need to explore alternatives to meet the needs of the community; the potential impacts to the environment, public health and safety related to the Project; the need to explore alternative locations that might better meet community concerns; a City of Boston ballot initiative in opposition to the Project; flooding concerns, storm surge and sea-level rise concerns;

See https://www.eversource.com/content/ema-c/residential/about/transmission-distribution/projects/massachusetts-projects/mystic---east-eagle---chelsea-reliability-project.

The Siting Board also maintains a specific webpage for this docket which provides access to key documents including the Initial Petition and Application, notices, the Project description, hearing transcripts and video recordings, key dates in the procedural schedule, a link to the Electronic Fileroom for the Siting Board docket with postings of all materials filed with and by the Siting Board, and links to the two earlier Siting Board Electronic Fileroom dockets for the Project. The webpage can be reached at https://www.mass.gov/info-details/east-eagle-certificate.

construction impacts; street closures; the proximity of the Project location to a local park; and potential safety concerns related to the proximity of fuels storage and use of transformer oil at the Substation. The Siting Board also received numerous written comments on many of the same concerns.

Petitions to intervene in the Certificate Proceeding were filed by State Senator Lydia Edwards, and MassDEP. The Conservation Law Foundation filed a Motion to Change its Status from Limited Participant to Intervenor and its attorneys filed appearances on behalf of GreenRoots an existing intervenor who participated in the Project Change Proceeding (together "CLF/GR"). All of these petitioners were granted full-party status (Ruling on Motions to Intervene and Motion for Limited Participant Status, EFSB 22-01, May 6, 2022). The Boston Residents Group ("BRG") filed a petition to intervene pursuant to G.L. c. 30A, § 10A and 980 CMR 1.05(1)(c), which was granted; however, consistent with G.L. c. 30A, § 10A and the Siting Board's regulations, the scope of issues that may be addressed by BRG is limited to the issue of damage to the environment and the elimination or reduction of such damage as defined in G.L. c. 214, § 7A (id.). The separate petition to intervene of Gail Miller was denied by the Presiding Officer (id.). The request by the City of Boston to participate as a limited participant was granted (id.). In addition, all parties to the Original and Project Change Proceedings automatically maintained the status they were previously granted by the Siting Board (id.).

The Siting Board conducted eight days of evidentiary hearings on May 17, 2022, and on June 13, 15, 17, 21, 22, 23, and 27, 2022. Eversource presented the testimony of the following Company witnesses in support of its filing: Craig Hallstrom, President of Eversource Regional Electric Operations for Connecticut and Massachusetts; Erin Engstrom, Director of Regulatory Affairs; Lavelle Freeman, Director of Distribution System Planning; Juan Martinez, Manager of Distribution System Planning; Daniel Ludwig, Manager of the Sales and Revenue Forecasting Group; Nicole Bowden, Manager, Energy Justice & Strategic Partnerships, Community Relations; Meredith Boericke, Senior Project Manager for Project Services; John Zicko, Director of Capital Projects Engineering; Christopher Newhall, Senior Environmental Specialist; David Petersile, Senior Project Manager, Construction/Design/Build Division at Burns & McDonnell; and Dr. Dwight Dunk, Principal and Co-Manager of the Coastal and Marine Science Practice at Epsilon Associates, Inc.

MassDEP provided pre-filed testimony and presented Christine Hopps, Assistant Director of MassDEP's Waterways Regulation Program. Senator Lydia Edwards, Dr. Elizabeth Stanton, Professor Marcos Luna, Brian Chee, Roseann Bongiovanni, Sandra Aleman-Nijjar, and John Walkey submitted pre-filed testimony and appeared on behalf of CLF/GR. Ben Downing, Dr. Brita Lundberg, Boston City Councilor Ruthzee Louijeune, Penn Loh, Juliana Manitz, Tania del Rio, and Heather O'Brien provided pre-filed testimony on behalf of BRG. Tania del Rio did not appear to adopt her pre-filed testimony or respond to questions during the hearings. The parties agreed that her written testimony would be included as part of the evidentiary record in this proceeding (Tr. 7, at 1269-1271). All other witnesses appeared under oath and were subject to cross-examination. The Siting Board and parties together conducted five rounds of discovery. The Siting Board issued a total of 27 record requests while the intervenors issued a total of nine record requests.

The evidentiary record in the Certificate case includes over 500 exhibits, consisting of the Company's Initial Petition and Application and related attachments, pre-filed testimony of intervenor witnesses, and responses to information and record requests by the Company, intervenors, and certain City of Boston boards, commissions and departments (see Exhibit List dated September 28, 2022). Eversource, CLF/GR, MassDEP, and BRG filed initial briefs on July 22, 2022, and Reply Briefs on August 5, 2022. In addition, Eversource, CLF/GR, MassDEP and BRG all filed supplemental briefs to address certain materials related to the August 31, 2022 Interlocutory Remand Order issued by the MassDEP Commissioner, in In the Matter of Algonquin Gas Transmission LLC, OADR Docket Nos. 2017-011, 012 Waterways License Application No. W16-4600, which were not available until after the reply briefs had been filed.

Siting Board staff prepared a Tentative Decision and distributed it in English and Spanish to the Siting Board members, and all parties and limited participants for review and comment on November 9, 2022. The Siting Board scheduled a remote Board meeting using Zoom videoconferencing for November 29, 2022, and November 30, 2022, if necessary, to receive

BRG briefs were limited to its scope of intervention under G.L. c. 30A, § 10A. MassDEP's briefs addressed issues relating to the Chapter 91 Waterways License.

comments, deliberate, and vote on the Tentative Decision. The Board provided for extensive notice of the meeting, requiring the Company to: (1) translate the Notice into Spanish, Portuguese, and Arabic; (2) publish the Notice in local English and Spanish language newspapers; (3) provide a copy of the Notice in all four languages to all persons on the service list; (4) provide a copy of the Notice in all four languages to all owners of property and all U.S. Mail addresses within one quarter mile of the New Site; and (5) post a copy of the Notice on the Company's website. The Siting Board also posted the Notice and Tentative Decision on its project-specific landing page. The Siting Board received written comments from CLF/Green Roots, the Boston Residents Group, and Eversource on November 18, 2022 on the Tentative Decision. The Siting Board also received written comments from Gail Miller, a limited participant, and from multiple members of the public.

The Siting Board conducted a remote Board meeting on November 29, 2022. At the Board meeting, parties and the public offered comment. The Siting Board provided Spanish interpretation at the Board meeting. At the November 29, 2022 Board meeting, after deliberation, the Siting Board voted to approve the Tentative Decision with conditions, and directed staff to prepare a Final Decision, inclusive of the approved conditions.

II. INITIAL PETITION

A. Standard of Review

To initiate a Certificate Proceeding, an applicant must file an initial petition. G.L. c. 164, § 69K; 980 CMR 6.02. For facilities other than generating facilities, the Certificate Statute provides that the Siting Board shall consider an initial petition if: (1) the applicant asserts at least one of the six grounds for an initial petition set forth in G.L. c. 164, § 69K; and (2) the Siting Board determines that, on the merits, at least one of the asserted grounds constitutes a valid basis for granting the initial petition. G.L. c. 164, § 69K; see Cape Wind at 9-10.

Pursuant to Massachusetts Open Meeting Law, G.L. c. 30A, §§18-25; 980 CMR 2.04(1); St. 2021, c. 20, extended by St. 2022, c. 107, the Siting Board's Notice announced that it would conduct the Siting Board meeting remotely using Zoom videoconferencing, and would provide simultaneous Spanish interpretation.

B. Grounds Asserted by Company for the Granting of the Initial Petition

The Company asserted two grounds as the basis for its Initial Petition: (1) undue delay of indefinite duration by Boston PIC and BPRD; and (2) the subject facility cannot be constructed due to the disapproval, condition, or denial by a local government (Exh. EV-1, at 32-33). The Company claims it experienced four separate and distinct statutory triggering events in that both the Boston PIC and the BPRD had: (a) imposed a burdensome condition per G.L. c. 164, § 69K and 980 CMR 6.02(2)(c) ("a state or local agency has imposed a burdensome condition or limitation on any permit which has a substantial impact on the [Siting Board's] responsibilities as set forth in [G.L. c. 164, § 69H]"); and (b) unduly delayed the grant of the requested approvals per G.L. c. 164, § 69K and 980 CMR 6.02(2)(b) ("the processing or granting by a state or local agency of any approval has been unduly delayed for any reason") (Exh. EV-1, atts. 1 and 2). As required by G.L. c. 164, § 69K and 980 CMR 6.02(2)(b), when asserting that an issuing agency has "unduly delayed" the processing or granting of an approval, the Company sent written notice to the Boston PIC and the BPRD by certified mail on January 14, 2022, providing 30 days' advance notice of the Company's intent to file the Initial Petition if the commissions did not take immediate action to process the Company's applications (Exh. EV-1, atts. 1 and 2).

1. <u>Undue Delay of Indefinite Duration by Boston PIC and Boston Parks and Recreation Department</u>

The Company argues that, despite ongoing attempts by Eversource to advance the Boston PIC review process as diligently as possible and to respond to any inquiries by City agencies, as of the date hereof, approval of the Boston PIC Approvals has not been received, nor is there an identified timeline or list of information sought by the Boston PIC or its participating agencies to initiate the review (Exh. EV-1, at 26-31). According to the Company, the undue delay associated with the Boston PIC Approvals has continued and the likely date for further action is unknown (Exh. EV-1, at 12-18).

Eversource requested three approvals from the PIC, a board within the Boston DPW that reviews certain applications as a prerequisite to the issuance of permits by Boston DPW (Exh. EV-1, at 13; att. 19). The PIC application requests approval for a pedestrian easement associated with proposed improvements to the existing sidewalk abutting the Substation site on Condor Street (Exh. EV-1, at 13). The easement is required to plant certain street trees requested by the City

along a portion of the sidewalk (<u>id.</u>) Because the street trees will reduce the width of the travelled path along the sidewalk, Eversource must provide an easement to the City for the public to pass over the portion of the sidewalk that is on a small portion of Company-owned property (<u>id.</u>).

Second, the Company requested grants of location for approximately 7,000 linear feet of distribution duct bank and 17 manholes to supply the new transmission capacity to be provided from the East Eagle Substation via distribution feeders to customers located in East Boston (Exh. EV-1, at 13). Third, the Company requested approval for a specific repair plan for Condor Street, a plan which includes a curb cut for vehicular access to the Substation site from Condor Street; the installation of proposed street trees; the relocation of one streetlight and fire hydrant; and the restoration of the sidewalk after the above work is complete (Exh. EV-1, at 14).

The Company described the steps in the Boston PIC approval process. Eversource began the PIC approval process on April 1, 2021, by circulating its plans for the Boston PIC Approvals to the PIC and the City agencies and utilities listed on the PIC website (Exh. EV-1, att. 19). On May 26, 2021, the Company filed the PIC petitions ("PIC Petitions") with the PIC along with a request that the petitions be placed on the PIC's New Business agenda (Exh. EV-1, at 14-15). The filing included updated plans, an engineering report, copies of comment letters from all relevant City agencies and utilities, an affirmation from the Company that it had addressed all agency comments received, a draft pedestrian easement and a draft License Maintenance Agreement to be executed in connection with the PIC Petitions (Exh. EV-1, att. 20).

The Boston PIC informed the Company on May 26, 2021, that the Eversource petitions would not be placed on its New Business agenda until written consent was received from the Boston Transportation Department ("BTD") and the Office of Neighborhood Services ("ONS") (Exh. EV-1, att. 21). ONS provided its consent on August 17, 2021, and BTD provided its consent on August 26, 2021 (Exh. EV-1, atts. 22 and 23). After the receipt of those consent documents, the Company's PIC Petitions were placed on the PIC's September 23, 2021, meeting agenda under New Business (Exh. EV-1, atts. 24 and 25). However, on September 22, 2021, the PIC notified the Company that the PIC Petitions would no longer be on the agenda for the next day and would not be included as agenda items until the Company provided the written consents to proceed from three additional City agencies: BWSC, BPRD, and Boston Planning and Development Agency ("BPDA") (Exh. EV-1, att. 24).

BWSC consented to the petitions proceeding to the PIC's New Business agenda (Exh. EV-1, att. 26). The BPDA requested additional copies of the filings and updates on the progress of the Company's community meetings regarding the façade design of the Substation (Exh. EV-1, at 16, att. 29). Correspondence between the Company and the BPDA continued into January 2022 (Exh. EV-1, at 16-17). On January 7, 2022, despite already having provided its consent, BPDA informed the Company that it needed an unspecified amount of additional time to review the PIC Petitions (Exh. EV-1, att. 34). In the subsequent months, the Company stated that despite its efforts the BPDA failed to provide any further updates regarding the status of its review of the Company's PIC Petitions (Exh. EV-1, at 17-18).

In its Initial Petition, Eversource provided a copy of a January 10, 2022 email from the PIC indicating that the PIC Petitions would not be placed on the PIC New Business agenda because ONS, BPDA and then-City Councilor Lydia Edward's office had contacted the PIC, asserting that the Project is "not ready to be considered by the PIC" (Exh. EV-1, atts. 34, 35). In that email, the PIC also requested that the Company provide its most recent plans to these agencies, which the Company provided on January 12, 2022 (Exh. EV-1, att. 28). Eversource noted that the updated plans do not reflect any material changes, and the comments by ONS and BPDA provide no explanation for their reversal of position, i.e., withholding consent for the PIC Petitions to be placed on the PIC New Business agenda (Exh. EV-1, att. 35).

Eversource filed its application with the BPRD on March 5, 2021 (Exh. EV-1, atts. 14 and 15). More than six months later, on October 8, 2021, with no action having been taken on the Boston Parks and Recreation Approval, BPRD notified the Company that the application would not be placed on the BPRD's agenda until all other local, state and federal permits and approvals have been granted (Exh. EV-1, att. 16). Eversource asserts that BPRD has taken no action on the Company's Boston Parks and Recreation Approval since it was filed, which constitutes undue delay triggering the need for a Certificate. See G.L. c. 164, § 69K; 980 CMR § 6.02(2)(b) ("the processing or granting by a state or local agency of any approval has been unduly delayed for any reason"). Therefore, the Company argues that similar to the Boston PIC Approvals, given the lack

of processing of the various City of Boston permits, the BPRD's review continues to be unduly delayed and is of an indefinite duration (Exh. EV-1, at 17-18).¹⁰

2. <u>Subject Facility Cannot Be Constructed Due to the Disapproval, Condition, or Denial by a Local Government</u>

Eversource argues that the condition imposed by the Boston PIC that certain City agencies "consent" to the placing of the Boston PIC Approvals on the Boston PIC New Business agenda is not only the cause of undue delay, it is also a burdensome condition per G.L. c. 164, § 69K; 980 CMR 6.02(2)(e) ("a state or local agency has imposed a burdensome condition or limitation on any permit which has a substantial impact on the [Siting Board's] responsibilities [as set forth in G.L. c. 164, § 69H]"); see also 980 CMR 6.02(2)(f) ("subject facility cannot be constructed due to disapproval, condition, or denial by a local government") (Exh. EV-1, at 29). The Company notes that Boston PIC has yet to act on the Boston PIC Approvals, which together represent three approvals needed to construct the Substation (Exh. EV-1, at 25). In addition, the Company argues that BPRD's requirement that it be the last agency to review and process a required permit or approval is a burdensome condition that has resulted in a stalemate in obtaining the BPRD's approval (Exh. EV-1, at 31). The Company also views as unreasonable BPRD's condition that the Company must obtain all other federal, state and local permits and approvals required for the Substation before BPRD will review and process the Boston Parks and Recreation Approval (Exh. EV-1, at 31 n.18, att. 16).

C. Positions of the Parties

BRG asserts that the Siting Board should grant the Company's Initial Petition based on the appeal of the Chapter 91 Draft Waterways License ("Draft License") (BRG Brief at 3; BRG Reply

Addressing the Company's concerns about undue delay, BRG volunteers that the Company could also validly claim that the appeals filed at MassDEP regarding the Chapter 91 Waterways License also provide a valid basis for the Company's Initial Petition (BRG Brief at 3; BRG Reply Brief at 5 n.3). As Eversource did not rely on any delays related to those appeals as grounds to support its request for a certificate in its Initial Petition to the Siting Board, we do not make any findings regarding those MassDEP appeals of the Company's application for a Chapter 91 license for the Substation as a potential ground for undue delay.

Brief at 3). However, BRG contends that City of Boston permits and approvals have not been denied or unduly delayed, that no burdensome permitting conditions have been imposed, nor non-regulatory elements required of the Company (BRG Reply Brief at 22-23). Referring to the testimony of its witness, City Councilor Ruthzee Louijeune, BRG asserts that it is standard City of Boston practice to withhold consideration on a permit or application when an underlying project approval is subject to litigation, such as the appeal pending in the Siting Board Project Change Proceeding (BRG Reply Brief at 22-23). Although the Company expressed dissatisfaction with the City's responses or non-responses to the Company's several permit applications, BRG contends the Company did not offer credible evidence that City of Boston agencies treated these applications in a materially different or more burdensome way than those requirements it may place on other applicants (BRG Reply Brief at 22-23). 12

The City of Boston, a limited participant in this proceeding, did not file a brief in this proceeding. CLF/GR, although opposed to the Company's request for a Certificate, did not address the grounds asserted by Eversource related to the Siting Board's consideration of the Initial Petition in its briefs.

D. <u>Analysis of the Company's Asserted Grounds for Granting the Initial Petition</u> Section 69K requires the Board to grant an initial petition for a certificate if a proponent "is

prevented from building a facility" due to certain enumerated grounds. The Certificate Statute is also premised on the Siting Board taking prompt action, within six months of an initial petition and application, to remove unwarranted obstacles to construction of a previously approved facility.

See G.L. c. 164, § 690. The Company contends that the actions of the Boston PIC and BPRD are in direct conflict with the statutory scheme created by the Massachusetts General Court, which places the Siting Board in the preeminent role of overseeing and permitting the siting,

On November 4, 2022, the Supreme Judicial Court rendered its decision upholding the Siting Board's approval of the Substation as set forth in <u>Eversource 2021</u>. <u>See GreenRoots</u>, Inc. v. Energy Facilities Siting Board, 490 Mass. 747 (2022).

In support of this argument, BRG attempted to lower expectations by noting that "City of Boston permit review is notoriously arbitrary" and has even been recognized as such by Suffolk Superior Court (BRG Reply Brief at 23, citing Van Buren v. South 22 Boston New Housing, LLC, Suffolk Superior Court No. 02-5467-A, 2005 WL 332815).

construction, and operation of jurisdictional energy facilities in the Commonwealth, and ensuring a reliable supply of energy at the lowest possible cost and with the least environmental impact (Company Brief at 25-26, citing G.L. c. 164, §§ 69G et seq.; Alliance II at 667-679; Box Pond Ass'n v. Energy Facilities Siting Board, 435 Mass. 408, 409-410 (2001); Town of Andover v. Energy Facilities Siting Board, 435 Mass. 377, 378-379 (2001)).

The record demonstrates that the Company has filed for the respective permits with the Boston PIC and BPRD and provided sufficient and timely information on which these agencies could render their respective permit decisions. The delay in processing the Company's applications before the Boston PIC and BPRD has undeniably prevented the construction of the Substation. In addition, the requirements by Boston PIC requiring multiple "consents" before placing the Company's permit requests on its agenda, and BPRD specifying that it must be the last agency to issue an approval, are procedurally burdensome, illogical, and devoid of an opportunity for an applicant to meet the substantive standards required by the agencies. In addition, the Siting Board cannot allow the construction of an approved facility to be delayed while a local agency refuses to act during the pendency of an appeal – such an approach would give a local agency power to effectively stay the Board's decisions, a power that should be reserved to the Supreme Judicial Court which hears appeals of Siting Board decisions. In the Siting Board's view, such practices are unacceptable, particularly as they concern the issuance of permits necessary to ensure the Siting Board's mandate to ensure reliable electric service, at a minimum impact to the environment, and the lowest possible cost is fulfilled. The Siting Board has previously made such findings for the East Boston Substation and continues to do so in this Certificate Decision.

BRG's argument that it is not unusual for the City of Boston to delay consideration of permit applications while litigation is pending is not on point. The Certificate Statute does not require a finding of *discriminatory* delay, but rather a finding of *undue* delay. That undue delay might, in BRG's view, be part and parcel of many City of Boston permitting proceedings does not deprive a proponent of a project approved by the Board of its remedies under the Certificate Statute when one or more of its permit applications are subject to undue delay.

Accordingly, the Siting Board finds that Eversource has raised at least one valid basis for the Board's consideration of the Company's Initial Petition in accordance with G.L. c. 164, § 69K and 980 CMR 6.02(2)(d).

E. Decision on the Initial Petition

The Company asserted in its Initial Petition two grounds on which the Siting Board's grant of an initial petition may be based. The Siting Board has found that Eversource has established at least one substantively valid basis for consideration of the Company's Initial Petition.

Accordingly, the Siting Board grants the Company's Initial Petition.

III. APPLICATION

A. Standard of Review

Pursuant to G.L. c. 164, § 690, any certificate issued must include the Siting Board's findings and opinions with respect to the following: (1) the need for the facility to meet the energy requirements of the applicant's market area taking into account wholesale bulk power or gas sales or purchases or other co-operative arrangements with other utilities and energy policies as adopted by the commonwealth; (2) the compatibility of the facility with considerations of environmental protection, public health, and public safety; (3) the extent to which construction and operation of the facility will fail to conform with existing state and local laws, ordinances, bylaws, rules and regulations and reasonableness of exemptions thereunder, if any, consistent with the implementation of the energy policies contained in the Siting statute to provide a reliable energy supply for the commonwealth with a minimum impact on the environment at the lowest possible cost; and (4) the public interest, convenience and necessity requiring construction and operation of the facility. G.L. c. 164, § 690. See also G.L. c. 164, § 69K; Sagamore at 10; Woburn-Wakefield at 4; see also Exelon West Medway, LLC and Exelon West Medway II, LLC, EFSB 17-01, at 4 (2017) ("Exelon"); Cape Wind at 3. In addition, pursuant to G.L. c. 164, § 69L, the Siting Board reviews the good faith efforts of an applicant to seek necessary approvals for construction and operation of a proposed facility. 980 CMR 6.05.

The Siting Board bases its findings and opinions on both the record developed in the certificate proceeding and the record developed in the underlying Siting Board proceeding in which the Board reviewed and approved the proposed facility. See Woburn-Wakefield at 15; Sagamore at 13-14; Cape Wind at 34; see also G.L. c. 164, §§ 69O, 69O¹/2. In this case, the record includes the record developed in this certificate proceeding, the Original Proceeding, and the Project Change Proceeding. The Siting Board does not relitigate in a certificate proceeding issues already fully and fairly determined in the underlying proceeding(s). Exelon at 12; Woburn-

Wakefield at 15; Sagamore at 13-14; Berkshire Power Development, Inc., EFSB 98-6, at 18-19 (1999) ("Berkshire Power"). However, in order to provide a full review of a previously approved facility, the Siting Board: (1) reviews the decision(s) from the underlying Siting Board proceeding(s); and (2) determines the extent to which new information has been developed or the circumstances of a project may have changed in the intervening period. See, e.g., Woburn-Wakefield at 15; Cape Wind at 13. Additionally, in certificate cases where the applicant is challenging an adverse agency permitting decision, the Siting Board verifies that the issues raised by the agency have been addressed in a comprehensive manner by the Siting Board, either in its review of the facility under G.L. c. 164, § 69J or in its review under G.L. c. 164, § 69K. See G.L. c. 164, § 69O; Exelon at 12; Cape Wind at 13. Finally, an applicant must demonstrate that it met the requirement in G.L. c. 164, § 69L to make a "good faith effort" to obtain the permits the applicant seeks to include in the certificate. 980 CMR 6.05.

B. Scope and Timing of This Certificate Proceeding

As presented above, the Siting Board reviews a request for a certificate in the four grounds as set forth in G.L. c. 164, § 69O. The Siting Board does not relitigate the issues presented in the underlying Siting Board approval of a project but does address new information presented or whether the circumstances of a project may have changed in the intervening period. See Woburn-Wakefield at 35; Exelon at 16; Footprint Power Salem Harbor Development LP, EFSB 13-1, at 26 (2014) ("Footprint Power"); Berkshire Power at 18-19.

1. Need and Project Alternatives

G.L. c. 164, § 69O requires that the Siting Board make a finding that a facility is needed to meet the energy requirements of an applicant's market area. The Siting Board made such a finding in the Original Proceeding. See Eversource 2017 at 28-29. In the Project Change Proceeding, the Siting Board indicated that need was outside the scope of the proceeding as the project change did not affect the need for the Project. Eversource 2021 at 14-15. GreenRoots filed a Motion to Reopen the Original Proceeding to allow introduction of evidence on need, which the Siting Board denied. Eversource 2021 at 32. In this Certificate Proceeding, the Siting Board is required to make a finding on need and took new evidence to make the necessary statutory finding. See Section III.C.

The Board also includes an examination of new evidence on whether project alternatives, in the form of non-transmission alternatives ("NTAs"), could meet the need based on the new evidence in this Certificate Proceeding. The evaluation of NTAs as a project alternative is appropriate, but not statutorily required, in a case such as this where the adjudication of need involves a review that inherently encompasses NTA technologies such as energy efficiency, photovoltaics, demand response and energy storage as part of load forecasting.

2. Other Site Locations

BRG seeks the Siting Board's consideration of alternative sites for the Substation, including a Massport site at Logan Airport (BRG Brief at 23). BRG argues that, to the extent that need for a substation in East Boston is driven by electricity demand associated with Logan Airport and airport-serving facilities located elsewhere in East Boston, locating a new substation at the proposed East Eagle location is an adverse environmental impact and an adverse environmental justice impact, that merits enhanced analyses under the Roadmap Act¹³ and the Commonwealth's environmental justice policies (BRG Brief at 20; BRG Reply Brief at 17, 25-26). ¹⁴

CLF/GR asserts that, because the Roadmap Act "contemplates the consideration of alternative siting locations at any time," and Massport's Logan Airport is a significant portion of the Chelsea Substation load, "consideration of sites closer to Massport property" is warranted (CLF/BR Brief at 40-41). CLF/GR also argues that the Siting Board failed to adequately consider alternative locations outside the East Eagle neighborhood in its underlying review in Eversource

An Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy. St. 2021, c. 8 ("Roadmap Act").

CLF/GR and BRG also make requests to the Siting Board to conduct further review focused on expanding the record to include materials related to the MassDEP Chapter 91 Draft License; a review of the regulatory standards of all permits requested; an assessment of the cumulative burdens of the Project on the community; a land-use analysis comparing the impacts of the Project to other potential uses for the site; and an enhanced environmental impact assessment in light of the proximity of the site to environmental justice populations. The Siting Board addresses requirements regarding the Chapter 91 Waterways License in Section III.F.1, and the Roadmap Act and environmental justice in Section III.F.2.

<u>2017</u>, and should consider alternative inland locations as part of the review of the Draft License issued by MassDEP (CLF/GR Brief at 40, 48; CLF/GR Reply Brief at 8, 14).

Eversource disagrees with CLF/GR's and BRG's arguments that the Siting Board should consider alternative sites for the Substation in this proceeding (Company Reply Brief at 41-42). The Company contends that in its prior approvals, the Siting Board found that the Substation would be sited at a location that ensures a reliable supply of electricity with a minimum impact on the environment and at the lowest possible cost (Company Reply Brief at 41, citing Eversource 2017 at 75-76; Eversource 2021 at 92-93). Eversource also notes that the Siting Board found, as part of the Company's site-selection process, the Company had not overlooked any alternative siting locations that would be clearly superior (Company Reply Brief at 41). In addition, the Company contends that from an electrical perspective, the Substation site is ideally located for construction of a Substation because it is adjacent to both the Chelsea Creek Crossing, where the Substation would interconnect with the existing transmission system, and to the East Boston load area that the Substation would directly serve (Company Reply Brief at 41, citing Exh. CLF-GR-G-23). According to Eversource, no other available parcel of land possesses these basic features (Company Reply Brief at 41). Eversource concludes that there are no available, superior sites in East Boston area to serve the identified need (Company Reply Brief at 41).

In response to BRG's and CLF/GR's call for an East Boston alternative substation location closer to or on Massport property, Eversource argues that a Massport alternative is not feasible (Company Reply Brief at 42). The Company states that Eversource must own or have rights to the land upon which its substations are constructed and operated and Massport has indicated that it is not agreeable to making land available for an Eversource substation (Company Reply Brief at 42, citing Exh. CLF-GR-G-23, at 2).

The logic underlying the Board's exercise of discretion in addressing NTAs as a project alternative in this proceeding does not extend to re-considering alternative sites for the Substation. The examination of a location for the Substation was fully and fairly adjudicated in the Original Proceeding, modified slightly in the Project Change Proceeding, and is unaffected by either the statutorily required review of need, or the discretionary review of NTAs being conducted in this proceeding. It is clear that a review of alternative locations for the Substation is outside the scope of our certificate process. A certificate, by statute, reviews the potential grant of permits for a project which already has secured approval from the Siting Board at a specific site, and is

grounded in the earlier review and findings made by the Siting Board for the construction and operation of a proposed energy facility at that site. Consideration of alternative sites for a proposed energy facility is not appropriate in considering the grant of state and local permits for a specific project design at a given location.

3. <u>Timing of Certificate Decision</u>

G.L. c. 164, § 69O requires that the Siting Board render a decision on a certificate petition "as expeditiously as possible but in no event later than six months from the date of the filing of the petition for a certificate..." The Siting Board notes that Eversource filed its Initial Petition and Application on February 16, 2022, more than six months ago. Although more than six months has elapsed, the Siting Board appreciates the urgency reflected in the statutory timeframe and has endeavored to adhere as closely as possible to this statutory directive.

CLF/GR and BRG argue that the Board should delay its decision in this Certificate Proceeding for various reasons until further actions and additional proceedings can be held. The Company urges the Siting Board to expeditiously exercise its authority pursuant to G.L. c. 164, § 69K and 980 CMR 6.00 et seq., to approve the Initial Petition and Application and grant a composite Certificate (Company Brief at 8).

BRG argues that the Siting Board should delay issuing the Certificate until the Board takes the following actions: (1) issue a separate Tentative Decision on the threshold question of whether the Substation is or is not a water-dependent use; (2) conduct enhanced analysis of the Draft License and all other requested Certificate elements; and (3) require the Company to develop contingency plans for providing reliable electric service to East Boston, both with and without the Substation (BRG Brief at 3-4).

First, CLF/GR argues that the Siting Board should not rule in this proceeding until the designated environmental seat on the Siting Board is filled and the new member is able to participate in deliberations on this environmental matter (CLF/GR Brief at 7). Second, CLF/GR asserts the Siting Board should wait for a complete investigation of the incident at the Eversource Newton Substation before rendering a Tentative Decision on the East Boston Substation to address safety concerns regarding substation operations during emergency situations (CLF/GR Brief

¹⁵ The Siting Board notes that the environmental seat on the Siting Board has been filled.

at 7). ¹⁶ Third, CLF/GR urges the Siting Board to wait for a resolution by MassDEP regarding the classification and regulatory treatment related to the Draft License for the Algonquin compressor station (CLF/GR Brief at 7-8). Finally, CLF/GR advises the Siting Board to delay issuing a decision until the Siting Board issues its environmental justice strategy ("EJ Strategy") (CLF/GR Brief at 8).

In Eversource 2017, the Siting Board found that the Substation was needed to maintain a reliable supply of electricity in the Chelsea/East Boston/Lynn Load Area. Eversource 2017 at 28-29. In Eversource 2021, the Siting Board found that the Substation remains needed for reliability purposes in serving the Chelsea/East Boston load area. Eversource 2021 at 24-25. As discussed below, the Siting Board finds that the Substation is needed immediately to ensure reliable service in East Boston. See Section III.C.4. The Siting Board is also aware of the statutory obligation to conclude a certificate proceeding expeditiously, as evidenced by the Legislature's direction to issue a decision within six months. ¹⁷ G.L. c. 164, § 69O; 980 CMR 6.05. Indeed, those facilities that come to the Siting Board for a certificate must have already been approved in a petition to construct proceeding.

Given the Legislature's clear intent that the Siting Board issue a certificate decision in six months, and the fact that the Siting Board finds that the Substation is needed immediately for reliability, the Siting Board declines to delay the resolution of this proceeding.

C. <u>Need for the Facility</u>

1. Certificate Requirements

Pursuant to G. L. c. 164, § 69O, the Siting Board must make a finding with respect to the need for the facility to meet the energy requirements of the applicant's market area, taking into account wholesale bulk power or gas sales or purchases or other cooperative arrangements with other utilities and energy policies as adopted by the Commonwealth. In addition, the Siting Board's regulations specify that an application for a certificate shall contain information relating to

See Section III.E.3 for further discussions about the incident at the Newton Substation.

Compare G.L. c. 164, § 69J, requiring the Siting Board to render a decision in twelve months. The Supreme Judicial Court has construed such language to be directory in nature. Box Pond Ass'n v. EFSB, 435 Mass 408, 415, n.7 (2001).

the company's long-range forecast and other evidence of need. See 980 CMR 6.03(3)(a), (b), (c), and (o). 18

2. Company Filing and Additional Record Evidence on Need

In <u>Eversource 2017</u>, the Siting Board found that the existing Chelsea Substation, serving Chelsea and East Boston, has capacity constraints and poses a significant risk of load-shedding. Therefore, additional energy resources are necessary to maintain a reliable supply of electricity to the area. <u>Eversource 2017</u> at 28-29. In <u>Eversource 2021</u>, the Siting Board declined to reopen the record on whether the Substation was needed, as its prior need finding was not affected by moving the Substation 190 feet to the west, and the issue of need was fully and fairly determined in the Original Proceeding. <u>Eversource 2021</u> at 20-28.

While acknowledging that statutory and regulatory provisions for issuance of a certificate require the Siting Board to establish need for the Facility, the Company stated that relitigating need for the Project in this proceeding is not required based on applicable legal precedent (Exh. EV-2 at 15; Company Brief at 41, citing Alliance II, 457 Mass. at 694 n.42, and Berkshire, EFSB 98-6, at 18). The Company maintains that this issue was fully and fairly determined in Eversource 2017 (and confirmed in Eversource 2021) by evaluating the need for the Substation to meet reliability, economic efficiency, and environmental objectives (Exh. EV-2, at 21). Nevertheless, the Company stated that, for avoidance of doubt, it provided information in its Application from its annual assessment of the adequacy of the transmission and distribution system for the load area served by the existing Chelsea Substation, specifically a 10-year peak load forecast for the 2021 –

However, pursuant to Chapter 164 of the Acts of 1997 and the Department's Order in D.T.E. 98-84A, Massachusetts electric companies are now exempt from the requirements of G.L. c. 164, § 69I. New England Power Company d/b/a National Grid, EFSB 13-2/D.P.U. 13-151/13-152, at 6, n.4 (2014); Order Exempting Electric Companies From Any and All of the Provisions of G.L. c. 164, § 69I, D.T.E. 98-84/EFSB 98-5, at 5 (2003). Thus, the Siting Board no longer considers whether the proposed transmission facilities are consistent with a recently approved long-range forecast.

2030 period (Exh. EV-2, at 17-18). ¹⁹ During discovery and evidentiary hearings, the Siting Board and parties sought and examined additional information pertaining to need.

In its summary of the Siting Board's prior findings, the Company noted that the need for the East Eagle Substation was first identified in Eversource 2017, which determined that the Substation is an integral part of the Project, and needed for the Company to maintain reliable electric service to its customers and to support future load growth in the East Boston and Chelsea areas served by the Substation (Exh. EV-2, at 15, citing Eversource 2017 at 26-29, 165). The Company recounted the Siting Board's finding that the existing Chelsea Substation, which currently supplies electricity to East Boston through a distribution network, has pre- and post-contingency capacity constraints, the latter of which risk post-contingency load shedding (Exh. EV-2, at 15, citing Eversource 2017 at 28-29).

With respect to the Project Change Proceeding in Eversource 2021, the Company noted that, while need was outside the scope, the Siting Board did review need testimony proffered by GreenRoots and concluded that the testimony, even if allowed into the proceeding, would not alter in any substantive way the Siting Board's conclusions concerning need in Eversource 2017 (Exh. EV-2, at 16, citing Eversource 2021 at 26). The Company stated that the proposed East Boston Substation remains necessary to ensure reliable electric service in Chelsea and East Boston (Exh. EV-2, at 16, citing Eversource 2021 at 26).

a) Chelsea Substation Peak Load Forecasts

(1) 2021 Chelsea Substation Forecast

According to the Company, East Boston's electric load is supplied solely by distribution lines extending into East Boston from the Chelsea Substation and, as a result, East Boston is an electrical island with no transmission lines providing service to its residents (Exh. EV-2, at 17). The Company noted that this situation does not exist for any other subdivision of the City of Boston and it makes East Boston inordinately vulnerable to outages, particularly during peak periods (Exh. EV-2, at 17).

The Company undertakes an annual assessment of the adequacy of the transmission and distribution system, including substation peak load forecasts, over a ten-year period (Tr. 3, at 386).

In its Certificate Application, the Company submitted a 10-year peak load forecast for the Chelsea Substation for the 2021 – 2030 period ("2021 Chelsea Substation Forecast") (Exh. EV-2, at 17-18). The Company stated that the 2021 Chelsea Substation Forecast confirms that "since 2017, the urgent need for the East Eagle substation is persisting" (Exh. EV-2, at 17). The Company described the Chelsea Substation as having a Substation Equipment Limit of 125 megavolt-amperes ("MVA") based on the Normal Rating of two remaining transformers (each 62.5 MVA) after loss of one of the transformers at the Substation (aka an "N-1 contingency") (Exh. EV-2, at 19 n.14).²⁰ A Substation Equipment Limit (or Normal Rating) is the output level that allows for sustained operation of the Substation equipment given loss of one of the transformers at the Chelsea Substation (Exh. EV-2, at 19 n.14). In contrast, the Substation Emergency Limit (or Long Term Emergency ("LTE") Rating) of 135 MVA reflects the Firm Capacity or maximum output of the Substation that can be sustained for up to twelve continuous hours after a loss of a transformer (Exh. EV-2, at 17 n.13; Tr. 3, at 431, 520). The 2021 Chelsea Substation Forecast shows peak loads rising from 125 MVA in 2021 to 141.8 MVA by 2030, breaching the 135 MVA Firm Capacity of the Substation in 2025 with a projected peak load of 136.3 MVA (Exh. EV-2, at 18).

(2) 2022 Chelsea Substation Forecast

In response to staff discovery questions, the Company indicated that it had recently completed the 2022 Chelsea Substation Forecast (for the 2022 – 2031 period), and provided the results of this updated study along with documentation of its forecasting method (Exh. EFSB-N-3).^{21,22} The Company also provided results of ten-year peak load forecasts

The Company noted that actual peak loads observed in 2021 for the Chelsea Substation were close to the 125 MVA Normal Rating of the substation (Exh. EV-2, at 19). The Company indicated that the actual Chelsea Substation peak for 2021 was 122.8 MVA and the weather-adjusted 90/10 summer peak was 123.2 MVA (Exh. Table EFSB-N-2(1)).

At the time of the Certificate Application, the Company indicated that the 2021 Chelsea Substation Forecast was the most recent one available (Exh. EV-2, at 18).

The 2021 Chelsea Substation Forecast submitted with the Certificate Application described the method the Company used to produce the forecast as follows: "The Company's methodology for conducting its peak load forecast and assessing its supply adequacy at

performed each year from 2015 - 2022 to highlight changes in the components of the forecast over this period (Exh. EFSB-N-3, at 1).

As stated above, the Company described its 2022 Chelsea Substation Forecast methodology. The Company's method to forecast substation peak load for specific locations begins by forecasting the peak demand at the Eversource system level that comprises the former Boston Edison Company ("Boston Edison") service territory (Tr. 3, at 446).²³ The Company derives the Eversource system-level peak demand using an econometric model that evaluates historical peak demand as a function of peak day weather conditions and the economy (Exh. EFSB-N-3, at 2). Eversource relies on a 90/10 extreme weather scenario that has a ten percent chance of being exceeded in any one year for its peak day weather inputs (Tr. 3, at 446).²⁴ The

area substations is unchanged from the Siting Board's review in Eversource 2017" (Exh. EV-2, at 17 n.12). Eversource noted that the Siting Board found the Company's forecasts in the Original Proceeding "reviewable, appropriate, and reliable for use in this proceeding to evaluate the Company's assertion of need" (Exh. EV-2, at 17 n.12, citing Eversource 2017 at 26, 28).

Boston Edison was the historic provider of electricity to East Boston, Chelsea, and most of the greater Boston service territory. In 1997, Boston Edison merged its operations with Cambridge Electric Light Company, Commonwealth Edison Company and Commonwealth Gas Company (along with related entities) to become part of the NSTAR Electric distribution system. See Boston Edison Company, Cambridge Electric Light Company, Commonwealth Edison Company and Commonwealth Gas Company, D.T.E. 99-19 (2001). This area is frequently referred to as Eversource East in more recent descriptions of the combined service territories. Within this discussion regarding need, we refer to the load pocket data for the East Boston/Chelsea territory as "Boston Edison" to capture the legacy nature of the historical service data within the current Eversource distribution service territory.

The Company determined the 90/10 weather conditions by selecting the highest three-day weighted temperature-humidity index ("THI") value that has occurred in the past ten years that is associated with an actual system peak (Tr. 3, at 446, 451). The THI chosen for use in the model is comprised of the maximum hourly measure of temperature and humidity for each day of the three-day period, with additional statistical weight given to each successive day in the three-day period (Tr. 3, at 446). The most extreme peak weather event in the past ten years occurred in 2016, which included an actual peak day high temperature of 97 degrees Fahrenheit and a THI value of 85 (Tr. 3, at 451; Exh. EFSB-N-2, at 2). Eversource selects a THI value that corresponds to a historical system peak, typically the third day of a period of extreme heat and humidity, ending on a non-holiday weekday

Company uses Moody's Analytics for historical and projected Boston-area economic data that are incorporated in its econometric model (Tr. 3, at 458). The Company tested the statistical significance of various economic data such as employment, gross state product, and retail sales in predicting system peak load, and ultimately chose retail sales data as providing the best predictive results (Tr. 3, at 454-456).

Once Eversource finalizes the system-level forecast, it develops a substation-level forecast using an econometric model that evaluates substation non-coincident peak historical demand as a function of Eversource's Boston Edison legacy service territory peak demand history (Exh. EFSB-N-3, at 3; Tr. 3, at 461). The substation econometric model measures how each substation performs relative to the Eversource system, and then projects that relationship into the future (Exh. EFSB-N-3, at 3).²⁵ All load forecasting performed by Eversource uses actual reported load statistics, inclusive of Company-sponsored energy efficiency ("EE"), natural marketplace efficiency gains, stricter building codes and standards, behind-the-meter ("BTM") photovoltaic ("PV") installations, and other load reductions and additions (Exh. EFSB-N-3, at 3). The net result of the econometric model yields a "trend forecast" (aka "regression result") for each substation (Exh. EFSB-N-3, at 4).²⁶

⁽Tr. 3, at 452). The Company relies on weather data collected at Logan Airport (Tr. 3, at 448).

The Company indicated that the Chelsea Substation peak loads are neither uniformly coincident nor non-coincident with its Boston-area system peak loads, and that this relationship can vary from year to year (Tr. 3, at 460). Company data show that from 2013-2021, the Chelsea Substation experienced yearly peak loads on the *same day* as the Boston Edison system, except in 2016; however, the *time-of-day* of the peak for the Chelsea Substation versus the Boston Edison system varied (i.e., a non-coincident peak) in every year, except 2020 (RR-EFSB-7).

The Company acknowledged that the use of a "two-step" forecasting process that begins with operating company system peak loads, and then developing a substation-level forecast could potentially be consolidated into a single step in the future (Tr. 3, at 463). The Company noted that the key reason it starts with system peak data analysis is that the economic and weather data that drives the forecast are regional in nature and correlate well with system peak loads (Tr. 3, at 462). These data are not generally available on a more localized basis (Tr. 3, at 462-463).

After producing a trend forecast for each substation, the Company adjusts this forecast to account for incremental EE, PV additions, and electric vehicles ("EV") activity, above and beyond what is implicitly included from prior activity in the trend forecast (Exh. EFSB-N-3, at 4). The Company prospectively estimated Eversource-sponsored EE effects based on the most recent three-year EE plan approved by the Department, which for the 2022 Chelsea Substation Forecast occurred in January 2022 (Exh. EFSB-N-3, at 4). Normally, the Company EE adjustment is proportionally allocated to individual substations based on their historical peak demand, consistent with how actual energy efficiency measures are distributed over the Eversource system (Exhs. EFSB-N-3, at 4; CLF-GR-N-32). For the first time, in the 2022 Chelsea Substation Forecast, the Company created and used an area-specific EE forecast for the area served by the Chelsea Substation – specifically focused on zip codes 02128 and 02150 (Exh. CLF-GR-N-32). The Company indicated that it may use this newly tailored forecasting approach for prospectively estimating the impact of its EE programs for other bulk substations in the future (Tr. 3, at 567).

With respect to prospective adjustments for BTM PV, the Company described additional revisions to its past forecasting methods. In previous forecasts, including the one used for Eversource 2017 for the Chelsea Substation (and other substations), Eversource relied on ISO-New England ("ISO-NE") produced PV estimates to derive the Company's prospective PV forecast (Tr. 3, at 492-493). Now, Eversource relies on its own in-house expertise to produce a prospective PV forecast (Tr. 3, at 492). 27

For the 2022 Chelsea Substation Forecast, the Company indicated that it made a significant change regarding the prospective PV load adjustments given that peak loads at the Chelsea Substation are now occurring over a broader period of time on peak days, from roughly 1:00 p.m. to 9:00 p.m. (Exh. CLF-GR-N-28; Tr. 3, at 442-443). Eversource notes that historical load data already reflect PV installed to date in the area served by Chelsea Substation (Tr. 3, at 442). However, because PV output is negligible in the last three or four hours of a potential peak load

The Company stated that its general PV forecast is developed at the operating company level and is consistent with state policy and recent history (Exh. EFSB-N-3, at 4). The Company assigns the system-level PV forecast capacity to individual substations using Google Project Sunroof data, which compute the solar potential on all available rooftops and takes into account items such as shadows cast by nearby structures and all possible sun positions over the course of a year (Exh. EFSB-N-3, at 4).

window, the Company considers it inappropriate to further reduce its Chelsea area peak load projections for any further increases in PV capacity (Tr. 3, at 443). The Company stated that regardless of the quantity of the overall PV contribution, the maximum peak remains (Exh. EFSB-PA-3, at 5).

For EV projections, the Company generated an estimate of light-duty EVs at the operating company level, which it then assigned to each substation based on proportional historic peak demand (Exh. EFSB-N-9, at 1). The EV forecast assumes that each vehicle will contribute approximately 0.9 kilowatts ("kW") to peak demand, which considers the fact that not all EVs will charge at the same time (Exh. EFSB-N-9, at 1). The Company anticipates that EV impacts on summer load will be highly variable; regions with heavy commuter inbound traffic will see significant early morning load growth, while more residential areas will encounter this growth later in the evening (Exh. EFSB-N-9, at 1). With regard to the Chelsea-East Boston load area, the Company anticipates both residential EV charging, and vehicles traveling to Logan Airport needing recharging (Exh. EFSB-N-9, at 1). The Company observed that EV adoption is still relatively new, and it expects growth throughout the forecast period (Tr. 3, at 441). ²⁸

In addition to EVs, the Company considered other forms of electrification that could affect the 2022 Chelsea Substation Forecast, such as increasing use of heat pumps. The Company sees heat pump use as having its most pronounced influence on load during the winter period, eventually transforming the Chelsea/East Boston load area and other parts of its system into a winter-peaking system, perhaps in 20 years or so (Tr. 2, at 329). The Company did not see the increasing use of heat pumps as a significant adjustment factor for summer peak load. The Company views heat pumps as providing a highly efficient form of space cooling that reduces load of customers with less efficient air conditioning, but increases loads for customers that did not previously have air conditioning, or gained square footage for cooling with whole-house heat pumps (Exh. EFSB-N-9, at 2; Tr. 3, at 487).

The Company adjusted its 2022 Chelsea Substation Forecast to reflect step loads, which it describes as discrete, identified, large development projects or expected changes in system

The possibility of EVs serving as a form of distributed battery energy storage to supply the grid with two-way charging is addressed as a project alternative, in Section III.D.2.f, below.

operations that the econometric forecasts could not otherwise predict and that are not accounted for as part of historical growth trends (Exhs. EFSB-N-3; EFSB-N-6; Tr. 1, at 137; Tr. 3, at 471, 473). Typically, the Company projects a step load addition for new customer connection work orders with incremental building electrical demands of one MVA or more of summer peak demand (RR-EFSB-25; Tr. 3, at 471). While most new service requests will not be considered as future step loads because they represent normal load growth, the Company does include combined multiple, larger project load additions, such as a large residential development (RR-EFSB-25; Tr. 3, at 474). The Company noted that East Boston, in particular, is experiencing a building boom for smaller projects, with increases that exceed historical levels, as reflected in various types of building permits issued by the City of Boston ISD (Exh. EFSB-N-6, at 13; Tr. 6, at 1202).

To estimate step loads, the Company relied on customer work orders, "load letters," discussions with developers, and publicly available information (Tr. 2, at 360; Tr. 3, at 440). The Company stated that although it has a high level of certainty that the step loads included in the 2022 Chelsea Substation Forecast will come online during the forecast period, it does not control when or to what extent these loads will materialize (Exh. EFSB-N-6; Tr. 2, at 344, 360; Tr. 3, at 440). The Company indicated that it must anticipate and plan for these large additional loads based on the best information available now because, even if the step loads do not occur exactly when anticipated, the Company is responsible for ensuring that it can serve all its customers (Tr. 3, at 440). With the exception of Hertz²⁹ and the Suffolk Downs Redevelopment ("Suffolk Downs"), ³⁰ the field construction for each of the step loads included in the 2022 Chelsea Substation Forecast is substantially, if not entirely, complete (RR-EFSB-25, at 3).

The Company indicated that the step load for Hertz relates to its expanding use of EVs and charging stations as part of an announced program to replace 20 percent of its fleet with EVs by the end of 2022 (RR-EFSB-25, at 3). The Company received a load letter documenting the additional load expectations at the Hertz facility in East Boston adjacent to Logan Airport (RR-EFSB-25(3)(att.)). The Company anticipated limited, if any, additional field construction on the utility side would be needed to connect the Hertz step loads, with the load additions expected to be fully realized by June 2025 (RR-EFSB-25, at 4).

The Suffolk Downs Redevelopment is a project of the HYM Investment Group, LLC, and includes an anticipated buildout of 10.5 million square feet of mixed-use buildings and homes in five phases over 20 years (Exh. EFSB-N-6, at 10-11). The Company's 2022 Chelsea Substation Forecast includes a 2 MVA load increase each year for the Suffolk

Eversource contends that beginning with its 2016 Chelsea Substation forecast (see Table 3, below), the Company's forecast models started to better capture the impact of EE, and that the resulting forecasts from 2016 – 2021 have shown improved accuracy (Company Reply Brief at 12).

Table 1: Step Loads for 2022 Chelsea Substation Forecast.

Year	Clippership (MVA)	Massport (MVA)	Suffolk Downs (MVA)	Hertz (MVA)	Cumulative (MVA)
2022					
2022	1.0	2.5	0.0	0.0	3.5
2023	0.0	1.0	2.0	1.0	7.5
2024	0.0	0.0	2.0	0.0	9.5
2025	0.0	0.0	2.0	0.0	11.5
2026	0.0	0.0	2.0	3.8	17.3
2027	0.0	0.0	2.0	0.0	19.3
2028	0.0	0.0	2.0	0.0	21.3
2029	0.0	0.0	0.0	0.0	21.3
2030	0.0	0.0	0.0	0.0	21.3
2031	0.0	0.0	0.0	0.0	21.3
Total	1.0	3.5	12.0	4.8	21.3

Sources: Exh. EFSB-PA-1, Tables EFSB-PA-1 and 2; Hertz step loads per RR-EFSB-25(3).

Downs Redevelopment from 2023 through 2028, while the Company's total projected load for the redevelopment over a 20-year period is 42 MVA (Exh. EFSB-N-6, at 11). Post-2031 load additions associated with Suffolk Downs are expected to be captured as part of the Company's future load forecasts (RR-EFSB-8, at 1). The Company's assessment of the Suffolk Downs step load is based on available public information contained in the Master Plan for the Redevelopment of Suffolk Downs, dated September 22, 2020 (Exh. EFSB-N-6, at 10-11). Based on a generic loading formula of four watts ("W") per square foot (which the Company regards as conservative), the Suffolk Downs project load over the anticipated twenty-year buildout period would be 42 MVA (Exh. EFSB-N-6, at 10-11). The Company indicated that the proposed East Boston Substation has the capability to include a third transformer if needed, which would be sufficient to accommodate the anticipated full 42 MVA buildout of Suffolk Downs (Tr. 3, at 485-486). The Company has not received formal notification of expected load from the developer of Suffolk Downs (RR-EFSB-8). However, the announced plans for the redevelopment of the racetrack facilities at Suffolk Downs are highly publicized and underway (Tr. 3, at 481-482). In addition, the developer has obtained BPDA and MEPA approvals (RR-EFSB-8, at 1).

Table 2: 2022 Chelsea Substation Forecast.

Year	Econometric Trend (MVA)	Energy Efficiency Impacts (MVA)	Electric Vehicle Impact (MVA)	Step Load Impact (MVA)	Peak Load (MVA)	Violation above Firm Limit 135 (MVA)
2022	125.8	-0.6	0.1	3.5	128.7	0.0
2023	127.4	-1.3	0.1	7.5	133.6	0.0
2024	128.0	-2.0	0.1	9.5	135.6	0.6
2025	128.4	-2.7	0.2	11.5	137.4	2.4
2026	129.0	-3.3	0.3	17.3	143.3	8.3
2027	129.4	-4.0	0.5	19.3	145.2	10.2
2028	130.0	-4.7	0.7	21.3	147.3	12.3
2029	130.6	-5.4	1.1	21.3	147.6	12.6
2030	131.3	-6.1	1.5	21.3	148.0	13.0
2031	131.9	-6.1	2.0	21.3	149.2	14.2

Sources: Exh. EFSB-PA-1, Tables EFSB-PA-1 and 2; Hertz step loads per RR-EFSB-25(3); Company Brief at 49.

Table 3: Chelsea Substation Peak Load Forecasting Accuracy (MVA).

									Weather Normalized
								Actual	(W/N) Actual
	Year	2016 Forecast	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast	Loads	Loads
	2016	128.1						119.9	119.9
	2017	129.8	126.9					115.3	120.8
	2018	131.5	128.9	121.6				121.4	122.2
	2019	132.0	129.4	121.9	125.5			114.0	118.9
	2020	132.2	129.5	126.4	125.2	123.2		115.0	121.5
	2021	132.5	129.6	131.0	129.7	127.4	125.0	122.8	123.2
Average Annual We Normalized (W/N) Forecast Variance	eather	-7.6%	-5.9%	-3.0%	-4.4%	-2.4%	-1.5%	Average (W/N) Forecatin Variance from 2016 to 202	-4%
Average Annual Act Forecast Variance	tual	-9.9%	-8.7%	-5.5%	-7.5%	-5.1%	-1.8%	Average Actual Forecating Variance from 2016 to 2021	-6%

Source: Exh. EFSB-N-4.

(3) Chelsea Substation Operating History

In response to staff discovery, the Company provided updated information on the Chelsea Substation's historical peak demand, including weather-adjusted values for 90/10 conditions for the 2016 – 2021 period (Exh. EFSB-N-2, Table EFSB-N-2(1)). As shown in Table 4 below, both

the actual summer peak and the 90/10 weather-adjusted peak loads reached a maximum level in $2021.^{31}$

Table 4: Chelsea Substation Historical Peak Demand and Weather Conditions.

Year	Actual Summer	90/10 Weather-	Actual Peak Day	Actual Peak Day
	Peak (MVA)	Adjusted Summer	Temperature	Temperature Humidity
		Peak (MVA)		Index (THI)
2016	119.9	119.9	97	85
2017	115.1	120.8	94	82
2018	121.4	122.2	97	84
2019	114.0	118.9	92	82
2020	115.0	121.5	92	82
2021	122.8	123.2	97	84

Source: Exh. EFSB-N-2, Table EFSB-N-2(1).

The Company provided a loss-of-service reliability history of the Chelsea Substation and its distribution feeders to East Boston (Exh. EFSB-N-7). The Company also assessed whether these loss-of-service events would have been prevented by the proposed East Boston Substation (Exh. EFSB-N-7, at 1). The Company stated that the Chelsea Substation receives power from the regional transmission system through three 115 kV transmission lines (Exh. EFSB-N-7, at 1). The 115 kV power is first transformed to 14 kV via the three transformers at the Chelsea Substation and then directed to metal clad switchgear where it is split into distribution feeders that serve both Chelsea and East Boston (Exh. EFSB-N-7, at 1). Loss of service from the Chelsea Substation could result from loss of transmission supply, the loss of station elements (such as a transformer or a switcher bus section), or from a trip of a 14 kV feeder (Exh. EFSB-N-7, at 1).

The Chelsea Substation is planned and designed such that, even at peak loads, the loss of a single transmission line or transformer will not result in a loss of service to customers (Exh. EFSB-N-7, at 1). Individual distribution feeders are designed and planned so that even at peak loads, there is a backup supply (Exh. EFSB-N-7, at 1). However, the distribution feeders are combined

Similar Chelsea Substation load data for the 2008 – 2015 period, included in Eversource 2017 at 22, Table 3, indicate that actual peak summer loads exceeded the 2021 level in 2011 and 2013; 90/10 weather adjusted peak loads exceeded the 2021 value each year, except for 2008 and 2015.

in groups to supply East Boston via the submarine cable crossing under the Chelsea Creek; a loss of the entire Chelsea Creek Crossing would disrupt service to East Boston with no existing means of backup supply (Exh. EFSB-N-7, at 1).

The loss-of-service data provided by the Company for the Chelsea-East Boston load area show that in the past ten years there have been no transmission line events that have resulted in loss of supply to Chelsea Substation, or its distribution customers (Exh. EFSB-N-7, at 2). With the completion of a third 115 kV transmission line into the Chelsea Substation (per Eversource 2017), the Chelsea Substation no longer is vulnerable to transmission line contingencies identified in Eversource 2017 (Exh. EFSB-N-7, at 2). Within the Chelsea Substation, however, there have been nine events since 2005 that have resulted in loss of service to some, or all, customers served by the Chelsea Substation (Exh. Table EFSB-N-7-1). The Company identified the causes of these outages as follows: blown fuses affecting station service transformers, tie bus faults that impacted multiple distribution circuits, and faulty relays and breakers due to various operational or equipment errors causing 14 kV bus section outages (Exh. EFSB-N-7, at 9). The Company indicated that the majority of outage events in Chelsea and East Boston stemmed from outages on feeder circuits relating to line faults and other issues outside of the Chelsea Substation (Exh. EFSB-N-7, at 9).

The Company observed that although substation outage events in the Chelsea-East Boston area occur much less frequently than outages on feeder circuits, the substation outage events impact a larger number of customers, and the duration of such outages can be prolonged (Exh. EFSB-N-7, at 9; Tr. 3, at 400-401). The Company anticipated that with a new Substation in East Boston, it would gain additional opportunities to sectionalize the existing circuits into East Boston from Chelsea, leading to shorter and more reliable circuits, and improved ability to transfer loads between the existing Chelsea Substation and the new East Boston Substation, thereby improving reliability in both communities (Exh. EFSB-N-7, at 9). However, the Company acknowledged that the development of the East Boston Substation would not necessarily have prevented all of the outages that have occurred in the past 10-15 years, although it would have likely mitigated the impacts of each outage in terms of the number of customer affected or event duration (Exh. EFSB-N-7, at 9).

3. Positions of the Parties

a) BRG

BRG acknowledges that analysis of facility need generally falls outside the scope of intervention of a party (such as BRG) that participates in a proceeding pursuant to the environmental protection provisions of G.L. c. 30A, § 10A (BRG Brief at 20). BRG observes that East Boston residents want reliable electric service and that, like all residents of Massachusetts, should not be subject to foreseeable and avoidable power outages (BRG Brief at 21, citing St. 1997) (Electric Utility Restructuring Act), c. 164, §§ 1(a), 1((h)); BRG Reply Brief at 19, citing Town of Sudbury v. Energy Facilities Siting Bd., 487 Mass. 737, 748 (2021)). BRG agrees with the Company that power outages in East Boston would constitute an adverse environmental impact and an environmental justice harm (BRG Brief at 21). Accordingly, BRG asserts that advancing solutions in this proceeding to avoid such outages is consistent with BRG's intervention scope under G.L. c. 30A § 10A (BRG Brief at 21). BRG contends that, to the extent that the need for a substation in East Boston is driven by electricity demand associated with Logan Airport, and airport-related facilities located elsewhere in East Boston, the proposed Substation is both an adverse environmental impact and an adverse environmental justice impact that should be subject to enhanced analysis under the Roadmap Act and the Commonwealth's environmental justice policies (BRG Brief at 20-21). Accordingly, BRG argues that the Siting Board should direct the Company to "evaluate and plan forward-going contingencies and alternatives with respect to the proposed substation, and to do so within the context of meaningfully and comprehensively addressing both electric service reliability, cost, and environmental impact" (BRG Brief at 22).

b) CLF/GR

CLF/GR asserts that Eversource's reliance on prior need determinations by the Siting Board fails to account for new information and changed circumstances regarding the need for the Substation in East Boston (CLF/GR Reply Brief at 4). CLF/GR rejects the Company's claims that "time is of the essence" for the Company to construct the Substation, or that a reliable electric supply for the Chelsea-East Boston area has been or is now in jeopardy (CLF/GR Reply Brief at 4-5). These claims ring hollow, CLF/GR asserts, because Eversource first claimed that the Substation was needed eight years ago (in 2014) when the Company first filed for approval to construct the Substation (CLF/GR Reply Brief at 5). Despite Eversource's prior assertion that the

Substation would be needed for reliability purposes by 2018, CLF/GR notes that this date "has come and gone without construction of the Substation and customers are still being served reliably" (CLF/GR Reply Brief at 5, citing Exh. CLF-GR-ES at 11). Contrary to Eversource's claim that "the passage of time since those decisions has not caused the need for the facility to abate," CLF/GR contends that the passage of time has instead shown that technologies and programs that can reduce demand have advanced and expanded, allowing for ever-greater reductions in peak demand (CLF/GR Brief at 10, citing Company Brief at 41).

CLF/GR argues that Eversource's Chelsea-East Boston load forecasts in this proceeding fail to account for ISO-NE's most recent load projections, including its state-level forecast for Massachusetts, which shows peak loads are expected to fall slightly from 2022 to 2024 and remain relatively flat over the next decade (CLF/GR Brief at 10-11, citing Exh. CLF-GR-ES at 6, 11). According to CLF/GR's witness, Dr. Elizabeth Stanton, ISO-NE's 2022 Capacity, Energy, Loads and Transmission ("CELT") forecast data for Massachusetts show that the state's 90/10 summer peak is expected to have an annual growth rate of 0.05 percent between 2022 and 2031 (Exh. CLF-GR-ES at 17-18). By substituting ISO-NE's anticipated 90/10 summer peak load growth rates for Massachusetts for those estimated by the Company in its forecasts for Chelsea-East Boston load area, CLF/GR's witness determined that the Chelsea Substation peak loads would remain below the 135 MVA reliability threshold for the entire forecast period (CLF/GR Brief at 11, citing Exh. CLF-GR-ES at 15-16).

CLF/GR rejects Eversource's criticism that ISO-NE's forecast is regional whereas Eversource's need assessment for the Chelsea-East Boston load area is based on "more granular data for the local area" (CLF/GR Reply Brief at 6, citing Company Brief at 40 n.15). CLF/GR notes that the ISO-NE forecasts do, in fact, include a state-level forecast for Massachusetts, on which CLF/GR's witness relied in her assessment of the Chelsea-East Boston load area (CLF/GR Reply Brief at 6; Exh. CLF-GR-ES at 15-16). CLF/GR's witness also noted that ISO-NE's peak

The 2022 CELT summer peak forecast for Massachusetts shows a peak load of 12,297 MW in 2022 and 12,320 MW in 2031, with a compound annual growth rate of 0.02 percent. See https://www.iso-ne.com/static-assets/documents/2022/04/forecast_data_2022.xlsx.

CLF/GR also notes that Eversource acknowledged that it does not have a mode or method to track the amount of energy used by all customers in East Boston with any level of granularity (CLF/GR Reply Brief at 7, citing Exh. CLF-GR-N-1, at 1).

load forecasts for Massachusetts have declined significantly, with projections of the peak load for 2022 dropping eleven percent from ISO-NE's 2015 forecast to its 2022 forecast (Exh. CLF-GR-ES at 13). CLF/GR contends that need arguments presented by Eversource rely largely on prior determinations by the Siting Board that fail to account for such new information and changed circumstances (CLF/GR Reply Brief at 4).

CLF/GR also argues that Eversource's forecast approach has significant information gaps and is incomplete (CLF/GR Reply Brief at 4). CLF/GR points out that while the Company contends that electrification will "cause a rapid and sustained increase in electrical demand throughout the region and specifically with the Chelsea and East Boston subarea," the Company has not completed a detailed electrification impact assessment for the Chelsea-East Boston load area (CLF/GR Reply Brief at 5, citing Company Brief at 52). CLF/GR contends that without an accurate electrification assessment for East Boston, it is impossible for Eversource to quantify the effects of electrification on demand (CLF/GR Reply Brief at 5). Similarly, CLF/GR asserts that Eversource has not assessed the impact of time-of-use ("TOU") rates on demand at Chelsea Substation (CLF/GR Reply Brief at 6). CLF/GR also questions the Company's decision to negate future PV contributions towards reducing forecasted summer peak loads at the Chelsea Substation owing to Eversource's view that peak loads now extend well into the evening hours of 9:00 p.m. or later when solar output is much reduced (CLF/GR Reply Brief at 6). CLF/GR argues that the Company has failed to account for the fact "that solar resources can generate electricity later in the day during these peak days in the summer because there is additional daylight, or for the potential use of battery storage system in shifting renewable generation on to peak" (CLF/GR Reply Brief at 6).

Another gap cited by CLF/GR in the Company's needs assessment is its "incomplete and inaccurate consideration of Logan Airport, a major international airport whose operations continue to benefit the broader region, while burdening the residents of East Boston and surrounding communities" (CLF/GR Reply Brief at 7). Despite the Company's acknowledgement that Logan Airport is the single largest customer served by Eversource in the Chelsea-East Boston load area, CLF/GR faults the Company for attempting to downplay the impact of Logan Airport by also arguing that the airport "does not represent the majority of load" (CLF/GR Reply Brief at 7, citing Company Brief at 42 n.16). CLF/GR also questions whether a single year's load data for Logan Airport, provided by the Company for the 2022 forecast period, is sufficient to determine whether

Logan Airport is, or is not, the primary driver of growing electric demand in the area, especially considering the impacts of the COVID-19 pandemic on air travel (CLF/GR Reply Brief at 7). CLF/GR concludes that even if the Siting Board were to find that there is need for the Substation, there is nothing in the evidentiary record to indicate that the need can be met only by a substation located in the current proposed location in the Eagle Hill neighborhood (CLF/GR Reply Brief at 7-8). Rather, CLF/GR argues that given the substantial contribution of Logan Airport to the East Boston Load, the Siting Board is required to consider different sites in, and closer to, Logan Airport (CLF/GR Reply Brief at 8, 22).³⁴

c) Company Response

The Company dismisses CLF/GR's characterization that Eversource relies heavily on the Siting Board's prior findings concerning need without further support in this proceeding. Rather, the Company contends that CLF/GR completely ignores the wealth of detailed evidence presented by Eversource on the need for the Substation (Company Reply Brief at 10). Not only does CLF/GR ignore this critical evidence, the Company contends, but CLF/GR fails to critique the Company's forecast methodology or cite to any Company exhibits, hearing testimony, or responses to information or record requests as lacking a credible basis (Company Reply Brief at 11). The Company faults CLF/GR's reliance solely on ISO-NE's statewide load projections as the basis to allege a lower load growth rate for the area served by the Chelsea Substation (Company Reply Brief at 11, citing CLF/GR Brief at 10-11). On this issue, the Company asserts that the Siting Board has found that Eversource's prior Chelsea Substation forecasts to be more relevant than inferring local conditions from the regional ISO-NE CELT forecast (Company Reply Brief at 11, citing Eversource 2017 at 27; Eversource 2021 at 22-23). 35

CLF/GR notes that of the four step loads identified in Exhibit EFSB-N-11(1) that Eversource describes as having a "Project Confidence" of "Certain" (totaling 14.8 MW), 8.3 MW (or 73 percent) are airport-related projects, namely by Massport and Hertz (CLF/GR Brief at 12 n.7).

The Company stated that ISO-NE does not produce a load forecast for the Chelsea Substation (Tr. 3, at 465). As noted previously, the Company produces a Chelsea Substation forecast as part of its annual process of ensuring the adequacy of its transmission and distribution system to meet anticipated load requirements to serve customers reliably (Exh. EV-2, at 17; Tr. 3, at 385).

The Company argues that CLF/GR misses the point entirely when calling into question the Company's forecasting accuracy as the Company has continued to serve the East Boston-Chelsea area reliably in recent years without the East Eagle Substation (Company Reply Brief at 11). Eversource maintains that CLF/GR's argument reflects a fundamental misunderstanding of well-accepted system planning principles that require the Company to ensure reliable service under foreseeable peak loads occurring during potential system contingencies over a reasonable planning horizon (Company Reply Brief at 11 n.11). The Company notes that it would be improper planning to wait for the occurrence of a system contingency and resulting overloads before implementing remedial measures to strengthen the system (Company Reply Brief at 11). ³⁶

The Company notes that load forecasts are predictions based on historical data and economic trends, and that if broad-based structural shifts occur that are not reflected in the historical data or economic trends, forecasting variances will emerge and persist until the modeling is revised (Company Reply Brief at 12, citing Exh. EFSB-N-10; Tr. 3, at 493-495). The Company acknowledges that it has experienced forecasting variances in the ten-year period 2011 through 2020 and that the timing of need for the East Eagle Substation has shifted over the years (Company Reply Brief at 11).³⁷ As stated above, Eversource contends that beginning with its 2016 Chelsea Substation forecast (see Table 3, above), the Company's forecast models started to better capture the impact of EE, and that the resulting forecasts from 2016 – 2021 have shown improved accuracy (Company Reply Brief at 12).

Eversource rejects CLF/GR's criticism that the Company's load forecast relied extensively on electrification estimates to bolster need without proper studies (Company Reply Brief at 12).

The Company cites the Supreme Judicial Court's recent decision in the <u>Town of Sudbury v.</u> Energy Facilities Siting Bd., 487 Mass. 737, 748 (2021), which notes that "[s]tate law makes it clear that the residents of the Commonwealth simply cannot be exposed to foreseeable and avoidable power outages" (Company Reply Brief at 11 n.11).

On cross-examination, the Company witness acknowledged that the forecasted 2022 summer peak load for the Chelsea Substation (as projected in the 2015 Chelsea Substation forecast used in Eversource 2017) was 149 MVA versus the 128.6 MVA projected in the 2022 Chelsea Substation Forecast (Tr. 3, at 496-497). Eversource's witness noted the approximate 20.4 MVA variance for 2022 and explained: "[we are] not going to shy away from the fact that that forecast we had in 2015, that really marked what I would call a paradigm shift in our forecasting. Again, it was the middle of that decade where all of these efficiencies came on the system. Looking back on it, we missed it" (Tr. 3, at 497).

Rather, the Company contends that the forecast does not account for widespread electrification, but only includes an adjustment for light-duty EVs based on recent historical penetration of EVs in the Commonwealth (Company Reply Brief at 12, citing Exhs. EFSB-N-9; CLF-GR-N-6). If full-scale electrification occurs in the East Boston-Chelsea area over the planning horizon, this would only augment the need already shown in the forecast, the Company contends (Company Reply Brief at 12-13). The Company maintains that it cannot disregard the reality of forthcoming state and local initiatives that will implement widespread electrification plans and cause significant shifts in the way vehicle mobility and heating needs are served for customers in the future (Company Reply Brief at 13). Moreover, by failing to ready the electric system in the Chelsea-East Boston load area to its current needs, the Company argues it would also preclude Chelsea and East Boston from experiencing all the benefits of an electrified future (Company Reply Brief at 13).

The Company responds to several other criticisms of its forecasting method. With regard to TOU rates, the Company contends that the impact of TOU rates is already reflected in the historical data used in the forecast (Company Reply Brief at 15, citing Tr. 3, at 564-565). With regard to Logan Airport, the Company acknowledges that Massport is the single largest customer in the Chelsea-East Boston area, but that the majority of load served out of the Chelsea Substation is from residential, commercial, and industrial customers other than Massport (Company Reply Brief at 15, citing Exh. RR-EFSB-26).

4. <u>Analysis and Findings</u>

In Eversource 2017, the Siting Board found that the existing Chelsea Substation, serving Chelsea and East Boston, has capacity constraints and posed a significant risk of load-shedding. Therefore, the Siting Board concluded that additional energy resources were necessary to maintain a reliable supply of electricity to the area. Eversource 2017 at 28-29. In Eversource 2021, the Siting Board declined to reopen the record on whether the Substation was needed, as its prior need finding was not affected by moving the Substation 190 feet to the west, and the issue of need was fully and fairly determined in the Original Proceeding. Eversource 2021 at 20-28.

While the Company maintains that statutory and regulatory provisions, as well as judicial precedent, do not require relitigating need for the Project in this proceeding, the Company nevertheless submitted a revised peak load forecast for 2021 for the Chelsea Substation in its Application. Additionally, during discovery, the Company submitted a newly prepared peak load

forecast for 2022 for the Chelsea Substation. Despite its position that the Siting Board should not relitigate need in this proceeding for the proposed Substation in East Boston, the Company has proffered new information in the form of a revised Chelsea Substation forecast, now covering the 2022 - 2031 period. Similarly, CLF/GR sponsored Dr. Stanton as an expert witness to assess need for the East Boston Substation, and she provided both an extensive critique of Eversource's 2022 Chelsea Substation Forecast, and her own independent analysis for the Chelsea Substation, largely based on ISO-NE's 2022 CELT load growth expectations for Massachusetts as a whole.

The Company is correct that re-litigation of the Siting Board's prior findings, such as need, is not required in a certificate proceeding. However, based on Siting Board precedent, the Board evaluated the extent of new information and changes in circumstances in the intervening period since Eversource 2017. Accordingly, the Siting Board took a fresh look at the Company's forecasting and reviewed all elements of the new 2022 Chelsea Substation Forecast.

While there are many similarities in the method used to produce Eversource's 2015 and 2022 Chelsea Substation forecasts, there are also significant differences, as well as entirely new input data. CLF/GR's criticism that the Company "simply relies mainly on the Board's findings in prior decisions concerning the proposed substation and fails to account for new information and changed circumstances in the intervening years since those decisions" is at odds with the fully refreshed record in this proceeding on the issue of need, which the Company accurately describes as a "mountain of evidence submitted by Eversource" – not to mention that evidence submitted by CLF/GR itself (CLF/GR Reply Brief at 1; Company Reply Brief at 3-4). Appropriately, the Board's review of need in this proceeding is based on the record in this proceeding, which has been fully and fairly developed and actively litigated by the parties.³⁸ The Siting Board makes its required finding on need based on this new information. See G.L. c. 164, § 690.

CLF/GR complains that because customer-specific data, such as for Logan Airport, is protected in this proceeding from disclosure to the public, it is impossible for the residents of East Boston to fairly and accurately assess the accuracy of Company claims that Logan Airport is not the majority of load served by the Chelsea Substation (CLF/GR Reply Brief at 7). The Siting Board notes that CLF/GR executed a non-disclosure agreement with the Company, and therefore CLF/GR has had full access to Logan Airport load data, provided by the Company in response to various CLF/GR information and record requests. Furthermore, CLF/GR did not object to the Company's motion or file an objection to the Presiding Officer's ruling on the confidential treatment of such data. Accordingly, CLF/GR's belated criticisms regarding the confidentiality limitations on customer load

CLF/GR disputes need for the East Boston Substation based on its perception that customers in the Chelsea-East Boston area are being served reliably, and that the prior year need in 2018 (as found in Eversource 2017) has "come and gone" without incident. This argument is flawed in two critical respects. First, and most importantly, well-established reliability planning standards adopted by the Siting Board (and other regulatory authorities such as the Federal Energy Regulatory Commission, Northeast Electric Reliability Council, Northeast Power Planning Conference, and ISO-NE) do not simply rely on recent actual operating conditions to assess whether need exists for additional resources. Although the occurrence of outages and overloads would certainly suggest such a need, the absence of actual outages and overloads does not necessarily mean that electric system reliability problems do not exist now or in the reasonably foreseeable future.

Second, established reliability planning practices rely on two key modeling elements: (1) stress conditions on the system reflecting peak loads and extreme weather; and (2) defined contingency scenarios that assume a failure of one or more system elements (such as a substation transformer, a transmission supply line, or other critical system resources). Absent both stress conditions and severe contingencies, it is not surprising that transmission-related outages and reliability impairments do not typically occur, and are, therefore, not evident to customers. Accordingly, the Siting Board does not regard the generally reliable operating history of the electric system in the Chelsea-East Boston load area as contradicting the Company's contention of urgent need for additional resources to reliably serve the Chelsea-East Boston load area. The Siting Board has noted on prior occasions that system reliability planning is based on the assumption of extreme, adverse conditions, with a low probability of occurrence, but severe consequences that could jeopardize reliability, public health, safety and welfare. See NSTAR Electric Company d/b/a Eversource, EFSB 17-02/DPU17-82/17-83, at 47 ("Sudbury-Hudson") (2019); NSTAR Electric Company, EFSB 10-2/DPU 10-131/132, at 25, 51 ("Lower SEMA") (2012); National Grid, EFSB 09-1/DPU 09-52/09-53 at 6 n. 7 (2011). The importance of this planning approach is firmly rooted in Siting Board statutes, regulations, case precedent, and

data, including that for Logan Airport, are without merit. See NSTAR Electric Company d/b/a Eversource Energy, EFSB 22-01, Presiding Officer Ruling Granting Protective Treatment (June 10, 2022); NSTAR Electric Company d/b/a Eversource Energy, EFSB 22-01, Presiding Officer Ruling Granting Protective Treatment (July 18, 2022).

judicial review of our decisions, and is well established. <u>See Town of Sudbury v. Energy Facilities</u> <u>Siting Bd.</u>, 487 Mass. 737, 748-749 (2021).

Aside from the application of proper reliability planning standards and methods, there are also indications in the recent actual operating history, and anticipated changes in the Chelsea-East Boston load area, of threats to system reliability – despite the completion (per Eversource 2017) of a new 115 kV transmission line connecting the Mystic Substation in Everett to the Chelsea Substation. First, actual peak loads at the Chelsea Substation in 2021 nearly returned to levels last seen in 2013, which first gave urgency to the need for the proposed East Boston Substation. Eversource 2017 at 22.³⁹ Actual peak loads from 2021 are close to the Chelsea Substation's Normal Rating of 125 MVA and may have already breached this level given the continuing recovery from pandemic-induced load suppression (Exh. EFSB-N-2, at 2). Second, significant load growth from major new step loads (discussed below) further threatens to exceed both Normal and Emergency capacity ratings of the Chelsea Substation in the near term (Exh. EFSB-N-6). Third, the Company has provided extensive historical data on loss-of-service events in the past 10-15 years for the Chelsea-East Boston load area that show some significant outage events (Exh. EFSB-N-7). While the East Boston Substation would not necessarily have prevented all such events, the evidence does indicate that the Substation would have reduced the number, duration, and severity of such outages by providing important new opportunities for the Company to further sectionalize its feeder lines out of the Chelsea Substation and make repairs to faulted circuits (Exh. EFSB-N-7, at 10). For the above reasons, the Siting Board dismisses CLF/GR's assertions that recent operating history somehow precludes a finding of need for the Chelsea-East Boston load area.

The record in this proceeding verifies several important characteristics of the electrical system in the Chelsea-East Boston load area relating to need. First, there is no alternative source of transmission supply into this area at present, other than through the Chelsea Substation (Exh. EV-2, at 17; Tr. 3, at 396). Second, there are also no alternative distribution feeder lines from other substations in the region that could currently pick up load in Chelsea or East Boston in

CLF/GR has questioned whether loads at Logan Airport may, in fact, have been suppressed due to the decline in air travel during the COVID-19 pandemic (CLF/GR Reply Brief at 7). To the extent this is true, the actual 2021 Chelsea Substation peak loads may also have been understated.

the event of a contingency at the Chelsea Substation (Tr. 3, at 396). Therefore, the Chelsea-East Boston load area is accurately described as an electrical island, with East Boston being at the outermost extremity, with no direct transmission lines, and the longest underground distribution feeders in this load area, which makes them the most susceptible to faults and outages (Exhs. EV-2, at 17; EFSB-N-7, at 10-11).

With regard to the general methods used to develop the 2022 Chelsea Substation Forecast, the Siting Board notes many similarities to the approach used in Eversource 2017, which the Siting Board found to be "reviewable, appropriate, and reliable for use in this proceeding to evaluate the Company's assertion of need." However, as noted above, there have been several revisions to the Company forecasting approach, and all of the input data for the 2022 Chelsea Substation Forecast has been revised since the 2015 forecast used in Eversource 2017. The Company contends that its forecasting method revisions have made its forecasts more accurate, and properly internalize some of the major structural shifts – particularly those relating to EE, that were unfolding at the time of its 2015 Chelsea Substation forecast (Exh. EFSB-N-3, at 6; Tr. 3, at 494). The Siting Board's review of the 2022 Chelsea Substation Forecast below focusses on issues raised by parties or staff during this proceeding and provides a brief review of the basic modeling methods used previously.

The Company's 2022 Chelsea Substation Forecast uses a generally similar method as in the 2015 forecast to produce a basic "trend forecast" using an econometric model, which evaluated historical peak demand as a function of peak day weather conditions and the economy. See Eversource 2017 at 14. Some noteworthy changes include the use of retail sales data rather than gross state product, which the Company observed to be a more useful predictive measure of peak load (Tr. 3, at 439). Starting in its 2016 Chelsea Substation forecast, and thereafter, the Company introduced a new dummy variable to better reflect a significant structural downshift in peak load due to increased EE and the implementation of stricter building codes (Tr. 3, at 493-494). At the same time, the Company removed another dummy variable originally used to capture growing peaks occurring in the 2011 – 2013 period of extremely hot and humid weather that proved to be an unreliable predictor in subsequent years (Tr. 3, at 494-495). As shown in Table 3 above, these changes helped to significantly improve the accuracy of the Company's Chelsea Substation forecasts since 2015, which continue to improve.

After producing the trend forecast for the Chelsea Substation, the Company adjusted this forecast to account for incremental EE, PV installations, and EVs above and beyond what is

implicit from historical data. In these areas, Eversource introduced several changes in the 2022 Chelsea Substation Forecast, relative to the 2015 forecast: (1) the Company created and used for the first time an area-specific EE forecast for the Chelsea Substation – specifically focused on zip codes 02128 and 02150 - rather than using a pro-rata share of Eversource East system EE savings based on relative substation peak loads (the 2015 forecast approach); (2) the Company zeroed out future BTM PV contributions to reducing peak load given that summer peak loads are now sometimes occurring later in the evening hours (until as late as 9:00 or 10:00 p.m.) when PV production is approaching zero; and (3) the Company added a new component for anticipated incremental light duty EV use based on a systemwide estimate assigned to each substation on a proportional historic peak allocation method (Exh. EFSB-N-9, at 1).

CLF/GR takes issue with each of these changes. With regard to EE, CLF/GR claims that Eversource fails to account adequately for EE programs in its needs assessment (CLF/GR Brief at 10). For PV, CLF/GR argues that the Company has failed to account for the fact "that solar resources can generate electricity later in the day during these peak days in the summer because there is additional daylight, or for the potential use of battery storage system in shifting renewable generation on to peak" (CLF/GR Reply Brief at 6). CLF/GR also faults the Company's EV projection (and other electrification load projections) as incomplete and conclusory (CLF/GR Brief at 11-12). CLF/GR also questions why the Company has not evaluated TOU rates as a means of reducing peak demand (CLF/GR Brief at 12). As discussed below, the Siting Board finds each of CLF/GR's arguments to be unpersuasive.

With regard to the EE adjustment, the Company's 2022 Chelsea Substation Forecast is specifically tailored to the Chelsea-East Boston load area, rather than a pro-forma allocation of system-level EE projections, seen in previous Eversource substation forecasts, including the 2015 Chelsea Substation forecast (Tr. 3, at 572). Notwithstanding CLF/GR's critique, this refinement appears beneficial in more accurately reflecting the fact that Eversource has recently embarked on targeted enhancements in the level of EE participation in the Chelsea-East Boston load area (Tr. 3, at 572). The Siting Board encourages Eversource (and other filing entities) to follow this method, where practicable, in the future.

Eversource's decision to essentially zero out the expected additional 6.2 megawatts ("MW") of PV installations in the Chelsea-East Boston load area in the next ten years as a peak load reducer, is a recent change of method to its substation forecasting (Tr. 3, at 492-493).

Previously, Eversource relied on ISO-NE's solar forecast methodology and assumed a small percentage of the incremental PV nameplate capacity as a reduction to future peak loads (Exh. EFSB-N-3).⁴⁰ The Company reported that it conducted a detailed analysis of the system peak hours for the Chelsea-East Boston load area and determined that the peak could now occur anytime between roughly 1:00 p.m. to as late as 9:00 p.m. (Tr. 3, at 506). Because the peak can occur in hours when PV production is tailing off, or even zero, the Company decided it was not appropriate to include an adjustment to peak for PV going forward (Exh. EFSB-PA-2). The Company observed that the shift in peak towards later in the evening reflects both the effect of PV production earlier in the day, as well as increasing residential demands that skew toward evening hours (Tr. 3, at 506-508).

The record in this proceeding shows that the summer peak hours in the Chelsea-East Boston area have been expanding in recent years to a broader period of time, from approximately 1:00 p.m. to 9:00 p.m. on hot, humid summer weekdays, particularly following a multi-day heat wave. Given this reality, PV production, whether BTM, or provided to the grid as net energy production will not necessarily correspond to system peak load hours, and may not be available at all during actual peaks, if the demand trend towards evening hours continues.

The prospect of battery energy storage shifting PV production to more reliably reducing summer peaks, as CLF/GR posits, cannot be discounted, but the Company raises important concerns about the practical effectiveness of this approach. First, because the window of potential system peaks in the Chelsea-East Boston load area extends for approximately eight hours (from 1:00 p.m. to 9:00 p.m.), even with perfect knowledge of system loads for the day, and optimal use of battery storage to reduce peak loads, shifting PV production for consumption later in the day with battery storage may alter the time of the system peak, but have only limited effect on its

Eversource notes it historically has forecasted the summer peak to occur around 5:00 pm, which equates to only 27 percent of potential solar output being available (Exh. EFSB-N-3). In the ISO-NE 2022 CELT forecast, the report notes that New England has over 4,800 MW of PV capacity installed, which has pushed the peak hour of grid demand to later in the day, when PV production is reduced. The 2022 CELT forecast estimated that PV resources reduce demand by 903 MW (or 18.75 percent of nameplate capacity) at the time of net summer system peak during early evening hours (Exh. CLF-GR-ES at 13 n.8 providing link to https://www.iso-ne.com/static-assets/documents/2022/04/forecast_data_2022.xlsx).

magnitude. In other words, by shifting solar output through battery storage to consumption later in the day, the peak system hours may simply regress to afternoon or early evening hours.

While the Siting Board shares some of the reservations expressed by the Company regarding the role that future PV installations may play in reducing peak loads for the Chelsea-East Boston area, we also view this area as requiring further study in future cases, as incentive programs for both PV and energy storage deployment evolve and become more mature. In accepting the Company's PV analysis for purposes of reviewing need in this proceeding, we are reassured that full consideration of PV coupled with energy storage options occurs in the Company's NTA analysis below. In addition, the amount of PV estimated over the next ten years (with a nameplate capacity of 6.2 MW) is well below the amount of capacity required to offset the deficiency of the Chelsea Substation's firm (LTE) capacity (14.2 MVA). Therefore, the forecast treatment of the additional PV in the next ten years, even if it were fully decremental to peak load, would not reverse the finding of need for additional resources.

With regard to projections of EV demand over the next ten years, the Company has presented a sufficient level of detail for the Siting Board to conclude that its estimates are reasonable, and consistent with expected programs and policy objectives, and market trends. If anything, it seems the Company's estimates of EV electric recharging demand are probably on the conservative side, given the presence of Logan Airport in East Boston, and its potential for widespread EV fleet use for both passengers and goods. The commitment of Hertz to procure a significant number of EVs for its Logan Airport location is a clear indication of this trend. Like battery storage, EV adoption rates, and their impact on peak loads is an evolving and rapidly growing market area that Eversource and other applicants are advised to evaluate closely in future filings.

Finally, the Siting Board sees no shortcoming in the Company's treatment of TOU rates in its load forecasting practices in this proceeding. To the extent that customers are using TOU rates currently, such time shifts in consumption would already be reflected in the econometric regression results using historical load data. Absent significant changes in TOU rate adoption in

CLF/GR also points out the role of EVs can potentially play in storing energy and supporting the grid with bi-directional charging (CLF/GR Brief at 11-12). As this nascent technology becomes more feasible, it warrants closer examination in future load forecasts.

the future, which CLF/GR has not alleged, there is no reason to conclude that the Company's methodology overlooks the contribution that TOU rates make in reducing peak loads to any significant degree.

By far, the most significant factor influencing Eversource's 2022 Chelsea Substation Forecast is the addition of large step loads that are not captured in the ordinary economic growth trends, both historical and forward looking, using econometric regression analysis (Exh. EFSB-N-6, at 1; Tr. 3, at 470-472). The Company limits step load additions in the forecast to "known, highly certain projects that [Eversource] feels are going to come online" (Tr. 3, at 472). The step load component of the 2022 Chelsea Substation Forecast includes four customers: Clippership (a luxury rental apartment complex in East Boston), Massport (terminal expansion project), Hertz (addition of EV charging), and the redevelopment of Suffolk Downs by the HYM Investment Group (Exh. EFSB-N-6; Tr. 3, at 482). Eversource acknowledges that Massport is the largest existing single customer in the area, 42 and a major locus of future load growth, including on-airport loads of Massport itself, and nearby airport-related loads, such as Hertz (Tr. 7, at 1268). Of even greater significance in the 2022 Chelsea Substation Forecast is the re-development plan for Suffolk Downs, with construction already underway, that is anticipated to add 12 MVA of new load by 2028, and potentially 42 MVA over a 20-year period (Exh. EFSB-N-6; Tr. 3, at 482). The proposed East Boston Substation would provide ample capacity for this load growth in the near term and is designed with room to accommodate a third transformer in the future, to handle the level of growth associated with the full build-out of Suffolk Downs (Tr. 3, at 485-486).

In its initial and reply briefs, CLF/GR lodges no criticisms of the Company's step load methodology, other than to note that approximately 73 percent of such loads that have a Company project confidence rating of "Certain" are airport related (CLF/GR Brief at 12 n.7). However, during cross-examination, CLF/GR's witness did express her view that steps loads are used in the Company's forecast because Eversource "is looking at specific facility-by facility, company-by-company additions to load beyond their initial econometric forecast" (Tr. 5, at 867). She also

Eversource provided load data from Massport but requested confidential treatment for that information. The information provided on a confidential basis was available to parties who executed an agreement limiting the release of the materials to protect customer-specific information. See NSTAR Electric Company d/b/a Eversource Energy, EFSB 22-01, Presiding Officer Ruling Granting Protective Treatment (June 10, 2022).

recommends that Eversource and the Siting Board should have, but have not, "verified the step loads in this proceeding, including letters from the customers regarding such new loads, their timing, any caveats, and alternatives that would flatten the load or reduce their energy use" (Tr. 5, at 871-872).

Despite CLF/GR's witness's misgivings, the Siting Board finds that the Company has, in fact, provided substantial evidence to verify the step load additions included in the 2022 Chelsea Substation Forecast. Such evidence includes load letters, public announcements, actual construction activities, project specifications, plans and approvals/permits, and other indicia of project certainty, magnitude, and timing. Importantly, the Company also requires step load customers to pay significant, up-front fees for Company engineering and equipment that are ordered to serve such loads (Tr. 3, at 477-479). The Company also has dedicated staff that work with developers, monitor the progress of these projects, attend planning meetings, and provide this information to others at the Company (Tr. 3, at 479). In view of the above, the Siting Board finds the Company's step load forecast to be sufficiently known and measurable for use in the 2022 Chelsea Substation Forecast.

CLF/GR sought to undermine the Company's load forecast through its witness,

Dr. Stanton, in Exhibit CLF-GR-ES. 44 This analysis uses ISO-NE's 2022 CELT growth rates for

The Company acknowledged that to date, it does not have a load letter from HYM Investment Group, the developer of Suffolk Downs (Tr. 3, at 477). The Company anticipates a load letter will be forthcoming from the Suffolk Downs developer in the future, and that conversations between the Company, the developer, and a consultant indicate that the Revere portion of the Suffolk Downs redevelopment (served by National Grid) will commence first and that the first portion of the redevelopment in East Boston will commence sometime in 2023 (RR-EFSB-8, at 1-2). As part of the Company's "Electric Service Requirement," the Company does expect the developer to submit a request for service, but ultimately it is the customer's decision when to proceed with this step (RR-EFSB-8, at 1). The Company maintains that the announced plans for the redevelopment of Suffolk Downs are highly publicized and underway (RR-EFSB-8, at 1). In addition, Eversource notes that the developer has obtained approvals from the BPDA and MEPA Office (RR-EFSB-8, at 1).

There seems to be some confusion about what to call this analysis: Dr. Stanton's testimony describes her quantitative analysis as "[t]he tentative C-EB-L *peak load forecast* provided in Table 4" [emphasis added] (Exh. CLF-GR-ES, at 17). However, during cross-examination, Dr. Stanton stated that in her analysis, "[she was] not providing an alternative

Massachusetts load for the 2022 – 2031 period as the basis to estimate an assumed compound annual growth rate of 0.05 percent for the Chelsea-East Boston load area served by the existing Chelsea Substation (Exh. CLF-GR-ES at 17). As noted above there are no external adjustments in Dr. Stanton's analysis for exogenous factors, such as anticipated step loads.

As the Company correctly notes, this is not the first time that parties (including GreenRoots) in the proceedings relating to the Project have argued for use of such an analysis in reviewing whether there is a need for the proposed East Boston Substation (Company Reply Brief at 4). CLF/GR alleges that the 2022 Eversource area-specific, granular-level peak demand forecast for Chelsea Substation should be ignored in favor of the ISO-NE trend model for statewide load. (CLF/GR Brief at 10-11). As CLF/GR is well aware, these exact claims have been rejected in the two prior proceedings regarding the Project. Eversource 2021 at 23-24; Eversource 2017 at 27. See also NSTAR Electric Company d/b/a Eversource Energy, D.P.U. 20-67, at 22-25 (2022). Little more needs to be said about our rejection, for a third time, of less accurate regional methodologies to assess the need for the Chelsea-East Boston load area. We hasten to add that the record in this proceeding shows that the Chelsea-East Boston load area comprises approximately one percent of the peak load for the entire state of Massachusetts determined by ISO-NE, and there is no reason to assume that its load characteristics and growth rates would necessarily mirror those of the entire state (Tr. 2, at 327-328). To the contrary, the record in this case, as in prior cases, highlights unique characteristics of the Chelsea-East Boston load area, and the unusually rapid pace of economic development activity in this relatively small portion of the entire state. Accordingly, we once again reject the use of overly broad, regional growth rate estimates as a means to develop a peak load forecast for the Chelsea-East Boston load area. Instead, we continue to prefer the Company's granular, substation-based approach as superior, and consistent with well accepted methods of the Siting Board.

As noted above, with respect to the issue of need, the Siting Board is not relitigating its findings in <u>Eversource 2017</u> or <u>Eversource 2021</u>. Rather, it is taking a fresh look at the issue. Given the statutory and regulatory imperatives to determine need in this Certificate Proceeding, and the substantial passage of time since the initial finding of need in <u>Eversource 2017</u>, the

forecast to the one provided by the Company. Rather, [she was] providing information as a critique to their forecast and pointing out issues with their forecast" (Tr. 5, at 866).

extensive record developed on need in this proceeding has been essential. This proceeding contains a fully revised record on need, including new studies based on updated methods and allnew input data, and new findings by the Siting Board.

While this new analysis has informed the Siting Board's understanding of need for purposes of its review of the Certificate request in this proceeding, it has also provided an unusual retrospective understanding of the Company's prior forecasting methods and related forecast variances over the elapsed eight-year time period. The record in this proceeding also shows that the Company has identified and addressed the elements of its forecasting methodology that relate to prior forecasting variances. Indeed, the record in this case demonstrates that the accuracy of more recent forecasts has improved markedly. The Siting Board encourages the Company, and other future applicants, to review and refine established forecasting methodologies and continually strive for improved accuracy.

In view of the above, the Siting Board finds that the Company's 2022 Chelsea Substation Forecast is reviewable, appropriate, and reliable to evaluate the issue of need for additional resources in the Chelsea-East Boston load area. The evidence in the proceeding clearly establishes a need for 0.6 MVA of additional resources in the Chelsea-East Boston load area by 2024, growing steadily to 14.2 MVA of additional resources by 2031. Beyond the time horizon of the 2022 Chelsea Substation Forecast, the prospect of 30 MVA of additional load after 2031 for redevelopment of Suffolk Downs suggests that the level of need reflected in the current forecast for the Chelsea-East Boston load area is likely to accelerate significantly in the longer term. The record also shows that peak load demand in the Chelsea-East Boston load area may be further augmented by increasing levels of electrification of buildings and transportation, still in their infancy, as the Commonwealth moves forward with its implementation plans for Net Zero in 2050. In view of above, the need for additional resources for the Chelsea-East Boston load area is immediate, significant, and likely to accelerate, and must be addressed now to ensure reliable electric service.

D. Project Alternatives

1. Company Position

In <u>Eversource 2017</u>, the Siting Board reviewed multiple potential transmission and NTAs to meet the need for the Project as presented in the Original Proceeding, including the Substation.

Eversource 2017 at 29-63. For NTAs, the Siting Board specifically assessed DG, DR, EE, large-scale generation and a large battery energy storage system ("BESS"). Eversource 2017 at 20-31. The Siting Board found that the Project, including the Substation, was superior to the other alternatives identified with respect to providing a reliable energy supply for the Commonwealth with minimum impact on the environment at the lowest possible cost. Eversource 2017 at 62-63

Eversource stated that in the Original Proceeding it presented extensive evidence on potential transmission and NTAs to meet the identified need in East Boston and Chelsea, demonstrating that they would be insufficient, more costly, more complex, and less reliable to implement than the Project (Company Brief at 54, citing Eversource 2017 at 59-63). Eversource argues that alternative options to satisfy need were fully and fairly evaluated in the underlying proceeding, and that the Siting Board does not relitigate such issues under established adjudicatory and judicial precedent (Company Brief at 54). Nevertheless, in response to the Siting Board's and intervenors' questions, the Company provided evidence in this proceeding on alternatives to satisfy the current forecast of need for the Substation. The Company argues that with new evidence, it has once again, conclusively demonstrated that no alternatives would be sufficient to address the identified need with the same level of reliability, timeliness, or cost-effectiveness as the Substation (Company Brief at 54).

Eversource noted that its evaluation of NTAs to the Project has evolved significantly since the underlying proceeding and reflects updated NTA technology profiles and better analytical tools to assess them (Tr. 6, at 1169-1170). For example, the Company noted that battery technology has improved significantly since the underlying proceeding, and that the cost of batteries, as well as solar panels and power inverters have all decreased and are "commodit[ies]" now (Tr. 6, at 1172, 1176). Conversely, the Company noted that a substantial amount of lower-cost EE opportunities have been tapped, and that incremental efficiency gains require significantly higher capital outlays (Tr. 6, at 1177). The Company described its new NTA screening tool to evaluate the viability of NTA solutions as reflecting advancements in forecasting and modeling, and increased availability of data (Tr. 6, at 1169-1170). Eversource asserts that, even with NTA technology improvements,

The Company also stated that there was an increased proliferation of DG resources like rooftop solar on the electric grid (Tr. 6, at 1172).

there is still no technically feasible NTA solution (nor combination of NTAs) that would satisfy the identified need for the Project (Exh. EFSB-PA-3; Tr. 2, at 336-337).

The Company noted that the rest of the overall Project described in Eversource 2017 has already been built, and it asserts that there is no alternative that could reliably serve the purpose of the Substation and its connection to the two completed transmission lines (Exh. EV-2, at 16). In its conclusion, Eversource again argues that the Substation is the "optimal, and [...] only practical solution for addressing the identified need" (Company Brief at 58).

2. Additional Record Evidence on Project Alternatives

In response to Siting Board and intervenor questions, Eversource evaluated the use of EE, DR, PV, and large-scale BESS, individually and in combination, as project alternatives to satisfy Project need as confirmed in this proceeding. The Company based its analysis on the NTA capacity and energy injection amounts needed to meet the updated peak load requirements. The Company also analyzed the NTAs as a combined portfolio dispatched on a peak load day (Exh. EFSB-PA-3; Tr. 3, at 514-524). Eversource also provided information on distributed energy solutions using BTM batteries and EVs with bi-directional charging capability to serve as mobile batteries, and increased TOU rate adoption to reduce peak demand (Exhs. EFSB-PA-3; CLF-GR-N-41; EFSB-N-13; Tr. 3, at 565; RR-EFSB-9).

a) NTA Capacity and Energy Injection Requirement

To conduct the NTA analysis, the Company determined capacity (with units MVA)⁴⁶ and energy (with units megawatt-hours – MWh) injection requirements to address the transmission and distribution needs at the Chelsea Substation (Exh. EFSB-PA-3, at 4). As noted above, the Company identified a need for increased capacity in the area served by the Chelsea Substation, which by 2031 would rise to a 14.2 MVA deficiency between the firm station capacity (i.e.,

MVA is often used to refer to the capacity of a piece of equipment (Tr. 3, at 444). The Company explained that MVA can be converted to MW by multiplying the value by a power factor (Tr. 3, at 444-445). The power factor represents the proportion of real work not lost to reactive power, which tends to be 97 to 98 percent (Tr. 3, at 445). The Siting Board notes that these two units for capacity are often used interchangeably, as is the case in this Decision.

135 MVA) and anticipated peak load on the system on a peak summer day (Exh. EFSB-PA-3, at 1-2). Based on an estimated 90/10 peak day load profile for load served by the Chelsea Substation in 2031, the Company stated that the corresponding energy deficiency would be 124.4 MWh (Exh. EFSB-PA-3, at 1-3). As noted previously, the Company stated that the Chelsea Substation could experience peak load any time between 1:00 p.m. and 9:00 p.m. due to continued commercial peak activity in the day and increasing residential peak activity in the evening (Exh. CLF-GR-N-28; Tr. 3, at 512-513). The Company explained that the energy injection requirement above (124.4 MWh) represents only a one-day event duration, whereas its analysis for 2031 showed that a peak deficiency could occur over 17 very hot days during the summer (Exh. EFSB-PA-3, at 2). The Company explained that a multi-day event would necessitate a 124.4 MWh energy injection for each day (Exh. EFSB-PA-3, at 2).

Eversource stated that an NTA solution should be able to address both the additional capacity required and the duration of the contingency (<u>i.e.</u>, time until the transformer element is repaired or until loads decline below the Firm Capacity level) (Exh. EFSB-PA-3, at 2,4). The Company considered an NTA technically feasible if it can resolve the Project need with comparable reliability, performance, and response time as the new Substation (Exh. EFSB-PA-3, at 4). The Company concluded that the fundamental requirement of an NTA resource is that it be able to continue operating until the contingency is resolved or load declines, which may require that it operate for several days or multiple weeks (Exh. EFSB-PA-3, at 4). The Company evaluated each possible NTA to determine whether it could provide the needed capacity and energy, could be constructed in a timely manner, and also evaluated the corresponding cost and environmental impacts of each NTA.

b) Solar PV

Eversource evaluated solar PV output using annual, 90/10 weather-adjusted irradiance profiles for summer conditions, which resulted in an irradiance factor of 24.1 percent (Exh. EFSB-PA-3, at 5).⁴⁷ Eversource explained that no amount of solar PV by itself can address the need for

The Company stated that weather conditions can diminish output of PV generation (Exh. EFSB-PA-3, at 5 n.6). The Company explained that the irradiance factor is based on the statistical likelihood of low sunlight energy under weather-adjusted conditions to account

the Project because solar resources are intermittent and non-dispatchable – solar can reduce peak load only during hours when sunlight is available but not during the evening (Exhs. EFSB-PA-1; EFSB-PA-3, at 4-5). The Company indicated that the unavailability of PV resources during evening hours is particularly troublesome because, on hot weather days, high loads served by Chelsea Substation extend well into the evening hours (Exhs. EFBS-PA-1; EFSB-PA-3; EFSB-PA-5; Tr. 3, at 502). Nevertheless, the Company noted that solar PV would still reduce the energy injection required during a peak day (from 124.4 MWh to 115.9 MWh), even though it would not reduce the capacity deficiency, as the overall peak deficiency of 14.2 MVA remains later in the day (Exh. EFSB-PA-3, at 5-6).

c) Active DR and Energy Efficiency

For its DR programs analysis, the Company considered the average workday load profile for the Chelsea Substation in the summer months of June, July and August (Exh. EFSB-PA-3, at 7). Eversource stated that active DR programs, which encourage customers to make temporary load reductions, would not achieve necessary reductions, due in part to the long duration of high load (load at, or close to 99 percent of the Substation's capacity) served by the Chelsea Substation – up to six hours between the hours of 4 p.m. and 10 p.m. (Exhs. EFSB-PA-3; EFSB-PA-4; Tr. 2, at 321-323). The Company explained that active DR programs typically last for two to four hours, which would not be long enough to serve as a solution for the entire duration of high loads (Exh. EFSB-PA-3, at 7). Eversource also indicated that customers participating in active DR programs tend to use more energy before or after being called upon to reduce usage, which would simply increase demand in a different time period (Tr. 3, at 502-503; Company Brief at 55).

for possible moment-to-moment cloud cover, haze and other detriments to PV production (Exh. EFSB-PA-3, at 5 n.6).

The Company stated that there is a total of approximately 6.2 MW of installed solar PV capacity currently in Chelsea and East Boston, which was installed within the past decade, with an additional planned 3.2 MW in queue (Exh. EFSB-PA-3, at 5). The Company added that the Commonwealth Decarbonization Roadmap, which calls for a 105 percent increase of solar installations in the next ten years, would require 6.5 MVA of additional PV (Exh. EFSB-PA-3, at 5).

The Company asserts that EE reductions through passive DR programs, including wholesale replacement of existing customer equipment such as air conditioners with more efficient equipment or upgrades to HVAC, would not diminish peak loads to the extent needed to eliminate need for the Substation (Exhs. EFSB-PA-3; EFSB-PA-4; Company Brief at 55). The Company represented that its 2022 Chelsea Substation Forecast already accounts for its "very aggressive" EE programs in the Substation area, under which the Company expects a demand reduction of 6.1 MVA from gross load in 2031 (Exhs. EFSB-PA-1; EFSB-PA-3, at 7). The Company asserts that it is nationally recognized for its "best-in-class" EE programs and that in the past ten years it has been active in signing up commercial customers that it deemed to be amenable to those programs (Exh. EFSB-PA-4; Tr. 6, at 1178-1179). The Company explained that, as a result, it had already tapped all "low hanging fruits" and that deploying more EE would be significantly more expensive (Tr. 6, at 1177). However, the Company indicated that, conceptually, it could achieve 2.3 MVA of additional EE savings through a concentrated focus on increasing EE above "business as usual" levels in the area (Exhs. EFSB-PA-3, at 8; EFSB-PA-4). ⁴⁹

d) <u>Utility-Scale BESS</u>

Given its expectations of 6.5 MVA of additional PV (pursuant to the Commonwealth Decarbonization Roadmap's overall target of a 105 percent increase in existing PV capacity by 2031) (see Section III.D.2.b, above) and 2.3 MVA of additional EE savings by 2031 (at a maximum under focused EE programs) (see Section III.D.2.c, above), Eversource calculated that the remaining capacity deficiency would be 12.1 MVA and the energy deficiency would be 88.9 MWh (Exh. EFSB-PA-3, at 8). The Company used this reduced capacity requirement and an energy injection requirement of 121 MWh (after applying a round-trip charging efficiency factor of 85 percent and an additional 20 percent minimum state-of-charge to extend battery life to the energy deficiency of 88.9 MWh) for its BESS analysis (Exh. EFSB-PA-3, at 9).

The Company stated that achieving savings beyond the additional 2.3 MVA would require convincing customers that had not already signed up for Eversource's EE programs, and who according to the Company are likely more reluctant participate, to make substantial investments to replace existing equipment (Exh. EFSB-PA-4; Company Brief at 56; Tr. 6, at 1178-1179). The Company argues that these additional customer signups would not come to the levels required in the timeframe needed to meet the load deficiency (Exh. EFSB-PA-4; Company Brief at 56; Tr. 6, at 1178-1179).

Eversource argues that a utility-scale BESS connected to the electric grid is not a suitable alternative to the Project because batteries alone are not a power source and must be recharged from the grid (Exh. EFSB-PA-5; Tr. 3, at 504). 50 During recharging, the Company stated, the BESS acts as a consumer of energy (Exh. EFSB-PA-5). Assuming a two-day, N-1 peak summer load event, the Company calculated that a utility-scale BESS, would be at or close to a zero state-of-charge at the beginning of the second day due to completely discharging all its energy the day before to address the contingency event (Exh. EFSB-PA-3, at 9-10). In order to recharge the BESS to a sufficient state-of-charge to have 121 MWh available later in the day for discharge, the Chelsea Substation would need to operate at its emergency LTE rating (135 MVA) for almost 18 hours in a day, from approximately 7:30 a.m. to 1:00 a.m. (Exh. EFSB-PA-3, at 9-10). The Company explained that this level of demand would be beyond the maximum 12-hour LTE rating of the two remaining available transformers at the Chelsea Substation under an N-1 contingency (Exhs. EFSB-PA-3; EFSB-PA-5; Tr. 3, at 504). The Company emphasized that in addition to the 12-hour LTE violation, the BESS would also not be able to recharge in time to address a multi-day peak load event, as described in Section III.D.2.a above (Exhs. EFSB-PA-3; EFSB-PA-5).

The Company also argues that charging a BESS with sufficient amounts of additional grid-connected solar power is not feasible (Company Brief at 57).⁵² The Company noted that

The Company stated that the hypothetical BESS would have to be connected to the distribution system to offload "critical" electric circuits running across Chelsea Creek and offload transformers in N-1 contingencies (Exh. EFSB-PA-7).

Eversource stated that, to reduce the hours during which Chelsea Substation operates at its LTE would result in the BESS not having enough time to charge from an empty state, thus disqualifying this approach from addressing the identified need (Exh. EFSB-PA-3, at 11). Otherwise, the BESS would have to enter a contingency event day with at least 65 percent of its charge – which would require the Company to be able to predict a contingency equipment failure ahead of time (Exh. EFSB-PA-3, at 11). The Company reiterates that the scenario it considered allows for zero margin of error in operation (Exh. EFSB-PA-3, at 11).

Other forms of generation, such as a diesel-fired emergency generator could also be used to supplant to the capacity and energy shortfall at the Chelsea Substation (Tr. 2 at 346). However, the Company and intervenors both noted the air emissions and other negative environmental considerations of such an option, and the Company also described a negative reaction to this idea in conversations with City of Chelsea officials (Tr. 2, at 346; Tr. 8, at 1339-1340)

under *ideal* conditions, with the highest possible solar output (<u>i.e.</u>, during a summer solstice and perfect weather conditions), 1 MW of installed PV capacity could generate 8.45 MWh in a single day (Exh. EFSB-PA-7, at 2-3).⁵³ Therefore, under these ideal production conditions, the PV capacity needed to adequately recharge the BESS in a single day, with a net injection of 121 MWh, would be 15.5 MW.⁵⁴ The Company provided further caveats about the assumed PV system required to recharge the hypothesized BESS NTA solution. The Company estimated that using a 90/10 assumption for summer weather, the output for a PV system would be derated to 24.1 percent of clear sky maximum irradiance, resulting in a 64.3 MW PV installation size to produce 121 MWh (Exh. EFSB-PA-7, at 3). The Company further derated its assumption for PV production, noting that if solar profiles for August are used (a time of high load and reduced solar output relative to summer solstice conditions) then 84.4 MW of PV capacity would be required on a 90/10 weather adjusted basis (Exh. EFSB-PA-7, at 3).

The Company indicated that there is insufficient space to build a solar farm in East Boston and Chelsea at the scale needed to recharge the BESS (Exh. EFSB-PA-7; Tr. 3, at 505-506). In estimating the footprint required to host the PV system, the Company assumed a figure of four acres per MW of solar (Exh. EFSB-PA-7, at 3). According to the Company, an 88.4 MW PV system would then require 337 acres (Exh. EFSB-PA-7, at 3). Additionally, the Company stated that the BESS would require 151,804 square feet (approximately 3.5 acres) of land (Exh.

^{8.45} MWh of daily output from a 1 MW PV system equates to a capacity factor of 8.45/24, or 35.2 percent at maximum daily production efficiency.

According to the Company, the 15.5 MW PV capacity target reflects an 85 percent round-trip efficiency to charge and discharge the battery (including DC to AC conversion losses) effectively increasing the PV energy requirement to 131 MWh (Exh. EFSB-PA-7, at 2).

During evidentiary hearings, the Company described the option of a centrally located solar PV farm as "out of the question" because of this space constraint (

According to Siting Board staff calculation, at four acres per MW of PV, the corresponding footprint for a 15.5 MW PV system would still be 62 acres (Exh. EFSB-PA-7, at 2-3).

The Company did not provide an estimate of the cost of the 337-acre solar farm. However, it estimated that the BESS alone would cost at least \$41.8 million, based on a NREL figure of \$345/kWh, which does not account for differences in construction costs due to location (Exh. EFSB-PA-7).

EFSB-PA-7). For comparison, the Substation would be located on an approximately 27,389 square foot (0.63 acre) site. Eversource 2021 at 3.

e) NTAs in Aggregate

As discussed above, the Company initially considered solar PV, EE, and BESS separately in its NTA analysis. Figure 2 below depicts a hypothetical peak summer day at the Chelsea Substation with all of these NTAs deployed as a combined portfolio (Exh. EFSB-PA-3(4)). The load demanded over the day is depicted by the jagged curve that starts under the zero line of the graph and goes above the line around 10:00 a.m. (Exh. EFSB-PA-3(4)). The zero line represents the Firm Capacity of the Chelsea Substation (135 MVA) – therefore, when the curve is above the line, demand has exceeded the Firm Capacity of the Substation (Exh. EFSB-PA-3(4)). When the curve is below the zero line, there is headroom at the Substation – meaning the Substation is operating below its Firm Capacity and is able to absorb additional loads such as charging a battery (Exh. EFSB-PA-3(4)). Solar PV and EE are shown to reduce the difference between the Chelsea Substation Firm Capacity and the load demanded that day (Exh. EFSB-PA-3(4)). The graph also shows a grid-connected utility scale battery addressing excess demand in the day and charging at night – shown by the reduced headroom area of the demand line under the zero line (Exh. EFSB-PA-3(4)). Note that the there is only a short period of time, during early morning hours, from 1:00 a.m. to 7:30 a.m., where the Substation is operating with headroom, during which the battery charging rate is limited by the BESS capacity (12.1 MVA) (Exh. EFSB-PA-3(4)).

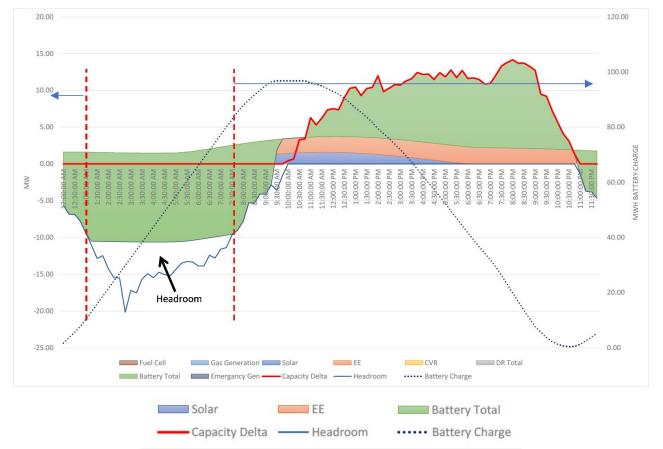


Figure 2: 2031 Peak Day Battery Dispatch Simulation for Chelsea-East Boston Area.

Adapted from Figure Exh. EFSB-PA-3(4).

f) Distributed PV/BESS, EVs, TOU Rates

At the request of the Siting Board, Eversource also evaluated distributed solar PV and BESS systems that could be installed as DR (Exh. EFSB-PA-7). For illustrative purposes, the Company used an off-the-shelf battery system with battery specifications of 13.5 kWh/5.8 kVA (RR-EFSB-9, at 1). The Company explained that for such BTM applications, customers typically use commercially available products instead of batteries with exact power-to-energy ratios that would be optimized to the NTA solution (RR-EFSB-9, at 1). Based on the example

The Company assumed use of a Tesla Powerwall modular battery and provided a link to the manufacturer's retail website at https://www.tesla.com/powerwall (RR-EFSB-9, at 1 n.2).

battery specification, the Company estimated that it would require 8,963 such battery systems to satisfy the need for 121 MWh of energy (RR-EFSB-9, at 1).⁵⁹

Using a 2019 National Renewable Energy Laboratory installed cost estimate of \$18,740 for a generic BTM standalone BESS of a similar size to the Tesla Powerwall, the Company estimated that the 8,963 battery systems required would cost \$168 million (RR-EFSB-9, at 1 n.4, 2). 60,61,62 The Company added that the estimated cost of the battery systems does not include the cost of a control and monitoring system that would enable the Company to coordinate and control dispatch, as well as any distribution system upgrades that would be needed to interconnect the storage resources (RR-EFSB-9, at 2). 63 The Company contends that the cost of the batteries, together with

According to the Company, since each Powerwall provides 5.8 kVA of capacity, the 8,963 units would add 52 MVA of installed capacity to the system (RR-EFSB-9, at 1). The Siting Board notes that this is well above the 12.1 MVA peak storage capacity required for the NTA (on top of the Company's estimate for a maximum EE scenario and an additional 6.5 MVA of rooftop PV by 2031) (see RR-EFSB-9, at 1; Exh. EFSB-PA-3, at 8).

The NREL estimate assumes an AC-coupled battery with a 5 kW power capacity and 14 kWh of energy. See https://atb.nrel.gov/electricity/2021/residential battery storage.

We note that the Tesla link provided by the Company includes an end-user location-specific retail price quotation feature for Tesla-installed PV and Powerwall combined systems, inclusive of available discounts, tax credits and utility incentive programs, such as SMART (solar and storage) and ConnectedSolutions Demand Response (see https://www.tesla.com/energy/design). The retail price shown for a single Powerwall is \$12,500, however Tesla requires Powerwall installation in conjunction with a PV system. In combination with a 7.2 kW PV system, the total retail price for an installed Tesla PV and single Powerwall system is approximately \$29,000 (without tax credits or utility incentives) (https://www.tesla.com/energy/design, accessed on November 8, 2022, using a representative East Boston address).

The Company stated that distributed BESS NTA solutions would be required to yield dispatch control to the Company's centralized dispatch office to ensure that the systems are available at all times, thus negating the customer's enrollment of the battery system in energy markets or other revenue-producing opportunities (Exh. EFSB-PA-7, at 4).

The Company did not provide costs for the distribution upgrades but characterized the costs as "significant" (Tr. 3, at 550). Using an estimated range of \$200/kW to \$500/kW for DG interconnection costs provided by distribution companies to the Department in the Order on Provisional System Planning Program, D.P.U. 20-75 (2021), Siting Board staff estimate that distribution system upgrades could range from \$10.4 million to \$26.1 million for approximately 9,000 5.8 MVA batteries alone, and from \$16.9 million to \$42.2 million for

additional costs for EE programs, would not be cost-effective in comparison to the proposed new Substation in East Boston (RR-EFSB-9, at 2). 64,65,66

The Company contends that regardless of whether a battery NTA solution is a centralized system or a BTM BESS with potentially thousands of installed locations, to alleviate the 2031 peak day capacity need in the Chelsea-East Boston load area, the batteries must be recharged with sufficient energy to supply 88.9 MWh net (after round-trip efficiency charging/discharging losses) in the load pocket, while not causing the two remaining transformers at Chelsea Substation to exceed the their 12-hour LTE rating (Tr. 3, at 506-507, 555). As noted above, the Company contends that for a centralized 12.1 MVA BESS, the necessary PV capacity could range from 15.5 MW (at maximum theoretical efficiency) to 84.4 MW (with derating assumptions for 90/10 weather, and PV production during an August peak day) and the respective areas required for such PV systems ranging from 62 to 337 acres (Exh. EFSB-PA-7, at 2-3; see also Section III.D.2.d). 67

^{84.4} MW of additional solar PV interconnections. <u>Order on Provisional System Planning Program</u>, D.P.U. 20-75 (2021) at 36.

The Company estimated the cost of the incremental maximum EE programs required as \$11.1 million (RR-EFSB-9, at 2).

The Company did not provide a cost estimate for the 84.4 MW of PV capacity that it calculated would be required to recharge the batteries for peak day load conditions in 2031, either for a centralized or distributed BESS NTA solution. However, using the pricing data provided on the Tesla website referenced by the Company, Siting Board staff calculated that a 7.2 kW PV system at a representative East Boston address, would have an installed retail price of \$17,496 (or \$7,251, net of potential tax credits and incentives) (see https://www.tesla.com/energy/design). Using these numbers, staff calculated a rough cost estimate of between \$84.6 million (net of credits/incentives) and \$204 million (cash price) for the 84.4 MW of distributed PV capacity that the Company claims is required in the Chelsea-East Boston load area as part of a BESS NTA solution.

For comparison, the estimated cost of the Substation is \$66 million. Eversource 2021 at 77.

In RR-EFSB-9, the Siting Board asked Eversource to "provide a cost estimate for a distributed energy resource option consisting of combined distributed solar and battery, noting what is and is not included in the estimate." Other than the business as usual assumption of 6.5 MVA of PV by 2031, the Company did not describe a need for additional PV capacity to recharge the BTM BESS units (with 52 MVA capacity), as it did in Exh. EFSB-PA-7, at 2-3 for the centralized BESS solution with 12.1 MVA capacity.

The Company described numerous technical drawbacks to this option, including that each combined PV and BESS would require additional electrical work, as well as distribution and protection upgrades in order to interconnect each system, contracts with each property owner, and multiple legal negotiations with building owners (Exh. EFSB-PA-7, at 4). The Company noted that the installation of 52 MVA of BESS capacity across the Chelsea/East Boston system is likely to cause hosting capacity issues, which would require distribution feeder upgrades (RR-EFSB-9, at 2 n.3). Further, the Company noted that it would be necessary to have redundant feeders connecting into the PV and battery systems to protect against feeder outages in an N-1 event (Exh. EFSB-PA-7, at 4). With a centralized utility-scale battery, this would be handled through the BESS connection to redundant feeders; however, this would not be feasible for distributed systems (Exh. EFSB-PA-7, at 4). Depending on the actual location of the BESS and PV installations on the distribution system, the Company argues that feeder redundancy issues could impose additional costs and complexities (Exh. EFSB-PA-7, at 4).

Using Google Project Sunroof data on usable sunlight and roof space, the Company estimated that Chelsea and East Boston have a combined total availability of 193.4 MW rooftop solar PV potential (Exh. EFSB-PA-7, at 3 n.7, citing https://sunroof.withgoogle.com/data-explorer). The Company concluded that this BTM meter combination of solar PV and BESS is neither technically nor financially feasible (Exh. CLF-GR-N-44; RR-EFSB-9). As with the NTAs discussed above, the Company explained that the modular battery and solar option would leave no margin for incremental unanticipated load increases beyond the snapshot of forecasted load conditions in 2031 Exh. EFSB-PA-7, at 4).

The Company also discussed several reasons why it did not consider EVs an energy storage opportunity, including that the mobility of EVs impede them from being a reliable capacity resource for peak load mitigation (Exh. CLF-GR-N-41).⁶⁸ The Company added that while charge management programs could mitigate this behavior, it would require a level of mandatory participation not measured previously (Exh. CLF-GR-N-41).

The Company also stated that using EVs as storage would present the same issue of the Chelsea Substation operating beyond its 12-hour LTE rating as a battery system that needs to be charged from grid, and described above (Tr. 3, at 522).

With regard to additional TOU participation as a means of addressing peak loads, the Company stated that in general customers that are eligible for TOU rates are already enrolled (Tr. 3, at 564; Exh. CLF-GR-N-18). The Company indicated that the impact of TOU rates was already "implicit" in its forecasted load (Tr. 3, at 564-565). The Company anticipated that new TOU rates would have disadvantages similar to active DR solutions as customers would not be able to shift their load further due to the length of the duration of high loads at the Chelsea Substation (Tr. 3, at 565).

g) <u>Temporary Solutions</u>

During the proceeding Eversource also discussed temporary solutions to address a contingency of losing a transformer at the Chelsea Substation. The Company argues that the effectiveness of these solutions would be limited and would not provide long-term reliability for East Boston-Chelsea customers in accordance with the Company's planning standards (Company Brief at 43, 45; Tr. 3, at 407-408, 414-415, 507; Tr. 7, at 1246). First, the Company stated that it could potentially replace a failed transformer with a spare standard transformer (Exh. EV-2, at 17; RR-EFSB-5; Tr. 3, at 402-405). However, according to the Company, the replacement could take a month or more, including the time needed to mobilize, deliver, connect, and energize the spare transformer (Exh. EV-2, at 17, RR-EFSB-5; Tr. 3, at 402-405). The Company asserts that this would cause an extraordinary hardship for residents and businesses in the East Boston community due to the loss of power for a long period of time (Company Brief at 42-43 citing Exh. EV-2, at 17). Furthermore, the Company contends that space constraints at the Chelsea Substation, complicated construction, and interconnection issues would make it infeasible to stage and connect a spare transformer at the substation in advance of a contingency event (RR-EFSB-5).

Currently, Eversource's emergency operating plan proposes to install several diesel generators and a mobile transformer at or around the Chelsea Substation in the event of a failed transformer contingency (RR-EFSB-5). The Company described the use of generators as a stopgap measure for peak periods of a hot summer day (Tr. 3, at 426-427). The Company also maintains that a mobile transformer would be a temporary solution as it would not allow the

The Company stated that it has currently staged spare transformers at various locations along Route 128 (Exh. EV-2, at 17, RR-EFSB-5; Tr. 3, at 402-405).

Company to restore the transmission system to normal operating conditions, which is necessary for the Company to meet its obligation to provide reliable service to customers (Company Brief at 43-44, citing Tr. 3, at 404, 414, 420-422; RR-EFSB-6). The Company explained that the substation configuration in its emergency operating plan would increase transformer loading during periods of peak load, while adding operational complexities for the Company to address further contingencies (RR-EFSB-5; RR-EFSB-6; Tr. 3, at 424; Exh. EV-2, at 17). In addition, the Company argues that the emergency solution would be insufficient to address system needs in future years due to anticipated step load growth in East Boston (Company Brief at 44, citing RR-EFSB-5).

3. Positions of the Parties 70

a) CLF/GR

CLF/GR disputes Eversource's statement that there is an immediate need for the Substation and that, if there is a need, it cannot be satisfied with alternatives (CLF/GR Brief at 11). In her pre-filed testimony, CLF/GR witness Dr. Stanton argued that Eversource had not explored alternative methods for maintaining reliability in the Chelsea-East Eagle load area without the Substation (Exh. CLF-GR-ES at 18). At the conclusion of evidentiary hearings, CLF/GR continues to argue that Eversource has failed to recognize that "with the passage of time," technologies and programs that can reduce demand have advanced and expanded (CLF/GR Brief at 10). CLF/GR adds that Eversource's forecast fails to fully "and properly" account for technologies such as DG and BESS, EE, rate design and TOU rates (CLF/GR Brief at 10). CLF/GR uses EVs and TOU rates as examples of technologies and programs that Eversource has declined to assess before making "conclusory" assertions (CLF/GR Brief at 11-12, citing Exh. CLF-GR-N-41).

CLF/GR argues that Eversource's assertions concerning lack of alternatives to meet need are incomplete and not supported by evidence (CLF/GR Reply Brief at 5). In its reply brief,

As described above, BRG was granted intervenor status pursuant to 980 CMR 1.05(1)(c) and therefore, consistent with G.L. c. 30A, § 10A and the Siting Board's regulations, the scope of issues that may be addressed by the BRG is limited to the issue of damage to the environment and the elimination or reduction of such damage as defined in G.L. c. 214, § 7A. BRG's briefs did not address NTA topics. MassDEP did not brief this topic.

CLF/GR again claims that the Company has not assessed EV and TOU rates (CLF/GR Reply Brief at 6). CLF/GR likewise asserts that the Company has not assessed whether deployment of a full suite of NTAs could together reduce or eliminate peak demand (CLF/GR Reply Brief at 6). CLF/GR also offers the suggestion that solar PV resources can generate electricity later into the day during peak summer days due to additional daylight hours (CLF/GR Reply Brief at 6). Furthermore, CLF/GR witnesses argue that even if there is a need for the Substation, the need should be met with an alternative site (Exh. CLF-GR-LE, at 8).

b) <u>Company Response</u>

Eversource argues that CLF/GR has ignored substantial record evidence and that the Company clearly evaluated EE, DG, BESS and TOU rates and other non-wires alternatives (Company Reply Brief at 13-14). The Company also asserts that CLF/GR has mischaracterized evidence regarding TOU rates, stating that the impact of TOU rates was implicit in forecasted loads and that attempting to shift load with TOU rates to a different time period would be unsuccessful due to the long duration of high loads at the Chelsea Substation (Company Reply Brief at 15).

4. Analysis and Findings

In the Original Proceeding, the Siting Board assessed NTAs for the whole Mystic-East Boston-Chelsea Reliability Project, including the Substation at its Original Site. The Siting Board found that there were no alternatives presented by the Company that were superior to the Project, including both the transmission line connection between Mystic Substation and Chelsea Substation, and the East Boston Substation under consideration here. Eversource 2017 at 59. The Siting Board found that "an NTA alone, or in combination with other alternatives would be either insufficient or significant[ly] more expensive to implement than the Project." Eversource 2017 at 59. With the introduction of new evidence on need, the Siting Board also looked at new information whether an NTA could satisfy the need identified in the Certificate Proceeding.

The Company's Initial Petition and Application presented no new evidence or studies to assess whether NTAs could serve the identified need in a more advantageous manner than the proposed Substation. Instead, the Company cited the Siting Board's findings in Eversource 2017 and maintained that the Siting Board fully considered possible alternatives and found that the

alternatives would be insufficient specifically, the alternatives would be more costly, more complex and less reliable to implement than the Project (Exh. EV-2, at 16). Eversource argues that the Siting Board does not relitigate such issues under established adjudicatory and judicial precedent (Company Brief at 54). Nevertheless, in response to the Siting Board's and intervenors' questions, the Company provided evidence in this proceeding on alternatives to satisfy the updated forecast of need for the Project.

Although the Siting Board is not required by the Certificate Statute to make findings on alternatives to the Project, there is a close connection between the statutorily required need analysis and an NTA analysis, as both involve making projections about the role that NTA technologies such as EE, active DR, solar PV (or other DG technologies), and BESS (or other storage technologies) will or could play in the future to meet customer energy needs. The key difference is that, in the need analysis context, NTA technology assumptions tend to be based on "business as usual" scenarios or firm planning expectations. In the context of analyzing project alternatives, an NTA study evaluates these same technologies (and others) with an eye towards the possible – increasing or altering their deployment to develop an alternative means of meeting the identified energy need. Ultimately, the Board need not determine whether the adoption of an NTA is within the appropriate scope of a certificate proceeding because, as described in more detail below, the Board exercised its discretion and did review NTAs in this proceeding, and the record evidence indicates that the approved Substation is superior to any NTA or combination of NTAs.

In addressing the question of whether any of the NTAs assessed in this proceeding, alone or in combination, compare favorably with the Substation, we make several initial observations. First, the East Boston Substation (including placing the New Lines in existing conduit beneath the Chelsea Creek, and installation of non-jurisdictional feeder lines from the Substation into East Boston) is the last remaining piece of the Mystic-East Eagle-Chelsea Reliability Project yet to be built. This is an important consideration in that the 115 kV lines now connecting the Mystic Substation and the Chelsea Substation, just across the Chelsea Creek, are already in service and ready to provide the first source of transmission-voltage service to East Boston. Therefore, the costs of the 115 kV line connecting the Mystic and Chelsea Substations are "sunk costs" that cannot be avoided – with or without the East Boston Substation. Thus, the relevant economic comparison is now between the proposed East Boston Substation itself, and potential NTA projects.

As noted above, given the significant changes in NTA technology, costs, and market development activity since the Original Proceeding, as well as new information on need in this proceeding, the Siting Board requested NTA information to ensure an adequate record based on current conditions. This proceeding has demonstrated advances in the ability of the parties and the Board to analyze NTAs due to additional analytical tools and increased availability of data. Further, the record has shown that NTA technologies have progressed rapidly, costs of many technologies have decreased markedly, and regulatory and market trends are accelerating the commercial deployment of NTAs (Tr. 6, at 1175).

In its NTA analysis, the Company has provided an updated approach by which it evaluates candidate NTAs individually and as a package. The parties did not voice significant concerns on brief about the Company's NTA analysis, with only minor exceptions noted below. Therefore, the review of the NTA studies below largely follows from the Board staff's questions and concerns.

The Company used the results of its 2022 Chelsea Substation Forecast to create a 24-hour load profile for a peak summer day in 2031. The Company evaluated additional energy efficiency savings that could be achieved in Chelsea-East Boston, exceeding the 6.1 MVA level already included in the forecast. The Company determined that 2.3 MVA of additional EE peak load reduction can be achieved by 2031, reducing the Chelsea Substation 2031 peak day capacity shortfall from 14.4 MVA to 12.1 MVA. The Company also estimated an additional 6.5 MVA of PV capacity being added to the Chelsea-East Boston load area by 2031, although the Company argues that this added capacity would not reduce the Chelsea Substation peak day capacity deficiency. The Company applied an irradiance factor adjustment to reflect 90/10 peak day weather conditions, derating a maximum daily PV production profile to 24.1 percent of the output for the 6.5 MVA of PV. The Company determined that the 12.1 MVA capacity and 88.9 MWh energy is needed. No parties challenged the EE or PV assumptions used in the NTA analysis, and the Siting Board finds them reasonable.

After developing peak day load curves (inclusive of additional EE and PV), the Company evaluated a potential centralized BESS solution, and later, a potential distributed BTM BESS solution. The objective of using a BESS is to store available electric energy in the Chelsea-East Boston load area during non-peak hours and use that energy during peak load conditions to ensure that the Chelsea Substation does not exceed its 12-hour LTE rating of 135 MVA (Tr. 3, at 519-520). The Company applied efficiency factors to the 88.9 MWh of energy injection required after

taking into account EE and PV and determined that it would need a BESS capable of suppling 121 MWh of energy.

The Company's centralized BESS analysis shows that a 12.1 MVA/121 MWh system is theoretically capable of storing and discharging a sufficient amount of electricity to alleviate the peak day capacity deficit of 12.1 MVA, and dispatch 88.9 MWh during the course of day to meet the load requirements that would otherwise exceed the 135 MVA limit of the Chelsea Substation. However, the Company contends that this BESS would not solve the Chelsea Substation reliability problem, since the substation would operate at its maximum loading of 135 MVA for almost 18 hours during the peak day, exceeding the 12-hour limit. Eversource contends that the problem is magnified when multiple hot, humid peak days occur in succession and the BESS begins the day fully depleted. Eversource estimated that if using PV to alleviate the energy deficiency causing this problem, it would require a PV installation as large as 84.4 MW, that could occupy 337 acres, with an unspecified cost.

The Company demonstrated the problem of recharging a BESS from the Chelsea Substation during a contingency event in the dispatch simulation graph in Figure 2 above. The Company's analysis shows that from approximately 10:30 a.m. to 11:00 p.m. the substation operates at 135 MVA and would exceed this limit were it not for the BESS serving load with the needed capacity and energy (Exh. EFSB-PA-3(4)). From 11:00 p.m. to 1:00 a.m. and 7:30 a.m. to 9:30 a.m. the BESS is recharging, but also consuming all available energy and capacity up to the 135 MVA substation limit (Exh. EFSB-PA-3(4)). From 1:00 a.m. to 7:30 a.m. the BESS is also recharging, but the substation still is able to operate below the 135 MVA level, leaving so-called "headroom" – unused energy and capacity, below the LTE levels (Exh. EFSB-PA-3(4)).

The record does not answer the question of why this headroom is not used to a greater extent to more fully recharge the BESS and reduce charging demands (and thereby reduce substation loading below 135 MVA) in the shoulder hours of 11:00 p.m. to 1:00 a.m., and 7:30 a.m. to 9:30 a.m. However, Figure 2 reveals that the maximum recharging MVA level in the simulation matches the modeled battery capacity of 12.1 MVA (Exh. EFSB-PA-3, at 10). Therefore, the Siting Board assumes that a larger capacity MVA BESS would be capable of more fully exploiting the headroom capacity (up to 20 MVA) from 1:00 a.m. to 7:30 a.m. for additional recharging and reducing loading during the four adjacent shoulder hours when the substation is otherwise at its LTE limit. Such an increase in BESS capacity would appear to bring the

Substation down to about 13.5 hours of LTE operation. Thus, even with a higher capacity BESS, and greater utilization of off-peak energy and capacity, the BESS still would not resolve the 12-hour LTE rating problem in 2031, nor would it leave room for any future load growth anticipated after 2031.

In addition to the energy recharging limitation above, the Company identified other concerns about the feasibility, reliability, cost, and environmental impact of the centralized BESS solution. First, as a conceptual project, the centralized BESS solution has no proposed or available site location and would require approximately 151,804 square feet (3.5 acres) of land. For comparison, the East Boston Substation would be located on an approximately 27,389 square foot (0.6 acre) site. Engineering, designing, permitting and constructing such a BESS facility could take many years, with no assurance of success, and leave the Chelsea-East Boston area at significant risk given the immediacy of need in 2024 (Exh. PA-3, at 13-14). The Company also points out that the BESS would be an extensive land use in a densely populated area, could raise safety concerns among residents, and produce urban-heating effects (Exh. PA-3, at 13-14). Such issues could potentially rival many of the current public concerns regarding the Substation.

In addition, the Company argues that the BESS solution would be significantly more expensive than the Substation. The Company estimated a cost of \$41.75 million for the BESS, based on NREL national average costs of \$345/kW. However, this cost figure is based on a national average and does not take into consideration relevant locational impacts on the cost of construction, such as higher labor costs and the complicated construction circumstances, land requirements, fire suppression, and engineering design requirements for dense urban settings (Exh. EFSB-PA-7, at 1). The Company points out that its experience to date suggests that the NREL costs estimates are probably too low – about one third of the actual costs per MWh that Eversource has seen in its Provincetown BESS facility (Exh. EFSB-PA-7, at 1-2). The Siting Board also notes that BESS facilities typically have a useful life that is 10-15 years, rather than the 40-year life of substation equipment. See D.P.U. 18-55, at 8. Therefore, replacement/refurbishment costs would also need to be considered in comparing the BESS solution to the Substation.

There are additional challenges regarding the integration of the BESS into the Chelsea-East Boston system that would increase both cost and complexity. Based on the configuration of the Chelsea Substation, it would be necessary to have two individual storage solutions, one connected to each bus section (Exh. PA-3, at 14). This would ensure that the BESS solution could

meaningfully reduce loadings on both of the larger transformers and ensure continued operation of each in an N-1 event (Exh. PA-3, at 14). Each of the two storage units would have to tap into two distribution feeders, to ensure supply reliability in case of a feeder outage, requiring double the effort and complex switchgear installations (Exh. PA-3, at 14).

Based on the evidence and analysis above, the Siting Board concludes that a centralized BESS would not be a feasible or timely solution to the need facing the Chelsea-East Boston load area and could cost significantly more given major unknown and unquantified costs, and the Company's own cost history for developing BESS facilities, such as the one in Provincetown. In comparison to the centralized BESS, the Substation would provide superior reliability, a timelier solution, and in all likelihood, lower costs and reduced land use and other environmental impacts.

The Company also evaluated the use of a BTM BESS solution that would also provide at least 12.1 MVA of capacity and 121 MWh of energy to satisfy the need during an N-1 peak day contingency event at the Chelsea Substation. Instead of a single utility-scale BESS, the distributed approach would require 8,963 batteries, such as a Tesla Powerwall unit, which the Company used as an illustrative model in its analysis.

The Company asserts that a BTM BESS solution presents the same key challenge as a centralized BESS: there is insufficient energy and capacity at the Chelsea Substation to recharge the batteries during a peak day and not exceed the 12-hour LTE rating of the substation. The Company asserts that the magnitude of this problem is the same as for a centralized BESS solution (Tr. 3, at 528). For the same reasons noted above, the Siting Board is not persuaded that the Company has fully quantified this limitation. In comparison to the 12.1 MVA centralized BESS used in the Company's analysis, the BTM BESS solution has 52 MVA of cumulative capacity. As discussed above, the Siting Board views a sufficiently large MVA rating of the BESS as the key to being able to fully use available energy and capacity headroom during overnight hours, and eliminate the need to recharge from system energy during the shoulder hours of 7:30 a.m. to 9:30 a.m. and 11:00 p.m. to 1:00 a.m. This change in charging pattern would eliminate four hours of substation operation at 135 MVA and bring it closer to the allowable 12-hour LTE operating parameter. To the extent that available headroom is more fully exploited for recharging, then the need for additional generation sources (such a PV) to make up for the energy deficit could be greatly reduced.

The Company also asserts that the BTM BESS solution may not provide a reliable supply if the feeder on which the BESS is located has an outage (Tr. 3, at 545-547). The Company offers two solutions to this problem: (1) install more BESS capacity than needed to have a margin of safety in the event of feeder line outages; or (2) build redundant feeder lines to provide additional assurance that distributed BESS units will not be disconnected from the substation that needs their energy and capacity (Tr. 3, at 545-547). The Company did not quantify the costs of either of these remedies but indicated that they could be substantial.

In estimating the cost of a BTM BESS solution, the Company used the Tesla Powerwall for its illustrative BTM BESS technical specifications, but chose NREL data for estimating the cost of such a system. Based on NREL data, the Company computed a cost of \$168 million for installing 8,963 systems. The Company identified, but did not quantify other costs, such as communications and control between Company dispatch and the BESS units, and hosting capacity costs for the feeder upgrades to handle 52 MVA of added generating capacity. The Company notes that there are likely additional costs to consider: premises electrical work, contracts with each property owner, and multiple legal negotiations with building owners.

The Tesla Powerwall link provided by the Company provides a different view of the cost of BTM BESS units. As noted above, Tesla does not currently sell a Powerwall unit without a PV system, and the manufacturer's website provides price quotations for the Powerwall, but only in conjunction with a PV installation. The itemized retail price for the Powerwall (without any installer discounts, tax credits, or utility incentives) is shown at \$12,500; the price of a combined 7.2 kW PV and Powerwall system, is approximately \$29,000 (without tax credits or utility incentives) and \$9,119 net of all tax credits and utility incentives, such as SMART and ConnectedSolutions Demand Response.

The Company notes that participation by BTM BESS units in a tailored NTA program would require that the customer yield storage control to the Company to ensure that the systems are available at all times for dispatch, thus negating the customers participation in "energy markets or other revenue opportunities." This statement suggests that the substantial utility incentives available to participants in generally available BTM BESS programs (as reflected on the Tesla website price quotation) may not be applicable to participants in an NTA program designed specifically to solve the Chelsea Substation constraints. Another limitation of the Tesla pricing information for BESS purposes, is that it requires a paired PV system. This pricing would not be

germane to those customers whose properties may not be amenable to a PV installation but could and would host a BTM BESS.

Given the above considerations, for purposes of estimating the cost of a Powerwall in our review of this a BTM BESS solution, the Siting Board finds it more reasonable to use the itemized retail price of \$12,500 shown on the Tesla website, less the 30 percent federal tax credit, for a net installed cost of \$8,750 rather than the \$18,740 NREL figure used by the Company. The Siting Board finds that this figure would more accurately reflect current market conditions for BTM BESS installations in the Chelsea-East Boston area and include known federal tax credits that are broadly applicable and in place at a 30 percent level until the end of 2032/2033. Based on record evidence that additional utility incentives (such as SMART and ConnectedSolutions Demand Response) would not be applicable to BTM BESS units in the context of a tailored NTA solution for the Chelsea-East Boston load area) the Siting Board does not further reduce the assumed installed net cost of a BESS unit. At \$8,750 per unit, the installed cost of 8,963 BESS units would be approximately \$78.4 million.

The Siting Board notes that the cost of the Tesla Powerwall itself is not the complete picture on the cost of this NTA solution. Other likely costs to the customer include: electrical and wiring upgrades of the premises, and for Eversource, programmatic costs such as control and communications hardware and personnel, contract negotiation, marketing, customer recruitment, and hosting capacity upgrades. While these additional costs are not established in the record, it is noted above that in the Order on Provisional System Planning Program, D.P.U. 20-75 (2021), the Department has cited typical utility hosting capacity costs of between \$200 - \$500 per kW for distributed energy resources. For 52 MVA of cumulative BTM BESS capacity, such costs could range from approximately \$10.4 million to \$26.0 million. With the BESS costs found above, the

Under the recently enacted federal Inflation Reduction Act, H.R. 5376, §13102, residential BESS installations (3 kW and above) may be eligible, under Section 48 of the Internal Revenue Code of 1986, for a 30 percent federal tax credit through 2032; business-owned BESS installation (5 kW and above) may be eligible under this same provision for a 30 percent tax credit through 2033.

total cost of the BTM BESS solution would be in the range of \$88.8 million to \$104.4 million, plus additional costs noted above that are not quantified in the record.⁷²

While the cost estimate of \$88.8 million to \$104.4 million is a rough approximation, the Siting Board finds it sufficiently reliable to conclude that the BTM BESS solution would not be less expensive than the Substation, and likely, substantially more expensive. Importantly, this cost estimate range does not include program design and administrative costs, customer recruitment costs, and the cost of electrical panel upgrades for customer premises. In addition, to provide comparable reliability as the Substation, it would be necessary to add a significant margin of redundant BESS capacity throughout the system to compensate for potential feeder outages that would island the BESS units on such feeders and render them unavailable to serve the Chelsea-East Boston distribution system. Finally, the design life for such a BTM BESS system is somewhere between 10 and 15 years, after which significant refurbishment or replacement would be necessary, with significant additional costs. These additional, unquantified costs are likely to be significant, and further the cost advantages of the Substation relative to the BTM BESS.

Maintaining reliability is a paramount objective for the Siting Board and the focus of our most serious concerns about the BTM BESS solution as a viable NTA. First, the Siting Board notes that recruiting enough participants to host 8,963 or more BTM BESS units is an enormous challenge given the presence of only approximately 32,000 customers in Chelsea and East Boston. See Eversource 2017 at 10. Unlike the construction and operation of a utility substation, which is fully under the control of the Company, a distributed BESS solution depends on voluntary participation by customers that are willing to not only host these systems on their premises, but

The Siting Board also notes that while the initial capital cost disparities between the Substation and NTAs considered in this proceeding, favor the Substation, the Siting Board recognizes that a "first cost" comparison approach may suffer from several deficiencies. Almost every conceivable energy project involves capital and operating costs, both of which affect consumers, either through their utility rates, and/or as participants in NTA activities in which they bear some or all of the direct costs of participation. We remind the Company that in prior NTA studies it has provided such information, which offers a more precise and accurate measure of comparative costs. See Sudbury-Hudson at 29-30. In addition, cost comparisons in pre-Restructuring Siting Board cases typically considered capital costs, operating costs over the useful life of proposed projects and alternatives, and a net present value comparison of these costs. See e.g., Commonwealth Electric Company, EFSB 96-6, at 44-45 (1997).

also invest a significant amount of their own capital to do so. We recognize that tailored utility incentives could help entice customer participation to a significant degree. However, the Company lacks the authority to compel customer participation. There are also uncertainties to retaining participating customers in the NTA program over time, although the incentives offered could help mitigate such risks. The risk of under-recruitment is a serious one given the immediacy of the needed solution for the Chelsea-East Boston load area.⁷³

In view of the above considerations, the Siting Board finds that a BTM BESS solution is inferior to the Substation in terms of reliability and cost and is therefore not a preferred solution. However, we also recognize that the advances in technology, and reductions in cost have made this NTA solution much more competitive than previously seen in Siting Board reviews. Accordingly, we advise future applicants to thoroughly assess BESS solutions – both centralized and BTM – and put forth solution strategies to address the challenges noted above.

Another BESS option considered during this proceeding involves bi-directional charging of EVs, enabling them to charge from the grid, as well as inject power (or provide other ancillary services) back to the grid. CLF/GR contends that the Company did not properly evaluate this opportunity, and the Company acknowledged that is has not assessed the impact of EVs as a storage resource (Exh. CLF-GR-N-41, at 1). The Company defended its decision by noting that EVs, in the long term, are expected to be one of the major load drivers, rather than a storage solution (Exh. CLF-GR-N-41, at 1). The Company adds that it has not seen enough empirical data to support the extent to which EVs batteries may be an energy storage alternative in the future (Exh. CLF-GR-N-41, at 1). The Company also voiced concern that the mobility of EVs could present a challenge for the provision of a firm resource for mitigation of system constraints (Exh. CLF-GR-N-41, at 1). Finally, the Company noted that EVs, like other BTM battery solutions, face similar issues in terms of control and management by the Company dispatchers, and share other limitations with BTM BESS solutions (Exh. CLF-GR-N-41, at 1).

The Siting Board appreciates the advocacy of CLF/GR in furthering the potential use of bidirectional EV charging as a possible NTA opportunity. The record indicates that this technology

The BTM BESS solution does offer the opportunity for gradual buildout based on future load conditions and can be implemented relatively nimbly compared to larger "lumpy" infrastructure options. The Siting Board strongly urges the Company and other applicants to continue exploring these advantages in future project development activities.

is in its infancy at this time, although it could become a more significant resource in the future (Exh. CLF-GR-N-41). The Company is also correct that the mobility of EVs presents challenges to harnessing EV batteries to help solve location-specific system constraints resulting from contingencies. While mobility, in theory, also provides a potential opportunity for the same reason – EVs can move to where the system need exists at any given time— individual EV owners would need to move their vehicles in a coordinated fashion on short notice upon a contingency taking place and then might need to keep their EVs in place for an extended period of time until the contingency is resolved. The Siting Board does not view bi-directional EVs as an immediate solution to the Chelsea-East Boston load area constraints but does encourage Eversource and others to continue to develop this technology and explore opportunities for its use in various grid applications and markets.

CLF/GR also contends that the Company did not appropriately assess the impact of TOU rates on demand at the Chelsea Substation. The Company notes that TOU customers are already reflected in the historical load data used in its peak load forecast. The Siting Board observes that the record in this case does address expanded use of TOU rates as a means of shifting peak loads to off peak times (Exh. CLF-GR-N-41, at 1). The Company contends that expanded TOU rate participation would be an ineffective remedy given the lengthy high load window at the Chelsea Substation. The Siting Board agrees that the unusually long high load exposure window at the Chelsea Substation makes TOU rates unlikely to help alleviate loads at this substation. While TOU rates are, in general, beneficial and help to promote efficient use of energy, they are designed for use in wide service areas. Based on the record, existing TOU rates appear to lack the specific features needed to address the particular characteristics of Chelsea Substation peak load issues.

In response to Siting Board and intervenor questions, Eversource also discussed the effectiveness of installing spare transformers (both standard and mobile) in the event of a transformer outage at the Chelsea Substation. The record shows that the Company would not be able to install a spare standard transformer in advance of a contingency. The Company would also not be able to install the spare transformer in a timely fashion after a contingency. The Company's current plan is to install mobile transformers, in addition to diesel generators, in the event of a failed transformer at the Chelsea Substation. The record shows that this temporary configuration presents risk of further contingencies during peak loads. Additionally, according to the Company, its emergency solution is designed to address current conditions rather than future load conditions,

which could increase due to projected load growth in the area, and would involve negative environmental impacts. The Siting Board accepts the Company's explanations that these temporary measures, such as mobile transformers and generators, are not suitable long-term solutions for the current needs in the Chelsea-East Boston load area.

As noted above, the Company has analyzed a variety of NTAs (including emergency measures) both individually and as a portfolio of an integrated solution that together could comprise an alternative solution to the Substation. This assessment has demonstrated that the approved Substation continues to be the superior alternative available to address the identified need reliably, with a minimum impact on the environment, and at the lowest possible cost.

E. Compatibility with Environmental Protection, Public Health and Public Safety

1. Certificate Requirements and Previous Findings

Pursuant to G. L. c. 164, § 690, the Siting Board must make a finding with respect to the compatibility of the Facility with considerations of environmental protection, public health, and public safety. The Siting Board bases its findings and opinions on both the record developed in the Certificate Proceeding and the record developed in the underlying Siting Board proceeding(s) in which the Board reviewed and approved the proposed facility. See Exelon at 12; Cape Wind at 3-4. In order to provide a full review of a previously approved facility, the Siting Board:

(1) reviews the decision(s) from the underlying Siting Board proceeding(s); and (2) determines the extent to which new information has been developed or the circumstances of a project may have changed in the intervening period. See, e.g., Woburn-Wakefield at 25; Cape Wind at 13. The Siting Board reviewed potential land use, safety, visual, hazardous waste, noise, traffic, sea level rise, air, water and wetlands, and magnetic field impacts in the Original Proceeding, and the Project Change Proceeding. See Eversource 2017 at 82-141; Eversource 2021 at 32.74 The Siting Board found that with compliance with certain conditions, the impacts of the Substation in these areas would be minimized. Eversource 2021 at 92.

Specifically, in <u>Eversource 2021</u>, the Siting Board reviewed new evidence on whether relocating the Substation would have different or greater environmental impacts, in terms of land use, safety, visual, hazardous waste, noise, traffic, sea level rise, water and wetlands, and magnetic fields. <u>Eversource 2021</u> at 32.

In its Application, the Company described the Siting Board's prior decisions regarding the Project in Eversource 2017 and Eversource 2021 as the basis for its argument that the Siting Board has already found the Project to be compatible with the Commonwealth's policies concerning environmental protection, public health, and safety, and that it remains so now (Exh. EV-2, at 21-23). In response to questions by the Siting Board and parties, the Company presented updated or additional evidence on those impact categories. In addition, parties in the proceeding sponsored various witnesses and presented testimony addressing several of these topics. The Siting Board summarizes the new evidence presented in this Certificate Proceeding, and addresses whether such evidence alters in any substantive way our previous findings regarding the environmental protection, public health, and safety aspects of the Project and the Substation in particular. Finally, we address whether the evidence in this proceeding, including the incorporated record in the prior proceedings, supports a finding of compatibility of the Facility with considerations of environmental protection, public health, and public safety.

2. Record and Company Position

a) Land Use

In Eversource 2017, the Siting Board found with the implementation of the mitigation measures proposed by the Company that the land use impacts of the Project along the Primary Route would be minimized. Eversource 2017 at 92. In Eversource 2021, the Siting Board evaluated existing land use of the New Site and surrounding land uses and found that the land use impacts of the Substation at its current proposed location would be minimized. See Eversource 2021 at 35. In this proceeding, the Company noted that the City of Boston had determined during its ownership of the Substation site that the cost for remediating the site and converting it to another land use was prohibitive (Exh. CLF-GR-G-22). See Section III.E.2.g, for discussion on the Company's remediation of the site.

The Company reported that it would plant a total of five new street trees on the sidewalk along Condor Street (Tr. 4, at 718; RR-EFSB-13).⁷⁵ The Company stated that has submitted its

In this proceeding, Eversource stated that, since <u>Eversource 2021</u>, it had added an additional street tree to its landscape plans (<u>Exh. EFSB-G-2</u>). The Company presented that it included the additional tree in its plans based on comments received from BPRD and the City Chief Landscape Architect (<u>Tr. 4</u>, at 705-706).

landscape plans to the Boston PIC (Tr. 4, at 708). The Company added that it would use a contractor to plant the trees according to City of Boston standards, after which the trees would be maintained by Eversource for a year according to a License Maintenance Agreement between the Company and the City (Tr. 4, at 709-710). ⁷⁶

b) <u>Safety</u>

(1) <u>Substation Safety</u>

In <u>Eversource 2017</u>, the Siting Board evaluated safety of the Substation, including potential fire risks associated with nearby land uses (<u>e.g.</u>, proximity to jet fuel tanks at a jet fuel depot located approximately 450 feet from the Original Site). <u>Eversource 2017</u> at 51; <u>see also Eversource 2021</u> at 36 n.38. In <u>Eversource 2021</u>, the Siting Board evaluated the distance from the Substation at the New Site to the jet fuel tanks and nearby parks. <u>Eversource 2021</u> at 38-39. The Siting Board found that with implementation of certain conditions, the safety impacts of the relocation of the Substation to the New Site would be minimized. <u>Eversource 2021</u> at 39.

The Company argues that the Siting Board comprehensively addressed safety issues during the prior proceedings (Company Brief at 72, citing Eversource 2021 at 36-39). In response to information requests by the Siting Board, the Company provided an update on safety concerns related to the Substation and proposed mitigation in this proceeding (Exhs. EFSB-G-3; EFSB-G-7). Eversource contends that substations do not pose a safety risk and cited the "track record" of its substations as support for that statement (Tr. 4, at 609). In response to a record request by the Siting Board, the Company prepared a table of safety-related incidents at its transmission and distribution stations since 2010 (Exh. RR-EFSB-22(1)). The Company identified such incidents at 13 of its 192 substations since January 1, 2010, and provided specific information on each, including root cause, corrective actions, community communications, and relevance to safety at the East Eagle Substation (Company Brief at 75, citing RR-EFSB-22; RR-EFSB-22(1)).

The Company reported that of the 13 incidents, one incident resulted in injury to a Company employee (Company Brief at 75; RR-EFSB-22(1)). The Company represented that no

The Siting Board notes that, with respect to the trees, Eversource provided a draft License Maintenance Agreement between the Company and the City of Boston, which the Company submitted with its Boston PIC Petitions (RR-EFSB-12).

incidents resulted in injury or illness to a member of the public or damage to an abutting property (Company Brief at 75). The Company also noted that the local Fire Department was called to respond to only five of the 13 incidents and that the Company performed outreach to inform members of the public and the municipality of those incidents (Company Brief at 75-76, citing RR-EFSB-22). The Company asserts that its track record is a strong indicator of the effectiveness of its engineering safeguards and emergency response procedures (Company Brief at 75).

During evidentiary hearings, the Company explained that, at substations, it focuses particularly on preventing transformer failures, because transformers are difficult to replace (Tr. 4, at 602-603). The Company added that it monitors the fluid level of the transformers at all times to detect loss of transformer mineral oil dielectric fluid (Tr. 2, at 251-252). Eversource equips each transformer with two automatic high-speed electrical protection systems, an automatic high-speed mechanical protection system and pressure relief valves, and an automatic high-pressure water mist system to extinguish a fire (Exh. EFSB-G-3). The Company explained that its safety systems aim to trip the transformer offline before pressure buildup, while containment and fire suppression systems serve as backup should such protection systems fail (Tr. 4, at 724-725).⁷⁷

The Company described the safety and protection systems at the Substation as "state-of-the-art" (RR-EFSB-21). Eversource stated that medium voltage equipment proposed at the East Eagle Substation would be contained in a grounded metal cabinet (RR-EFSB-21). The Company also stated that it would design a Substation grounding system to meet or exceed IEEE Standards to protect the public from stray voltages from the Substation (Company Brief at 72, citing Exh. EFSB-G-3). The Company explained that if there were an electrical arc 78, the arc would fault to the grounded metal enclosure and be contained in the grounded enclosure, presenting no danger to a person standing outside the switchgear (Company Brief at 74). The Company also stated that the equipment and lines at the Substation will be equipped with redundant protection systems that

The Siting Board previously found that, with the implementation of the Company's proposed mitigation measures – including containment systems to protect against accidental release of fluids, impacts from potential fluid leaks would be minimized. Eversource 2017 at 113.

A fault (or electrical arc) is a continuous electric discharge of high current that flows through an air gap between conductors (RR-CLF-GR-7).

remove the source of electric energy to a short circuit (Company Brief at 74-75, <u>citing</u> Exh. EFSB-G-7).

The Company reported that it performs routine maintenance on its transmission system to ensure all equipment are in working order and that its employees are trained in all aspects of its "All Hazards Plan", further described below in Section III.E.2.b.2 (Company Brief at 75, Tr. 4, at 598). Eversource stated that it would monitor the Substation 24 hours a day, 365 days per year, through its operations center, to address any "abnormal" operating conditions immediately (Company Brief at 73, citing Exh. EFSB-G-3).

(2) <u>Safety Plans</u>

The Company has an emergency response plan (or All Hazards Plan) that outlines standard practices of substation operations personnel during major events, and will apply it to the Substation once it is in operation (Company Brief at 73; Tr. 6, at 1031-1032). The All Hazards Plan comprises event-specific plans, tackling issues such as cybersecurity, business continuity and specific weather events (Tr. 6, at 1024-1025). The Company indicated that its entire employee base is trained on the All Hazards Plan and the incident command structure and emergency responses contained in the plan (Company Brief at 73, citing Tr. 6, at 1024-1025). ⁷⁹

The Company reported that it does not usually develop Substation-specific plans (Tr. 6, at 1032-1033). However, the Company, as directed by the Siting Board in Condition Y of Eversource 2021, will prepare and periodically update an emergency response plan specific to the Substation (Company Brief at 73; Tr. 4, at 728). The Company stated that this emergency response plan would include descriptions of specific steps to be taken by the Company in response to emergency situations such as flooding and fires (Company Brief at 73, citing Exh. EFSB-G-3). The Company will consult with appropriate municipal and state public safety and emergency

Craig Hallstrom, Eversource's President of Regional Electric Operations for Connecticut and Massachusetts testified that whenever there is a relevant event, an executive committee convenes to ensure that the All Hazards Plan was being implemented and that there were adequate resources for actions set out in the plan (Tr. 6, at 1031-1032).

management officials, including the Boston Fire Department, ⁸⁰ Boston Police Department, Boston Emergency Management Agency and Massachusetts State Police in the development of the Plan (Exh. EFSB-G-11; Company Brief at 73). The Company committed to implementing the All Hazards Plan and emergency response plan for the Substation, required by Condition Y of Eversource 2021, including reaching out to the public during events (Company Brief at 76).

(3) <u>Fuel Pumps</u>

Eversource maintains that the Siting Board found, in the Project Change Proceeding, that the construction of the Substation would not pose an undue safety risk to the East Eagle neighborhood (Company Brief at 76, citing Eversource 2021 at 38-39). During the public comment hearing, a commenter stated that the City of Boston police station beside the Substation had fuel pumps, which were not previously described, and questioned whether the presence of the fuel pumps near the Substation would pose a safety risk (Exh. EFSB-G-9). The Company estimated that the new fuel pumps would be 70 feet from the nearest pieces of Substation equipment, a pad-mounted transformer and the gas-insulated switchgear, and 60 feet from the Substation fence line and would not pose a safety risk (Company Brief at 76; Exh. EFSB-G-9). The Company stated that the proximity of the transformer and gas-insulated switchgear would not present a safety risk as the current-making or current-breaking devices would be contained in grounded metal cabinets (Exh. EFSB-G-9). The Company asserts that evidence in this proceeding is consistent with the Siting Board's prior safety-related findings regarding proximity to fuel tanks at the jet fuel depot (Company Brief at 77).

c) <u>Visual</u>

In Eversource 2021, the Siting Board found that, with the implementation of conditions, the visual impacts of the Project at the Substation site would be minimized. See Eversource 2021 at 43. To minimize the visual impacts, the Siting Board imposed Condition U. Condition U states:

The Siting Board directs the Company to implement a public engagement effort, as detailed below, regarding the aesthetic design for the enclosure surrounding the New

The Company stated that the Boston Fire Department has immediate authority in emergency conditions to evaluate, evacuate and respond to any potential event at the Substation (Exh. EFSB-G-11).

Substation, with particular emphasis on the western and northern boundaries. The community input process shall include the following steps: (1) the Company shall hold a focus group, either virtually or in-person, meeting with ten to fifteen members, including community members; (2) based on input from the focus group discussion, the Company will develop conceptual design plans; (3) the conceptual design plans will be reviewed at a follow-up focus group meeting; (4) an Open House, either virtually or inperson, will be held for the community to view and provide feedback on the design plans; and (5) following the Open House, the Company shall in consultation with the focus group, select a final design, which is subject to BPDA approval. The Company shall make available Spanish language interpretation and document translation services for the focus group and Open House. Eversource shall consult with interested stakeholders in regard to identifying a time and place for the focus group and Open House in an effort to maximize public participation (e.g., meeting venues in close proximity to the New Site, scheduling the focus group and Open House during evening hours). Prior to construction of the elements surrounding the Substation, the Company shall report back to the Siting Board on the final design plan, including a narrative describing the community input from all steps of the process, and describing how the final plan was influenced by and, if applicable, differs from the feedback or recommendations of the focus group and received from the Open House, as well as a copy of the BPDA approval letter.

Eversource 2021 at 97.

Eversource stated that it had implemented the community input process prescribed by the Siting Board under Condition U of Eversource 2021, and that the process was still ongoing (Company Brief at 68). The Company reported that it had held meetings with a focus group, comprising members of the East Boston community and municipal representatives, to gather feedback on design elements for the Substation's eastern façade (Company Brief at 68, citing Exhs. EFSB-G-1; EFSB-P-7). The Company stated that it had already presented several iterations and options for the facade design to the focus group attendees, additional community members, and municipal agencies (Company Brief at 68, citing Exh. EFSB-P-7). The next step for finalizing the facade design would be a presentation of the updated designs at neighborhood meetings (Company Brief at 68, citing Exh. EFSB-P-7). For a current representative rendering of the façade design for the Substation, see Appendix A.

Eversource reported that the neighborhood meetings, which were originally scheduled for April 2022, were postponed due to a surge in COVID-19 infections at the time (Company Brief

The Company provided the additional design concepts on which it was seeking community input (RR-EFSB-11; RR-EFSB-11(1); RR-EFSB-11(2); RR-EFSB-11(3)).

at 68, citing Exh. EFSB-P-7(S1)). The Company expected, at the time, to reschedule the meetings to late summer (Company Brief at 68). The Company stated that it will finalize the façade design based on feedback from the neighborhood meetings and in consultation with the focus group (Company Brief at 68-69, citing Exh. EFSB-P-7). The Company will submit the final design to the Boston ISD as part of its final plans for its forthcoming Building Permit application (Company Brief at 69, citing RR-ESFB-11). 82

Eversource requests that the Siting Board revise the Company's compliance requirement under Condition U in Eversource 2021 to eliminate the language that specified the Company should obtain approval from BPDA, and to remove the requirement that the Company obtain and submit BPDA's "approval letter" to the Siting Board (Company Brief at 69-70). The Company asserts that while the BPDA is authorized to review the design of certain developments pursuant to Article 80 of the Boston Zoning Code, the Substation does not trigger those review thresholds (Company Brief at 69, citing Exh. EFSB-P-10; Tr. 1, at 66). The Company alleges that, therefore, Article 80 review is not applicable to the Substation and that BPDA does not have a formal role in approving the Substation and its facade design (Company Brief at 69). The Company indicated, however, that it would continue to invite BPDA to participate in the facade design review process (Company Brief at 70 n. 33).

In accordance with Condition T of Eversource 2021, the Company was directed to design a 12-foot concrete wall, with a 13-foot fiberglass fence on top, along the northern portion of the Substation site to prevent public access into the Substation property (Company Brief at 70; Exh. EFSB-G-2). The Company maintains that, in addition to enhancing safety, the wall would screen views of the Substation equipment (Company Brief at 70). The Company provided visual renderings of the external walls of the Substation that are visible to the public (RR-EFSB-11). The Company noted that because of the security features required by the Siting Board for the northern wall, and its topography, the design of the northern wall was "already defined" and not subject to further community input under Condition U of Eversource 2021 (Tr. 4, at 695).

Eversource stated that it intended to apply for the Building permit with the Boston ISD upon completion of the community outreach process governed by Condition U (Exh. EFSB-P-7). The Company would then amend its Boston ISD Foundation permit to a Foundation and Building permit (Exh. EV-1, at 20).

d) Water and Wetlands/Sea Level Rise

In Eversource 2017, the Siting Board evaluated the potential for adverse impacts from future sea level rise and found that the Company had appropriately addressed risks associated with sea level rise by positioning electrical equipment above any anticipated flood level. Eversource 2017 at 129. In Eversource 2021, the Siting Board assessed the impacts to wetlands and waterways from sea level rise at the New Site, and found that impacts to wetlands and waterways by the Project, as well as impacts from sea level rise on the Project would be minimized with the implementation of the Company's proposed mitigation measures (Eversource 2021 at 69). The Siting Board discusses the MassDEP Draft License in detail, in Section III.F.1., below.

(1) Stormwater Basin

Eversource previously described a catch basin connected to an underground infiltration system for the Substation site. See Eversource 2021 at 62. According to the Company, it revised the location of the basin several times as a result of comments from BWSC and MassDEP, establishing the final relocation in response to a MassDEP request to move the basin outside of a 100-foot buffer zone to a Coastal Bank (Exhs. EV-1, att. 5, at 2; EFSB-G-2). The Company indicated that the final location of the basin had been incorporated in plans for the facility as approved by MassDEP in the SOC, and the revised Site Development Plans and Stormwater Management Report (Exh. EFSB-G-2). The Company added that the new location for the stormwater basin would still be within land controlled by Eversource (Tr. 4, at 699). According to the Company, MassDEP confirmed that the relocation would not result in material change to the facility plans it had reviewed for its SOC (Tr. 4, at 704).

(2) Sea Level Rise

The Siting Board conducted a comprehensive review of sea level rise during the Project Change Proceeding and found that the impacts to the Substation at the New Site from sea level rise have been minimized. Eversource 2021 at 69. In Eversource 2021, the Siting Board also imposed Condition Z, which requires that Eversource, every five years from the date of operation of the Substation, review Boston and Massachusetts sea level rise projections and submit a report to the Siting Board analyzing whether additional flood mitigation measures would be required at the

Substation.⁸³ Eversource 2021 at 99. The Company contends the record in the Project Change Proceeding fully supported the Siting Board's finding that the Substation is designed to withstand the risk of sea level rise through the expected life of the Substation equipment (Company Brief at 77, citing Eversource 2021 at 67).

The Company chose a base flood elevation ("BFE") equal to the Federal Emergency Management Agency ("FEMA") 500-year storm (0.2 percent annual chance) flood elevation of 15.71 feet Mean Lower Low Water ("MLLW") and added three feet to the BFE to account for anticipated sea level rise by 2070 under a representative high-greenhouse gases ("GHG") emissions scenario found in a Boston Research Advisory Group ("BRAG") Report issued in 2016 (Exh. EV-1, app. G, at 1-4 from Project Change Proceeding; Company Brief at 77, citing Eversource 2021 at 58). After adding one foot of freeboard (an additional safety margin), thereby arriving at an elevation of 19.71 MLLW, the Company chose an even higher elevation for the design flood elevation ("DFE") – 23 feet MLLW – to match the existing highest grade at the site (Company Brief at 77-78, citing Eversource 2021 at 58). In addition to the DFE at 23 feet MLLW, the Company explained that the actual equipment could withstand at least one additional foot of rise over the top of the equipment foundation (Company Brief at 78, citing Eversource 2021 at 57-62).

The Supreme Judicial Court found the Siting Board's adoption of a forty-year planning horizon and five year reviews included in the analysis of this issue in <u>Eversource 2021</u> to be reasonable, given the uncertainties of sea level rise and electricity demand and a reasonable approach to handling the uncertainty of climate change. <u>GreenRoots, Inc. v. Energy Facilities Siting Board</u>, 490 Mass. 747, 756-758 (2022).

The anticipated sea level rise of three feet is at the high end of the "likely" range of sea level rise under Representative Concentration Pathway ("RCP") 8.5 in the 2016 BRAG Report (Exh. EV-1, app. G, at 1-4 from Project Change Proceeding; Exh. EFSB-CLF-4). The BRAG Report describes the "likely" range as that between the 16.7 to 83.3 percentiles for anticipated sea level rise (Exh. EV-1, app. B, at 11 from Project Change Proceeding). In the BRAG Report, RCP 8.5 represents the scenario with the highest GHG emissions, resulting in the highest sea level rise (Exh. EV-1, app. G, at 2-4 from Project Change Proceeding).

In response to Siting Board questions in this proceeding, the Company elaborated that additional flood mitigation measures at the Substation could include increased wall heights around the Substation, or installing under-drains and pumping systems for water that gets under Substation walls (Tr. 4, at 642). The Company also added that it would deploy

During this proceeding the Board asked for updates on publicly available sea level rise data and analysis since the Project Change decision, such as the 2022 Sea Level Rise Technical Report issued by the National Oceanic and Atmospheric Administration ("NOAA") (Exh. EFSB-G-4). The Company asserted that, based on its review of the NOAA report, it did not need to update its flood elevation information provided to the Siting Board in Eversource 2021 (Exh. EFSB-G-4). The Company indicated that the predictions in the NOAA report were within the range of predictions already analyzed by the Company and taken into account when designing its DFE of the Substation (Exh. EFSB-G-4). The Greater Boston Research Advisory Group ("GBRAG") also released an update to the prior 2016 BRAG Report in June 2022 ("2022 GBRAG Report") (Company Brief at 79-80). 86

Eversource indicated that it also designed the Substation to not exacerbate neighborhood flooding (Company Brief at 80). See also Eversource 2021 at 62.

e) <u>Magnetic Fields</u>

In <u>Eversource 2017</u>, the Siting Board evaluated the magnetic field impact of the Substation and found that magnetic field impacts from construction and operation of the Project would be minimized. <u>Eversource 2017</u> at 123. In <u>Eversource 2021</u>, the Siting Board evaluated the magnetic field impact of the Substation at the New Site, and found that magnetic field impacts from the relocation of the Substation would be minimized. <u>Eversource 2021</u> at 77.

The Company stated that the Siting Board previously found that the predominant source of magnetic fields from the Project would be distribution lines rather than Substation equipment or transmission lines (Exh. EFSB-G-7, citing Eversource 2021 at 77). The Company recounted that the record in the Project Change Proceeding demonstrated that magnetic field levels from new

portable flood barriers or other similar measures if necessary, until a permanent solution could be achieved (Exh. EFSB-G-4).

The GBRAG Report was provided by CLF/GR in Exh. EFSB-CLF-4(1). Using the same scenario approved by the Siting Board in Eversource 2021 (the RCP 8.5 scenario in the high end of the "likely" range for projected sea level rise in 2070), Siting Board staff calculated a high of 2.8 feet for sea level rise from the 2022 GBRAG Report (Exh. EFSB-CLF-4(1) at 80). The 2016 BRAG Report showed 3.1 feet of sea level rise (Exh. EV-1, app. G, at 1-4 from Project Change Proceeding).

distribution lines fed from the Substation would be similar to magnetic field levels along existing distribution lines in the immediate area (Company Brief at 71, citing Eversource 2021 at 77). The Company also alleges that there would be no impact to the adjacent police station from magnetic fields at the Substation, with the predominant magnetic field within the police station being produced from the police station's own equipment (Company Brief at 71 n. 34, citing Tr. 4, at 720-721). The Company argues that there was no evidence presented in this proceeding that should cause the Siting Board to modify its previous findings regarding magnetic field impacts (Company Brief at 71).

f) Air Emissions

In <u>Eversource 2017</u>, the Siting Board found that with the implementation of the Company's proposed mitigation measures, potential air impacts (including from sulfur hexafluoride – SF₆) from the construction and operation of the Project would be minimized. <u>Eversource 2017</u> at 141. As stated in that decision, the Company committed to installing equipment at the Substation with an annual SF₆ emission rate of 0.1 percent, which complies with the MassDEP standard of 1.0 percent per year found in 310 CMR 7.72 (Company Brief at 62; RR-EFSB-14). <u>See Eversource 2017</u> at 139. The Company notes that there will be no combustion of fuels during operation of the Substation, no degradation of air quality, and that as the Board found previously, construction and operation of the Substation would minimize air emissions (Company Brief at 62-63, <u>citing</u> Eversource 2017 at 140-141).

g) Hazardous Waste, Noise, and Traffic

In <u>Eversource 2017</u>, the Siting Board found that based on the Company's proposed mitigation, the impacts from potentially hazardous materials and solid waste associated with the Project would be minimized. <u>Eversource 2017</u> at 113. In <u>Eversource 2021</u>, the Siting Board found that with compliance to all applicable requirements pertaining to remediation of the site, the hazardous waste impacts of the Substation would be minimized. <u>Eversource 2021</u> at 48. The Company explained that it has removed almost 10,000 tons of contaminated soil and treated several thousand gallons of contaminated groundwater (Exh. CLF-GR-G-22; Tr. 2, at 205-206, 216). In <u>Eversource 2021</u>, the Company stated that it would submit a Permanent Solution Statement with Conditions to MassDEP by the end of the first quarter of 2021. <u>See Eversource</u>

2021 at 48.87,88 The Company stated that there was no evidence submitted in this proceeding that challenges the Siting Board's previous findings regarding the Company's remediation activities (Company Brief at 62).

In <u>Eversource 2017</u>, the Siting Board found that with the implementation of certain noise conditions, the noise impacts from construction and operation of the Project would be minimized. <u>Eversource 2017</u> at 134. In <u>Eversource 2021</u>, the Siting Board found that operational noise from the Substation would have little effect on total noise levels in the Project area. <u>Eversource 2021</u> at 51. The Company reported that there was no evidence presented in this proceeding that should cause the Siting Board to change its previous findings regarding noise impacts (Company Brief at 72).

In <u>Eversource 2017</u>, the Siting Board found that, with the implementation of certain conditions, the traffic impacts from construction and operation of the Project would be minimized. <u>Eversource 2017</u> at 107. In <u>Eversource 2021</u>, the Siting Board found that the traffic impacts of the relocation of the Substation to the New Site would be minimized. <u>Eversource 2021</u> at 53. The Company stated that there was no evidence presented in this proceeding that should cause the Siting Board to change its prior findings regarding traffic impacts (Company Brief at 70).

h) Project Construction

The Company described the construction of the Substation in <u>Eversource 2017</u>.

<u>See Eversource 2017</u> at 81-82. For "large" projects such as this one, the Company maintains a

The Siting Board notes that Eversource submitted its Temporary Solution Statement in the underlying Project Change Proceeding (Exh. EFSB-G-1(2) from the Project Change Proceeding).

According to the Company, MassDEP assigned a release tracking number to a City parcel, which included the Substation site (<u>Exh. CLF-GR-G-22</u>). The Company added that in order to "reach closure" on the release tracking number, it would place an Activity and Use Limitation on the Substation site (<u>Exh. CLF-GR-G-22</u>). The Siting Board notes that, according to the Company, Eversource would file for a Permanent Solution Statement after it implements an Activity and Use Limitation (<u>Eversource 2021</u> Exh. EFSB-G-1(2) at ES).

dedicated project webpage (Tr. 6, at 1150-1511).⁸⁹ The Company added that the website would also contain contact information, traffic management plans, and construction updates (Tr. 6, at 1153-1154). Eversource provided a construction specification for establishing and maintaining pest controls during construction and stated that it will incorporate the specification in its construction contract for the Substation (Exh. EFSB-G-15).

The Company provided additional descriptions of the construction process not previously presented. In addition to construction of the Substation, the Company would perform work on both sides of Chelsea Creek to interconnect the Substation with the already operational New Lines (Exh. EFSB-G-6). The Company explained that this work would begin with excavation at the Substation site to uncover the existing conduit, installation of a new manhole and a connecting conduit (Exh. EFSB-G-6). Eversource reported that the excavation at the Substation site would be backfilled to bury the manhole vault and conduit prior to construction of the Substation foundation and base (Exh. EFSB-G-6). On the City of Chelsea side, construction would be limited to tying into the already-installed transmission lines, with the majority of splicing work taking place in an existing manhole (Exh. EFSB-G-6). The Company stated that the above work would take place at the same time as the early stages of Substation construction (Exh. EFSB-G-6).

The Company would then clean the existing Chelsea Creek conduit of obstructions that could snag transmission line conductors (Exh. EFSB-G-6). Next, the Company would pull the conductors through the conduit and splice them inside manholes (Exh. EFSB-G-6). The Company would test the new splices before testing the full circuit from the Chelsea side of Chelsea Creek to the new manhole at the Substation site (Exh. EFSB-G-6). The Company would then cut and splice the new lines to the existing Mystic-Chelsea Line 448-519 line during a scheduled outage of that line (Exh. EFSB-G-6). The Company stated that the installation of the conductors would take place during the last six months of Substation construction (Exh. EFSB-G-6).

^{89 &}lt;u>See https://www.eversource.com/content/ema-c/residential/about/transmission-distribution/projects/massachusetts-projects/mystic---east-eagle---chelsea-reliability-project.</u>

3. Positions of the Parties

a) MassDEP

MassDEP's briefs focus exclusively on the matter of the Draft License. As described below, in Section III.F.1, MassDEP recommends that the Siting Board issue the Draft License as the final Chapter 91 license (MassDEP Brief at 6; MassDEP Reply Brief at 10).

b) CLF/GR

CLF/GR argues that based on the application of relevant laws and policies to the evidence in the record, the Siting Board must conclude that the Substation is not compatible with considerations of environmental protection, public health, and public safety (CLF/GR Brief at 13). CLF/GR states that Eversource's reliance on findings by the Siting Board in the underlying proceedings is misplaced (CLF/GR Brief at 13). CLF/GR argues that it is incorrect for Eversource to assert that no facts were presented during the Certificate Proceeding that necessitate revisiting earlier findings on environmental protection, public safety, and public health (CLF/GR Reply Brief at 8). CLF/GR argues that contrary to the Company's claim, there has been new information and changed circumstances in this proceeding that require the Board to reconsider its prior findings (CLF/GR Reply Brief at 14). CLF/GR also asserts that the Substation is incompatible with the 2021 Massachusetts Environmental Justice Policy ("EJ Policy") (CLF/GR Brief at 19-20). The Siting Board discusses environmental justice considerations in Section III.F.2, below.

Referencing a brochure published by the Public Service Commission of Wisconsin, CLF/GR lists short term and long term impacts of construction at a representative substation, including construction-related noise, dust, soil erosion, stormwater runoff, permanent visual impacts, magnetic field impacts, reduced natural areas, increased noise and light pollution, disrupted vegetation growth, and interrupted wetland areas (CLF/GR Brief at 27-28, citing https://psc.wi.gov/Documents/Brochures/Impacts%20of%20Substations.pdf). CLF/GR also provided pre-filed testimony that raised general concerns about the potential impact of SF₆ on the environment (Exh. CLF-GR-BC, at 6-7).

The Siting Board notes that the brochure referenced by CLF/GR in its brief was not previously offered or entered into evidence.

CLF/GR also states that using the "open parcel" for the Substation prevents its use for community green and recreational spaces (CLF/GR Brief at 26-27). 91 CLF/GR indicates that East Boston and Chelsea has the "lowest amounts of open space per person" compared to other Boston neighborhoods and nearby communities (CLF/GR Brief at 27). CLF/GR states that, therefore, the Substation would adversely impact the community, contributing to cumulative burdens on residents, and remove an opportunity to convert the site to green space (CLF/GR Brief at 27).

Regarding site remediation, CLF/GR asserts that Eversource did not state whether it had completed remediation activities or whether the property was still contaminated (CLF/GR Brief at 26; CLF/GR Reply Brief at 15). CLF/GR also argues that the Company had not given an indication of when it would seek an Activity and Use Limitation for the site (CLF/GR Brief at 26; Exh. CLF-GR-G-22). CLF/GR contends that without an independent environmental review to determine the status of the contamination risks, the facility is incompatible with considerations of environmental protection, public health, and public safety (CLF/GR Brief at 26). CLF/GR also contends that the costs incurred by remediation of the contaminated soils, and CBA have been and will continue to be paid by ratepayers (CLF/GR Brief at 28).

CLF/GR asserts that testimony from residents of East Boston identified public safety concerns about the facility (CLF/GR Brief at 21). CLF/GR states that the Substation would sit on the banks of "highly industrialized and severely degraded" Chelsea Creek, in proximity to a dense residential neighborhood and tanks of jet fuel and home heating oil (CLF/GR Brief at 24). CLF/GR asserts that it would be inappropriate to locate a potentially hazardous piece of electrical infrastructure directly across the street from a playground that is heavily used by community members and their children year-round, especially if other sites are available as alternatives (CLF/GR Brief at 21, citing Exh. CLF-GR-RB-JW-SAN at 7). CLF/GR also argue that the facility would produce electromagnetic radiation and magnetic fields (CLF/GR Brief at 38, citing Exh. CLF-GR-RB-JW-SAN, 8-9).

CLF/GR points to a June 20, 2022 incident at the Eversource substation in Newton, which it asserts raises safety concerns regarding electrical substations in general (CLF/GR Brief at 21-

The Siting Board addresses use of the New Site for recreation in Section III.F.2., below.

22). 92 CLF/GR argues that the Siting Board should deny the Certificate in order to allow the Board to gain more information on public safety issues after the conclusion of an investigation by Eversource and the Department regarding the incident in Newton (CLF/GR Brief at 22). CLF/GR claims that the incident was not an isolated event and voices concern about the 13 safety-related incidents since 2010 at Eversource's substations, as reported by the Company (CLF/GR Reply Brief at 14, 22).

CLF/GR contends that because the Company operations center that monitors substations is not located near most substations, the Company is limited in its ability to provide direct assistance to fire departments in emergency scenarios (CLF/GR Brief at 22, citing Tr. 6, at 1097-1098). CLF/GR also asserts that the Company does not have proper procedures to inform the public and customers about safety incidents (CLF/GR Brief at 23, citing Tr. 6, at 1100-1101). Furthermore, CLF/GR notes that Eversource does not usually have substation-specific plans in the event of hazards such as a fire or flooding event (CLF/GR Brief at 23, citing Tr. 6, at 1032-1033).

CLF/GR contends that the Substation site "faces an excessive and unacceptable risk of flooding and is an inappropriate site to place the proposed electrical Substation" (CLF/GR Brief at 23, citing Exh. CLF-GR-ML at 4). CLF/GR argues that Eversource's analysis "under-represents the risk of flooding the site in several ways" including: (1) Eversource constrained the time horizon for the projected flood impacts when a Substation could, according to CLF/GR, last 100 years or more; (2) the analysis omitted considerations of worst-case scenarios; and (3) the analysis was not consistent with Climate Ready Boston or MassDOT's ⁹³ consideration of 0.1 percent annual chance of flood (due to a 1000-year storm) (CLF/GR Brief at 25). CLF/GR also asserts that the Company's DFE did not consider storm surges (CLF/GR Brief at 25). CLF/GR also argues that the unpredictability of flooding increases with time, due to increased risks from climate change and sea level rise (CLF/GR Brief at 26).

The Company explained that the incident resulted from a fault that occurred during routine maintenance being carried out by three Eversource employees, and noted that its investigation into the incident is still ongoing (Company Brief at 73-74).

Dr. Luna indicates that the Massachusetts Coast Flood Risk Model was created by a consulting group for MassDOT to evaluate its critical infrastructure, such as Boston's central artery highway/tunnel system (Exh. EFSB-CLF-4, at 2). Dr. Luna notes that the MassDOT model is still under development (Exh. EFSB-CLF-4, at 2).

CLF/GR witness Dr. Marcos Luna cited the 2022 GBRAG Report as being relevant to analyzing sea level rise for Boston Harbor (Exh. EFSB-CLF-4, at 1). 94 Dr. Luna contends that an electrical substation is critical infrastructure and thus should be evaluated under a worst-case scenario (Exh. EFSB-CLF-4). Dr. Luna noted that for the RCP 8.5 scenario, the 2022 GBRAG Report shows that in 2100 there would be lower projected sea level rise within the "likely" range of probabilistic outcomes but greater risk from inundation under a worst-case scenario (at the 99.9th percentile case, representing a 0.1 percent chance that sea level rise will exceed the projected value) at that time (Exhs. EFSB-CLF-4, at 1; EFSB-CLF-4(1) at 80). 95 Dr. Luna represents that the worst-case sea level rise projected by GBRAG for 2100 increased by nearly 50 percent from the 2016 projection (10.5 feet to 14.5 feet) (Exh. EFSB-CLF-4). Dr. Luna further maintains that the addition of impervious surface through the construction of the Substation would exacerbate flooding conditions in the area and cause greater negative impacts on the Substation in the event of stormwater flooding (Exh. EFSB-CLF-4).

CLF/GR argues that Condition Z imposed by the Siting Board in Eversource 2021, not only ignores "worst-case scenarios" but further ignores that the facility would flood at the proposed site (CLF/GR Brief at 25). With regard to the Company potentially increasing wall heights as an additional flood mitigation measure, CLF/GR argues that such "mitigation" merely demonstrates that the Substation is improperly sited (CLF/GR Reply Brief at 17). CLF/GR states that the proposed Substation location was about 80 feet from the high-water mark of the Chelsea Creek (CLF/GR Brief at 23). CLF/GR also claims that the putting the Substation in a floodplain is not safe to protect it from flooding (CLF/GR Brief at 35). CLF/GR argues that the residents' fears of

At the request of the Siting Board, Dr. Luna delineated the portions of his pre-filed testimony that were not previously introduced in the underlying proceedings (Exh. EFSB-CLF-4). According to Dr. Luna, changes that have taken place between Eversource 2021 and the submission of his pre-filed testimony in this Certificate Proceeding include his additional academic experience as well as new Project information in the current proceeding (Exh. EFSB-CLF-4). Dr. Luna also provided updates to flood maps he had provided in his pre-filed testimony (Exh. EFSB-CLF-4). Finally, Dr. Luna made reference to the 2022 GBRAG Report (Exh. EFSB-CLF-4).

As noted earlier (Section III.E.2.d.2), the range of sea level rise projections in the RCP 8.5 scenario for 2070 is lower in the 2022 GBRAG Report than the 2016 BRAG Report comparable projection for 2070.

Substation flooding are "well-founded" based on previous flooding incidents (CLF/GR Brief at 24). CLF/GR further asserts that flooding at the site could cause on-site electric fires and explosions in addition to damaging Eversource's infrastructure (CLF/GR Brief at 24).

c) BRG

BRG argues that the Project should receive an enhanced environmental analysis before the Siting Board issues its findings in this proceeding (BRG Brief at 23). BRG states that, while the Company has presented protocols with respect to safe substation operations, BRG believes that the proposed Substation presents an elevated safety risk to residents and the environment over baseline condition (BRG Brief at 23).

BRG also recommends that the Siting Board direct the Company to prepare an alternative to siting the Substation at its current proposed site, including within Logan Airport (BRG Brief at 23). BRG claims that Logan Airport, as critical regional infrastructure, would be afforded high priority for protection against sea level rise and climate change by the Commonwealth (BRG Reply Brief at 21). It then follows, according to BRG, that the proposed Substation site would be potentially available to the community as open space and flood buffer area (BRG Reply Brief at 21).

BRG criticizes the Company's reliance on predictive modeling for sea level rise and concludes that predictive models are subject to unanticipated structural change which could cause "consensus bounded" ranges of probability to shift (BRG Reply Brief at 20). Accordingly, BRG again recommends that the Company prepare an alternative Substation site (BRG Reply Brief at 20-21).

d) Company Response

Eversource describes CLF/GR's arguments regarding sea level rise considerations as untenable (Company Reply Brief at 28). Eversource refutes the notion that the sea level rise planning horizon should extend to 2100 or beyond and that a "worst case" scenario that has a 0.1 percent chance of occurrence should drive the DFE of the Substation or prevent building the Substation at the site altogether (Company Brief at 80). The Company further asserts that it would not be reasonable or represent a "proper" balancing of reliability, cost and environmental impacts to plan for those scenarios (Company Brief at 80). The Company asserts that Condition Z of

Eversource 2021 provides sufficient time to address emerging circumstances surrounding sea level rise at the Substation should they materialize (Company Reply Brief at 28). The Company further argues it was baseless for CLF/GR to suggest that the Company is ignoring potential threats to its infrastructure from potential sea level rise (Company Reply Brief at 28). The Company also clarifies that the Project is not within a mapped floodplain and is above the BFE of Chelsea Creek (Company Reply Brief at 28, fn. 22).

Eversource asserts that CLF/GR and BRG make unsubstantiated claims about public safety concerns without stating specific threats potentially caused by the Substation (Company Reply Brief at 29, citing CLF/GR Brief at 21; BRG Brief at 23). The Company further asserts that citizen letters referred to by CLF/GR state concerns about public safety and environmental risks without providing substantive evidence of alleged risks (Company Reply Brief at 30, citing CLF/GR Brief at 27). The Company argues that, contrary to CLF/GR's and BRG's assertions, substation are extremely safe and that the Company has taken steps to eliminate and reduce safety risks at the proposed Substation (Company Reply Brief at 30).

The Company argues that the recent incident at the Newton Substation was an isolated incident, and unlikely to occur at the East Eagle Substation (Company Reply Brief at 31; Company Brief at 74-75). The Company explained that the equipment at the Newton Substation is completely different from the planned equipment design proposed at the East Eagle Substation (and other new projects) (RR-EFSB-21). Eversource stated that at the Newton Substation, the equipment and bus work are built into the walls of the building, which are made of non-conductive material (RR-EFSB-21). The Company added that the Substation will use microprocessor-based relaying that is more sensitive and would clear a fault faster than in the incident at Newton (Company Brief at 74, citing Tr. 6, at 1082-1083).

With regard to remediation, Eversource argues that CLF/GR disregards the substantial remediation work that the Company has already performed at the Substation site (Company Reply Brief at 31, citing CLF/GR Brief at 26). In asking for an independent review of environmental contamination, the Company argues that CLF/GR disregards the fact that all remediation activities are being conducted by a Licensed Site Professional in accordance with G.L. c. 21E and 310 CMR 40.00 (Company Reply Brief at 31). The Company notes that there was substantial pre-existing contamination at the Substation site when the Company acquired it from the City of Boston (Exh. CLF-GR-G-22 at 2). The Company performed remediation activities consistent with its plan to

construct a Substation on the site, which, it argues, greatly improved the condition of the Substation site, producing substantial mitigation and community benefits (Exh. CLF-GR-G-22 at 2; Company Reply Brief at 31 n.34). If the Company were to discontinue the use of the Substation at some point in the future and look to either convey the property back to the City of Boston, or otherwise make it available for public use, additional efforts would likely need to be undertaken to further remediate the site before green space and/or recreative uses would be permissible (Exh. CLF-GR-G-22 at 2). The Company stated that, the Activity and Use Limitation placed on the site pursuant to the Massachusetts Contingency Plan (310 CMR 40.00 et seq.) disallows community green space and recreative space uses absent further remediation beyond the 10,000 tons of contaminated soil the Company has already removed and thousands of gallons of contaminated groundwater it has treated (Exh. CLF-GR-G-22 at 2). The Company notes that the site is a private, vacant lot within the broader City Parcel (where the police station and the City's DPW facilities now exist) and is not located in an area that represents a natural resource or an outdoor recreational space (Company Reply Brief at 38).

In conclusion, the Company argues that neither CLF/GR nor BRG raised any legitimate issues regarding the Substation's compatibility with considerations of environmental protection, public safety and public health (Company Reply Brief at 35).

4. Analysis and Findings

The Siting Board: (1) reviews the decision from the underlying Siting Board proceeding; and (2) determines the extent to which new information has been developed or the circumstances of a project may have changed in the intervening period. The Siting Board does not relitigate in a certificate proceeding issues that have been fully and fairly decided in the underlying proceeding. This practice reflects considerations of both fairness and administrative efficiency. See Woburn-Wakefield at 35; Exelon at 16; Footprint Power at 12; Berkshire Power at 18-19.

It is the Siting Board's view that, as a general rule, a Certificate proceeding should not serve as a vehicle for the re-litigation of issues that have already been fully and fairly determined in the related facility approval proceeding, particularly where the issue in question is one that is central to the Board's fulfillment of its statutory obligations. To allow it to do so would effectively render the Facility approval proceeding meaningless. It also would violate accepted principles of due process for those parties, including the project applicant, who participated in the facility approval proceeding, litigated the issues in question, and justifiably held the expectation that they could rely upon the finality of the Siting Board's Final Decision in that proceeding.

Berkshire Power at 18-19.

As indicated above, in the underlying proceedings, the Board conducted a comprehensive review of the Project's potential impacts. In the underlying proceedings, the Siting Board had found that, with the implementation of various mitigation measures and conditions, the environmental impacts of constructing the Project including the Substation would be minimized.

See Eversource 2017 at 143. The Siting made these findings with respect to various environmental impact categories, after developing a record through the issuance of information requests, record request and cross-examination in evidentiary hearings. These issues were fully and fairly determined in the underlying proceedings. In this Certificate Proceeding, the Siting Board is required to make a finding with respect to the compatibility of the Facility with considerations of environmental protection, public health, and public safety. G. L. c. 164, § 690

Siting Board precedent in certificate proceedings also considers the extent to which new information has been developed or the circumstances of a project may have changed in the intervening period. See Woburn-Wakefield at 35; Exelon at 16; Footprint Power at 10; Cape Wind at 13. The Siting Board compares the record evidence and the decision in the underlying Siting Board proceeding with the record in a certificate proceeding to make a determination of whether new information has been developed or the circumstances of a project have changed in the intervening period. In response to discovery and cross examination of the Siting Board staff and parties, and other evidence and arguments introduced by parties, the Company has presented new or updated evidence on several environmental impact categories. In its development of the record in this proceeding, the Siting Board also considered written and oral comments by the public. With regard to compatibility with environmental protection and public health and safety, the Siting Board finds that there has been new information in the intervening period that warrants review and analysis beyond that contained in Eversource 2017 and Eversource 2021.

The record shows that the Company has made several design changes to the Substation since the Project Change Proceeding. The design changes include an additional street tree, the relocation of the site stormwater basin, and the addition of a wall on the northern end of the Substation site. The record shows that the Company would work with the City of Boston on the maintenance of the additional tree and all other street trees planted around the Substation. The Siting Board expects the Company to continue to work with the City on the maintenance of the

street trees. The Siting Board finds that the additional street tree would not alter its previous findings on land use. See also Eversource 2021 at 35. The record also shows that the final location of the site's stormwater basin is outside of a wetland buffer zone and has been reviewed by MassDEP as part of the Project's SOC. Therefore, the Siting Board finds that the relocation of the stormwater basin would not change its previous findings on wetlands and waterways. See also Eversource 2021 at 69.

As part of Eversource 2021, the Siting Board included Condition T, which requires the Company to design a wall on the northern facade of the Substation site, which faces a public park. The record shows that the Company has designed this wall, and provided visual renderings of the new wall, which will be visible to the public from the public park. The Siting Board had previously found that, despite requiring the wall for safety purposes, the wall would provide additional visual mitigation by screening the Substation equipment from the public on the northern facade of the site. Eversource 2021 at 43. Based on the information provided by the Company in this proceeding, the Siting Board finds that the wall design change would not change its previous findings on site safety and visual impacts. See also Eversource 2021 at 39, 43.

In Eversource 2021, the Siting Board also directed the Company to conduct a public input process on the design of its facade facing west along Condor Street as part of Condition U. The record shows that the Company has carried out this process in compliance with the condition and that the process is still ongoing. The Siting Board expects that the Company continue to work towards compliance with the condition. As part of this proceeding, the Company also requested modification to Condition U. Specifically, the Company requests that BPDA's formal role be removed because the Substation facade did not reach BPDA review thresholds. The Siting Board notes that the original condition and inclusion of a representative Boston agency in review, were meant to ensure community input in the design. The record shows that the final facade design is crucial to the Company finalizing its Foundation and Building Permit.

The Siting Board views BPDA's input as a valuable avenue to reflect community concerns related to the façade design process. Nevertheless, the Siting Board also does not intend to further delay the construction and operation of this critical energy facility. With these considerations, the Siting Board elects to make the following addition to Condition U: Upon the completion of the Company's community design façade process, it shall provide the proposed final design to BPDA for input. The Company shall consider additional input from BPDA. Should BPDA fail to

provide a response within 30 days of receipt of the design, the Company may proceed with the final façade design, which shall be based on input received in its public process. The Siting Board further expects that the final design be consistent with those provided to the Siting Board in this proceeding unless further justification is provided by the Company in its compliance filing. The Company shall file the final design with the Siting Board.

The Siting Board notes on the topic of site remediation that the Company had stated in Eversource 2021, that it would submit a Permanent Solution Statement with Conditions to MassDEP in 2021. The record also shows that the Company would implement an Activity and Use Limitation on the Substation site. The Siting Board directs the Company to provide an update on its submission of the Permanent Solution Statement with Conditions to MassDEP and its plan for implementing the Activity and Use Limitation for the site. With compliance of the condition described above, the Siting Board finds that the Project's hazardous waste impacts have been minimized.

During the course of the Certificate Proceeding, the Siting Board and intervenors extensively explored the issue of Substation site safety. The Company provided evidence on its track record with regard to Substation safety, its emergency response plans, various onsite safety measures, its remote monitoring of Substation conditions, and safety regarding the Substation's proximity to surrounding people and infrastructure. At the request of the Siting Board, the Company provided a listing of all safety related incidents at its substations since January 1, 2010. The record shows that there were incidents at 13 of the Company's 192 substations in Massachusetts that the Company described as "safety related."

During evidentiary hearings, there were also specific questions raised by staff and intervenors on the safety of transformers. The record shows that the Company pays particular attention to the operations of transformers, including monitoring the level of fluid within a transformer 24 hours a day, 365 days a year. At the substation level, the Company employs the same type of monitoring and would be able to respond to any "abnormal" conditions. The record shows that the Company's protection systems are meant to prevent serious failures before they can escalate beyond the fence line and impact the surrounding areas (RR-EFSB-22). The record shows that of the 13 "safety related incidents" at Eversource substations since 2010, none resulted in impacts beyond the fence line of a substation.

On brief, CLF/GR expressed reservations about the Company's substation safety track record due to the Newton incident. The record shows that, based on the Company's initial investigation of the incident at the Newton Substation, it was not likely that an incident with the same root cause would happen at the Substation at East Eagle (RR-EFSB-21). This is because the equipment configuration proposed by the Company at the new Substation would be completely different, with improved grounding characteristics (RR-EFSB-21). The record also shows that the Substation would have a number of safety measures designed to minimize specific generation pathways for short circuits (Exh. EFSB-G-7).

In response to the Siting Board and intervenors, the Company also described its corporate All Hazards Plan and Substation-specific emergency response plan that it would develop. The Substation-specific emergency response was required by the Siting Board as part of Condition Y in Eversource 2021. The record shows that the Company does not usually have emergency response plans for each substation. On brief, CLF/GR questioned the lack of substation-specific plans. As part of this proceeding, the Company described in some detail how it intends to comply with Condition Y. The Siting Board expects the Company to continue to work towards compliance with that condition. Based on the record of incidents provided by the Company and its description of its All Hazards Plan and the Substation-specific plan the Company will develop, the Siting Board finds that the Company has an adequate safety response plan for the Substation. The Siting Board finds that with the Substation safety measures described in the record, the Substation would be built and operated in a manner consistent with considerations of ensuring public safety.

In Eversource 2021, the Siting Board found that sea level rise impacts to the Substation would be minimized with the implementation of the Company's mitigation measures and approved the Company's approach to deriving DFE for the Substation. See Eversource 2021 at 67-69. Specifically, the Siting Board accepted the Company's use of anticipated sea level rise associated with a planning horizon through 2070, under a high-GHG emissions scenario (RCP 8.5) at the high end of the "likely" range of sea level rise probabilities as described in the 2016 BRAG Report.

Eversource 2021 at 59 n.66. As in Eversource 2021, CLF/GR argue that the Company should design the Substation to withstand sea level rise that might ensue beyond the design life of the equipment, i.e., to at least 2100. See also Eversource 2021 at 63-64. CLF/GR also argues that the Siting Board should consider the worst-case scenario in the 2022 GBRAG Report (i.e., a 0.1 percent probability of being exceeded) in determining the risk of flooding at the Substation

site. See also Eversource 2021 at 63 n.73. The Siting Board had fully considered these arguments in the Project Change Proceeding and sees no compelling reason to adopt the "worst-case" probabilistic scenario or a 2100 timeframe to estimate sea level rise. In fact, the record shows that for the scenario accepted by the Siting Board in Eversource 2021 (2070, RCP 8.5, high end of the "likely" range of projected sea level rise) the 2022 GBRAG Report projects lower sea level rise figures than found previously in the 2016 BRAG Report. As a result, the Siting Board views the 2022 GBRAG as providing additional support for maintaining our earlier findings on sea level rise.

In addition to the 2022 GBRAG Report, the Siting Board also considered the NOAA 2022 Sea Level Rise Technical Report, which provides additional new evidence published since the Project Change Proceeding. The record shows that the sea level rise predictions in the NOAA report were within the range of predictions already analyzed by the Company and taken into account in the DFE approved for the Substation in Eversource 2021. The Siting Board notes that it previously found that building the Substation at a higher elevation, would likely add costs to Project development and provide unclear benefits. See Eversource 2021 at 68. As an added level of protection, the Siting Board required that the Company reevaluate its sea level rise information every five years, from operation of the facility, and report to the Siting Board any additional measures that should be taken, as part of Condition Z to Eversource 2021. As before, the Siting Board finds that with the implementation of Condition Z, which requires the Company to periodically review additional information on sea level rise, the impacts of sea level rise would be mitigated.

CLF/GR also contends that the Company's flood risk calculations in its DFE fail to account for the most severe storm surges (a 1000-year storm event) rather than the 500-year storm event used by Eversource (CLF/GR Brief at 25). As part of its flooding risk evaluation in Eversource 2021, the Siting Board reviewed the impact of storm surges on the Substation site and found that the Company's use of a 500-year storm event to be reasonable. See Eversource 2021 at 67.

Again, the Siting Board is not persuaded that adopting the worst-case approach for both sea level rise and storm events advocated by CLF/GR is appropriate in selecting a DFE for the Substation. Condition Z provides further assurance that flooding risk information will be reviewed by the Company periodically, and addressed in any necessary future mitigation, subject to review by the Siting Board every five years. See GreenRoots, Inc. v. Energy Facilities Siting Board, 490 Mass. 747, 756-758 (2022).

In addition to the above topics, there were various issues raised by public commenters and parties. These include the addition of fuel pumps at the neighboring City of Boston police station, magnetic field impacts on surrounding uses, SF₆ emissions, site pollution remediation, and pest control during construction. The Siting Board had previously made findings on most of these issues in the underlying proceedings. See Eversource 2017 at 141; Eversource 2021 at 92.

Nevertheless, the Siting Board directed additional questions at the Company to develop a record that included the most recent available information. The Siting Board finds that the additional evidence submitted into the record for these topics would not result in changes to its previous findings and the findings below remain valid. See also Eversource 2021 at 81.

With the implementation of conditions from <u>Eversource 2017</u> and <u>Eversource 2021</u>, and the conditions in this Decision, the Siting Board finds that construction of the Substation is compatible with considerations of environmental protection, public health, and public safety.

F. <u>Conformance with Laws and Reasonableness of Exemption Thereunder</u>

Pursuant to G. L. c. 164, § 69O, the Siting Board must make a finding with respect to the extent to which construction and operation of the Facility will fail to conform with existing state or local laws, ordinances, by-laws, rules and regulations and the reasonableness of exemption thereunder, if any, consistent with the implementation of the energy policies applicable to Siting statute. Woburn-Wakefield at 40-42; Colonial Gas Company d/b/a Keyspan Energy, EFSB 06-1, at 39-43 (2007); Cape Wind at 24. In this Section, the Siting Board addresses conformance with Chapter 91, and the Roadmap Act and the Executive Office of Energy and Environmental Affairs ("EEA") EJ Policy.

1. <u>Chapter 91 Draft Waterways License</u>

a) Chapter 91 Purpose and Regulations

General Law Chapter 91 governs activities on both coastal and inland waterways, including construction, dredging and filling in tidelands, great ponds, and certain rivers and streams.

Through Chapter 91 and MassDEP's waterways regulation program, ⁹⁶ the Commonwealth seeks

MassDEP's Chapter 91 regulations are at 310 CMR 9.00 et seq. ("Waterways Regulations"). MassDEP's general licensing and permitting regulations governing activities overseen by the Waterways Division are provided in 310 CMR 9.31.

to preserve and protect the rights of the public, and to guarantee that private uses of tidelands and waterways serve a proper public purpose. MassDEP regulations provide that "No license or permit shall be issued by the Department for any project on tidelands or Great Ponds, except for water-dependent use ["WDU"] projects located entirely on private tidelands, unless said project serves a proper public purpose which provides greater benefit than detriment to the rights of the public in said lands." Although other agencies, including the Department of Conservation and Recreation, Massachusetts Coastal Zone Management, and the Division of Fisheries and Wildlife, play a role in preserving public rights in public trust lands, the Waterways Regulation Program, the section of MassDEP that oversees Chapter 91, is the primary agency charged with implementing the "public trust doctrine." Armstrong v. Secretary of Energy and Environmental Affairs, 490 Mass 243, 244 (2022) ("Armstrong"). The Supreme Judicial Court recently found that the public trust doctrine embodied in Chapter 91 provides that the Commonwealth holds tidelands in trust for the benefit of the public and upheld MassDEP's primary role in the responsibility of making licensing decisions for both water- and non-water-dependent uses. See Armstrong, 490 Mass. at 244.

To license a project in tidelands, MassDEP's required findings depend on whether a facility is a water dependent use or a non-water dependent use. Compare G.L. c. 91, § 14, with G.L. c. 91, § 18. MassDEP has specific regulations regarding the activities that may take place in tidelands,

⁹⁷ See 310 CMR 9.31(2) which describes the Proper Public Purpose Requirement. In applying 310 CMR 9.31(2), the Department shall act in accordance with the following provisions. (a) Water-dependent Use Projects - The Department shall presume 310 CMR 9.31(2) is met if the project is a water-dependent use project. (b) Non-water-dependent Use Projects -The Department shall presume 310 CMR 9.31(2) is met if the project is a non-waterdependent use project which: 1. complies with the standards for conserving and utilizing the capacity of the project site to accommodate water-dependent use, according to the applicable provisions of 310 CMR 9.51 through 9.52; and complies with the additional standard for activating Commonwealth tidelands for public use, according to the applicable provisions of 310 CMR 9.53; 2. if located in the coastal zone, complies with the standard governing consistency with the policies of the Massachusetts Coastal Zone Management Program, according to 310 CMR 9.54; and 3. if consisting entirely of infrastructure facilities, to which 310 CMR 9.31(2)(b)1 does not apply, complies with the special mitigation and public access standards governing such facilities, according to 310 CMR 9.55.

including tidelands in Designated Port Areas ("DPAs") such as the Chelsea Creek. ^{98,99} See 310 CMR 9.02; 310 CMR 9.31. DPAs are areas specifically delineated to promote and protect water-dependent industrial uses ¹⁰⁰ and the interest of the public in maintaining access in coastal areas for these uses. 301 CMR 25.01. On May 23, 2022, CZM issued a report as part of the periodic reevaluation of boundaries for the Chelsea Creek DPA. ¹⁰¹ The Substation site is located within filled tidelands and the Chelsea Creek DPA (see Exh. EV-1, att.1, at 1). Therefore, the Substation is subject to Chapter 91 licensing requirements as a project in Commonwealth tidelands (Exh. EV-1, att. 11, at 9, 12).

b) Waterways License Application for the Substation

In September 2010, NSTAR Electric submitted a Chapter 91 petition to MassDEP for a license to construct and maintain three submarine conduits crossing the Chelsea River between Chelsea and East Boston (Chelsea Creek Crossing) (Eversource 2021, Exh. EFSB-Z-10(1), at 48-51; Exh. MassDEP-CH-1, at 2). On April 14, 2011, MassDEP issued a final Chapter 91 license

DPAs are areas specifically delineated to promote and protect water-dependent industrial uses and the interest of the public in maintaining access in coastal areas for these uses. 301 CMR 25.01; 310 CMR 9.32. DPAs have the necessary physical and operational features needed to support businesses that require close proximity to the ocean, such as commercial fishing, shipping, and other vessel-related activities associated with water-borne commerce, as well as manufacturing, processing, and production activities that require marine transportation or the withdrawal or discharge of large volumes of water. 301 CMR 25.01.

CZM designates DPAs. 301 CMR 25.00. There are eleven different DPAs designated by CZM, including Gloucester Inner Harbor, Beverly Harbor, Salem Harbor, Lynn, Mystic River, Chelsea Creek, East Boston, South Boston, Weymouth Fore River, New Bedford-Fairhaven, and Mount Hope Bay. https://www.mass.gov/service-details/czm-port-and-harbor-planning-program-designated-port-areas.

MassDEP's regulations provide that a use determined to be water-dependent includes any use found to be water-dependent industrial. 310 CMR 9.12(2).

See Chelsea Creek Designated Port Area Boundary Designation Report at https://www.mass.gov/files/documents/2022/06/15/chelsea-creek-dpa-boundary-review-2022.pdf.

¹⁰² In 2015, NSTAR Electric started doing business under the name Eversource Energy.

(License No. 12943) for the Chelsea Creek Crossing, and in consideration of a payment by NSTAR Electric to the treasury of the Commonwealth for the sum of \$3,240, the governor approved the license as a just and equitable charge for rights and privileges granted in the land of the Commonwealth (Eversource 2017, Exh. EFSB-Z-10(1), at 48-51). The Company installed the Chelsea Creek Crossing conduits in 2011 (Eversource 2017, Exh. EFSB-Z-10(1), at 16). 103

MassDEP licensed the Chelsea Creek Crossing as a water-dependent use, based on its classification as an infrastructure crossing facility (Exh. MassDEP-CH-1, at 2).

On November 19, 2014, the Company filed a Chapter 91 license application with MassDEP for the proposed Substation for the Original Site (Exh. EV-1, at 10; Eversource 2017, Exh. EFSB-Z-10(1) at 1-51). MassDEP issued a public notice for the application on November 25, 2014 which identified the Substation as a water-dependent use facility (Exh. EFSB-DEP-1). MassDEP received comments that challenged the Company's application as a water-dependent use (Eversource 2017, Exh. EFSB-Z-9 attachments).

Since the East Eagle Substation was proposed within filled tidelands, MassDEP regulations required an alternative site analysis to examine potential sites outside of jurisdictional tidelands. Eversource 2017 at 70. As part of the 2014 Chapter 91 application, the Company performed the required site alternatives analysis, using the following criteria to evaluate potential sites: (1) an East Boston location; (2) site size greater than or equal to 0.4 acres; (3) the site must be undeveloped and developable; and (4) the site must be outside of filled tidelands (Eversource 2017 at 70). As part of this screening process, the Company began its evaluation considering all of East Boston, including Logan Airport (Eversource 2017, Exh. CF-RR-10(1) at 1). The Company noted that it typically prefers 40,000 to 43,000 square feet for a substation site, but that given the realities of operating in a densely populated urban setting, this is not always possible. Eversource 2017 at 70. The Company indicated that the use of the smaller East Eagle Substation site (approximately 17,000 square feet), would provide less buffering to surrounding uses, and would require special considerations such as securing laydown space for future maintenance. Eversource 2017 at 70.

The Chelsea Creek Crossing was installed in 2011; two duct banks are currently used for distribution while the remaining duct bank can accommodate either distribution or transmission cables. See Eversource 2017 at 64, n.75.

The Company identified two additional sites in East Boston in the alternative site analysis: (1) the Frankfort Street Parcel; and (2) the McClellan Highway Parcel. Eversource 2017 at 70. The Company stated that the Frankfort Street Parcel, owned by the Roman Catholic Church, is located next to a school, in a densely populated neighborhood. Eversource 2017 at 70. The Company concluded that the noise and visual impacts, as well as an additional one-mile transmission line connection, rendered the site unsuitable. Eversource 2017 at 70-71. The Company also concluded that the one-mile distance from the McClellan Highway parcel to the Chelsea Creek Crossing would require additional costs to build the transmission and distribution lines to interconnect to the existing transmission and distribution systems, and therefore render the site inferior to the East Eagle Substation site. Eversource 2017 at 71. Further, the estimated \$3 million sale price of the privately-owned site made the McClellan Highway site economically infeasible. Eversource 2017 at 71. Based on this analysis of substation site alternatives, Eversource determined that there was no reasonable alternative site that satisfied the identified need where the proposed Substation may be located outside of tidelands (Eversource 2017, Exh. EFSB-Z-10(1), at 19).

Eversource stated that the processing of the application was put on hold during the course of the Siting Board's Project Change Proceeding, and was reinitiated by the Company on November 15, 2018 as a review of an amended Waterways License for the New Site (Exh. EV-1, at 11). MassDEP established two additional public comment periods (December 21, 2018 and April 10, 2021), ¹⁰⁴ during which GreenRoots and CLF/GR filed written comments on behalf of their organizations and other advocacy groups and residents regarding the Chapter 91 license for the Substation at the New Site (Exh. EV-1, at 11).

MassDEP provided publication requirements to Eversource for the notice of Eversource's application for a Waterways License for the Substation (Exh. MassDEP-CH-1, at 4). MassDEP

Eversource filed an updated plan for the Substation at the New Site on February 4, 2020, and MassDEP provided a comment period for these updates (Eversource 2021 Exh. EFSB-P-2(S1)).

MassDEP's public notice and participation requirements are set forth in 310 CMR 9.13. Under those regulations, MassDEP issues the notice to be distributed and published by the applicant. 310 CMR 9.13(1). For water-dependent projects, the notice must contain a description of the proposed project and a statement of the MassDEP's determination

directed the Company to take additional steps regarding publication of the notice and outreach activities in recognition of the site's location in an environmental justice community (Exh. MassDEP-CH-1, at 4). In light of that direction, Eversource published the notice in multiple languages including Spanish and Portuguese and in publications focused on serving readers speaking Spanish and Portuguese (Exh. MassDEP-CH-1, at 4). MassDEP also encouraged Eversource to conduct outreach and engage with environmental justice organizations and community leaders in advance of and during the public comment period (Exh. MassDEP-CH-1, at 4). MassDEP's witness noted that the notice and outreach requirements established by MassDEP were in compliance with MassDEP's 2020 Environmental Justice Public Involvement and Community Engagement Guidance as well as the EEA 2021 EJ Policy (Exh. MassDEP-CH-1, at 4).

On January 3, 2022, MassDEP issued a Draft License to Eversource pursuant to Chapter 91 and its Waterways Regulations for the Substation at the New Site, which authorizes Eversource to install and maintain an electric substation ancillary to the existing water-dependent industrial infrastructure crossing facility (Chelsea Creek Crossing) (Exhs. EV-1, att. 11, at 9; EFSB-DEP-1). This 2022 Draft License is the subject of this Certificate Proceeding. The Draft License was appealed to MassDEP's Office of Appeals and Dispute Resolution ("OADR"), and Eversource has requested that the Siting Board include a final approval in lieu of a Chapter 91 Waterways License for the Substation as part of a Certificate in this docket (Exh. EV-1, at 10; see Exh. EV-1, att. 11 (the Draft License)). MassDEP has indicated its assent to the issuance of the Draft License as the Final Waterways License as part of the Certificate (Exh. EFSB-DEP-2; MassDEP Reply Brief at 10).

The Draft License issued by MassDEP did not contain a written determination that the Substation constituted a water dependent use because MassDEP regulations do not require a

regarding water-dependency. 310 CMR 9.13(1)(c). The notice must also provide information on the time and manner for public comment on an application. For water-dependent projects, no public hearings are required. 310 CMR 9.13(3).

Waterways License Application No. W14-4297 (Exh. MassDEP-CH-1).

written determination where an EIR is not submitted. 310 CMR 9.12(2)(d). ¹⁰⁷ Instead, the MassDEP witness stated that: "[MassDEP] issued a draft license as provided for pursuant to [310 CMR] 9.14(2)(b) which specifies that for water-dependent use projects where written comments have been submitted pursuant to 310 CMR 9.13(4)(c) [MassDEP] may issue a license or permit without issuing a written determination, in which case [MassDEP] may issue a draft license or draft permit, including proposed license or permit conditions, for public review prior to issuance of the license or permit" (Exh. MassDEP-CH-1, at 3). MassDEP's witness explained:

[MassDEP] considered the application materials, public comments submitted, and responses to comments as part of its review. [MassDEP]'s Administrative Completeness Review letter specifically requested information from Eversource that justifies how the project is an ancillary facility that is operationally related to the infrastructure crossing facility and requires an adjacent location. On the basis of that information, in addition to the review of the rest of the application and comments, [MassDEP] determined the project meets the definition of an ancillary facility to a water-dependent infrastructure crossing facility

(Exh. MassDEP-CH-1, at 3).

MassDEP provided copies of comment letters filed with it regarding the three notices issued for the Eversource application for a Waterways License for the Substation (RR-EFSB-16). According to MassDEP, the comments raised concerns regarding the appropriate classification of the project as a water-dependent use as well as the nature of the notice provided to community members by MassDEP (id.). ¹⁰⁸ These issues were included in the appeals filed regarding the Draft

The Siting Board notes that the materials that MassDEP relied on to make its determination following the third comment period are part of the record in this proceeding and the underlying proceedings. See Eversource 2021 Exh. EFSB-P-11(1) for plans that Eversource submitted with its petition to MassDEP; Eversource 2021 Exh. EFSB-P-2(S1)(2), (3) and (4) for comment letters filed during the third public comment period; Eversource 2021 Exh. EFSB-P-2(S1)(6) for the Company's letter in response to the written comments.

In a response to a comment letter by then Boston City Councilor Edwards, Senator Joe Boncore and Representative Adrian Madaro regarding notices related to the Company's Draft License application for the proposed Substation, MassDEP noted that the Company was directed to issue notice in 2018 and again in 2020 including re-notice to the BPDA with additional opportunity to comment (RR-EFSB-16, att. Comment Letter May 8, 2020, Addendum A).

License (Exh. EV-1, att. 13), and reiterated in this proceeding by CLF/GR and BRG (CLF/GR Brief at 14-19; BRG Brief at 17-20).

There have been two challenges to the January 3, 2022 Draft License that were filed with the MassDEP OADR, including an appeal filed on January 23, 2022 by Gail Miller ("Miller Appeal") as an individual (Exh. EV-1, att. 12), and an appeal filed by CLF and a group of 17 residents (referred to as "Ten Residents Group" in the MassDEP proceeding) on January 24, 2022 (Exh. EV-1, att. 13). The Miller appeal was voluntarily withdrawn on March 28, 2022 (Exh. EFSB-DEP-3, att. 6). All action on the CLF and Ten Resident Group appeal has been stayed by the MassDEP OADR Presiding Officer in charge of the appeal pending the outcome of this proceeding (Exhs. EFSB-DEP-1, att. 5; EFSB-P-4). 109

c) Weymouth Compressor Station Litigation

During the course of this proceeding, the Norfolk Superior Court issued a decision related to the appeal of MassDEP's grant of a Chapter 91 water dependent use license for a natural gas compressor station in Weymouth. See Ten Residents Group v. Massachusetts Department of Environmental Protection, Norfolk Superior Court C.A. No. 1982-01503, Memorandum of Decision and Order On [Parties' Cross-Motions] for Judgment on the Pleadings (May 2, 2022) ("Superior Court Decision") (RR-EFSB-27, att.(1)). MassDEP had determined that the compressor station was an ancillary facility pursuant to 310 CMR 9.02 and 9.12(2)(d), in a DPA. Superior Court Decision at 2-3. A group of residents appealed MassDEP's Decision. Superior Court Decision at 1. The Superior Court Decision vacated MassDEP's decision to issue a Chapter 91 license to Algonquin Gas Transmission, LLC to construct the Weymouth Compressor Station, and remanded the matter to reassess whether the compressor station was an ancillary facility pursuant to definitions in 310 CMR 9.02 or 310 CMR 9.12(2)(d). Superior Court Decision at 7-8. CLF/GR and BRG argue that the Superior Court Decision is relevant to this proceeding, and that the Substation is not a WDU under the Superior Court Decision reasoning. Eversource and

The Siting Board notes there are no regulatory timelines governing MassDEP's adjudicatory process, and, as described above, MassDEP's adjudicatory review of the CLF and Ten Resident Group appeal has been stayed pending the outcome of this Certificate Proceeding.

MassDEP argue that the Superior Court Decision does not change the determination that the Substation is an ancillary facility to a water-dependent use.

In granting the Chapter 91 license to the compressor station, MassDEP had found that the compressor station was operationally related to and required an adjacent location to the underwater interstate gas pipeline already in operation and the subject of an existing Chapter 91 license as a water-dependent use. Superior Court Decision at 4. MassDEP had defined "requires" as "suitable or appropriate." Superior Court Decision at 4. Referring to MassDEP's regulations, the Court stated that for a structure to qualify as an ancillary facility to an infrastructure crossing facility, the structure must be both operationally related to such crossing facility and require an adjacent location. Superior Court Decision at 6-7. The Court stated the proposed location for the ancillary facility must be "necessary" as part of the operation of the interconnected facilities, not just reasonable or appropriate to qualify as an ancillary facility to an infrastructure crossing facility. Superior Court Decision at 6-7.

On remand to MassDEP, on July 15, 2022, the OADR presiding officer issued a Recommended Remand Decision ("RRD"), applying the definition of "required" as "directed by the Superior Court." RRD at 13-16. In the RRD, the presiding officer recommended that MassDEP's Commissioner find that the site of the compressor station was not necessary or required and the application for the Chapter 91 license filed by the applicant included reasonable alternative site locations for the compressor station. ¹¹⁰ RR-EFSB-27, att. 2, at 3-4; RRD at 3-4.

The RRD noted that since alternative site locations were possible for the compressor and that the technical requirements of the pipeline operations could be met if compressor facilities were located at those alternative sites, the proposed location for the compressor station was not required to be located in tidelands. RRD at 4. The presiding officer wrote that ancillary facilities are structures that cannot reasonably and feasibly be located away from the related infrastructure crossing facility because each is integral to the operation of the infrastructure crossing facility and that locating them away from the infrastructure crossing facility would defeat their purpose. RRD at 15. Therefore, the presiding officer concluded that, because the compressor station did not

In the Matter of Algonquin Gas Transmission, LLC., OADR Docket Nos. 2017-011 and 2017-012 Recommended Remand Decision Remanding Matter to MassDEP's Waterways Program for Further Permit Review (July 15, 2022) (RR-EFSB-27(2)).

require a location adjacent to the pipeline now in operation and can reasonably and feasibly be located in one of several alternative locations and it is not integral to the operation of the offshore pipeline, the compressor station did not qualify as an ancillary facility consistent with the MassDEP definition of 301 CMR 9.02. RRD at 13-16. In addition, the RRD noted:

As well, the use of the phrase "requires an adjacent location" in 310 CMR 9.02 evidences a recognition by MassDEP that coastal resources are limited, particularly coastal resources for industrial activities and facilities, and these resources should be reserved for activities and facilities that require a location in the tidelands. The analysis of the regulatory language requires greater scrutiny on remand, given how the Superior Court directed the regulation to be reexamined. Finally, 310 CMR 9.12(2)(d) clearly indicates a preference for water-dependent ancillary facilities to be those that cannot reasonably be located or operated away from tidal or inland waters.

RRD at 16.

The RRD concluded that the record supported a finding that the compressor station does not require a location adjacent to the HubLine because it could be reasonably and feasibly be located in one of several alternative locations and it is not integral to the operation of the Infrastructure Crossing Facility (<u>id.</u> at 17).

On August 31, 2022, the MassDEP Commissioner issued an Interlocutory Remand Order ("IRO"), reviewing the presiding officer's July 15, 2022 RRD (RR-EFSB-27. att. (3)). In that IRO, the Commissioner deferred a final decision regarding whether to adopt, modify, or reject the presiding officer's finding that the compressor station is not an ancillary facility pursuant to 310 CMR 9.02 or 310 CMR 9. 12(2)(d) (RR-EFSB-27, att. (3), at 2). The Commissioner stated that he wanted to review a complete record which "includes the review that the Presiding Officer recommended that [he] require MassDEP's Waterways Program to perform, specifically, the Program's consideration of the compressor station as a non-water dependent project, but also the Program's consideration of any other potentially relevant provisions of the Chapter 91 regulations" (RR-EFSB-27, att. (3), at 2). The Commissioner further directed the parties to submit briefs on the Waterways Licensing Program's determinations resulting from its further review of the Application required by the procedural schedule included in the IRO (RR-EFSB-27, att. (3), at 2). Under that procedural schedule in the IRO, the Final Decision on Remand addressing all issues on remand, including the deferred issue of whether the Applicant's compressor station is or is not an ancillary facility pursuant to 310 CMR 9.02 or 310 CMR 9.12(2)(d), could be available in approximately eight months (RR-EFSB-27, att. 3, at 4).

d) Positions of the Parties

(1) MassDEP

MassDEP asserts that the evidence supports the conclusion that it properly issued the Draft License for the Substation as an ancillary facility to an infrastructure crossing facility pursuant to Chapter 91 and 310 CMR 9.00 et seq. (MassDEP Brief at 5). MassDEP stated that it is acceptable to MassDEP for the Board to include the Draft License issued January 3, 2022, in its entirety in the Certificate in lieu of a final Chapter 91 license, noting that there may be procedural requirements to be addressed by MassDEP concerning specific statutory and regulatory requirements for issuance and recording of the Chapter 91 license that may need to be addressed after this proceeding is concluded (Exh. EFSB-DEP-2).

MassDEP's briefs also respond to challenges to the nature of the notice and outreach efforts provided by the Company at its direction related to Eversource's Chapter 91 waterways application; its determination of the classification of the Substation application as an appropriate water-dependent use; MassDEP's environmental justice policies, and the potential impact of certain judicial and MassDEP decisions related to the Weymouth compression station facility (MassDEP Brief at 2-7; MassDEP Reply Brief at 2-10).

MassDEP states that the Substation is an ancillary facility to the Chelsea Creek Crossing, a water-dependent Infrastructure Crossing Facility, pursuant to 310 CMR 9.02 (Exh. MassDEP-CH-1, at 2; MassDEP Brief at 7). Moreover, MassDEP characterizes the Substation as both (1) operationally related to the Infrastructure Crossing Facility, and (2) requiring an adjacent location to the facility within a DPA in order to avoid unnecessary environmental impacts (Exh. MassDEP-CH-1, at 2). MassDEP explains that as an ancillary facility, the Substation is considered a part of the water-dependent Infrastructure Crossing Facility, and the regulations do not require a separate determination of water-dependency for the Substation as a standalone facility (MassDEP Reply Brief at 10).

MassDEP further argues that the Commissioner's decision makes it clear that, in the agency's view, the pending new review of the compressor station ordered by the IRO is not relevant to a review of the Draft License for the Substation (MassDEP Supplemental Brief at 2). In the Supplemental Brief addressing the IRO, MassDEP states that the: "Algonquin Appeal currently has no precedential value to this proceeding since it is, in effect, beginning again with the

c. 91 program review and assessment of the compressor station project" (MassDEP Supplemental Brief at 2-3).

(2) <u>CLF/GR</u>

CLF/GR asserts that MassDEP's actions to date on the Chapter 91 License have been insufficient (CLF/GR Brief at 15-19). CLF/GR argues that MassDEP failed to properly consider environmental protection, public safety, and public health in its review of the license — values explicitly included in MassDEP's public waterway regulations at 310 CMR 9.01(2) (CLF/GR Brief at 14). CLF/GR identifies four flaws related to the MassDEP draft licensing process which it claims must be addressed before the Siting Board could validly issue the Draft License as part of a Certificate decision (CLF/GR Brief at 15). First, CLF/GR argues that the MassDEP determination that the Substation is "ancillary to the existing water-dependent industrial infrastructure crossing facility" must be reassessed in light of the Superior Court Decision (CLF/GR Brief at 15).

Second, CLF/GR argues that there is insufficient record evidence for MassDEP to make a determination that the proposed Substation is a water-dependent use under the Waterways Regulations (CLF/GR Brief at 17). CLF/GR alleges that the Eversource's Chapter 91 application materials provide inadequate evidentiary support upon which MassDEP could possibly find that facility meets the definition of a water-dependent use project, echoing the assertions made in CLF/GR's January 24, 2022 appeal of the Draft License describing the alternative site analysis as outdated and insufficient (CLF/GR Brief at 17; see also Exh. EV-1, att. 13). CLF/GR characterizes the alternative site analysis provided by Eversource as insufficient, in part, because Eversource originally intended to construct the Substation at the "Bremen Street Parcel" (CLF/GR Brief at 18). Moreover, CLF/GR points to the pre-filed testimony of its witness, Brian Chee who stated that that the proposed Substation "does not require direct access to a location in tidal or inland waters to function effectively" and that it "can feasibly be located at many locations other

The Company originally considered placing the Substation at a Company-owned parcel at the intersection of Prescott Street and Bremen Street in East Boston (referred to by CLF/GR as the Bremen Street Parcel). See Eversource 2017 at 68-69. However, the City of Boston wanted to use the Bremen Street Parcel for its new East Boston Public Library, and conducted a land swap of the Bremen Street Parcel for land on the west side of the City Parcel. Eversource 2017 at 68-69.

than 338 East Eagle Street ... including at a location further from the East Boston Waterfront" (CLF/GR Brief at 18, citing Exh. CLF-GR-BC at 4).

Third, CLF/GR states that because there was insufficient evidence to support MassDEP's determination that the Substation is a water-dependent use, the presumption that the Project serves a proper public purpose under 310 C.M.R. 9.31(2)(a) does not apply (CLF/GR Brief at 18). Therefore, CLF/GR asserts that the Siting Board, in issuing the Draft License as part of the Certificate, would need to make a requisite finding for a non-water-dependent use project pursuant to 310 CMR 9.31(2) of a proper public purpose, as MassDEP must make in connection with the issuance of any license or permit located on tidelands or Great Ponds. Further, CLF/GR argues that the Siting Board must also find that the benefits of the Substation outweigh the burden to the public (CLF/GR Brief at 18-19). 112

Fourth, CLF/GR turns to its pending appeal of the Draft License and asserts that the Siting Board must make an independent review of appeals pending before OADR and make a finding whether the Company should receive an approval of the Draft License as part of any Certificate in this proceeding (CLF/GR Brief at 19). CLF/GR asserts that, if the Siting Board grants the equivalent of a final Chapter 91 License in this proceeding, then the Board's decision concerning Chapter 91 will be governed by the provisions of G.L. c. 25, § 5 and G.L. c. 164, § 69P, as opposed to G.L. c. 30A, § 14, as would be the case for a license issued directly by MassDEP pursuant to Chapter 91 (CLF/GR Brief at 19, citing Exh. RR-CLF-1). CLF/GR concludes that the Siting Board must consider that the standard of review and rights of a party the appealing party (CLF/GR Brief at 19).

CLF/GR asserts that Eversource's arguments concerning the Chapter 91 license are inaccurate and would lead the Siting Board to commit errors of law (CLF/GR Reply Brief at 9). CLF/GR further argues that Eversource entirely ignores the RRD issued by the MassDEP OADR presiding officer in the Weymouth case (CLF/GR Reply Brief at 9). CLF/GR argues that there are parallels between that case and MassDEP's prior determinations for the Substation that merit the

MassDEP requires a finding that the benefits of a project outweigh the burdens for non-water-dependent use projects and find that the benefits of the project must "outweigh the detriment to the public rights to the land." 310 CMR 9.31(2).

Siting Board's consideration in reviewing the Draft License for the Substation (CLF/GR Reply Brief at 10).

In its reply brief, CLF/GR notes that the outcome of whether the Substation is a water-dependent facility would trigger different legal standards (CLF/GR Reply Brief at 12). CLF/GR asserts that because the Siting Board's previous public safety considerations were made under the assumption that the current facility met water-dependent criteria, the Board did not fully evaluate other alternative locations for the Substation (CLF/GR Reply Brief at 14). CLF/GR also similarly noted that MassDEP's initial brief failed to mention the OADR ruling (CLF/GR Reply Brief at 10). CLF/GR states that MassDEP did not make an assertion about whether its past determination for the Substation was consistent with the "correct legal standard it now must apply" (CLF/GR Reply Brief at 11).

CLF/GR suggests that the Siting Board should either resolve the issues presented in the pending CLF/GR appeal of the Draft License or wait for the resolution of the pending appeal of the Chapter 91 Draft License pending before MassDEP OADR (CLF/GR Brief at 7, 14-19). CLF/GR asserts that the RRD with regard to the Weymouth compressor facility demonstrates that MassDEP's water-dependency determination practices have been based on MassDEP's improper interpretation of the definition of ancillary facilities under MassDEP's regulations (CLF/GR Brief at 7, 15-18; CLF/GR Reply Brief at 10-18).

CLF/GR further argues that because the Project exceeds a MEPA review threshold related to Wetlands, Waterways and Tidelands under 301 CMR 11.03(3) and is located near EJ populations, the review of the Project must be include an enhanced analysis of potential impacts and mitigation options (CLF/GR Brief at 31-32). 113

In its Supplemental Brief, CLF/GR states that the IRO issued by the MassDEP commissioner has no impact on the Siting Board's obligation to undertake an independent review of the Waterways License application for the Substation including consideration of the arguments raised regarding the ancillary facility status and questions raised regarding the Algonquin compressor station (CLF/GR Supplemental Brief at 2). CLF/GR argues that "[n]othing in the Interlocutory Remand Order issued by the MassDEP commissioner on August 31, 2022, [RR-EFSB-27(3)], changes how the Board must approach the issue of the Chapter 91 Waterways

Environmental justice is discussed below in Section III.F.2.

License for the proposed substation in the present proceeding" (CLF/GR Supplemental Brief at 2). CLF/GR concludes that "[i]n these circumstances, the Board must make findings that are consistent and in accordance with each of the applicable requirements of M.G.L. c. 91 and 310 CMR 9.00, while also resolving the insufficiencies of MassDEP's actions to date on the Chapter 91 license" (CLF/GR Supplemental Brief at 3).

(3) BRG

BRG urges the Siting Board to make an independent determination as to whether the Substation is a water dependent use, and to find that the review of the Draft License should include an enhanced analysis of environmental impacts in light of environmental justice principles and concerns presented in the Roadmap Act (BRG Brief at 3-4). In its reply brief, BRG adopts the reasoning and conclusions regarding the Chapter 91 license review made by CLF/GR (BRG Reply Brief at 15). BRG asserts that the Siting Board did not comprehensively address the Chapter 91 license in the underlying proceedings (BRG Reply Brief at 15).

BRG further contends that the Company's arguments for the Siting Board to adopt the Draft License are not persuasive or consistent with requirements of the public trust doctrine (BRG Reply Brief at 15). BRG refers to a Supreme Judicial Court ruling in Alliance II, for the proposition that "express legislative directive" exists under Section 69K authorizing the Siting Board to assume MassDEP's licensing responsibility in reviewing Chapter 91 licenses in a certificate proceeding (BRG Reply Brief at 15-16). However, BRG also asserts that "where a c. 91 tidelands license is at issue, the Board may stand in the shoes of MassDEP while fulfilling all public trust obligations associated with c. 91. The Board's well-established analytic framework, standard of review, and balancing of factors under G. L. c. 164, § 69H must be strictly excluded from Board evaluation of a c.91 license" (BRG Brief at 17). BRG asserts that in evaluating the requested Waterways License within a certificate proceeding, the Board assumes not only the

BRG also asserts that enhanced analysis is needed for all other requested Certificate elements in order that the Board might make the requisite findings and determinations concerning public interest and convenience, compatibility with environmental protection, public health and safety, and conformance with all current, applicable state and local laws (BRG Brief at 3-4).

authority to grant, grant with conditions, or deny a license, but also the obligation to protect public trust interests in Commonwealth tidelands (BRG Brief at 19).

BRG states that the Public Waterfront Act regulations require analysis of alternatives and other information analyzing measures that can be taken to avoid or minimize adverse impacts on the environment consistent with 310 CMR 9.12 (2)(d) (BRG Brief at 5). BRG contends that in light of the context of the Superior Court Decision, and application of the Court's interpretation of 310 CMR 9.02 or 310 CMR 9.12(2)(d) to the proposed East Eagle Substation, the Siting Board must conclude that the proposed Substation is not "required" to be located on Commonwealth tideland and immediately adjacent to the Chelsea Creek infrastructure crossing transmission cables (BRG Brief at 18). BRG also asserts that the Siting Board should find that in the context of the Draft License issued by MassDEP, that the Substation should not be located at the existing site but in a location outside the Commonwealth's filled tidelands (BRG Brief at 17-18; BRG Reply Brief at 26). In commenting on the potential impact of the IRO, BRG maintains its position that the Siting Board should conduct an independent review and the IRO does not offer any substantive impact on BRG's recommendations (BRG Supplemental Brief at 1).

BRG also argues the Board must conduct a sufficient Chapter 91 application review and independently ensure that all requirements of a MassDEP review process under 310 CMR 9.11 (3) are met (BRG Reply Brief at 18). BRG states that the Siting Board's review process must include: (1) an evaluation under 310 CMR 9.11 (3)(c)(2) as to how the project serves a proper public purpose, provides greater benefit than detriment to public rights in tidelands and is consistent with the policies of the Coastal Zone Management Program, as applicable, in accordance with the provisions of 310 CMR 9.31(2); (2) a description of how the project conforms to any applicable provisions of a municipal harbor plan, pursuant to 310 CMR 9.34(2); (3) a response to comments as required by 310 CMR 9.11 (4); and (4) a comprehensive analysis of alternatives and other information analyzing measures that can be taken to avoid or minimize adverse impacts on the environment, in accordance with G.L. c. 30, §§ 61 through 62H (BRG Reply Brief at 18).

BRG states that if an EIR is not required to be submitted, the Siting Board may make findings based on information presented in the application and during the public comment period consistent with the MassDEP requirements under 310 CMR 9.12 (2)(d) (BRG Reply Brief at 18). BRG also recommends that the required alternatives analysis to be completed within a defined time limit include an evaluation of a site within Logan Airport (BRG Reply Brief at 18). Finally,

BRG notes that the language accommodation and public engagement defects of Chapter 91 review identified by CLF/GreenRoots in its Brief in this proceeding also disqualifies the existing Draft License from consideration and must also be addressed by the Siting Board in its further Chapter 91 review (BRG Reply Brief at 18-19, citing CLF/GR Brief at 42-45).

In light of the determinations related to MassDEP's definition of ancillary facilities presented in the Superior Court Decision and the MassDEP RRD, BRG has requested that the Siting Board review the issue of whether the Substation should be considered as an ancillary facility consistent with MassDEP regulations and request an independent determination of the Siting Board of MassDEP's grant of a Draft License to Eversource for the Substation.

"Residents conclude that under the plain language of 310 CMR 9.02 or 310 CMR 9.12(2)(d) and in light of decisions to date in the Weymouth Remand, the anticipated Tentative Decision should find that, for the purposes of waterways licensing, the East Eagle substation is not required to be located within Commonwealth tidelands at the proposed location. Residents assert that in evaluating the requested Waterways license within a Certificate proceeding, the Board assumes not only the authority to grant, grant with conditions, or deny a license, but also the obligation to protect public trust interests in Commonwealth tidelands"

(BRG Brief at 19).

In its conclusion, BRG recommends that the Board act as follows with respect to the requested Waterways License:

- 1. Issue a Tentative Decision on the threshold question of whether the proposed East Eagle substation is or is not a water-dependent use serving a proper public purpose as an ancillary facility to an infrastructure crossing facility, and that this Tentative Decision find that for the purposes of waterways licensing, the East Eagle substation is not required to be located at the proposed location; and irrespective of whether the Board tentatively finds that the proposed substation is or is not a water-dependent use serving a proper public purpose or may otherwise be granted or denied a Chapter 91 license, Residents respectfully recommend that the Board further find:
- 2. That Waterways License review by the Board under § 69K in this proceeding requires enhanced analysis under the Roadmap Bill, including environmental justice analysis.
- 3. Finally, with regard to these recommendations, Residents emphasize that they propose a Tentative Decision be issued no later than December 30, 2022, and that it be amended, as necessary, by the results of enhanced analysis in a Final Decision, allowing for issues raised in the Weymouth Remand Decision to be potentially more fully developed.

(BRG Brief at 3; 26-27; BRG Reply Brief at 26).

(4) <u>Company</u>

Eversource requests that the Siting Board adopt in the Certificate the Draft License that MassDEP has already issued as the approval in lieu of a Final Waterways License pursuant to Chapter 91 (Company Reply Brief at 16; Company Supplemental Brief at 3). Eversource defends MassDEP's notice and review processes associated with the Company's application for a Waterways License for the Substation and rejects the objections raised by BRG and CLF/GR as to the validity of the MassDEP's determination that the Substation constituted a water dependent use, including concerns related to court and regulatory decisions associated with other utility projects (Company Reply Brief at 42-43). Eversource notes that MassDEP has indicated its assent to the Siting Board's issuance of the Draft License as a Final Waterways License in this proceeding (Company Brief at 22-23, citing Exh. EFSB-DEP-2). The Company argues that no evidence submitted in this proceeding calls into question MassDEP's determinations under Chapter 91 and its implementing regulations at 310 CMR 9.00 (Company Brief at 68).

Eversource argues that, contrary to CLF/GR and BRG's arguments, the Superior Court Decision does not affect the validity of the Draft License in the Certificate Proceeding (Company Reply Brief at 17). Eversource asserts that CLF/GR has not advanced any credible argument for why the Substation does not qualify as an ancillary facility that can be licensed as a water-dependent facility (Company Reply Brief at 26-27). The Company argues that CLF/GR improperly relies on a recommended decision in another matter, concerning the Weymouth compressor station, where the infrastructure facility and its related permitting are different from the Substation (Company Reply Brief at 28).

Eversource also asserts that the Siting Board has full statutory authority to issue the Draft License as part of a Certificate in this proceeding, noting that the Legislature "has expressly vested authority to the Siting Board to act in MassDEP's stead when deciding whether to approve the equivalent of a Chapter 91 Waterways License in a [c]ertificate proceeding" (Company Reply Brief at 25, citing Alliance II at 679, that states "Section 69K operates as an overlay of c. 91"). Eversource also argues that MassDEP made the necessary findings to issue the Draft License, including a water dependency determination on which the Siting Board can rely (Company Reply Brief at 25). The Company asserts that MassDEP's findings that the Substation is "operationally

related" to the Chelsea Creek Crossing and "requires" a location adjacent to it are in perfect alignment with the Siting Board's prior determinations that the Substation is needed and that it is sited in a location that satisfies the Siting Board's statutory standards for ensuing a reliable energy supply, with a minimum impact on the environment, and at the lowest possible cost (Company Reply Brief at 25-26).

Eversource asserts that the Project does not require MEPA review, and is appropriately classified as a Water Dependent facility (Company Reply Brief at 26-27). In addition, the Company asserts that an alternatives analysis is not required as part of an assessment as a WDU and that as a WDU, the Substation is presumed to meet a proper public purpose by MassDEP consistent with 310 CMR 9.12(2) (Company Reply Brief at 26-27). Eversource argues that the Substation is integral to the operation of the transmission and distribution system approved by the Siting Board in Eversource 2017 (Company Brief at 64-68, citing Exhs. EV-1, at 2; CLF-GR-P-7). "Quite simply, the transmission cables that are the subject of the Chapter 91 license as an infrastructure crossing facility cannot serve their intended purpose of bringing new transmission capacity into East Boston without a connection to the proposed Substation" (Exhs. EV-1, at 2; EFSB-N-5; Company Brief at 65). Eversource notes that the terminus of the Chelsea Creek Crossing is directly beneath the Substation and that the Substation will integrate the lines located within the Chelsea Creek duct bank into the Company's existing transmission and distribution system (Company Brief at 65, citing Exhs. EV-1, at 2; CLF-GR-P-7; Tr. 2, at 202-203).

Eversource argues that the Substation is essential to the function of the Chelsea Creek Crossing in bringing reliable transmission capacity to East Boston, and that without the Substation, the two Siting Board-approved transmission lines that were constructed as part of the Mystic-East Eagle-Chelsea Reliability Project cannot function as intended (Company Brief at 64, citing Exhs. EV-1, at 2; CLF-GRP-7). The Company notes that the Chelsea Creek Crossing has been previously licensed by MassDEP as a water dependent infrastructure crossing facility (Company Brief at 65, citing Exh. CLF-GR-P-7). The Company adds that the Chelsea Creek Crossing will carry the two transmission lines currently operating as one line connecting the Mystic and Chelsea Substations on the Chelsea side of the Chelsea Creek. (Company Brief at 65). The terminus of the Chelsea Creek Crossing is directly beneath the Substation Site, and the Substation will integrate the New Lines, running through the Chelsea Creek Crossing duct bank, into the Company's East Boston distribution system (Company Reply Brief at 21). Without the Substation the needed new

transmission capacity to serve East Boston, approved and constructed per the Siting Board's order in Eversource 2017, cannot function as intended (Company Reply Brief at 20-21, citing Exhs. EV-1, at 2; CLF-GR-P-7; Tr. 2, at 202-203).

Eversource maintains that BRG and CLF/GR's continued reliance on the decisions related to the Weymouth compressor station to argue for a reassessment of MassDEP's determination that the substation is appropriately classified as an ancillary facility to a water-dependent use is misplaced (Company Supplemental Brief at 4-5). The Company asserts that the series of decisions contained in RR-EFSB-27 instead clearly illustrate that a determination regarding the appropriate classification of a facility is highly fact-dependent (Company Supplemental Brief at 5). Eversource argues that the electric substation is fundamental to the proper operation of the Chelsea Creek Crossing transmission lines (Company Supplemental Brief at 5). In contrast, Eversource notes that the operation of the Algonquin compressor station is not necessary for the continued supply of HubLine Gas to customers (Company Supplemental Brief at 5). The Company concludes that the substation is required for the operation of the transmission lines to provide service to electric customers, which clearly distinguishes the appropriate classification of the substation as an ancillary facility (Company Supplemental Brief at 5).

Eversource also notes that the Company has demonstrated that there are no available alternative locations for the Substation and that the current site is clearly required to be adjacent to the Chelsea Creek Crossing for the proper operation of the transmission lines to supply Chelsea and East Boston customers (Company Supplemental Brief at 6-7).

e) Analysis and Findings

Eversource's application includes a request for the Siting Board to issue a final approval in lieu of a Chapter 91 license for the Substation as part of the composite Certificate in this proceeding. MassDEP and Eversource urge the Siting Board to include the Draft License as part of a Certificate in this proceeding. In briefs, both BRG and CLF/GR oppose the Company's request for the Siting Board to issue a final approval in lieu of a Chapter 91 license based on the information provided in the existing record. We begin our analysis by reviewing MassDEP's role in granting waterways licenses and the Siting Board's unique role in reviewing requests for certificates for state and local permits for energy facilities.

(1) Siting Board and MassDEP Roles and Obligations

The Siting Board's role in reviewing proposed energy facilities is critical to ensuring a reliable energy supply for the Commonwealth's residents. The Supreme Judicial Court has emphasized that the Siting Board's governing mandate is to provide a reliable energy supply with a minimum impact on the environment at the lowest possible cost. Town of Sudbury v. Energy Facilities Siting Bd., 487 Mass. 737, 748-749 (2021); Alliance to Protect Nantucket Sound, Inc. v. Energy Facilities Siting Bd., 448 Mass. 45, 46-47 (2006) ("Alliance I"); Alliance II at 663, 679; see also G.L. c. 164, § 69H. The Court also has recognized the importance of the Siting Board's role to grant certificates in lieu of state and local approvals and permits despite hurdles to the construction and operation of those projects faced in local and state permitting forums. The Court found that "the intent and purpose of the [siting board] statute . . . is in part to ensure that local boards do not use their power over licenses and permits to thwart the needs of the broader community for a reliable, affordable, and environmentally sound energy supply". Agawam, 437 Mass. at 821.

The Siting Board has issued draft Chapter 91 licenses in certificate proceedings in the past. In Cape Wind Associates, EFSB 07-8, the Siting Board issued a number of state, regional and local permits for an energy facility, including a Chapter 91 license. In making its determination to grant the Chapter 91 license, the Siting Board noted that MassDEP had expressly stated that it has no objection to including the Written Determination as the Chapter 91 License for the project in a certificate to be issued by the Board in that proceeding, provided that all conditions contained in the Written Determination are included. Cape Wind at 35. In making that determination, the Siting Board noted that its grant of the Chapter 91 license would "eliminate potentially substantial delay in the construction and operation of a project that the Siting Board has twice approved, and, in this proceeding, has found to be needed and in the public interest. Id. The Siting Board notes that it faces a similar set of facts in this proceeding. Similarly, in Footprint Power, although MassDEP considered expediting a pending appeal for a necessary permit, the Siting Board found "the potential for project delay attributable to allowing the administrative appeal process to go forward ultimately may be significant and could prevent timely construction of the project." Footprint Power at 22. The Siting Board noted its concern regarding the proposed near-term inservice date for the Footprint generating capacity and included the permit in the Certificate. Footprint Power at 23.

In reviewing the waterway licensing determination made by MassDEP for the Substation, we recognize the important role of MassDEP in protecting tidelands and preserving the public's interest in maintaining access to waterways. The Supreme Judicial Court has recognized the historic importance of preserving public access to waterways. "For centuries, the Commonwealth has recognized the importance of regulating its tidelands under the public trust doctrine, "an ageold concept with ancient roots . . . expressed as the government's obligation to protect the public's interest in . . . the Commonwealth's waterways." Armstrong at 248. In addition, the Supreme Judicial Court pointed to MassDEP as the ultimate arbiter of preserving the public interest in the Commonwealth's waterways: "In [Chapter] 91 (Waterways Act), the Legislature has delegated to one agency -- the Department of Environmental Protection (department) -- the responsibility of making licensing decisions for both water- and nonwater-dependent uses." Armstrong at 244.

MassDEP's role in waterways licensing as well as the Siting Board's role in reviewing Chapter 91 licenses for energy facilities as part of a certificate review has been recognized by the Supreme Judicial Court in decisions relating to other energy facilities. With regard to the Cape Wind project, the Court found "The Legislature has designated [MassDEP] as the agency charged with responsibility for protecting public trust rights in tidelands through the [Chapter] 91 licensing program"). Alliance II at 678. The Supreme Judicial Court explicitly determined that the Siting Board's Certificate Statute provided a clear directive to the Siting Board to issue the equivalent of a Chapter 91 license in lieu of MassDEP in such instances. Alliance II at 678 (holding that "express legislative directive" authorized siting board to assume department's licensing responsibility). The Supreme Judicial Court stated that the Siting Board has full authority to issue a Chapter 91 license in the context of a certificate proceeding. "In sum, we find in s. 69K a sufficiently articulated legislative delegation of authority to the siting board to act in the place of DEP, and to administer the public trust rights within DEP's jurisdiction in the limited context of deciding whether to approve the equivalent of a [Chapter] 91 tidelands license." Alliance II at 678 ("an evaluation of s. 69K's relationship to the public trust doctrine must take into account the fact that in a case such as this, 69K operates as an overlay of [Chapter] 91"). 115

CLF/GR argue that the granting of a Certificate including a Chapter 91 license would bypass their appeal rights under Chapter 91 (CLF/GR Brief at 14). In addition, CLF/GR argue that the standard of review and rights of an appealing party are different for a Chapter 91 License issued by the Siting Board (CLF/GR Brief at 19). The legislature has

Both CLF/GR and BRG assert that the Siting Board should make an independent review of the Substation, apply the MassDEP regulations regarding ancillary facilities and water-dependent uses, and find that there could be alternative sites to interconnect the transmission lines using the Chelsea Crossing to distribution lines serving East Boston. While the Siting Board notes that a de novo review of MassDEP's findings is not necessary or advisable, the Board agrees that it should make an independent assessment of whether and how the construction and operation of the Substation would fail to conform to MassDEP's regulations, taking into account MassDEP's expertise and testimony on this subject. If this assessment were to find a failure to conform, however, that would not be the end of the inquiry. Provided that a construction and operation of a proposed energy facility is consistent with otherwise applicable requirements of the public trust doctrine, strict conformance with MassDEP's regulations is not a prerequisite to issuing a certificate. See Alliance II, 457 Mass. at 679 n.28.

In the Cape Wind certificate proceeding, the Siting Board issued a draft Chapter 91 License as the final license, without conducting a de novo review of MassDEP's determinations on the draft license. In Alliance II, the Court noted that MassDEP had already issued a draft license for the Cape Wind Project. Furthermore, the Court in noting MassDEP's role in protecting the public's interest in tidelands, stated that because the Certificate Statute delegates to the Siting Board the power and obligations to stand in the shoes of MassDEP regarding the Chapter 91 license, if MassDEP had not made the findings that the Siting Board adopted, the Siting Board would have had to undertake the same review process that MassDEP did in evaluating the Chapter 91 license. Alliance II at 678-679. In that case as in this, the Siting Board will incorporate the MassDEP findings in the Draft License into the Certificate issued in this docket.

In addition, CLF/GR and BRG argue that the Siting Board must take the same procedural steps as the agencies who would normally issue the 14 permits at issue. Again, the Certificate

provided that if determined in a Certificate Proceeding before the Siting Board, Chapter 91 appeal rights should be expressed through the appeal procedure for Siting Board decisions. G.L. c. 164, § 69P.

CLF/GR also argue that while past Siting Board decisions were expressly contingent on MassDEP's resolution of Chapter 91 issues, only a Draft License has been issued here (CLF/GR Brief at 5). However, the Court in Alliance II accepted the Siting Board's issuance of a draft license in the Cape Wind certificate proceeding. Alliance II at 676-682.

Statute does not require the Board to undertake each agency's permitting process. In contrast, the Certificate Statute contemplates an expedited process for needed energy facilities that have been reviewed and approved by the Siting Board. See G.L. c 164, § 69O) (Siting Board to issue a certificate decision "expeditiously as possible but in no event later than six months from the date of filing of the petition"). Rather than adopt a permitting agency's *procedures*, the Siting Board must consider the *substance* of "existing state and local laws, ordinances, by-laws, rules and regulations" and how they relate to the "construction and operation" of the proposed facility, consistent with the implementation of energy policies to provide a necessary energy supply for the commonwealth with a minimum impact on the environment at the lowest possible cost. G.L. c. 164, § 69O.

Indeed, in this proceeding, MassDEP has indicated that it properly issued the Draft License to Eversource for the Substation as an ancillary facility to an infrastructure crossing facility and therefore a water-dependent facility pursuant to Chapter 91 and 310 CMR 9.00 et seq. (MassDEP Brief at 5). Moreover, MassDEP has chosen to stay its proceedings related to the CLF/GR appeal, in anticipation of a Decision by the Siting Board on the Certificate.

MassDEP clearly has both the responsibility and the expertise to evaluate applications for waterways licenses including the Company's application for such a license for the proposed Substation in East Boston. The Siting Board accords substantial deference to MassDEP with regard to its licensing decisions and relies on its expertise in interpreting the application of its regulations to proposed energy facilities.

It is clear that MassDEP exercised its regulatory expertise in reviewing the Company's application for a Chapter 91 license for the Substation and followed its regulatory requirements in processing this most recent waterways application. In this proceeding, MassDEP testified that it reviewed the comments and certain technical information in making its decision on the Draft License. "The Department considered the application materials, public comments submitted, and responses to comments as part of its review. The Department's Administrative Completeness Review letter specifically requested information from Eversource that justifies how the project is an ancillary facility that is operationally related to the infrastructure crossing facility and requires an adjacent location. On the basis of that information, in addition to the review of the rest of the application and comments, the Department determined the project meets the definition of an ancillary facility to a water-dependent infrastructure crossing facility" (Exh. MassDEP-CH-1, at 5;

Tr. 5 at 778-791; MassDEP Brief at 4). ^{117,118} Taking into account MassDEP's technical expertise in assessing the record before it regarding the most recent application for the Substation and MassDEP's adherence to the regulatory requirements in making its determination, and in view of the testimony of the MassDEP witness, the Board concurs with this assessment.

The proposed Substation is integral to the proper functioning of the transmission and distribution lines already approved by the Siting Board to bring transmission capacity and most importantly, reliable electric service to East Boston residents. Ultimately the Siting Board reviews the need for a certificate under its statutory framework consistent with our obligation to ensure reliable energy with minimum environmental impacts at the lowest cost.

Accordingly, the Siting Board hereby determines that the Certificate in this proceeding shall include the equivalent of a final Chapter 91 License, which shall be the Draft License issued by MassDEP on January 3, 2022. This approval is incorporated in Exhibit A.

(2) Applicability of the Weymouth Substation Rulings

CLF/GR and BRG argue that the Siting Board should not issue a Decision on the Certificate until MassDEP's review of the Weymouth compressor station license application after remand from the Superior Court is concluded, or it must apply the RRD to the Substation in this Certificate Proceeding. However, the function of the compressor station component of the Algonquin HubLine is not the same as the operation of the electric transmission system needed to serve East Boston electric customers.

Eversource provided a copy of the Company's December 29, 2020 response to MassDEP's administrative completeness letter of July 2, 2020, in RR-BRG-1(1). The response discussed notice issues and contacts between the BPDA and Eversource regarding the MassDEP Chapter 91 license application but did not include copies of project plans which were to be provided as part of MassDEP's technical review. Additional information relative to the technical operation and alternative sites reviewed were provided in Project Change Exh. EFSB-P-2(S1) and incorporated into the record in this docket.

MassDEP's designation of the Substation as an ancillary facility to a water-dependent infrastructure crossing facility is identified in MassDEP's notices for the Waterways License (see e.g., Eversource 2021 Exh. EFSB P-2(S1)(1)), and its Draft License (see Exh. EV-1, att. 11).

The Siting Board finds that the Superior Court Decision, and MassDEP's RRD and IRO do not determine the outcome of this Certificate Proceeding. The litigation regarding the Weymouth compressor station concerns a different proceeding regarding a different facility. In addition, the RRD and IRO are not the final word regarding MassDEP's standard for an ancillary facility, as there is more process ahead. The Siting Board notes that MassDEP supports its earlier determination that the Substation is an ancillary facility to the Chelsea Creek Crossing and has not changed that determination after the Superior Court Decision or the RRD. In addition, OADR has suspended its proceedings related to the CLF/GR appeal pending resolution of the Certificate Proceeding. Should MassDEP reconsider its determination regarding the Substation, then the Siting Board would take that further proceeding at MassDEP into account. At this time, MassDEP's RRD and IRO are not controlling in this matter, although the RRD may be taken into account for its persuasive value.

CLF/GR argue that MassDEP cannot base its finding that the Substation requires an adjacent location under the standard rejected by the Superior Court Decision (CLF/GR Reply Brief at 8-11). The Siting Board agrees that the Superior Court Decision rejected a reading of "required" as "suitable or appropriate" applied in the MassDEP review of the Algonquin Gas Chapter 91 license. Superior Court Decision at 6-7. In its response to MassDEP's Administrative Completeness Letter, Eversource addressed how the Substation was required under the standard that was in effect at the time of its response (Eversource 2021 Exh. EFSB-P-2(S1), MassDEP Brief at 4, citing Tr. 5, at 772-773, 778, 780-781; RR-EFSB-16). In that letter, Eversource did assess whether the Substation on the New Site was suitable or appropriate. However, Eversource provided additional information as to why the Substation cannot be reasonably located or operated away from tidal waters: that the purpose of the Chelsea Creek Crossing is to integrate power lines on both sides of the Creek; that alternative locations would involve additional impacts and costs for customers; that locating the Substation in the Chelsea Creek DPA was a permissible and suitable use; that the Substation is a necessary component of the Project; and that the Project at the New Site achieves the Siting Board's requirements and statutory mandate. Eversource states that "no other available parcel of land possesses the essential features" of the New Site. MassDEP stated that it based its determination that the Substation is an ancillary facility to a water dependent infrastructure crossing facility on the basis of information from Eversource, in addition to the review of the rest of the application and comments. There is no indication that MassDEP limited

its consideration of whether the Substation required an adjacent location solely to part of the Company's analysis, or that it based its determination of "required" as "suitable or appropriate."

The Siting Board recognizes that the issuance of a final Chapter 91 License for the Weymouth compressor station will not take place, at a minimum, until the pending administrative appeal has been resolved. Therefore, any potential change in MassDEP's policy regarding the determination of the compressor station's status as an ancillary facility is unknown. Delays in waiting for that final determination and any possible subsequent judicial appeals, could result in unjustifiable delay this proceeding. We also note that in the Cape Wind final decision, the Siting Board found it appropriate to avoid further permitting delay by including the otherwise unobtainable local permits in a certificate, as opposed to requiring the applicant to undertake an entire de novo permitting process. Cape Wind at 30-37; see also Footprint Power at 18-19. In that instance, the Siting Board noted that several factors important in its determination including: (1) the Siting Board had comprehensively reviewed, and has approved the project over a span of seven years; (2) other state agencies with major permitting authority over the project had reviewed and approved it; (3) the relevant local permitting entities had an opportunity to participate actively in the Certificate process, including the opportunity to provide the Siting Board with suggested conditions for the proposed project; and (4) the record contained examples of the types of permits in question, issued by the same agencies for a very similar project. Cape Wind at 30-37. In view of the legislature's command to move "expeditiously" and the immediate need for the Substation's construction and operation to provide reliable electric service to East Boston, the Siting Board declines to wait to issue this Certificate Decision.

(3) Technical Analysis of Water Dependent Use

CLF/GR and BRG make arguments relating to the definition of infrastructure crossing facility (which MassDEP regulations define as a water dependent use), as "[a]ny structure which is operationally related to such crossing facility and requires an adjacent location shall be considered an ancillary facility thereto," 301 CMR 9.02, and whether the Substation meets this definition.

The classification of the Substation as a water dependent use has important implications for the permitting requirements for the Substation. A WDU designation may result in the exemption of a facility located in tidelands from MEPA review thresholds. If the Substation were to be determined to be a non-water-dependent use, Eversource would need to file an Environmental

Notification Form and potentially an EIR with MEPA¹¹⁹ before MassDEP could issue a Chapter 91 License. 301 CMR 11.03 (a)(5) and/or (b)(5). In turn, the project proponent's application to MEPA could be subject to the new EJ regulations and protocols now in effect including the enhanced public involvement and analysis requirements, and an assessment of the existing "unfair or inequitable environmental burden" in the EJ community.¹²⁰ However, the Substation project is exempt from MEPA review because no MEPA review thresholds are triggered (Tr. 6, at 1134).

See 301 CMR 11.03(3)(a)5 and 11.03(3)(b)5.

The Draft License states that "the license is granted to install and maintain an electric substation ancillary to the existing water-dependent industrial infrastructure crossing facility (Chelsea Creek Crossing) located at the project site" (Exh. EV-1, att. 11, at 9). 121 The Draft License makes clear that MassDEP found the Substation to be ancillary to an existing industrial infrastructure crossing facility which is a water-dependent use.

MassDEP provided guidance on the application of its regulations in determining that the Company's application for a waterways license should be reviewed as a water-dependent use. Pursuant to 310 CMR 9.02, an Infrastructure Crossing Facility includes "ancillary facilities" and means

any infrastructure facility which is a bridge, tunnel, pipeline, aqueduct, conduit, cable, or wire, including associated piers, bulkheads, culverts, or other vertical support structures, which is located over or under the water and which connects existing or new infrastructure facilities located on the opposite banks of the waterway. Any structure which is operationally related to such crossing facility and *requires* an adjacent location shall be considered an ancillary facility thereto. Such ancillary facilities generally include, but are not limited to, *power transmission substations*, gas meter stations, sewage headworks and pumping facilities, toll booths, tunnel ventilation buildings, drainage structures, and approaches, ramps, and interchanges which connect bridges or tunnels to adjacent highways or railroads. 310 CMR 9.02.

The MEPA regulations require a proposed project to file an ENF if a proposed project involves a new, expanded or existing unlicensed non-water dependent use of waterways or tidelands, provided a Chapter 91 license is required. See 301 CMR 11.03(3)(a)5 and (3)(b)5.

See discussion of MEPA protocols in environmental justice section, Section III.F.2.b.

Notably, the definition of "ancillary" provided in the regulations expressly includes "power transmission substations" as a primary example of facilities that are functionally connected to the operation of the infrastructure crossing facility. 310 CMR 9.02.

310 CMR 9.02 (emphasis added).

Pursuant to 310 CMR 9.12(2), MassDEP determines a use to be water-dependent upon finding that said use requires direct access to or location in tidal or inland waters, and therefore cannot be located away from said water (Exh. MassDEP-CH-1, at 3-4). MassDEP explained the regulatory provisions that it applied to make its determination: "[i]n making this determination, [MassDEP] shall act in accordance with the following provisions: 310 CMR 9.12(2)(b) specifies that [MassDEP] shall find to be water-dependent-industrial the following uses: 16. other industrial uses or infrastructure facilities which cannot reasonably be located at an inland site as determined in accordance with 310 CMR 9.12(2)(c) or (d); (d) In the case of an infrastructure crossing facility, or any ancillary facility thereto... If an EIR is not submitted, such finding may be made by the Department based on information presented in the application and during the public comment period thereon" (Exh. MassDEP-CH-1, at 3). MassDEP noted also that the Site is in the Chelsea Creek DPA, which is significant because water-dependent-industrial uses and ancillary facilities are expressly allowed uses in DPAs. 301 CMR 25.01(2); 310 CMR 9.12(b)7.; Exh. MassDEP-CH-1; Tr. 2, at 218-219, 282. Therefore, MassDEP concluded, locating the Substation in the Chelsea Creek DPA is a permissible and suitable use. 301 CMR 25.01(2); 310 CMR 9.12(b)7; Exh. MassDEP-CH-1; Tr. 2, at 218-219, 282.

CLF/GR contests the determination that the Substation is appropriately classified as a water dependent use, pointing to its appeal still pending before the MassDEP Office of OADR (CLF/GR Brief at 7). CLF/GR argues that the Draft License was improperly issued because MassDEP did not find: that the applicant's ancillary structure is a water-dependent use, that the project's public benefits outweigh its public detriments, or that the license promotes the Commonwealth's principles of environmental justice (Exh. EV-1, att. 13, at 1). CLF/GR maintain that before the Board can issue the requested Certificate in this proceeding, the Siting Board must address the claims already asserted in CLF/GR's MassDEP appeal (CLF/GR Supplement Brief at 3).

CLF/GR argue that the Substation is does not meet the standard for ancillary facility because the Substation is not required to be operated at an adjacent location (CLF/GR Brief at 16-17). CLF/GR point to testimony offered by its witness, Mr. Chee, that in his opinion, the Substation can reasonably be located at many locations further from the East Boston waterfront (CLF/GR Brief at 18, citing Exh. CLF-GR-BC, at 4). Highlighting previous substation locations

proposed by Eversource, CLF/GR argues "Eversource's proposed location for a substation in East Boston is not ancillary to the Chelsea Cross infrastructure as it could be constructed in another location to achieve its goal of serving East Boston residents, such as another landlocked parcel" (CLF/GR Brief at 17).

During the comment period on the Chapter 91 application, MassDEP received comments questioning MassDEP's determination of the Substation as a water-dependent use, based in part on the alternative site analysis submitted by Eversource regarding the Substation location (see Eversource 2021 Exh. EFSB-P-2(S1)(1)). MassDEP requested supplemental information from Eversource, stating "The Department's Administrative Completeness Review letter specifically requested information from Eversource that justifies how the project is an ancillary facility that is operationally related to the infrastructure crossing facility and requires an adjacent location. On the basis of that information, in addition to the review of the rest of the application and comments, the Department determined the project meets the definition of an ancillary facility to a water-dependent infrastructure crossing facility" (Exh. MassDEP-CH-1, at 3).

In that response, Eversource explained how it meets the definition of ancillary facility. Eversource states that an infrastructure crossing facility is "any infrastructure facility which is a bridge, tunnel, pipeline, aqueduct, conduit, cable, or wire ... which is located over or under the water and which connects existing or new infrastructure facilities located on the opposite banks of the waterway." 310 CMR 9.02 (emphasis added). An infrastructure facility is one that "produces, delivers, or otherwise provides electric, gas, water, sewage, transportation, or telecommunication services to the public." 310 CMR 9.02. The existing Chelsea Creek Crossing is an Infrastructure Facility that is also an Infrastructure Crossing Facility. It is a conduit system that was specifically designed to accept high-capacity distribution and transmission cables for crossing beneath the Chelsea Creek. The Chelsea Creek Crossing was previously licensed by MassDEP as a Waterdependent Use Project based on its classification as an infrastructure crossing facility (Waterways License Number 12943). The Company's Project includes construction of the East Eagle Street Substation and two new 115 kV transmission lines, one between the Company's existing Mystic Station in Everett to the proposed East Eagle Street Substation and one line from the proposed East Eagle Street Substation to the Chelsea Substation. The Mystic-East Eagle-Chelsea Reliability Project was approved by the Siting Board in 2017 and proposes the use of the Chelsea Creek Crossing for interconnection of the lines at the East Eagle Street Substation. Eversource 2017 at 3.

An ancillary facility to an infrastructure crossing facility is defined as "[a]ny structure which is operationally related to such crossing facility and requires an adjacent location shall be considered an ancillary facility thereto." 310 CMR 9.02 (emphasis added). The phrase "operationally related" is not defined in the Waterways Regulations but, within the meaning of 310 CMR 9.02, the phrase has been interpreted to mean "that the proposed facility must be functionally connected to, or working together with, the operation of the infrastructure crossing facility." Matter of Algonquin Gas Transmission LLC, OADR Docket Nos. 2017-011, 012, Recommended Interlocutory Decision on Issues 1, 7 and 8 at 25 (November 21, 2018); Matter of Algonquin Gas Transmission LLC, OADR Docket Nos. 2017-11, 12, Final Decision (October 24, 2019).

In the Certificate proceeding, Eversource provided testimony that stated that the Draft License was properly issued as a water-dependent use determination for the Substation as an ancillary facility to a previously determined water-dependent use, the Chelsea Creek Crossing (Waterways License No. 12943). The Company vigorously defends the technical basis supporting the integral relationship between the Substation and the transmission lines intended to serve the Chelsea local area (Company Brief at 26). "The very purpose of the Chelsea Creek Crossing working together with the Substation is to provide for the interconnection of electric infrastructure on both sides of Chelsea Creek (Company Brief at 65-66, citing Exh. CLF-GR-P-7; Tr. 2, at 202-203). Eversource argues that without the Substation, the transmission lines coming through the Chelsea Creek would have nothing to connect to and the specific purpose of the transmission lines, to provide a new source of electric capacity into East Boston, would be negated (Company Brief at 26, citing Exhs. EV-1, at 2; CLF-GR-P-7).

The Siting Board agrees with MassDEP that the operation of the Substation is integral to the operation of the transmission and distribution systems providing service to East Boston. The Substation is necessary to allow the extension of the transmission lines to serve East Boston with reliable power, now at risk due to the strain on the capacity of load that can be served by the Chelsea Substation. The very point of the Chelsea Creek Crossing is to allow for the interconnection of electric infrastructure on both sides of Chelsea Creek. Moreover, the definition of Infrastructure Crossing Facility expressly includes "power transmission substations" as an example of an ancillary facility. 310 CMR 9.02. In view of the express inclusion of substations as the first of several examples of ancillary facilities, it would be an odd reading of MassDEP's regulations to find that a substation is not an ancillary facility. MassDEP's conclusion that the

Substation is operationally related to the Chelsea Creek Crossing conforms with MassDEP's rules regarding ancillary facilities.

CLF/GR and BRG dispute whether the Substation truly requires a location adjacent to the infrastructure crossing, the Chelsea Creek Crossing. Both CLF/GR and BRG argue that the New Site cannot be required within the meaning of the Superior Court Decision if the Company looked at alternative sites and found alternative sites that are technically able to provide the same ability to interconnect the transmission lines to distribution lines serving East Boston. In the MassDEP proceeding, the East Eagle Substation Chapter 91 alternative site analysis used the following criteria to evaluate potential sites: (1) an East Boston location; (2) site size greater than or equal to 0.4 acres; (3) site must be undeveloped and developable; and (4) site must be outside of filled tidelands (Eversource 2017, attachment EFSB-Z-10(1), attachment A).

The Siting Board reviewed the location of the Substation in two previous proceedings. In Eversource 2017, the Siting Board reviewed the Company's assessment of feasible alternative sites and found the Original Site on the City Parcel to be superior. Eversource 2017 at 75-76. Although the Company proposed to locate the Substation adjacent to the Chelsea Creek Crossing (on the west side of the City Parcel), the City rejected this proposal and the Company was directed to the initial location, the east side of the City Parcel. Eversource 2017 at 69. At that time, the Company provided an analysis of potential sites. The Siting Board found given the reliability benefits of locating the Substation in East Boston, constructing the Substation in East Boston is preferred; however, the availability of vacant parcels in a densely developed urban neighborhood to be limited. Eversource 2017 at 76. The Company and the City of Boston engaged in a land swap within East Boston that resulted in the site selected with strict limits imposed by the City on that site. Id. The Siting Board concluded that there were not any readily available, superior sites in East Boston. Eversource 2017 at 76.

During the Project Change Proceeding, the Company requested a change to the location of the East Eagle Substation, from the east side to the west side of the City Parcel. Eversource 2021 at 3-5. The proposed Substation on the New Site would contain the same components as were

The Company explained that the City of Boston would not grant an easement across the City Parcel to connect the proposed East Eagle Substation to the Chelsea Creek Crossing, because the City wanted to preserve the rest of the City Parcel for future development.

<u>Eversource 2017</u>, Exh. EFSB-RS-16; <u>Eversource 2017</u>, Exhs. EFSB-RS-19; CF-49.

proposed for the Original Site (id. at 6). However, given that an existing duct bank crossing under Chelsea Creek is located directly beneath the New Site after making landfall, the New Lines would be able to connect directly into the Substation instead of being routed beneath East Eagle Street and Condor Street to the Original Site (id. at 8). The Siting Board evaluated the New Site with respect to the cost of the proposed Project Change and with respect to the potential environmental impacts of relocating the Substation from the Original Site to the New Site within the City Parcel. Specifically, the Siting Board reviewed Project cost and potential land use, safety, visual, hazardous waste, noise, traffic, sea level rise, water and wetlands, and magnetic fields impacts.

Eversource 2021 at 33. The Siting Board concluded that, on balance, relocation of the Substation to the New Site provided the best opportunity at this time to meet the identified Project need with minimum impact on the environment, at the lowest possible cost, in accordance with the Siting Board's statutory mandate under G.L. c. 164, § 69J. Eversource 2021 at 81.

Contrary to CLF/GR's argument, the consideration of other sites not adjacent to the Chelsea Creek Crossing is not fatal to the conclusion that the Substation is a water dependent use. Rather, the Company's analysis and rejection of other sites strengthens the conclusion that the Substation is both an "ancillary facility" and an "other industrial use[] or infrastructure facilit[y] which cannot reasonably be located at an inland site as determined in accordance with 310 CMR 9.12(2)(c) or (d)." 310 CMR 9.12(2)(b)(16) (emphasis added). CLF/GR's arguments seem to urge the Siting Board to view the existence of any alternative site, if it is technically or even theoretically possible, to preclude a finding that the Substation is required to be constructed next to the Chelsea Creek Crossing. This view is inconsistent with not only MassDEP's regulations, but also MassDEP's role in protecting the environment and the Siting Board's mandate to ensure reliable electric service with the least environmental impacts at the lowest possible cost. In reviewing other sites for the Substation, the Company must consider whether it would actually be able to construct and operate the Substation at the site, in a timely manner so as to provide reliable electric service, for the lowest possible cost (as ratepayers pay for this infrastructure), with minimum impact on the environment (which is also MassDEP's mandate). See G.L. c. 164, § 69O(3) (explicitly referencing necessary energy supply with a minimum impact on the environment at the lowest possible cost). The extensive alternatives analysis in these proceedings clearly shows that there is no reasonable alternative location in East Boston for this Substation. The Substation is required to be located adjacent to the Chelsea Creek Crossing because the New

Site is the sole feasible location identified in the record, and therefore cannot reasonably be located away from the Crossing. The Siting Board sees no failure to conform with Chapter 91 and its implementing regulations and finds that construction and operation of the Substation at the New Site is consistent with implementation of energy policies to provide a necessary energy supply with a minimum impact on the environment at the lowest possible cost. G.L. c. 164, § 690.

(a) Alternative Analysis of a Failure to Conform

While the Weymouth Compressor Litigation, including the Superior Court Decision and the RRD, are not controlling in this Certificate proceeding, they do illustrate that the scope of "ancillary facility" under MassDEP's regulations is a matter of some dispute. While, for the reasons above, the Board concludes that the Substation is an ancillary facility and should be licensed as such, the Board recognizes that CLF/GR and BRD disagree, and this matter may be subject to further judicial review. Accordingly, the Board considers whether the failure of the Substation to qualify as an ancillary facility under an alternative reading of MassDEP's regulations would alter the outcome of this Certificate proceeding and concludes that it would not.

MassDEP's waterways regulations are designed to protect the public trust and ensure that tidelands are used in a manner that serves a proper public purpose. They are also designed to strike a balance: the public benefit must outweigh any detriment to the rights of the public in those tidelands. As the Supreme Judicial Court explained in <u>Alliance II</u>, when the Board stands in the shoes of MassDEP with respect to Chapter 91 licensing, the Board must uphold the public trust doctrine. While the Board may issue a certificate for a facility that would not qualify for a license under MassDEP's regulations, it must do so in a way that is consistent with otherwise applicable requirements of the public trust doctrine.

The Substation serves a proper public purpose: ensuring that residents and businesses in East Boston have reliable electric power even in the event of contingencies that would otherwise disrupt the power supply. The public benefit is significant. In addition, Eversource has provided and the Siting Board has required numerous mitigation measures for the Substation, including measures relating to flood mitigation and minimization of visual impacts. However, the Siting Board acknowledges the Substation also includes detriments to the public's rights in the tidelands at the New Site. Public use is incompatible with use as a Substation; the public would not be permitted to enter the premises during construction or operation of the facility. There is no

evidence in the record, however, that the Substation would interfere with fishing, fowling or navigation.

On balance, considering the entire record of this proceeding, the Original Proceeding and the Project Change proceeding, and for the reasons described in Section III.G below, the Board concludes that the benefit to the public in ensuring a reliable electric supply to East Boston at the lowest cost and with the least impact on the environment outweighs the detriment to the public's rights in the tidelands at the New Site.

(4) <u>Procedural Requirements for MassDEP Proceeding</u>

CLF/GR and BRG argue that MassDEP provided inadequate notice during its review of Eversource's Chapter 91 license application. In their appeal of the Chapter 91 Draft License filed with MassDEP, CLF and the Ten Residents Group assert that notice was provided in Spanish, English and Portuguese only during the third MassDEP comment period and that communitybased organizations expressed concerns that the public comment notice was not adequately provided to Spanish speaking residents (Exh. EV-1, att. 13, at 11-12). CLF/GR assert that throughout the process for Eversource's application for a Chapter 91 License, MassDEP did not adequately include residents and did not ensure adequate public engagement (CLF/GR Brief at 44). CLF/GR state that although MassDEP provided three comment periods throughout the Chapter 91 License process, Eversource acknowledged that MassDEP did not receive any public comments during the second comment period," shedding light on the inadequate public knowledge about the proposed substation" (CLF/GR Brief at 44, citing Exh. EV-1, att. 13 at 31). In addition, CLF/GR asserts that despite the substantial Spanish speaking population in East Boston, Spanish speaking residents were largely left out of the process and many "were utterly unaware of what Eversource was proposing until GreenRoots began holding meetings, talking with community members, and informing them about the project" (CLF/GR Brief at 44, citing Exh. CLF-GR-RB-JW-SAN at 4). CLF/GR identify several measures that could have been taken to inform and educate residents about the substation, such as providing translation resources, requiring Eversource to send notices to community-based organizations, posting flyers at known public gathering locations, holding informational meetings, and establishing a local repository (CLF/GR Brief at 44).

Critically, neither CLF/GR nor BRG identify any impact these alleged failures had on the Draft License or on MassDEP's conclusion that the Substation was an ancillary facility. In a Certificate proceeding, the Board takes over consideration of whether permits ordinarily issued (or not issued) by other agencies should be part of a certificate for a facility. Defects in process or notice at the agency level are not, generally speaking, relevant to the Board's proceedings. However, given the deference the Board has given to MassDEP's Draft License and interpretation of its regulations, the Board has considered CLF/GR's and BRG's arguments on this issue and MassDEP's response. The Board determines that it need not resolve the dispute between the parties because CLF/GR and BRG have not identified any way in which MassDEP's alleged failings impacted the Draft License which has become part of the record before the Board.

2. Environmental Justice and Language Access

In Eversource 2017, the Siting Board noted that the Project did not exceed any MEPA thresholds that would have triggered application of the Siting Board's enhanced public participation and enhanced analysis provisions contained in the EEA's EJ Policy. However, the Siting Board noted that it undertook public outreach measures consistent with the enhanced public participation components of the EJ Policy, including language services. Eversource 2017 at 145.

In <u>Eversource 2021</u>, the Siting Board evaluated the Project's consistency with various environmental protection policies, including EEA's EJ Policy and the Commonwealth's Language Access Policy ("LAP"). The Board reiterated its finding that because the Project does not trigger any MEPA thresholds, EEA's EJ Policy does not require the Siting Board to conduct enhanced public participation or enhanced review of the Project. <u>Eversource 2021</u> at 84. However, the Siting Board found that its actions in providing language access were consistent with LAP requirements. <u>Eversource 2021</u> at 90-91. 124

The Siting Board has viewed environmental justice and language access concerns as part of its analysis of consistency of a project with environmental protection policies.

The Supreme Judicial Court found that while the Project did not exceed an ENF threshold requiring the specific enhanced public participation provision of the EJ Policy, the Board implemented enhanced public participation procedures consistent with the EJ Policy. The Supreme Judicial Court also found that the Siting Board complied with the general EJ

The Certificate Statute requires that the Siting Board make a finding regarding the extent to which construction and operation of the facility will fail to conform with existing state and local laws, ordinances, bylaws, rules and regulations and reasonableness of exemptions thereunder, if any, consistent with the implementation of the energy policies contained in the Siting statute to provide a reliable energy supply for the commonwealth with a minimum impact on the environment at the lowest possible cost. G.L. c. 164, § 69O.

Since the Siting Board issued Eversource 2021, there have been a number of changes to applicable laws relating to environmental justice. These changes include: enactment of the Roadmap Act, corresponding changes to MEPA regulations implementing provisions of the Roadmap Act; issuance of two MEPA protocols relating to environmental justice 125; revisions to EEA's EJ Policy to reflect the Roadmap Act provisions; and opening of the Siting Board's Notice of Inquiry ("NOI") on Enhancing Public Awareness of and Participation in its Proceedings, EFSB 21-01. Parties in this proceeding disagree on how various provisions in the Roadmap Law and implementing regulations, protocols, and policies apply to the Project and the Siting Board's review of the Project. To provide a context for the Company's and parties' positions relating to these topics, the Siting Board first provides a summary of these provisions, focusing on those of particular relevance to the Siting Board in this proceeding.

a) Roadmap Act

On March 26, 2021, Governor Baker signed the Roadmap Act which updates the greenhouse gas emissions limits in the 2008 Global Warming Solutions Act, codifies Massachusetts' commitment to achieve Net Zero emissions in 2050, and authorizes the Secretary

principles required by the EJ Policy. <u>GreenRoots, Inc. v. Energy Facilities Siting Board</u>, 490 Mass. 747, 752-755 (2022).

Pursuant to 980 CMR 1.06(7), the Siting Board takes official notice of two MEPA protocol documents as follows: (1) MEPA Public Involvement Protocol for Environmental Justice Populations (which can be found at https://www.mass.gov/doc/final-mepa-public-involvement-protocol-for-environmental-justice-populations-effective-date-of-january-1-2022/download).

of EEA to establish a greenhouse gas limit based on an emissions reduction of at least 50 percent below 1990 levels for 2030, and at least 75 percent for 2040. Roadmap Act, Section 10. 126

The Roadmap Act included several provisions that address environmental justice. <u>See</u>
Roadmap Act, Sections 56-60. The Roadmap Act contains statutory definitions of environmental justice populations, environmental benefits, and environmental burdens (including those from climate change). <u>See</u> Roadmap Act, Section 56, amending G.L. c. 30, § 62. The Roadmap Act's definition of "environmental justice population," includes four categories of environmental justice neighborhoods (defined as census block groups) based on: (1) median income level;
(2) percentage of residents who are minorities; (3) percentage of residents who have limited English proficiency; and (4) a combined minority percentage and income threshold. Roadmap Act, Section 56.

The Roadmap Act requires the Secretary to direct EEA agencies (including departments, divisions, boards, and offices under the Secretary's control and authority) to consider

On June 30, 2022, the Secretary of the EEA released the Clean Energy and Climate Plan for 2025 and 2030 ("CECP"). The 2025/2030 CECP represents the Commonwealth of Massachusetts' comprehensive plans to achieve aggressive emissions reduction in 2025 and 2030 and provides details on the actions the Commonwealth will undertake through the next decade to ensure the 2025 and 2030 emissions limits are met.

¹²⁷ Environmental justice populations are defined as: a neighborhood that meets one or more of the following criteria: (i) the annual median household income is not more than 65 per cent of the statewide annual median household income; (ii) minorities comprise 40 per cent or more of the population; (iii) 25 per cent or more of households lack English language proficiency; or (iv) minorities comprise 25 per cent or more of the population and the annual median household income of the municipality in which the neighborhood is located does not exceed 150 per cent of the statewide annual median household income; provided, however, that for a neighborhood that does not meet said criteria, but a geographic portion of that neighborhood meets at least 1 criterion, the secretary may designate that geographic portion as an environmental justice population upon the petition of at least 10 residents of the geographic portion of that neighborhood meeting any such criteria; provided further, that the secretary may determine that a neighborhood, including any geographic portion thereof, shall not be designated an environmental justice population upon finding that: (A) the annual median household income of that neighborhood is greater than 125 per cent of the statewide median household income; (B) a majority of persons age 25 and older in that neighborhood have a college education; (C) the neighborhood does not bear an unfair burden of environmental pollution; and (D) the neighborhood has more than limited access to natural resources, including open spaces and water resources, playgrounds and other constructed outdoor recreational facilities and venues. Roadmap Act, Section 56.

environmental justice principles in making "any policy, determination or taking any other action related to a project review, or in undertaking any project pursuant to [G.L. c. 30] sections 61 through 62J, inclusive, and related regulations that is likely to affect environmental justice populations." Roadmap Act, Section 60, creating new G.L. c. 30, § 62K; see also 2021 EJ Policy, Statement of Purpose. The Roadmap Act defines those environmental justice principles as including (1) the meaningful involvement of all people with respect to the development, implementation and enforcement of environmental laws, regulations and policies, including climate change policies; and (2) the equitable distribution of energy and environmental benefits and environmental burdens. G.L. c. 30, § 62; Roadmap Act, Section 56.

The Roadmap Act includes revisions to the MEPA review process. The Secretary must consider environmental justice principles during the MEPA review process to "reduce the potential for unfair or inequitable effects upon an environmental justice population." Roadmap Act, Section 60. The Roadmap Act requires an environmental impact report ("EIR") for any project that is "likely to cause damage to the environment" and is located within a distance of one mile of an environmental justice population; this distance extended to five miles for a project that impacts air quality. Roadmap Act, Sections 58, 59, amending G.L. c. 30, § 62B. This required EIR must assess any existing unfair or inequitable environmental burden and related public health consequences impacting the environmental justice population from any prior or current operation or project that has damaged the environment; if such assessment indicates an unfair or inequitable environmental burden or related health consequence, the EIR must also (1) identify any environmental and public health impact from the propose project that would likely result in a disproportionate adverse effect on such population; and (2) potential impact or consequence from the proposed project that would increase or reduce the effects of climate change on the environmental justice population. Roadmap Act, Section 58. 128

In addition, the Roadmap Act requires MassDEP to conduct a stakeholder process to develop a cumulative impact analysis as a condition of air permitting for certain projects. See St. 2021, c. 8, Section 102C. This analysis would require an evaluation of a baseline assessment of the health and environmental sources of pollution throughout the community as well as an assessment of the environmental benefits and environmental burdens of a project as part of the air permit process. See www.mass.gov/info-details/cumulative-impact-analysis-in-air-quality-permitting. The Roadmap Act requires

The Roadmap Act also requires the Secretary to provide opportunities for meaningful public involvement through the MEPA review process. Section 60 of the Act, which creates new G.L. c. 30, § 62J, provides that, "[t]o enable the public to assess the impact of proposed projects that affect their environment, health and safety through the [MEPA] project review process . . . , the secretary [of EEA] shall provide opportunities for meaningful public involvement" by environmental justice populations. Roadmap Act, Section 60. 129 Where an environmental justice population is present within the one-mile designated geographic area (or five miles if the project impacts air quality), and lacks English language proficiency, the proponent is required to indicate on an ENF if the population is reasonably likely to be affected negatively by the project. Roadmap Act, Section 60. In such cases, the Secretary must require additional measures to improve public participation by the environmental justice populations, including: (1) translating public notices, ENFs, EIRs, and other key documents related to the Secretary's review and decisions in languages spoken by a significant number of the affected environmental justice population; (2) providing interpretation services at public meetings where a significant portion of the affected environmental justice population lacks English language proficiency; (3) requiring public meetings be held in accessible locations that are near public transportation; (4) providing appropriate information about the project review procedure for a proposed project; and (5) establishing a local repository for project review documents. Roadmap Act, Section 60.

b) <u>MEPA Provisions</u>

Starting in 2020, the MEPA Office embarked on an update its environmental justice-related review protocols, and this coincided with a general effort to update MEPA regulations at 301 CMR 11.00 et seq. MEPA Interim Protocol for Analysis of Project Impacts on Environmental Justice Populations. After enactment of the Roadmap Act, MEPA's ongoing regulatory efforts additionally addressed the new legislatively mandated environmental justice requirements for the

MassDEP to propose regulations to include cumulative impact analyses for air permitting within eighteen months of the Act's effective date. St. 2021, c. 8, Section 102C.

EEA maintains a website providing the locations of neighborhoods which meet certain criteria for environmental justice neighborhoods at https://mass-eoeea.maps.arcgis.com/apps/MapSeries/index.html?appid=535e4419dc0545be980545a0eeaf9b53.

MEPA process. This series of actions culminated in the publication of revised MEPA regulations on December 24, 2021, applicable to any new project for which an ENF or expanded ENF is filed on or after January 1, 2022. As part of this regulatory revision, MEPA also issued: (1) MEPA Interim Protocol for Analysis of Project Impacts on Environmental Justice Populations ("MEPA EJ Analysis Protocol"); and (2) MEPA Public Involvement Protocol for Environmental Justice Populations ("MEPA EJ Public Involvement Protocol"). These protocols also apply to all MEPA projects filed after January 1, 2022.

Under the MEPA EJ Analysis Protocol, pursuant to Section 58 of the Roadmap Act, an EIR is required for any project likely to cause damage to the environment and located within one mile of an environmental justice population, or within five miles of an environmental justice population if the project impacts air quality. MEPA EJ Analysis Protocol at 2. The term "likely to cause damage to the environment" is construed in the regulations and protocol to mean project impacts that meet or exceed MEPA review thresholds set forth in 301 CMR 11.03¹³². MEPA EJ Analysis Protocol at 2. Thus, MEPA requires that projects that meet or exceed one or more MEPA review thresholds and are otherwise subject to MEPA review under 301 CMR 11.01(2) to submit an EIR, if the project is located within one mile of an environmental justice population, or is located within five miles of an environmental justice population and will impact air quality. MEPA EJ Analysis Protocol at 2.

Consistent with the Roadmap Act, the MEPA EJ Analysis Protocol establishes provisions for: (1) assessment of existing unfair or inequitable environmental burden; (2) analysis of project impacts to determine disproportionate adverse effect; (3) analysis of project impacts to determine climate change effects; and (4) mitigation and Section 61 Findings. MEPA EJ Analysis Protocol at 2-11.

The revised MEPA regulations implement various provisions of the Roadmap Act.

MEPA also issued "MEPA Interim Protocol on Climate Change Adaptation and Resiliency."

MEPA review thresholds identify categories of project or aspects thereof of a nature, size or location that are likely, directly or indirectly, to cause Damage to the Environment. 301 CMR 11.01.

Under the MEPA EJ Public Involvement Protocol, consistent with Section 60 of the Roadmap Act, project proponents are required to identify the location of the project relative to environmental justice populations, describe the characteristics of the environmental justice populations within five miles of the project site, and the likely effects on environmental justice populations. MEPA EJ Public Involvement Protocol at 2-3. The MEPA EJ Public Involvement Protocol requires measures to enhance public involvement prior to filing an ENF/EENF, including advance notification of between 45 and 90 days provided to community-based organizations and tribes/indigenous organizations based on an EEA Reference List, and measures to promote public involvement through a meaningful community engagement and outreach process. MEPA EJ Public Involvement Protocol at 4-5.

c) 2021 EJ Policy

In addition to the Roadmap Act environmental justice requirements discussed above, the Siting Board is also guided by the 2021 EJ Policy, applicable to all agencies within EEA, including the Siting Board and the Department. The 2021 EJ Policy is based on the principle that all people have a right to be protected from environmental hazards and to live in and enjoy a clean and healthful environment regardless of race, color, national origin, income, or English language proficiency. Environmental justice is the equal protection and meaningful involvement of all people and communities with respect to the development, implementation, and enforcement of energy, climate change, and environmental laws, regulations, and policies and the equitable distribution of energy and environmental benefits and burdens. In June 2021, EEA revised its EJ Policy 134 to reflect requirements in the Roadmap Act, including adding new statutory definitions,

The EJ Policy explicitly references compliance with the A&F Bulletin #16 Language Access Policy and Implementation Guidelines (March 20, 2015).

The Supreme Judicial Court noted that the 2017 EJ Policy was based on a recognition that disadvantaged communities have historically borne disproportionate environmental burdens that benefit the entire Commonwealth and established both general principles and more specific requirements for project that exceed certain thresholds. GreenRoots, Inc. v. Energy Facilities Siting Board, 490 Mass. 747, 753-754 (2022).

and stating that environmental justice principles are to be an "integral consideration" in MEPA review and all EEA programs. ¹³⁵

The 2021 EJ Policy states:

Through its agencies and programs, EEA works to engage environmental justice populations in environmental decision-making through expanded and inclusive outreach, to minimize health risks through targeted environmental enforcement, and to improve environmental quality in all communities through initiatives that include reduction of pollutants and emissions, remediation and redevelopment of contaminated land, and investment in urban parks and greenspace.

The 2021 EJ Policy also identified specific provisions applicable to the Siting Board and its review of energy facilities: 2021 EJ Policy at Section 20. The Siting Board's obligations for enhanced public participation and enhanced analysis of impacts and mitigation procedures are triggered by certain MEPA thresholds as identified in Sections 16 and 17 of the 2021 EJ Policy.

The 2021 EJ Policy recognizes the existing public participation measures that the Siting Board employs in reviewing petitions in environmental justice neighborhoods:

The Siting Board shall continue to use enhanced public participation procedures in its review of energy facility petitions, based on the defined project parameters used by MEPA noted in Section 16 above. The Siting Board shall continue to require petitioners to translate public hearing notices into languages relevant to affected EJ populations and to publish such notices in both English and foreign-language media outlets, as well as to post notices in community locations that reach EJ populations. In addition, the Siting Board shall continue to require that translators be available at public comment hearings for project locations where EJ populations are present.

2021 EJ Policy at 12, Section 20.

With regard to the Siting Board's analysis of a proposed project's potential impacts, the 2021 EJ Policy recognizes that the Siting Board employs an enhanced analysis of impacts and mitigation procedures in its review of proposed generating facilities, based on the defined project parameters used by MEPA. 2021 EJ Policy, Section 20. Consistent with the Siting Board's statutory obligations, the Siting Board reviews air, water resource, wetlands, solid waste, visual,

In addition, the CECP explains the core environmental justice principles incorporated throughout the policies set forth in the most recent CECP. To realize the Commonwealth's vision for environmental justice as part of the strategies described in the CECP, the Plan reiterates the Commonwealth's commitment to utilizing best practices for enhanced community engagement. 2025/2030 CECP, Chapter 2.

noise, and local and regional land use and cumulative health impacts for proposed generating facilities of 100 MW or more. See G.L. c 164, § 69J¹/₄.

For other jurisdictional facilities, the Siting Board is required by statute to assess land use impact, water resource impact, air quality impact, solid waste impact, radiation impact and noise impact. 2021 EJ Policy, Section 20. Decisions issued by the Siting Board review the scope of potential mitigation measures and requirements for a project proponent to include to mitigate such impacts for the affected communities as part of its review of the environmental impacts of a proposed facility. See G.L. c 164, § 69J.

d) <u>Siting Board Notice of Inquiry</u>

On June 30, 2022, the Siting Board issued an NOI (EFSB 21-01) opening a formal process to assess opportunities to enhance equitable public awareness of, and meaningful participation in, Siting Board proceedings. In addition, the Siting Board stated its intention to use the NOI process as part of its ongoing development of an EJ Strategy consistent with the 2021 EJ Policy. EFSB 21-01, at 1. The Department issued a companion Order in D.P.U. 21-50 earlier that year, to examine procedural enhancements to its public notice requirements to increase public awareness of and participation in Department proceedings, including avenues to increase both the visibility of its public notices and public and stakeholder involvement in Department proceedings. The Department and Siting Board have requested two rounds of comments. In addition, the Siting Board and Department convened a joint roundtable to further explore opportunities to enhance stakeholder engagement and participation in Siting Board and Department proceedings, regardless of English language proficiency. The investigations are ongoing.

e) Community Benefits Agreement in Eversource 2021

In Eversource 2021, the Siting Board directed Eversource to engage with the East Boston community in recognition of the environmental justice populations residing in the East Boston community and the unique legacy of significant environmental impacts associated with existing major infrastructure in this community. Eversource 2021 at 100. The Siting Board required the Company to enter into good-faith negotiations for a CBA prior to construction of the Substation.

Id. The Siting Board noted that the CBA should include measures to further mitigate impacts and further increase environmental and energy benefits from construction of the Substation, and it must

directly benefit the community of East Boston. Eversource provided an executed copy of a CBA negotiated with two organizations representing the Eagle Hill neighborhood as part of a compliance filing in the Project Change Proceeding as well as within the record in this Certificate Proceeding. The CBA includes a list of several commitments which provide energy and environmental benefits to the Eagle Hill neighborhood of East Boston, including funding for the Urban Wild, green space, the American Legion Playground, and facilities improvements for the Salesian Boys & Girls Club. ¹³⁶

f) Positions of the Parties

(1) <u>CLF/GR</u>

CLF/GR argues that a "business-as-usual approach" to decisions concerning the siting of energy facilities in environmental justice neighborhoods is no longer acceptable under state law (CLF/GR Brief at 1). As CLF/GR notes, no party disputes that the Substation would be located in an area designated by the Commonwealth as an environmental justice neighborhood "occupied by a high percentage of renters, low-and moderate-income residents, communities of color, and Limited English Proficiency and immigrant populations" (CLF/GR Brief at 28, citing Exh. CLF-GR-LE at 5). With the passage of Roadmap Act, CLF/GR asserts that the Legislature established a new legal framework for assessing projects proposed to be sited in environmental justice neighborhoods, which the Siting Board must apply in this proceeding (CLF/GR Brief at 1). As CLF/GR views this case, Eversource seeks a Certificate to place a highly contentious, ill-sited electrical substation in East Boston — an environmental justice neighborhood already overburdened by industrial infrastructure and insufficient access to open space (CLF/GR Brief at 1). Applying this new environmental justice framework of the Roadmap Act, CLF/GR contends that the Board must find that the Project burdens outweigh the benefits, and that under G.L. c. 164, § 690, the facility does not conform with existing state and local laws (CLF/GR Brief at 1).

CLF/GR argues that the Roadmap Act authorizes the EEA Secretary to require project proponents and EEA agencies to enhance opportunities for meaningful participation by

The Supreme Judicial Court noted that the CBA commitments were consistent with the 2017 EJ Policy goals for agencies to increase access to open space and parks and engage in the cleanup and redevelopment of brownfield sites. GreenRoots, Inc. v. Energy Facilities Siting Board, 490 Mass. 747, 754-755 (2022).

environmental justice populations located within proximity to proposed projects and consider the environmental justice principles to reduce the potential for unfair or inequitable effects upon an environmental justice population (CLF/GR Brief at 29). While faulting the underlying proceedings as having numerous examples of inadequate and "far from meaningful public participation," CLF/GR acknowledge that Eversource and the Siting Board have made strides in expanding public participation in this proceeding by "scheduling the public hearing in the evening, providing translated materials including communications from the Presiding Officer, offering simultaneous interpretation of English and Spanish at public and evidentiary hearings, and recording information to post to YouTube" (CLF/GR Brief at 31). Nevertheless, CLF/GR claims that the "pace of these proceedings has made it challenging for residents to participate" (CLF/GR Brief at 29).

CLF/GR contends that Project is required to file an ENF pursuant to 301 CMR 11.03(3)(b)(5) given that it requires a Chapter 91 License, and CLF/GR asserts, is "a non-water dependent use of tidelands" (CLF/GR Brief at 32). CLF/GR bolsters this argument by noting that "it is not an overhead utility line; it is not a structure occupying 1,000 or less square feet or necessary to a single-family dwelling; it is not a temporary use; and it is not an unlicensed structure in use since prior to 1984 (CLF/GR Brief at 32). Thus, the project is subject to MEPA review" (CLF/GR Brief at 32). Having concluded that an ENF filing is required for the Substation, CLF/GR advances the argument that because the Substation is also within a distance of one mile of an environmental justice population, the Project is also required to undergo an EIR, in keeping with environmental justice-related review requirements in the Roadmap Act pertaining to enhanced analysis of impacts and mitigation (CLF/GR Brief at 32 n.17)). ¹³⁷

CLF/GR also contends that the 2021 EJ Policy "identifies only three of the numerous MEPA thresholds that trigger enhanced analysis of impacts and mitigation procedures in its review of proposed energy projects...(.)" (CLF/GR Brief at 32, n.17, citing 2021 EJ Policy at 11,

³⁰¹ CMR 11.03(3)(b)(5) specifies that a mandatory ENF is required, and other MEPA review if the Secretary so requires, if "Provided that a Chapter 91 License is required, New or existing unlicensed non-water dependent use of waterways or tidelands, unless the Project is an overhead utility line, a structure of 1,000 or less sf base area accessory to a single family dwelling, a temporary use in a designated port area, or an existing unlicensed structure in use prior to January 1, 1984."

Section 17). CLF/GR also argues that "the Secretary may require that an assessment be performed at any stage of the review process" and to date, no MEPA review has occurred for the Substation (CLF/GR Brief at 33, citing G.L. c. 30, § 62B). Accordingly, CLF/GR asserts that the EEA Secretary, as chair of the Board, must require an EIR that meets the requirements of G.L. c. 30, § 62B prior to the Board rendering a tentative decision (CLF/GR Brief at 33).

Separate from any required MEPA actions, CLF/GR argues that the Roadmap Act obligates the Siting Board to consider and meaningfully address environmental justice principles:

To further the environmental justice principles the secretary shall direct its agencies, including the departments, division, boards and offices under the agency's control and authority, to consider the environmental justice principles in making any policy, determination or taking any other action related to a project review, or in undertaking any project pursuant to said sections 61 through 62J inclusive, and related regulations that is likely to affect environmental justice populations.

(CLF/GR Brief at 33, citing G.L. c. 30, § 62K).

CLF/GR offers a variety of observations and suggestions to guide the Siting Board's recommended use of the environmental justice principles in reviewing the Company's Certificate filing. With regard to "environmental benefits," CLF/GR points to testimony of multiple witnesses for CLF/GR and BRG in attesting to a desire of residents to seek more open space along the Chelsea Creek, including the Substation Site, which has "long been planned for open space opportunities" (CLF/GR Brief at 34). Contrary to Eversource's testimony, CLF/GR maintains that energy reliability "is not statutorily defined as an environmental benefit" and that East Boston residents "do not view the substation as an environmental benefit" (CLF/GR Brief at 34).

CLF/GR contends that "a mountain of evidence" in this proceeding as well as the underlying proceedings indicates that a "substantial amount of East Boston residents, including elected officials, view the substation as an environmental burden" (CLF/GR Brief at 34). Among the reasons cited by CLF/GR are: risks to public health, safety concerns, exposure to Substation flooding, cumulative risks, and lack of company transparency with the community (CLF/GR Brief at 35). In addition, CLF/GR argues that the use of the New Site for the Substation prevents the creation of additional green space for the Eagle Hill community (CLF/GR Brief at 26-27).

CLF/GR notes that the Roadmap Act obligates the Secretary to provide direction to EEA agencies to limit inequitable impacts on environmental justice populations, and establish an EJ Council, which has not been appointed to date (CLF/GR Brief at 35-36). CLF/GR also asserts that

without a Siting Board-specific EJ Strategy, which it contends was required by Executive Order 552, parties do not have guidance regarding the Board's application of its obligations to promote environmental justice (CLF/GR Brief at 7). CLF/GR argues that the Siting Board must evaluate environmental benefits versus environmental burdens in making a determination or taking action related to a project likely to affect environmental justice populations (CLF/GR Brief at 33, citing G.L. c. 30, § 62K). CLF/GR points to recommendations made by its witness, Senator Edwards, such as: (1) assessing a community's environmental justice conditions (e.g., asthma rates, air quality, tree canopy, climate change vulnerability); (2) a questionnaire of the proponent seeking information about its outreach process, and efforts to minimize impacts; (3) the Siting Board and community advocates could develop a list of suggested mitigation to "assure mitigation equity and transparency;" and (4) review by the EJ Council to assess whether the project is "environmentally just" and whether it should go forward for permitting (CLF/GR Brief at 36, citing RR-EFSB-18). CLF/GR also emphasizes the role of cumulative impact assessments, and the role of convening a multistakeholder process to decide the harms of a particular project, and a ranking of impacts relative to one another (CLF/GR Brief at 37). ¹³⁸

CLF/GR Brief at 39). CLF/GR observes that the CBA provides for \$1.4 million to fund upgrades and repairs to parks and add clean energy in a community facility, as well as \$4.5 million for soil remediation, and that these are environmental benefits (CLF/GR Brief at 39). However, CLF/GR dismisses these benefits as "costs associated with eliminating or reducing opposition to the East Boston substation," which it contends should be paid by shareholders, not ratepayers (CLF/GR Brief at 40).

In sum, CLF/GR argues that the Siting Board should find that the Substation's environmental burdens outweigh the environmental benefits in violation of the environmental justice principles and the Roadmap Act (CLF/GR Brief at 40). By denying the Initial Petition and Application, which CLF/GR urges the Siting Board to do, CLF/GR contends that would allow time for the relevant permitting entities to render decisions, for Eversource to correct for any

The EJ Council convened on July 28, 2022. See https://www.mass.gov/event/july-28-2022-meeting-of-the-environmental-justice-council-ejc-2022-07-28t093000-0400-2022-07-28t113000-0400."

deficiencies at its substations after learning more about the incident at its Newton Substation, and for the Board to finalize and release an EJ Strategy and apply it to the current proceeding (CLF/GR Reply Brief at 4).

(2) BRG

BRG asserts that the Roadmap Act requires the Siting Board to do more than simply improve public participation (BRG Brief at 11). BRG further argues that the Roadmap Act provides for comprehensive analysis of baseline environmental conditions in the Commonwealth's environmental justice communities, and for correspondingly comprehensive analysis of the impacts and alternatives for proposed projects in these communities. St. 2021, c. 8 §§ 58, 59 (BRG Brief at 11). BRG concludes that the Roadmap Act should be and must be considered by the Board in this Certificate Proceeding -- with special focus given to the baseline assessments and enhanced environmental analysis provisions of the Act and its initial implementing policies (BRG Brief at 14; BRG Reply Brief at 7-8). BRG argues that the Roadmap Act and its implementing policies (such as the 2021 EJ Policy) constitute substantially changed circumstances and require the Siting Board to make a consistency finding as part of any final decision in this proceeding (BRG Reply Brief at 7).

BRG asserts that the Siting Board may, and should, use the Certificate Proceeding to begin establishing rules and policies with respect to the critical, priority issues of environmental protection in environmental justice neighborhoods (BRG Brief at 14). BRG asserts that the Roadmap Act and EJ Policy have not been adequately applied in this proceeding as environmental justice impacts and benefits were not fully developed in the record (BRG Reply Brief at 7). BRG recommends that the Board use its wide discretionary authority, which it does not view as constrained by MEPA thresholds, to direct that an enhanced environmental and environmental justice analysis be completed for the proposed East Eagle Substation (BRG Brief at 16; BRG Reply Brief at 14).

While BRG agrees with the Company and CLF/GR that the Company had fulfilled EJ Policy requirements on public participation, BRG asserts that the Roadmap Act requires the Siting Board to do more than just improve public participation (BRG Reply Brief at 9-10). BRG reiterates that the Roadmap Act requires comprehensive analysis of baseline environmental conditions and an enhanced analysis of impacts and alternatives for the Project (BRG Reply Brief

at 9-10, <u>citing BRG Brief at 11</u>). BRG also agrees with CLF/GR that the Siting Board should develop an EJ Strategy as required by Executive Order 552 (BRG Reply Brief at 10).

BRG cites the results of the City of Boston's non-binding ballot measure on the Substation as relevant in informing the Siting Board as to the public interest. BRG asks that the Board consider the results of this ballot measure in its deliberations as to whether further environmental and environmental justice analysis would be appropriate for the proposed Substation in East Boston (BRG Brief at 17). However, BRG also acknowledges that power outages in East Boston would constitute an environmental and environmental justice harm, and that avoiding such outages is consistent with BRG's intervention scope (BRG Brief at 21).

(3) <u>Company</u>

Eversource acknowledges that the Roadmap Act and the 2021 EJ Policy compel EEA agencies (including the Siting Board) to require project proponents to enhance opportunities for meaningful participation by environmental justice populations located within proximity to proposed projects (Company Reply Brief at 35). The Company contends that the Siting Board fully complied with these enactments by requiring the Company to provide enhanced notification procedures in several languages, scheduling several sessions of the public comment hearing at various times, and providing interpretation services during the public comment and evidentiary hearings (Company Reply Brief at 35). The Company states that the Siting Board's requirements, and the Company's actions to meet those requirements, provided opportunities for meaningful public involvement by environmental justice communities consistent with the goals of the Roadmap Act and the 2021 EJ Policy (Company Brief at 84). 139

The Company rejects CLF/GR's view that the Substation requires MEPA review and therefore, triggers the enhanced analysis of impacts and mitigation requirements in the 2021 EJ Policy or the Roadmap Act (Company Reply Brief at 36). Although CLF/GR may not agree with MassDEP's determination that the Substation is a water-dependent facility (i.e. it does not require

Eversource also noted its corporate commitment to environmental justice principles and provided its Draft Equity Framework in response to a record request from the Siting Board (RR-EFSB-15). The Company stated that the Draft Equity Framework demonstrates the internal policies that it has in place to ensure a continued focus on equity, racial and social justice in all communities served by Eversource (Company Brief at 83 n. 41).

MEPA review), the Company emphasizes that it is MassDEP's determination, and not CLF/GR's opinion, that matters (Company Reply Brief at 36). The Company dismisses CLF/GR's related suggestion that a cumulative impact assessment must be performed to compare overall environmental benefits and burdens in the community, which the Company contends is not required for the Substation under any existing law and lacks foundation (Company Reply Brief at 38 n.33, citing CLF/GR Brief at 37)

CLF/GR asserts Executive Order 552 requires the Siting Board to develop an EJ Strategy, and having not yet done so, the Siting Board lacks the necessary guidance to protect environmental justice populations (CLF/GR Brief at 42). In response, the Company argues that, on June 24, 2021, EEA updated its prior EJ Policy, consistent with the Roadmap Act, which applies to the Siting Board, as did prior versions of the EJ Policy (Company Reply Brief at 37). The Company refers to the Supreme Judicial Court's finding that the Siting Board's environmental justice policies and compliance can be achieved via case-by-case adjudication or rulemaking (Company Reply Brief at 38, citing Brockton Power Co. LLC v. Energy Facilities Siting Board, 469 Mass. 215, 220 (2014)). Accordingly, the Company asserts, the Siting Board has, in fact, complied with Executive Order 552 (Company Reply Brief at 38).

Although CLF/GR argues that East Boston's environmental justice population is overburdened by industrial infrastructure (CLF/GR Brief at 1), the Company contends that is not the case with electric infrastructure, leaving the community underserved electrically (Company Reply Brief at 37). Eversource questions the notion that because East Boston is an environmental justice community, the Substation should not be constructed there; rather, Eversource argues, environmental justice policies do not prohibit siting necessary electric infrastructure in environmental justice communities, but do require that additional outreach measures be taken to ensure meaningful opportunities for participation by residents in siting decisions (Company Reply Brief at 37). Without the Substation, Eversource views the status quo in Chelsea and East Boston as imposing a heavy and inequitable energy burden, with substandard electric reliability for these environmental justice communities (Company Reply Brief at 37). Eversource notes that the Supreme Judicial Court has found that a reliable electric supply is essential for the health and welfare of residents (Company Brief at 86, citing Town of Sudbury, 487 Mass. at 748).

Finally, the Company maintains that, on balance, the environmental and energy benefits that will accrue from the Substation far outweigh the minor, and largely temporary, environmental

burdens (Company Reply Brief at 41). The Company asserts the Substation has been designed to minimize impacts associated with wetlands, noise, traffic, air, electric and magnetic fields, safety, hazardous waste, flooding, and visual aesthetics; each of these impacts has been comprehensively reviewed, evaluated and minimized, in this Certificate Proceeding and in the two prior Siting Board decisions (Company Brief at 87). As noted above, the Company sees no requirement applicable to the Substation that would mandate a cumulative impact assessment for the Substation, as demanded by CLF/GR and BRG (Company Reply Brief at 38).

Whether or not certain residents of East Boston view the Substation and its electric reliability improvements as an environmental benefit is not determinative, according to the Company (Company Reply Brief at 38). The Company contends that that energy and environmental benefits of the Substation are substantial and include: improved electric reliability, soil and groundwater remediation of the Substation Site, decarbonization through residents' participation in electrification of home heating and transportation; and enhanced open space, tree cover and recreational opportunities pursuant to a CBA negotiated with the Eagle Hill Civic Association and the Salesian Boys & Girls Club of East Boston (Company Brief at 87; Company Reply Brief at 39-40).

g) Analysis and Findings

The Siting Board has addressed the topic of environmental justice in many dockets since the Board was transferred to the EEA Secretariat in 2007 (and therefore became subject to the 2002 EJ Policy). See e.g., Footprint Power Salem Harbor, EFSB 12-2 (2013); Exelon West Medway, EFSB 15-01/D.P.U. 15-25 (2016); Brockton Power, EFSB 07-7/D.P.U. 07-58/07-59 (2009). In this proceeding, the Siting Board marks the first occasion where environmental justice and language access have been central to its review of a certificate request. Unlike a Section 69J or 69J¼ proceeding where environmental justice/LAP issues are addressed on the basis of "consistency with current health, environmental protection, and resource use and development policies of the Commonwealth," a certificate review addresses environmental justice/LAP issues in a slightly different manner. In this case, we consider environmental justice and LAP requirements, pursuant to G. L. c. 164, § 69O, and "the extent to which construction and operation of the Facility will fail to conform with existing state or local laws, ordinances, by-laws, rules and regulations and

the reasonableness of exemption thereunder, if any, consistent with the implementation of the energy policies applicable to the Siting statute."

The law and policy regarding environmental justice/LAP issues have evolved since Eversource 2017 or Eversource 2021, given important legislative and regulatory changes, program developments at the Siting Board and various EEA agencies, project development activity and related stakeholder actions. At the heart of the environmental justice/LAP issues in this proceeding are two basic questions: (1) What is required in the Siting Board's review of the Certificate request? (2) Did the Siting Board do what is required? The Company asserts that all environmental justice/LAP requirements have been satisfied in the proceeding, while CLF/GR and BRG contend that there are significant errors and omissions in required environmental justice/LAP processes and analyses and that the Board cannot lawfully approve the Certificate at this time.

A key fact in the answer to these questions is that MassDEP previously made a determination in its Draft License that identifies the Substation as water-dependent because it is ancillary to a previously licensed water-dependent infrastructure crossing facility (the Chelsea Creek Crossing, Waterways License No. 12945). MassDEP's Waterways Regulations provide that a facility that is operationally related to an infrastructure crossing facility, and requires an adjacent location to it, qualifies as an ancillary facility that can be licensed as a water-dependent facility (see 310 CMR 9.02; Tr. 5, at 773-779). As found above, the Siting Board maintains the Substation's water-dependent designation in adopting the MassDEP Draft License in its approval in lieu of a Waterways License ordinarily issued by MassDEP pursuant to G.L. c. 91 and 310 CMR 9.00. With the water-dependent designation for the Substation, first made by MassDEP in 2014, and adopted again in this proceeding, the Substation (and the overall Project) has never triggered MEPA filing requirements. Eversource 2017 at 125.

The absence of a MEPA filing requirement has relevance to several of the environmental justice-related review procedures that would otherwise apply and have been demanded by the CLF/GR and BRG. Most obvious is that none of MEPA's recently adopted environmental justice-related regulations or review protocols ¹⁴⁰ – based on directives in the Roadmap Act – would be

As noted above, MEPA's environmental justice-related protocols include: (1) MEPA EJ Analysis Protocol; and (2) MEPA EJ Public Involvement Protocol. The former protocol includes an EIR requirement for projects near environmental justice populations, which includes as assessment of existing unfair or inequitable environmental burdens (i.e.,

triggered by the proposed Substation or the Certificate request. Although CLF/GR and BRG challenge the water-dependent designation for the Substation, there is no disagreement that with such a designation, MEPA review is not mandated for the Substation.

With the absence of MEPA filing requirements for the Substation, neither the enhanced requirements of the new MEPA EJ protocols nor Section 20 of the 2021 EJ Policy are triggered. Nevertheless, the 2021 EJ Policy contains Secretariat-wide General Requirements provisions (Sections 13 and 15, in particular) that are applicable to the Siting Board, and do not depend on a project's MEPA filing status. Section 13, for example, obligates EEA agencies (including the Siting Board) "to develop strategies to proactively promote EJ in ways that are tailored to the agency's mission." Section 15 requires EEA agencies "to establish an inclusive, robust public participation program for key agency actions that focuses agency resources on outreach activities that enhance public participation opportunities for agency activities that potentially affect EJ populations." The question of whether the EFSB has fulfilled these general provisions of the 2021 EJ Policy in this proceeding is discussed below.

Because the Substation does not meet any threshold defined by MEPA ¹⁴¹ which would trigger the requirement for filing an Environmental Notification Form ("ENF"), the Substation project is exempt from MEPA's review. Therefore, a variety of complex and extensive analyses demanded by CLF/GR and BRG are not mandatory under applicable environmental justice and LAP provisions for MEPA, MassDEP, or the Siting Board. Requirements attached to the filing of an EIR (such as the requirement an analysis of disproportionate adverse effects to EJ populations) do not apply to the Substation. See 301 CMR 11.07. In addition, 2021 EJ Policy provisions triggered by exceeding MEPA thresholds do not apply to the Substation. See 2021 EJ Policy at Sections 16, 17, 20. In effect, CLF/GR and BRG ask the Siting Board, MEPA and MassDEP to disregard the existence and application of unambiguous environmental impact thresholds

baseline conditions); and analysis of project impacts to determine disproportionate adverse effect and the effects of climate change. 301 CMR 11.01(1)(d).

MEPA review is required when one or more review thresholds are met or exceeded and the subject matter of at least one review threshold is within MEPA jurisdiction.

A review threshold that is met or exceeded specifies whether MEPA review shall consist of an ENF and a mandatory EIR, or an ENF and other MEPA review if the Secretary so requires. The thresholds are set forth in 301 CMR 11.00

embedded in these agencies' respective environmental justice-related review requirements. The Siting Board notes that these threshold levels of environmental impact, like others used in environmental legislation and regulation, are important tools to focus where impacts are likely to be significant, and not create universal filing requirements applicable to every project. For this reason, the Siting Board declines to deviate from these thresholds that determine the applicability of the environmental justice-related review provisions.¹⁴²

Both CLF/GR and BRG fault the Siting Board for not having an EJ Strategy, as directed by Executive Order 552, although BRG acknowledges that the Siting Board has opened a docket to do so in EFSB 21-01. CLF/GR contends that without an EJ Strategy, there is no strategy to guide this proceeding or inform parties, and it advises that the Board should not render a decision in this proceeding. While the Siting Board has indicated its intention to develop and adopt an EJ Strategy and has been working to do so in the context of EFSB 21-01, we disagree that the lack of an EJ Strategy requires us to withhold a decision in this proceeding. First, Executive Order 552 requires EEA to develop an EJ Strategy. EO 552, at Section 5. The 2021 EJ Policy requires that each EEA agency develop its own EJ Strategy, and that process is ongoing. 2021 EJ Policy at Section 13. Second, the Supreme Judicial Court has ruled that the Siting Board's environmental justice policies and compliance can be achieved via case-by-case adjudication, rather than rulemaking. Brockton Power Co. LLC v. Energy Facilities Siting Board, 469 Mass. 215, 220 (2014). The Siting Board has implemented multiple environmental justice-focused steps in its case-specific reviews, consistent with our environmental justice obligations. In addition, the Siting Board has implemented several recommendations from EFSB 21-01, even though not formally reflected in a written EJ Strategy. Finally, the Siting Board notes that it is developing its EJ Strategy as part of its NOI in conjunction with draft environmental justice strategies for each of the EEA agencies, which will reflect the comments and input of stakeholders from across the Commonwealth.

As noted above, the Roadmap Act obligates the Secretary to direct all EEA agencies, including the Siting Board, to "consider the environmental justice principles in making any policy, determination or taking any other action related to a project review, or in undertaking any project

The Siting Board notes that none of parties advocating for cumulative impact assessments, enhanced impact and mitigation reviews, or other studies that may have been triggered by MEPA filing requirements, made any request of the Company or the Siting Board to obtain such studies through discovery, cross-examination, or the filing of a motion.

pursuant to said sections 61 through 62J, inclusive, and related regulations that is likely to affect environmental justice populations." Roadmap Act, Section 60. The Roadmap Act defines those environmental justice principles as

principles that support protection from environmental pollution and the ability to live in and enjoy a clean and healthy environment, regardless of race, color, income, class, handicap, gender identity, sexual orientation, national origin, ethnicity or ancestry, religious belief or English language proficiency, which includes (i) the meaningful involvement of all people with respect to the development, implementation and enforcement of environmental laws, regulations and policies, including climate change policies; and (ii) the equitable distribution of energy and environmental benefits and environmental burdens.

G.L. c 30, § 62; Roadmap Act, Section 56. The Siting Board addresses these new principles below.

CLF/GR and BRG argue that the Siting Board is obligated to make findings regarding the consideration of the equitable distribution of energy and environmental benefits and environmental burdens, as reflected in the environmental justice principles specified in the Roadmap Act. The Company, too, acknowledges this standard of review in its Reply Brief, although it rejects CLF/GR's suggestion that a cumulative impact analysis is required; it also reaches a different conclusion from CLF/GR on the merits of the Substation.

The Siting Board notes that the newly created G.L. c. 30, § 62K adds language to the MEPA statute and appears to require consideration of environmental justice principles during the course of MEPA review. Recently amended MEPA regulations reiterate the obligation of the Secretary and EEA agencies to consider EJ principles in implementing MEPA reviews. See 301 CMR 11.01(1)(a). Nonetheless, the Siting Board concurs that the Roadmap Act is intended to facilitate consideration of the equitable distribution of energy and environmental benefits and environmental burdens to EJ populations. In addressing this question, the Siting Board notes that MEPA has developed new regulatory provisions and a detailed protocol to implement the specific regulatory directives it received in the Roadmap Act. The Roadmap Act contained no such directives specific to the Siting Board, and to date, the Siting Board has not applied this standard of review in any of its decisions. We do so now.

In many Siting Board proceedings, jurisdictional energy facilities under Board review are also subject to MEPA filing requirements. Although the Siting Board review process does not require use of the MEPA information (unless a Section 61 finding is necessary, in certain cases),

the Siting Board has long found MEPA information of great value in our reviews, as intended by its statutory purpose of informing other permitting agencies about environmental impacts of projects. With regard to the Substation, MEPA filing requirements do not apply, and therefore, there is no information through the MEPA process to incorporate here. We view the adoption of MEPA's environmental justice review protocols and their use in project reviews as similarly informative in conducting Siting Board adjudicatory reviews, although not necessarily dispositive of the Siting Board's own methods and future findings.

The record in this proceeding shows divergent thinking about basic definitional concepts such as "energy and environmental benefits" and "environmental burden." The Roadmap Act provides specific definitions of "environmental benefits" and "environmental burdens," yet it fails to define "energy benefits," which is also a definitional component of the environmental justice principles. The Company proffers "electric system reliability" as a benefit of the Substation, which CLF/GR dismisses as "legally incorrect" under the Roadmap Act. While the Roadmap Act does not define "energy benefits" and therefore does not enumerate "electric system reliability" as a benefit, it would run counter to other legislative enactments to disregard the fundamental importance and benefit of electric system reliability to public health, safety, and well-being. He Recognizing electric reliability as a benefit is consistent with the broad statutory definition of environmental benefits and the structure of Roadmap Act that explicitly links "energy and environmental benefits" in its definition of the environmental justice principles. Therefore, the Siting Board views electric system reliability as an "energy benefit" in its analysis of the Project under the Roadmap Act.

The Roadmap Act amended Section 62 of Chapter 30 to define environmental benefits as "the access to clean natural resources, including air, water resources, open space, constructed playgrounds and other outdoor recreational facilities and venues, clean renewable energy sources, environmental enforcement, training and funding disbursed or administered by the executive office of energy and environmental affairs."

See St. 1997, c. 164, § 1 (h) (Electric Utility Restructuring Act) ('reliable electric service is of utmost importance to the safety, health, and welfare of the commonwealth's citizens and economy'). See also St. 1997, c. 164, § 1 (a) ('electricity service is essential to the health and well-being of all residents of the commonwealth, to public safety, and to orderly and sustainable economic development').

CLF/GR is also dismissive of other Project benefits such as soil and groundwater remediation of the Substation Site, and the Company's commitments in the CBA, given its view that "ratepayers will foot the bill for the costs of eliminating or reducing opposition to the East Boston Substation, not Eversource or its shareholders." In this regard, the Roadmap Act's definitions of benefits are not contingent on which entity pays for the benefit. The remediation of the New Site provides obvious environmental and public health benefits. The CBA commitments from the Company provide the community with energy, environmental, recreational and neighborhood benefits – all being relevant to the application of the test required by the Roadmap Act.

CLF/GR also seek to use the concept of "distributional equity" of the environmental justice principles as an opportunity to relitigate the location of the Substation. As noted earlier, this issue was fully and fairly adjudicated in the Original Proceeding and modified by a slight shift on the same City Parcel in the Project Change Proceeding. While it is appropriate to address alternative site locations in a G.L. c. 164 § 69J petition to construct proceeding, this obligation does not go so far as to warrant revisiting the location of the Substation in a certificate proceeding, where no such mandate exists. Accordingly, in this decision, we decline to follow CLF/GR's request.

The Siting Board measures the energy and environmental benefits of the Substation as significant, with particular emphasis on electric service reliability that is at immediate risk. On this point, BRG agreed that "power outages in East Boston would constitute an environmental and environmental justice harm." We also find that the Project provides other important benefits to the East Boston community including extensive soil and groundwater remediation of the Substation site; a CBA that enhances neighborhood recreational opportunities and environmental conditions; and an open and active community engagement process by Eversource to achieve an aesthetically designed Substation exterior that complements the architectural themes in the Substation's Eagle Hill neighborhood. On the environmental burden side, the Siting Board has made extensive findings that the impacts of the Substation are primarily construction-related, short-lived, minor, and fully mitigated

As noted above, CLF/GR, BRG and many public commenters have voiced unhappiness about the use of the New Site as an electrical substation, rather than as a recreational facility, such as a soccer field, as was once considered by the City of Boston (Tr. 6 at 1189-1192). Such concerns, relating to the loss of a prospective community amenity, may be viewed as an

"environmental burden" and could be considered as such. As described below, we are not persuaded that such "environmental burdens" outweigh the obvious and important benefits of the Substation.

The Substation Site at issue has a long history of soil and groundwater contamination from generations of industrial uses. See Eversource 2021 at 43-48. The record in the Project Change Proceeding shows that efforts to remediate this City of Boston-owned site were expected to be expensive and proceeded at a very slow pace, culminating in a MassDEP's Administrative Consent Order with the City of Boston to remediate the site that was still pending at the time Eversource took ownership of the property in a land swap with the City of Boston. Eversource 2021, at 45. Remediation plans developed by the City of Boston during its ownership period provided no indication that the City of Boston ever intended to remediate the parcel to a degree that would have allowed the recreational uses now at issue (Eversource 2021, Exhs. EFSB-HW-1(1); EFSB-HW-1(3) at ES).

When it took ownership of the Substation site, Eversource followed through on the City's unfulfilled Administrative Consent Order obligations, and promptly remediated the property to an even greater degree than envisioned in the City's earlier remediation plans filed with MassDEP Eversource 2021 at 46-47. Nevertheless, despite the enhanced remediation by Eversource, even this level of remediation is not consistent with recreational uses of the Substation site; this limitation is reflected in the AUL on file with MassDEP, now in effect for the Substation site. See Section III.E.2.g. With respect to the hazardous waste remediation of the Substation site, there has never been any indication that the remediation plans submitted to MassDEP (either by the City of Boston or Eversource) contemplated recreational uses of the property. Thus, the alleged "loss" of a prospective recreational facility at the Substation site appears inconsistent with at least some other planning efforts by the City of Boston. 145

While much ire is directed by certain parties and the public towards the Company for the perceived loss of a recreational resource (and regarded as an "environmental burden" or a lost "environmental benefit"), the long and complex history of the selection of the New Site for the

BRG asserts that the belief that the City fully intended to construct a recreational facility on the site prior to the City's land-exchange decision was not unreasonable (see BRG Comments on the Tentative Decision at 2).

Substation is instructive. Initially, Eversource intended to build the Substation at the Bremen Street/Prescott Street location but was dissuaded from doing so by the City of Boston so that the City could use that property to build an East Boston Public Library branch, now providing an important public use. See Eversource 2017 at 68-71. In exchange for the Bremen Street/Prescott Street property that the City desired for the new library (and, at an earlier point, threatened to take by eminent domain), the City of Boston took steps to relocate the Substation development to the City Parcel through a request for proposal ("RFP") process by which Eversource secured ownership of the original Substation Site on the east side of the City Parcel (Eversource 2017, Exhs. CF-3(1), at 15; EFSB-Z-10(1) attachments; Eversource 2017 at 69-70). After the Final Decision in Eversource 2017, and prior to the Project Change Proceeding, Eversource again exchanged parcels with the City of Boston, taking ownership of the current Substation Site, to address Condition A in Eversource 2017. Eversource 2021 at 4.

From this history, the Siting Board recognizes that the City of Boston has attempted to best serve its residents' interests, as it initiated, administered, and completed the land transactions that have led to the now-approved Substation Site. The record is clear that the City of Boston has played a key role in the decade-long decision-making process leading to the now-approved use of the New Site for the Substation. The Siting Board also recognizes that the City of Boston has exercised its prerogatives and judgment in managing city-owned property. The Siting Board regards this outcome as reflecting a balancing of benefits and burdens, as perceived and acted upon by the City of Boston, on behalf of the "beneficial interest of the residents of East Boston" as noted in the City of Boston's RFP selection criteria.

In view of the above, the Siting Board finds that considerations of the equitable distribution of energy and environmental benefits and environmental burdens strongly favor the Substation and are consistent with the environmental justice principles articulated in the Roadmap Act.

Regarding the Roadmap Act's requirement that the Board consider "the meaningful involvement of all people with respect to the development, implementation and enforcement of environmental laws, regulations and policies, including climate change policies", the Siting Board

The RFP issued by the City of Boston, which offered a permanent easement for the original site on the east side of the City Parcel, noted that the RFP would be awarded to an entity whose use of the property "includes a public purpose for the beneficial interest of the residents of East Boston" (Eversource 2017, Exh. Bulk Attachment CF-3(S-1)(1), at 123).

has extensively outlined its public participation activities. Fulfillment of environmental justice/LAP public participation requirements in this proceeding is perhaps the area of greatest agreement between the Company, CLF/GR, and BRG. CLF/GR acknowledged "that Eversource and the Board have made strides in expanding public participation in EFSB 22-01 by scheduling the public hearing in the evening, providing translated materials including communications from the Presiding Officer, offering simultaneous interpretation of English and Spanish at public and evidentiary hearings, and recording information to post to YouTube." BRG agrees with CLF/GR's assessment, and the Company shares the view that that the Siting Board has complied with the Roadmap Act and EJ Policy in its conduct of the proceeding. The Siting Board appreciates this recognition of its efforts to ensure fulfillment of environmental justice and LAP objectives of providing meaningful participation opportunities in this proceeding and eliminating language barriers to such participation.

In view of the above, the Siting Board finds that it has fulfilled all applicable environmental justice and LAP requirements in this proceeding, and that this decision is compatible with all applicable environmental justice and LAP policies. We further find, pursuant to G. L. c. 164, § 69O, that construction and operation of the Facility will conform with existing environmental justice and LAP-related laws, rules, and regulations and that no exemption is required therefrom.

3. <u>Conclusion on Conformance with Laws and Reasonableness of Exemption Thereunder</u>

The Siting Board finds that the construction and operation of the Substation would conform with existing state or local laws, ordinances, by-laws, rules and regulations. G.L. c. 164, § 69O.

G. Public Interest, Convenience or Necessity

Pursuant to G. L. c. 164, § 69O, the Siting Board must make a finding with respect to the public interest, convenience or necessity of requiring construction and operation of the Facility. The parties raise several issues concerning the public interest and convenience, including requesting that the Board take into consideration public statements by elected officials and public opposition to the Substation, and requiring Eversource to create a contingency plan for East Boston.

1. <u>Positions of the Parties</u>

a) <u>BRG</u>

BRG argues that there have been extensive public interest related actions concerning the proposed Substation since Eversource 2021, and that the Siting Board should consider those actions in its deliberations (BRG Brief at 24). BRG cites a public statement made by the Attorney General in response to the Siting Board's decision in Eversource 2021, 147 and also the City of Boston non-binding ballot question in November 2021 (BRG Brief at 24). BRG requests that the Siting Board consider the views of the Attorney General, local and state elected officials, and City of Boston voters (BRG Brief at 24). BRG concludes that "the Board should not at this stage of EFSB 21-01 [sic] proceedings make a decisive finding that the proposed East Eagle substation is in the public interest" (BRG Brief at 24).

BRG asserts that the Application and record evidence show that the East Eagle Substation as proposed is not consistent with the Roadmap Act and with the Massachusetts Waterfront Act and their respective regulations and policies (BRG Brief at 23). BRG contends that the Company's obligations as an electric company require the Company to prepare, and provide prior to a Siting Board decision, contingency plans for providing reliable electric service to East Boston residents, to Logan Airport and airport serving facilities, and all other commercial and industrial users in East Boston (BRG Brief at 4). BRG further suggests that these contingency plans must include a "with East Eagle Substation" alternative (the current proposal) and a "without East Eagle Substation" alternative, including evaluation of a site within a Logan Airport (BRG Brief at 4, 27).

b) <u>CLF/GR</u>

CLF/GR argues that, in the years since Eversource 2017, it has become clear that the Substation is not in the public interest, convenience or necessity (CLF/GR Brief at 45). CLF/GR claims that the term "public interest, convenience and necessity" is not defined in G.L. c. 164, § 69O or § 72 (CLF/GR Brief at 45). CLF/GR asserts that the Siting Board should consider all

^{147 &}lt;u>See https://twitter.com/MassAGO/status/1364026671129645057.</u>

The Siting Board addressed environmental justice and the Roadmap Act in Section III.F.2, above.

aspects of public interest, convenience and necessity, consistent with statements regarding the Department's review of Section 72 cases (CLF/GR Brief at 45-46, citing Boston Edison Company v. Town of Sudbury, 356 Mass. 406, 419 (1969)).

CLF/GR cites a non-binding City of Boston ballot initiative in November 2021, in which 80 percent of voters citywide voted to oppose the Substation (CLF/GR Brief at 45-46; CLF/GR Reply Brief at 24, citing Exh. CLF-GR-LE at 4)). 149 CLF/GR also cites testimony of Boston City Councilor-at-Large Louijeune that the Siting Board granting the Certificate would not be in the public interest given the "the democratic expression of public interest made by Boston residents voting in the 2021 advisory ballot measure," baseline adverse environmental impacts from Logan Airport and other industrial and commercial activities, and the public health and safety risks of the Substation at the proposed location (CLF/GR Brief at 46). CLF/GR also references testimony of Senator Edwards and GreenRoots that the Siting Board must consider all aspects of the public interest including the referendum vote, the history of community opposition, and expressions of opposition by elected officials in weighing the public interest (CLF/GR Brief at 46-47; CLF/GR Reply Brief at 24-25).

CLF/GR argues that had the Siting Board denied Eversource's petitions in the underlying proceedings, it would have allowed the possibility of conversion of the Substation site in accordance with the City of Boston Open Space Plans (CLF/GR Reply Brief at 23-24). CLF/GR asserts that granting the Certificate would impose another environmental burden and remove the opportunity for environmental benefit, counter to G.L. c. 30, §§ 62, 62K (CLF/GR Reply Brief at 24).

CLF/GR reiterates its argument, also stated above in Section III.E, that the construction and operation of the proposed Substation in the Eagle Hill neighborhood raises public safety and public health concerns, and therefore not in the public interest (CLF/GR Brief at 47). CLF/GR rejects Eversource's argument that the Board has already determined the project to be in the public interest given that the Siting Board's previous assessments of the Project were not done so in the context of the "15 legal frameworks" for the 15 permits under consideration in this proceeding

See https://www.boston.gov/news/city-boston-municipal-election-ballot-questions at "Question 2". The Ballot Measure was unanimously endorsed by resolution of the City of Boston City Council. The final vote total for the Advisory Ballot Measure was: YES: 19,787 votes 16.25% NO: 101,953 votes 83.75%.

(CLF/GR Reply Brief at 25). CLF/GR again requests that the Siting Board reconsider alternative siting locations for the Substation (CLF/GR Reply Brief at 23-24).

c) Company

The Company states the Siting Board extensively reviewed need, cost, project alternatives, routing alternatives and environmental impacts of the Project and determined that the Project would contribute to a reliable energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost (Company Brief at 90, citing Eversource 2017 at 167-171; 92-94). Further, the Company indicates that the Siting Board determined pursuant to G.L. c. 40A, § 3, that the Project is needed to ensure reliability in the Project area, is superior to other approaches, and that the proposed facilities are sited in locations that minimize cost and environmental impacts (Company Brief at 91, citing Eversource 2021 at 92-94. Finally, the Company points to the Siting Board's finding that the need for the Substation is time sensitive (Company Brief at 91, citing Eversource 2017 at 163 and Eversource 2021 at 96. Eversource then concludes that the Siting Board has already made the findings of public interest, convenience and necessity required by G.L. c. 164, § 69O (4) and should reiterate those findings again in this Decision (Company Brief at 91).

Eversource asserts that CLF/GR's and BRG's arguments misunderstand the Company's fundamental obligation as an electric company as defined by G.L. c. 164, § 1, and the Siting Board's obligation to ensure a reliable supply of energy for residents and businesses in the state pursuant to G.L. c. 164, §§ 69K-69O (Company Reply Brief at 43-44). The Company characterizes CLF/GR's argument as such: that the Siting Board must elevate local interests over all other considerations, including the need for electric infrastructure (Company Reply Brief at 44). The Company argues that if that were the case, essential energy infrastructure would rarely get constructed in a timely manner and the reliability of the electric transmission system would suffer (Company Brief at 44). The Company rejects BRG's suggestion that Eversource be required to prepare a contingency plan for providing reliable service to East Boston (including an evaluation of a site within Logan Airport) as only perpetuating the delays that have given rise to the current proceeding (Company Reply Brief at 45).

2. Analysis and Findings

After conducting an extensive review of the need for the Project, project alternatives and alternative routes, potential environmental impacts, and consistency with certain Commonwealth policies, the Siting Board found in the underlying proceeding that upon compliance with specific conditions set forth in Eversource 2021, construction and operation of the proposed Substation is needed, and will provide a reliable energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost, in keeping with the Siting Board's statutory obligations under G.L. c. 164, § 69H. Eversource 2021 at 94. The Siting Board found that the Project is necessary, will serve the public convenience and is consistent with the general public interest, under G.L. c. 164, § 72. Eversource 2021 at 96. The Siting Board further found that the general public interest in constructing the Project outweighs identifiable adverse local impacts.

See Eversource 2021 at 93. Accordingly, the Siting Board found that the Project is reasonably necessary for the convenience or welfare of the public. See Eversource 2021 at 96.

In addition, in the Project Change Proceeding, the Siting Board found that: (1) the Company demonstrated that it qualifies as a public service corporation; (2) the Company demonstrated that the proposed use of the land or structure is reasonably necessary for the convenience or welfare of the public; and (3) the Company established that it requires exemptions from the zoning ordinance or bylaw. See Eversource 2021 at 96. The Siting Board granted the individual exemptions and comprehensive exemption requested by Eversource from the Boston Zoning Code for the Substation on the New Site. Id. In granting those exemptions, the Siting Board recognized the need for the zoning relief granted in order to authorize the construction and operation of necessary energy infrastructure consistent with the Section 6 of Chapter 665 of the Acts of 1956 for Boston,

The Siting Board notes that the legislature established the Siting Board (and its predecessor) with significant powers to grant state and local permits needed by approved projects where they face unreasonable delay, denial, or conditions that unreasonably impede the project from serving the public need. In the first Supreme Judicial Court case upholding a certificate issued by the Siting Board for a generating facility, the Court found the intent and purpose of the statute, which is in part to ensure that local boards do not use their power over licenses and permits to thwart the needs of the broader community for a reliable, affordable, and environmentally sound

energy supply. Agawam, 437 Mass. at 828. See Alliance II at 663, 674; Winchester, 98 Mass. App. Ct. 1101, 150 N.E. 3d 1146 (2020). While the results of the non-binding City of Boston ballot measure in November 2021, as worded, demonstrate that a majority of those who voted in Boston do not favor the Substation at its present location, the location resulted from a thorough adjudicatory review process, in which siting alternative were fully and fairly considered, and the decision was not appealed. If a final decision of the Siting Board can be effectively reversed by a local non-binding ballot measure, the Supreme Judicial Court's findings in Agawam would have no meaning, and the purposes for which the Board was granted certificate authority by the legislature irreparably damaged. The Siting Board notes that the Substation also serves the electric reliability needs of Chelsea residents, and these residents' views may not necessarily be reflected in a non-binding vote taken in a different municipality.

The Siting Board fully reviewed and determined that the public interest requires construction of the Project to meet reliability needs for the Chelsea/East Boston area. In addition, based on the review of the need for the facility set forth earlier in this Decision, the Siting Board has found that need to be immediate. Given the decision below to grant the Certificate and the imminent construction of the Substation, we see no need for, or benefit of, BRG's suggested contingency plan. In determining the public interest, the Siting Board has considered benefits and impacts, and balanced multiple factors and the information provided in each of the three proceedings related to the East Boston Substation. Nothing in the record of the instant proceeding changes the Siting Board's findings, and the Siting Board again finds that the Substation is in the public interest, convenience and necessity. ¹⁵⁰

H. Representation of Good Faith Effort

Pursuant to G.L. c. 164, § 69L(A)(4), one of the required elements of an Application is: a representation by the applicant as to the *good faith effort* made by the applicant to obtain from state agencies and local governments the licenses, permits, and other regulatory approvals required by law for the construction or operation of the facility.

(Emphasis supplied). See also, Exelon at 34-35; Cape Wind at 7, fn.8; 31-32.

¹⁵⁰ Conditions to be imposed as part of the Certificate are addressed in Section IV, below.

While Section 69O does not require a finding of good faith effort in order to grant a certificate (see Section IV.A, above), the Siting Board recognizes the importance of an applicant's good faith efforts to work with affected communities to seek the permits it requires. Therefore, we review the Company's actions to secure the necessary local approvals it requires to build the Project.

1. <u>Positions of the Parties</u> 151

BRG argues that Eversource has met minimal standards of good faith efforts in seeking City of Boston approvals (BRG Brief at 25). BRG also references Senator Edwards' communications with the Company, as described by the Senator in her pre-filed testimony, and represents that the Company's response to the Senator were inconsistent with Siting Board policies and expectations for parties appearing before the Board (BRG Brief at 25).

Eversource asserts that the Company has demonstrated its full compliance with the Siting Board's requirement of good faith efforts to obtain the necessary permits before filing its Certificate request with the Siting Board (Company Brief at 92, citing Exh. EV-1, at 10-17, 19-22). In support, the Company notes the testimony provided by its Project Manager, the detailed information provided regarding filings at the City of Boston agencies from which it requested permits; its success at obtaining certain permits and its community outreach efforts (Company Brief at 92, citing Exh. EV-1, att. 48).

Eversource asserts that: "From the outset of the Project and continuing through the Company's efforts to obtain local permits, the Company's Project team has consistently acted reasonably, diligently and in good faith to obtain its local permits and to address the concerns of the community in a manner that is consistent with the Siting Board's approval of the Project" (Company Brief at 48-49). In addition, the Company argues that the evidence of its efforts presented in this proceeding demonstrate that it has acted in good faith and has met the Siting Board's requirements that (1) an applicant provide the permitting authority with sufficient information to issue a permit; or (2) shown that efforts apply for the permit is futile or

¹⁵¹ CLF/GR did not present arguments regarding representations of Eversource's good faith efforts.

unreasonable under the circumstances (Company Brief at 37-38, <u>citing Footprint</u> at 26 and <u>Cape Wind</u> at 7 n.8; 28-29).

2. Analysis and Findings

The necessity for an applicant to make a representation as to its good faith efforts in its application was discussed in the legislative history of the statutes establishing the Siting Board.

See House No. 6190, Third Report of the Massachusetts Electric Power Plan Siting Commission at 25 (March 30, 1974).

"The 'good faith effort' requirement places the companies on notice as to what standard they must conduct themselves by, while at the same time eliminating frivolous claims. In addition by requiring that the electric companies disclose which permits and approvals they have already obtained, this siting bill manifests a clear intention that a certificate should not be granted to an applicant who has failed to make a substantial effort to obtain the required licenses, permits and other regulatory approvals."

In light of the language of Section 69L that an applicant makes a good faith effort to obtain the permits sought to be included in a certificate, and the legislative history quoted above, Siting Board precedent consistently requires that applicants seek necessary permits before applying for a certificate except in limited circumstances. See, e.g., Exelon at 35; Footprint at 25-26; Cape Wind at 31-34. This requirement does not mandate that an applicant must apply for all permits before requesting a certificate, as there may be factors that make applying for a particular permit unreasonable or futile under the circumstances. Exelon at 35. However, the applicant must make a substantial effort to obtain required approvals and describe those efforts in its Certificate Application.

The history of this Project spans multiple years. The Project has been the subject of administrative review before this agency since the initial filing of the Mystic-East Eagle-Chelsea Reliability Project application to the Siting Board in 2014. In addition, the Company has been involved in various permitting activities with the affected municipalities as well as various state agencies since at least 2014. Consequently, the Siting Board finds that the Company has devoted a significant amount of time and effort to obtain approvals for this Project, both state and local.

Eversource has pointed to the testimony of its Project Manager regarding the Company's efforts to obtain necessary permits from the City of Boston, the City of Chelsea and the MassDEP.

The Company asserts that the Project Manager for the Company attested to the accuracy of the factual representations contained in the Company's Application and the Company's reasonable, good-faith efforts to obtain all local permits for which the Company seeks a Certificate (Exh. EV-2, att. 48). The Company applied for all of the permits included in its Certificate request. The Company provided a list of remaining state and local permits 152 necessary for the construction and operation of the Substation and a description of the status of each permit (Exh. EFSB-P-12(S1)). The Company also provided permit applications for the permits requested to be included in the Certificate, evidence of actual success in obtaining certain local permits and evidence of the Company's efforts to address concerns raised by local permitting authorities for the local permits not yet obtained (Exh. EV-1, at 12-17, 19-22). Eversource also notes its community outreach efforts with a variety of stakeholders to gather input about the Project and the Substation throughout the permitting process including the Chapter 91 process at MassDEP and meetings held with East Boston community residents and organizations (Exh. EFSB-G-1; Tr. 2, at 227-230). See Eversource 2017 at 159-160.

For these reasons, the Siting Board finds that the Company has acted in good faith in seeking the permits for this Project. In our conclusion on good faith, the Siting Board notes the various commitments made by the Company in the underlying proceeding and this proceeding to continue working with the local residents and community-based organizations. Nothing in this Decision replaces the responsibility of the Company to continue to cooperatively work together with these entities.

I. <u>Decision on the Application</u>

The Siting Board has made the four findings that are required in order to issue the Certificate pursuant to Section 69O. Specifically, the Siting Board has found that: (1) the Project is needed and Substation continues to be the superior alternative available to address the identified need reliably, with a minimum impact on the environment, and at the lowest possible cost; (2) construction and operation of the Substation is compatible with considerations of

Mr. Petersile testified that the Company did not include certain permits necessary for the construction and operation of the Substation which would customarily be obtained shortly before the commencement of construction and which are frequently obtained by contractors acting on behalf of the Company (Tr. 1, at 42-45).

environmental protection, public health, and public safety; (3) the construction and operation of the Substation would conform with existing state or local laws, ordinances, by-laws, rules and regulations; and (4) issuing a Certificate would serve the public interest, convenience and necessity. In addition, the Siting Board has found that the Company has acted in good faith in seeking the permits for this Project. The findings made by the Siting Board support granting a Certificate for the Project so that it may be constructed, and the Siting Board hereby grants such a Certificate.

J. Scope of the Certificate

As noted in Section I.A.2, above, Eversource has requested a composite Certificate that includes 14 separate permits identified by the Company as necessary for Project construction and operation. The Siting Board considers below which of these permits should be included in the Certificate.¹⁵³

1. <u>Positions of the Parties</u>

a) <u>CLF/GR</u>

CLF/GR did not provide arguments on the scope the composite Certificate but argued that the Siting Board must apply standards related to the Roadmap Act and environmental justice concerns in reviewing the requested permits and deny the Company's Certificate request (CLF/GR Brief at 2-3).

The Siting Board requested that each of the state and local agencies which would normally issue the permits requested by the Company for inclusion in the Certificate to provide information related to those permits including the purposes for issuing the permits, the process followed by that agency in reviewing a permit, the opportunity for public input in the process, and specific conditions that agency would like to include as part of a permit which could be issued through the Certificate process. See e.g., Exhs. EFSB-BP-1 through EFSB-BP-5; EFSB-WSC-5; EFSB-WSC-1 through EFSB-WSC-15. The Siting Board included specific permit conditions from BWSC and the City of Boston Department of Public Works in the permits included as part of the Certificate.

b) BRG

BRG argues that the record does not support the issuance of a composite Certificate (BRG Brief at 9-17; BRG Reply Brief at 5-6). BRG states that significant new information has been developed and circumstances have substantially changed since the underlying two proceedings such that the current record evidence does not support the findings required to issue the requested Certificate (id.). BRG also contests the Company's position that the City of Boston permits and approvals have been denied or unduly delayed, asserting that no burdensome conditions have been imposed or non-regulatory elements required of the Company (BRG Reply Brief at 22). BRG argues based on its conclusions relative to the City of Boston permitting process, that the Siting Board basis a should not include any City of Boston permits and approvals at this juncture (BRG Brief at 25-26; BRG Reply Brief at 22).

c) <u>Company</u>

Eversource argues that the Siting Board must issue a certificate "in the form of a composite of all individual permits, approvals or authorizations that would be necessary for the construction and operation of the generating facility," and, therefore, any certificate granted must include each of the requested permits (Company Brief at 93-96, citing G.L. c. 164, § 69K; Company Reply Brief at 44). The Company states that the Siting Board's certificate regulations provide that if the application relates to more than one permit, the Siting Board may issue a certificate with regard to all such permits *or less than all*. 980 CMR 6.05(3) (emphasis added); see also Exelon at 38-39; ¹⁵⁴ Keyspan at 45. ¹⁵⁵ (Company Brief at 94).

2. <u>Analysis and Findings</u>

The Siting Board notes that the Company has removed the wetlands approval under the Boston Wetlands Ordinance from the list or requested permits as that permit has become final and no longer subject to appeal (Exhs. EFSB-P-2(S2); EFSB-P12(S1); Company Brief at 93). The

As the Company notes, in the <u>Exelon</u> Decision, the Siting Board declined to grant eleven permits. See Exelon at 39-40; Woburn-Wakefield at 63-64.

As the Company noted in its briefs, in <u>Keyspan</u>, the Board declined to grant two permits. The Board then directed the Company to file for and seek to obtain those two permits from the respective agencies. <u>See Keyspan</u> at 45.

other parties have not expressed an objection to this change. Accordingly, the Siting Board has removed the wetlands approval related to the Boston Wetlands Ordinance from the list of permits requested by Eversource and does not address that permit further in this Decision.

The Siting Board grants the Certificate as attached in Exhibit A. As part of the Certificate, the Siting Board grants the following permits and approvals:

- 1. An approval for buildings and structures that are constructed or altered within 100 feet of a park or parkway pursuant to Boston Municipal Code Section 7-4.11, ordinarily issued by the City of Boston Parks and Recreation Department;
- 2. An approval of a Condor Street pedestrian easement, which authorizes public access along portions of a sidewalk that extends onto private property; ordinarily issued by the City of Boston Public Improvement Commission;
- 3. An approval of grants of location for new duct banks, conduits and manholes in a public way (Condor Street, East Eagle Street, Glendon Street, Lexington Street, Shelby Street, and Chelsea Street), which authorize the installation of utility infrastructure in a particular location in a public way, ordinarily issued by the City of Boston Public Improvement Commission;
- 4. An approval of a Specific Repair Plan for Condor Street, which authorizes work/repair of a public sidewalk including a curb-cut for vehicle access, installation of proposed street trees, relocation of a streetlight and fire hydrants and sidewalk restoration, ordinarily issued by the City of Boston Public Improvement Commission;
- 5. An approval of a Foundation Permit, which authorizes the construction of building and structure foundations; and a Building Permit, which authorizes the construction of buildings and structures, ordinarily issued by the City of Boston Inspectional Services Department;
- 6. An approval of a Street Excavation Permit (Condor Street, East Eagle Street, Glendon Street, Lexington Street, Shelby Street, Saratoga Street and Chelsea Street), which allows the Company to open up the street by excavation and to obtain police details for traffic control, ordinarily issued by the City of Boston Department of Public Works;
- 7. An approval of a Street/Manhole Occupancy Permit (Condor Street, East Eagle Street, Glendon Street, Lexington Street, Shelby Street, and Chelsea Street), which allows for duct bank installation and connection to sewer and storm drains, ordinarily issued by the City of Boston Department of Public Works;
- 8. An approval of a Sidewalk Occupancy Permit (Condor Street); which allows for duct bank installation and connection to sewer and storm drains within sidewalk areas, ordinarily issued by the City of Boston Department of Public Works;
- 9. An approval of a Construction Stormwater Permit, which approves discharge of stormwater from a construction site to waters of the United States within the City of Boston, ordinarily issued by the City of Boston Water and Sewer Commission;

10. An approval of a Construction Dewatering Discharge Permit, which approves discharge of groundwater from a construction site to City of Boston infrastructure, ordinarily issued by the Boston Water and Sewer Commission;

- 11. An approval of a General Services Application-needed in order to connect water or sewer services to a site, ordinarily issued by the Boston Water and Sewer Commission;
- 12. An approval of a Street Occupancy Permit (Willow Street), which allows the Company to occupy space in the street for a specific purpose and to obtain police details for traffic control, ordinarily issued by the City of Chelsea Department of Public Works;
- 13. An approval of a G.L. c. 91 ("Chapter 91") Waterways License pursuant to Chapter 91 and its implementing regulations at 310 CMR 9.00, which authorizes structures in filled and flowed tidelands of the Commonwealth, which is ordinarily issued by the Massachusetts Department of Environmental Protection; and
- 14. An approval of a Superseding Order of Conditions under the Massachusetts Wetlands Protection Act, G.L. c. 131, § 40, and 310 CMR 10.00, which authorizes work within jurisdictional wetland resource areas subject to the WPA, ordinarily issued by the Massachusetts Department of Environmental Protection.

Within the grant of the individual permits included in this Decision, the Siting Board has included specific conditions consistent with the individual agency requirements for those permits and approvals and which the Company is obligated to include in its construction and operation of the Substation. In addition, the Company is directed to comply with all conditions in Eversource 2021, as amended here.

IV. CONCLUSION

The Siting Board grants the Initial Petition and grants the Application of NSTAR Electric Company d/b/a Eversource Energy for a Certificate of Environmental Impact and Public Interest, pursuant to G.L. c. 164, §§ 69K-69O. The Certificate granted is an approval that is the equivalent for 14 of the originally requested permits.

In addition, the Siting Board approves the Condition U modification to ensure that any potential delay in the Company's ability to obtain timely input from the BPDA regarding the façade design does not present a further element of delay in the timely construction of the Substation consistent with Condition U of Eversource 2021. The Siting Board elects to make the following addition to Condition U: Upon the completion of the Company's community design façade process, it shall provide the proposed final design to BPDA for input. The Company shall consider additional input from BPDA. Should BPDA fail to provide a response within 30 days of receipt of the design, the Company may proceed with the final façade design, which shall be based on input received in its public process. The Siting Board further expects that the final design be consistent with those provided to the Siting Board in this proceeding unless further justification is provided by the Company in its compliance filing. The Company shall file the final design with the Siting Board.

The Siting Board further directs the Company to provide an update on its submission of the Permanent Solution Statement with Conditions to MassDEP and its plan for implementing the Activity and Use Limitation for the site.

The Certificate is appended to this Decision as Exhibit A, including attachments 1-14. The grant of the Certificate is conditioned on Eversource's compliance with all conditions included in the Certificate.

Donna C. Sharkey, Esq.

Sand Sharkey

Presiding Officer

Appendix A: Substation with Potential Terra Cotta Design

(View from American Legion Playground)



Source: RR-EFSB-11(2).

Note: This is a Design concept only. The final design will be chosen in collaboration with the community and may vary.

COMMONWEALTH OF MASSACHUSETTS ENERGY FACILITIES SITING BOARD

)	
In the Matter of the Initial Petition and)	
Application of NSTAR Electric Company d/b/a)	
Eversource Energy for a Certificate of)	EFSB 22-01
Environmental Impact and Public Interest)	
Pursuant to G.L. c. 164, §§ 69K-69O)	
	_)	

EXHIBIT A TO FINAL DECISION IN EFSB 22-01

CERTIFICATE OF ENVIRONMENTAL IMPACT AND PUBLIC INTEREST

Pursuant to its authority under G.L. c. 164, §§ 69K-69O, the Energy Facilities Siting Board (the "Siting Board") hereby grants (1) the Initial Petition and (2) Application of NSTAR Electric Company d/b/a Eversource Energy ("Eversource" or the "Company"), and issues this Certificate of Environmental Impact and Public Interest ("Certificate") to Eversource. This Certificate constitutes Exhibit A to, and is part of, the Final Decision in EFSB 22-01.

I. SCOPE OF CERTIFICATE

In accordance with G.L. c. 164, § 69K, this Certificate "shall be in the form of a composite of all individual permits, approvals or authorizations which would otherwise be necessary for the construction and operation of the facility" and it acts in the place of the permits referenced below. This Certificate relates to the proposal by Eversource to construct and operate a new electric substation on a Company-owned lot in East Boston (the "Substation"), which was originally approved as a part of the Mystic-East Eagle-Chelsea Reliability Project (the "Project") in NSTAR Electric Company d/b/a Eversource Energy, EFSB 14-04/D.P.U. 14-153/14-154 (2017) ("Eversource 2017"). On February 26, 2021, the Siting Board approved the relocation of the Substation approximately 190 feet to the west of the site that it had originally approved in 2017. NSTAR Electric Company d/b/a Eversource Energy, EFSB 14-04A/D.P.U. 14-153A/14- 154A (2021) ("Eversource 2021"). In addition to the Substation, the Project includes two 115- kilovolt transmission lines between two of the Company's existing substations: (1) an approximately

3.2-mile line from the Company's Mystic Substation in Everett to the Substation; and (2) an approximately 1.5-mile line from the Substation to the Company's Chelsea Substation in Chelsea. Currently, the two lines have been constructed and were placed in operation on September 17, 2020.

This Certificate authorizes Eversource to construct and operate the Project, including the Substation at the location in East Boston, as was approved by the Siting Board in Eversource 2021.

II. APPROVALS

This Certificate contains the following approvals (collectively, "Approvals"):

- 1. An approval for buildings and structures that are constructed or altered within 100 feet of a park or parkway pursuant to Boston Municipal Code Section 7-4.11, ordinarily issued by the City of Boston Parks and Recreation Department (the Boston Parks and Recreation Approval);
- 2. An approval of a Condor Street pedestrian easement, ordinarily issued by the City of Boston Public Improvement Commission (collectively, with the approvals listed as 3 and 4 below, the Boston PIC Approvals);
- 3. An approval of grants of location for new duct banks, conduit and manholes in a public way (Condor Street, East Eagle Street, Glendon Street, Lexington Street, Shelby Street, and Chelsea Street), ordinarily issued by the City of Boston Public Improvement Commission;
- 4. An approval of a specific repair plan for Condor Street, ordinarily issued by the City of Boston Public Improvement Commission;
- 5. An approval of Foundation Permit, which authorizes the construction of building and structure foundations; and a Building Permit, ordinarily issued by the City of Boston Inspectional Services Department;
- 6. An approval of certain Street Excavation Permits (Condor Street, East Eagle Street, Glendon Street, Lexington Street, Shelby Street, Saratoga Street and Chelsea Street), ordinarily issued by the City of Boston Department of Public Works;
- 7. An approval of a Street/Manhole Occupancy Permit (Condor Street, East Eagle Street, Glendon Street, Lexington Street, Shelby Street, and Chelsea Street), ordinarily issued by the City of Boston Department of Public Works;
- 8. An approval of a Sidewalk Occupancy Permit (Condor Street), ordinarily issued by the City of Boston Department of Public Works;
- 9. An approval of a Construction Stormwater Permit, ordinarily issued by the City of Boston Water & Sewer Commission;
- 10. An approval of a Construction Dewatering Discharge Permit, ordinarily issued by the City of Boston Water & Sewer Commission:

11. An approval of a General Services Application, ordinarily issued by the City of Boston Water & Sewer Commission;

- 12. An approval of a Street Occupancy Permit (Willow Street), ordinarily issued by the City of Chelsea Department of Public Works;
- 13. An approval of a G.L. c. 91 Waterways License pursuant to Chapter 91 and its implementing regulations at 310 CMR 9.00, ordinarily issued by MassDEP; and
- 14. An approval of a Superseding Order of Conditions under the Massachusetts Wetlands Protection Act, ordinarily issued by MassDEP.

III. <u>CONDITIONS</u>

The granting by the Siting Board of this Certificate and each of the Approvals herein is subject to the following conditions:

- 1. Eversource must comply with all conditions in Eversource 2017 and Eversource 2021.
- 2. Eversource has an absolute obligation to construct the Substation in conformance with all aspects of the Project as presented to and approved by the Siting Board in Eversource 2021, and this Certificate. Eversource is required to notify the Siting Board of any changes other than minor variations to the Substation so that the Siting Board may determine whether to inquire further into a particular change. Eversource must provide the Siting Board with sufficient information on changes to the Substation to enable the Siting Board to make these determinations.
- 3. Eversource shall provide a copy of this Certificate, including all Attachments, to its general contractor prior to the commencement of construction of the Substation.
- 4. In accordance with G.L. c. 164, § 69K, this Certificate fulfills the requirement for Eversource to obtain approval for all remaining state and local permits required to construct and operate the Substation. No state or local agency shall require any approval, consent, permit, certificate or condition for the construction, operation, or maintenance of the Substation. No state or local agency shall impose or enforce any law, ordinance, by-law, rule or regulation nor take any action nor fail to take any action that would delay or prevent construction, operation, or maintenance of the Substation.
- 5. In accordance with G.L. c. 164, § 69K, that portion of the Certificate that relates to subject matters within the jurisdiction of a state or local agency shall be enforced by such agency as if it had been directly granted by such agency.
- 6. Any appeal of the Siting Board's Certificate Decision shall be brought in accordance with G.L. c.25, § 5, and G.L. c. 164, § 69P.
- 7. Eversource shall file this Certificate with the City Clerks for Boston and Chelsea.

Bethany A. Card, Chair

Energy Facilities Siting Board

ATTACHMENT 1

NSTAR ELECTRIC COMPANY D/B/A EVERSOURCE ENERGY, EFSB 22-01

CERTIFICATE OF ENVIRONMENTAL IMPACT AND PUBLIC INTEREST

APPROVAL IN LIEU OF CITY OF BOSTON PARKS AND RECREATION COMMISSION APPROVAL PURSUANT TO BOSTON MUNICIPAL CODE SECTION 7-4.11

- 1. Pursuant to its authority under G.L. c. 164, §§ 69K-69O, the Energy Facilities Siting Board (the "Siting Board") hereby grants to NSTAR Electric Company d/b/a Eversource Energy ("Eversource" or the "Company") an Approval in lieu of an approval from the City of Boston Parks and Recreation Commission for buildings and structures that are constructed or altered within 100 feet of a park or parkway pursuant to Boston Municipal Code Section 7-4.11. This Approval authorizes the construction of a new electric substation on a Company-owned lot in East Boston, which is a part of the Mystic-East Eagle-Chelsea Reliability Project, and has been approved by the Siting Board in NSTAR Electric Company d/b/a Eversource Energy, EFSB-14-04/D.P.U. 14-153/14-154 (2017); NSTAR Electric Company d/b/a Eversource Energy, EFSB 14-04A/D.P.U. 14-153A/14-154A (2021); and NSTAR Electric Company d/b/a Eversource Energy, EFSB 22-01 (2022), within 100 feet of a City of Boston park.
- 2. This Approval is issued subject to the Conditions in the Certificate of Environmental Impact and Public Interest that is appended as Exhibit A to the Final Decision in <u>NSTAR Electric Company d/b/a Eversource Energy</u>, EFSB 22-01 (2022).
- 3. Eversource shall maintain ongoing communication with the City of Boston Parks and Recreation Commission and other municipal officials, as appropriate, regarding the work undertaken pursuant to the Siting Board's Certificate and this Approval.

Bethany A. Card, Chair

Energy Facilities Siting Board

Bethy A. Carl

ATTACHMENT 2

NSTAR ELECTRIC COMPANY D/B/A EVERSOURCE ENERGY, EFSB 22-01 CERTIFICATE OF ENVIRONMENTAL IMPACT AND PUBLIC INTEREST

APPROVAL IN LIEU OF CONDOR STREET PEDESTRIAN EASEMENT FROM THE CITY OF BOSTON PUBLIC IMPROVEMENT COMMISSION

- 1. Pursuant to its authority under G.L. c. 164, §§ 69K-69O, the Energy Facilities Siting Board (the "Siting Board") hereby grants to NSTAR Electric Company d/b/a Eversource Energy ("Eversource" or the "Company") an Approval in lieu of a Condor Street pedestrian easement from the City of Boston Public Improvement Commission. This Approval authorizes the acceptance of a pedestrian easement along a new electric substation on a Company-owned lot in East Boston which is a part of the Mystic-East Eagle-Chelsea Reliability Project, and has been approved by the Siting Board in NSTAR Electric Company d/b/a Eversource Energy, EFSB-14-04/D.P.U. 14-153/14-154 (2017); NSTAR Electric Company d/b/a Eversource Energy, EFSB 14-04A/D.P.U. 14-153A/14-154A (2021); and NSTAR Electric Company d/b/a Eversource Energy, EFSB 22-01 (2022).
- 2. This Approval is issued subject to the Conditions in the Certificate of Environmental Impact and Public Interest that is appended as Exhibit A to the Final Decision in NSTAR Electric Company d/b/a Eversource Energy, EFSB 22-01 (2022).
- 3. Eversource shall maintain ongoing communication with the City of Boston Public Improvement Commission and other municipal officials, as appropriate, regarding the work undertaken pursuant to the Siting Board's Certificate and this Approval.

Bethany A. Card, Chair

Energy Facilities Siting Board

ATTACHMENT 3

NSTAR ELECTRIC COMPANY D/B/A EVERSOURCE ENERGY, EFSB 22-01

CERTIFICATE OF ENVIRONMENTAL IMPACT AND PUBLIC INTEREST

<u>APPROVAL IN LIEU OF GRANTS OF LOCATION FROM THE CITY OF BOSTON PUBLIC IMPROVEMENT COMMISSION</u>

- 1. Pursuant to its authority under G.L. c. 164, §§ 69K-69O, the Energy Facilities Siting Board (the "Siting Board") hereby grants to NSTAR Electric Company d/b/a Eversource Energy ("Eversource" or the "Company") an Approval in lieu of grants of location from the City of Boston Public Improvement Commission, pursuant to G.L. c. 166, § 22, for new distribution duct bank, conduits and manholes in six public ways (Condor Street, East Eagle Street, Glendon Street, Lexington Street, Shelby Street, and Chelsea Street. This Approval authorizes grants of location needed to deliver the new source of supply to customers in East Boston from the Substation, which is a part of the Mystic-East Eagle-Chelsea Reliability Project, and has been approved by the Siting Board in NSTAR Electric Company d/b/a Eversource Energy, EFSB-14-04/D.P.U. 14-153/14-154 (2017); NSTAR Electric Company d/b/a Eversource Energy, EFSB 14-04A/D.P.U. 14-153A/14- 154A (2021); and NSTAR Electric Company d/b/a Eversource Energy, EFSB 22-01 (2022).
- 2 This Approval is issued subject to the Conditions in the Certificate of Environmental Impact and Public Interest that is appended as Exhibit A to the Final Decision in NSTAR Electric Company d/b/a Eversource Energy, EFSB 22-01 (2022).
- 3. Eversource shall maintain ongoing communication with the City of Boston Public Improvement Commission and other municipal officials, as appropriate, regarding the work undertaken pursuant to the Siting Board's Certificate and this Approval.

Bethany A. Card, Chair

ATTACHMENT 4

NSTAR ELECTRIC COMPANY D/B/A EVERSOURCE ENERGY, EFSB 22-01

CERTIFICATE OF ENVIRONMENTAL IMPACT AND PUBLIC INTEREST

APPROVAL IN LIEU OF AN APPROVAL OF A SPECIFIC REPAIR PLAN FOR CONDOR STREET FROM THE CITY OF BOSTON PUBLIC IMPROVEMENT COMMISSION

- 1. Pursuant to its authority under G.L. c. 164, §§ 69K-69O, the Energy Facilities Siting Board (the "Siting Board") hereby grants to NSTAR Electric Company d/b/a Eversource Energy ("Eversource" or the "Company") an Approval in lieu of an approval of a specific repair plan for the sidewalk abutting the Substation on Condor Street from the City of Boston Public Improvement Commission. This Approval authorizes a specific repair plan for the sidewalk in connection with the construction of a new electric substation on a Company-owned lot in East Boston, which is a part of the Mystic-East Eagle-Chelsea Reliability Project, and has been approved by the Siting Board in NSTAR Electric Company d/b/a Eversource Energy, EFSB-14-04/D.P.U. 14-153/14-154 (2017); NSTAR Electric Company d/b/a Eversource Energy, EFSB 14-04A/D.P.U. 14-153A/14-154A (2021); and NSTAR Electric Company d/b/a Eversource Energy, EFSB 22-01 (2022).
- 2 This Approval is issued subject to the Conditions in the Certificate of Environmental Impact and Public Interest that is appended as Exhibit A to the Final Decision in NSTAR Electric Company d/b/a Eversource Energy, EFSB 22-01 (2022).
- 3. Eversource shall maintain ongoing communication with the City of Boston Public Improvement Commission and other municipal officials, as appropriate, regarding the work undertaken pursuant to the Siting Board's Certificate and this Approval.

Bethany A. Card, Chair

ATTACHMENT 5

NSTAR ELECTRIC COMPANY D/B/A EVERSOURCE ENERGY, EFSB 22-01

CERTIFICATE OF ENVIRONMENTAL IMPACT AND PUBLIC INTEREST

APPROVAL IN LIEU OF A G.L. c. 91 WATERWAYS LICENSE FROM THE MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION

- 1. Pursuant to its authority under G.L. c. 164, §§ 69K-69O, the Energy Facilities Siting Board (the "Siting Board") hereby grants to NSTAR Electric Company d/b/a Eversource Energy ("Eversource" or the "Company") an Approval in lieu of a G.L. c. 91 Waterways License from the Massachusetts Department of Environmental Protection, pursuant to G.L. c. 91 and implementing regulations at 310 C.M.R. § 9.00. This Approval authorizes construction and operation of a new electric substation, located within filled tidelands on a Company-owned lot in East Boston, which is a part of the Mystic-East Eagle-Chelsea Reliability Project, and has been approved by the Siting Board in NSTAR Electric Company d/b/a Eversource Energy, EFSB-14-04/D.P.U. 14-153/14-154 (2017); NSTAR Electric Company d/b/a Eversource Energy, EFSB 14-04A/D.P.U. 14-153A/14-154A (2021); and NSTAR Electric Company d/b/a Eversource Energy, EFSB 22-01 (2022).
- 2. This Approval is issued subject to the Terms and Conditions in the Draft Waterways License issued by the Massachusetts Department of Environmental Protection on January 3, 2022 (incorporated by reference and made a part hereof), and in the Certificate of Environmental Impact and Public Interest that is appended as Exhibit A to the Final Decision in NSTAR Electric Company d/b/a Eversource Energy, EFSB 22-01 (2022).
- 3. Eversource shall maintain ongoing communication with the Massachusetts Department of Environmental Protection, as appropriate, regarding the work undertaken pursuant to the Siting Board's Certificate and this Approval.

Bethany A. Card, Chair

ATTACHMENT 6

NSTAR ELECTRIC COMPANY D/B/A EVERSOURCE ENERGY, EFSB 22-01

CERTIFICATE OF ENVIRONMENTAL IMPACT AND PUBLIC INTEREST

APPROVAL IN LIEU OF A FINAL ORDER OF CONDITIONS FROM THE MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION

- 1. Pursuant to its authority under G.L. c. 164, §§ 69K-69O, the Energy Facilities Siting Board (the "Siting Board") hereby grants to NSTAR Electric Company d/b/a Eversource Energy ("Eversource" or the "Company") an Approval in lieu of a Final Order of Conditions from the Massachusetts Department of Environmental Protection ("MassDEP"), pursuant to G.L. c. 131, § 40 and implementing regulations at 310 C.M.R. § 10.00. This Approval authorizes construction and operation of a new electric substation in a buffer zone subject to the jurisdiction of MassDEP under the state Wetlands Protection Act on a Companyowned lot in East Boston, which is a part of the Mystic- East Eagle-Chelsea Reliability Project, and has been approved by the Siting Board in NSTAR Electric Company d/b/a Eversource Energy, EFSB-14-04/D.P.U. 14-153/14-154 (2017); NSTAR Electric Company d/b/a Eversource Energy, EFSB 14-04A/D.P.U. 14-153A/14-154A (2021); and NSTAR Electric Company d/b/a Eversource Energy, EFSB 22-01 (2022).
- 2. This Approval is issued subject to the Conditions in the Superseding Order of Conditions issued by the Massachusetts Department of Environmental Protection on October 29, 2021 (incorporated by reference and made a part hereof), and in the Certificate of Environmental Impact and Public Interest that is appended as Exhibit A to the Final Decision in NSTAR Electric Company d/b/a Eversource Energy, EFSB 22-01 (2022).
- 3. Eversource shall maintain ongoing communication with the Massachusetts Department of Environmental Protection, as appropriate, regarding the work undertaken pursuant to the Siting Board's Certificate and this Approval.

Bethany A. Card, Chair

ATTACHMENT 7

NSTAR ELECTRIC COMPANY D/B/A EVERSOURCE ENERGY, EFSB 22-01

CERTIFICATE OF ENVIRONMENTAL IMPACT AND PUBLIC INTEREST

<u>APPROVAL IN LIEU OF FOUNDATION AND BUILDING PERMITS FROM THE</u> <u>CITY OF BOSTON INSPECTIONAL SERVICES DEPARTMENT</u>

- 1. Pursuant to its authority under G.L. c. 164, §§ 69K-69O, the Energy Facilities Siting Board (the "Siting Board") hereby grants to NSTAR Electric Company d/b/a Eversource Energy ("Eversource" or the "Company") Approvals in lieu of Foundation and Building Permits from the City of Boston Inspectional Services Department, pursuant to the State Building Code, 780 CMR. This Approval authorizes construction and operation of a new electric substation on a Company-owned lot in East Boston, which is a part of the Mystic- East Eagle-Chelsea Reliability Project, and has been approved by the Siting Board in NSTAR Electric Company d/b/a Eversource Energy, EFSB-14-04/D.P.U. 14-153/14-154 (2017); NSTAR Electric Company d/b/a Eversource Energy, EFSB 14-04A/D.P.U. 14- 153A/14-154A (2021); and NSTAR Electric Company d/b/a Eversource Energy, EFSB 22-01 (2022).
- 2 This Approval is issued subject to the Conditions in the Certificate of Environmental Impact and Public Interest that is appended as Exhibit A to the Final Decision in <u>NSTAR</u> Electric Company d/b/a Eversource Energy, EFSB 22-01 (2022).
- 3. Eversource shall maintain ongoing communication with the City of Boston Inspectional Services Department, as appropriate, regarding the work undertaken pursuant to the Siting Board's Certificate and this Approval.

Bethany A. Card, Chair

Energy Facilities Siting Board

ATTACHMENT 8

NSTAR ELECTRIC COMPANY D/B/A EVERSOURCE ENERGY, EFSB 22-01

CERTIFICATE OF ENVIRONMENTAL IMPACT AND PUBLIC INTEREST

APPROVAL IN LIEU OF STREET EXCAVATION PERMITS FROM THE CITY OF BOSTON DEPARTMENT OF PUBLIC WORKS

- 1. Pursuant to its authority under G.L. c. 164, §§ 69K-69O, the Energy Facilities Siting Board (the "Siting Board") hereby grants to NSTAR Electric Company d/b/a Eversource Energy ("Eversource" or the "Company") an Approval in lieu of Street Excavation Permits from the City of Boston Department of Public Works for the installation of new distribution duct bank, conduits and manholes in six public ways (Condor Street, East Eagle Street, Glendon Street, Lexington Street, Shelby Street, Saratoga Street and Chelsea Street). This Approval authorizes permits needed to deliver the new source of supply to customers in East Boston from a new electric substation on a Company-owned lot in East Boston, which is a part of the Mystic-East Eagle-Chelsea Reliability Project, and has been approved by the Siting Board in NSTAR Electric Company d/b/a Eversource Energy, EFSB-14-04/D.P.U. 14-153/14-154 (2017); NSTAR Electric Company d/b/a Eversource Energy, EFSB 14-04A/D.P.U. 14-153A/14-154A (2021); and NSTAR Electric Company d/b/a Eversource Energy, EFSB 22-01 (2022). This Approval also authorizes street openings needed to connect to Boston Water & Sewer Commission facilities.
- 2. This Approval is issued subject to the Conditions in the Certificate of Environmental Impact and Public Interest that is appended as Exhibit A to the Final Decision in NSTAR Electric Company d/b/a Eversource Energy, EFSB 22-01 (2022).
- 3. Eversource shall maintain ongoing communication with the City of Boston Department of Public Works, as appropriate, regarding the work undertaken pursuant to the Siting Board's Certificate and this Approval.
- 4. Eversource shall be bonded and insured.

5. Eversource shall sign a Mattocks-Higgins affidavit of workplace safety yearly and submit it to the City of Boston Department of Public Works.

Bethany A. Card, Chair

ATTACHMENT 9

NSTAR ELECTRIC COMPANY D/B/A EVERSOURCE ENERGY, EFSB 22-01

CERTIFICATE OF ENVIRONMENTAL IMPACT AND PUBLIC INTEREST

APPROVAL IN LIEU OF STREET/MANHOLE OCCUPANCY PERMITS FROM THE CITY OF BOSTON DEPARTMENT OF PUBLIC WORKS

- 1. Pursuant to its authority under G.L. c. 164, §§ 69K-69O, the Energy Facilities Siting Board (the "Siting Board") hereby grants to NSTAR Electric Company d/b/a Eversource Energy ("Eversource" or the "Company") an Approval in lieu of Street and Manhole Occupancy Permits from the City of Boston Department of Public Works for the installation of new distribution duct bank, conduits and manholes in six public ways (Condor Street, East Eagle Street, Glendon Street, Lexington Street, Shelby Street, Saratoga Street and Chelsea Street). This Approval authorizes permits needed to deliver the new source of supply to customers in East Boston from a new electric substation on a Company-owned lot in East Boston, which is a part of the Mystic-East Eagle-Chelsea Reliability Project, and has been approved by the Siting Board in NSTAR Electric Company d/b/a Eversource Energy, EFSB-14-04/D.P.U. 14-153/14-154 (2017); NSTAR Electric Company d/b/a Eversource Energy, EFSB 14-04A/D.P.U. 14-153A/14-154A (2021); and NSTAR Electric Company d/b/a Eversource Energy, EFSB 22-01 (2022).
- 2 This Approval is issued subject to the Conditions in the Certificate of Environmental Impact and Public Interest that is appended as Exhibit A to the Final Decision in <u>NSTAR</u> Electric Company d/b/a Eversource Energy, EFSB 22-01 (2022).
- 3. Eversource shall maintain ongoing communication with the City of Boston Department of Public Works, as appropriate, regarding the work undertaken pursuant to the Siting Board's Certificate and this Approval.
- 4. Eversource shall be bonded and insured.

Bethany A. Card, Chair

ATTACHMENT 10

NSTAR ELECTRIC COMPANY D/B/A EVERSOURCE ENERGY, EFSB 22-01

CERTIFICATE OF ENVIRONMENTAL IMPACT AND PUBLIC INTEREST

APPROVAL IN LIEU OF A SIDEWALK OCCUPANCY PERMIT FROM THE CITY OF BOSTON DEPARTMENT OF PUBLIC WORKS

- 1. Pursuant to its authority under G.L. c. 164, §§ 69K-69O, the Energy Facilities Siting Board (the "Siting Board") hereby grants to NSTAR Electric Company d/b/a Eversource Energy ("Eversource" or the "Company") an Approval in lieu of a Sidewalk Occupancy Permit from the City of Boston Department of Public Works. This Approval authorizes occupancy of a portion of the Condor Street sidewalk during implementation of the specific repair plan for a new electric substation on a Company-owned lot in East Boston, which is a part of the Mystic-East Eagle-Chelsea Reliability Project, and has been approved by the Siting Board in NSTAR Electric Company d/b/a Eversource Energy, EFSB-14-04/D.P.U. 14-153/14-154 (2017); NSTAR Electric Company d/b/a Eversource Energy, EFSB 14-04A/D.P.U. 14-153A/14-154A (2021); and NSTAR Electric Company d/b/a Eversource Energy, EFSB 22-01 (2022).
- 2. This Approval is issued subject to the Conditions in the Certificate of Environmental Impact and Public Interest that is appended as Exhibit A to the Final Decision in <u>NSTAR</u> Electric Company d/b/a Eversource Energy, EFSB 22-01 (2022).
- Eversource shall maintain ongoing communication with the City of Boston Department of Public Works, as appropriate, regarding the work undertaken pursuant to the Siting Board's Certificate and this Approval.
- 4. Eversource shall not work during inclement weather conditions.

Bethany A. Card, Chair

Energy Facilities Siting Board

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ATTACHMENT 11

NSTAR ELECTRIC COMPANY D/B/A EVERSOURCE ENERGY, EFSB 22-01

CERTIFICATE OF ENVIRONMENTAL IMPACT AND PUBLIC INTEREST

APPROVAL IN LIEU OF A CONSTRUCTION STORMWATER PERMIT FROM THE CITY OF BOSTON WATER AND SEWER COMMISSION

- 1. Pursuant to its authority under G.L. c. 164, §§ 69K-69O, the Energy Facilities Siting Board (the "Siting Board") hereby grants to NSTAR Electric Company d/b/a Eversource Energy ("Eversource" or the "Company") an Approval in lieu of a Construction Stormwater Permit from the City of Boston Water and Sewer Commission. This Approval authorizes discharges during the construction of a new electric substation on a Company-owned lot in East Boston, which is a part of the Mystic-East Eagle-Chelsea Reliability Project, and has been approved by the Siting Board in NSTAR Electric Company d/b/a Eversource Energy, EFSB-14-04/D.P.U. 14-153/14-154 (2017); NSTAR Electric Company d/b/a Eversource Energy, EFSB 14-04A/D.P.U. 14-153A/14-154A (2021); and NSTAR Electric Company d/b/a Eversource Energy, EFSB 22-01 (2022).
- 2 This Approval is issued subject to the Conditions in the Certificate of Environmental Impact and Public Interest that is appended as Exhibit A to the Final Decision in <u>NSTAR</u> Electric Company d/b/a Eversource Energy, EFSB 22-01 (2022).
- 3. Eversource shall maintain ongoing communication with the City of Boston Water and Sewer Commission, as appropriate, regarding the work undertaken pursuant to the Siting Board's Certificate and this Approval, including whether the Project infiltrates a volume of runoff equal to 1 inch of rainfall times the total footprint of proposed impervious area on the site.
- 4. Eversource shall update its site plan annually and submit it to the City of Boston Water and Sewer Commission.

Bethany A. Card, Chair

ATTACHMENT 12

NSTAR ELECTRIC COMPANY D/B/A EVERSOURCE ENERGY, EFSB 22-01

CERTIFICATE OF ENVIRONMENTAL IMPACT AND PUBLIC INTEREST

APPROVAL IN LIEU OF A CONSTRUCTION DEWATERING DISCHARGE PERMIT FROM THE CITY OF BOSTON WATER AND SEWER COMMISSION

- 1. Pursuant to its authority under G.L. c. 164, §§ 69K-69O, the Energy Facilities Siting Board (the "Siting Board") hereby grants to NSTAR Electric Company d/b/a Eversource Energy ("Eversource" or the "Company") an Approval in lieu of a Construction Dewatering Discharge Permit from the City of Boston Water and Sewer Commission. This Approval authorizes dewatering discharges during construction of the duct banks needed to deliver the new source of supply to customers in East Boston from a new electric substation on a Company-owned lot in East Boston, which is a part of the Mystic- East Eagle-Chelsea Reliability Project, and has been approved by the Siting Board in NSTAR Electric Company d/b/a Eversource Energy, EFSB-14-04/D.P.U. 14-153/14-154 (2017); NSTAR Electric Company d/b/a Eversource Energy, EFSB 14-04A/D.P.U. 14- 153A/14-154A (2021); and NSTAR Electric Company d/b/a Eversource Energy, EFSB 22-01 (2022).
- 2. This Approval is issued subject to the Conditions in the Certificate of Environmental Impact and Public Interest that is appended as Exhibit A to the Final Decision in <u>NSTAR</u> Electric Company d/b/a Eversource Energy, EFSB 22-01 (2022).
- 3. Eversource shall maintain ongoing communication with the City of Boston Water and Sewer Commission, as appropriate, regarding the work undertaken pursuant to the Siting Board's Certificate and this Approval.
- 4. Eversource shall apply for a construction permit by submitting a Notice of Intent to the United States Environmental Protection Agency at least two days prior to intended construction activity (clearing, grading, or grubbing). All parties with day-to-day responsibility for site operations shall apply co-permittees of the Notice of Intent.
- 5. Eversource shall understand and comply with conditions in the construction permit. Compliance with the construction general permit means that Eversource has a stormwater pollution plan ("SWPP") that addresses all permit requirements, that Eversource maintains the plan on site, logs all inspections and results and update the plan, as necessary.

6. Eversource shall develop a SWPP prior to submitting the Notice of Intent to the United States Environmental Protection Agency and retain the SWPP on site and submit a copy to

7. City of Boston Water and Sewer Commission. Eversource shall review tips on developing and maintaining a SWPP.

Bethany A. Card, Chair

Energy Facilities Siting Board

ATTACHMENT 13

NSTAR ELECTRIC COMPANY D/B/A EVERSOURCE ENERGY, EFSB 22-01

CERTIFICATE OF ENVIRONMENTAL IMPACT AND PUBLIC INTEREST

<u>APPROVAL IN LIEU OF A GENERAL SERVICES APPLICATION FROM THE CITY</u> <u>OF BOSTON WATER AND SEWER COMMISSION</u>

- 1. Pursuant to its authority under G.L. c. 164, §§ 69K-69O, the Energy Facilities Siting Board (the "Siting Board") hereby grants to NSTAR Electric Company d/b/a Eversource Energy ("Eversource" or the "Company") an Approval in lieu of a General Services Application from the City of Boston Water and Sewer Commission. This Approval authorizes the connection of municipal water and stormwater lines and the relocation of a fire hydrant during the construction and operation of a new electric substation on a Company-owned lot in East Boston, which is a part of the Mystic-East Eagle-Chelsea Reliability Project, and has been approved by the Siting Board in NSTAR Electric Company d/b/a Eversource Energy, EFSB-14-04/D.P.U. 14-153/14-154 (2017); NSTAR Electric Company d/b/a Eversource Energy, EFSB 14-04A/D.P.U. 14-153A/14-154A (2021); and NSTAR Electric Company d/b/a Eversource Energy, EFSB 22-01 (2022).
- 2 This Approval is issued subject to the Conditions in the Certificate of Environmental Impact and Public Interest that is appended as Exhibit A to the Final Decision in <u>NSTAR</u> Electric Company d/b/a Eversource Energy, EFSB 22-01 (2022).
- 3. Eversource shall maintain ongoing communication with the City of Boston Water and Sewer Commission, as appropriate, regarding the work undertaken pursuant to the Siting Board's Certificate and this Approval.
- 4. Eversource shall comply with the Environmental Protection Agency construction general permit.

Bethany A. Card, Chair

Energy Facilities Siting Board

Bethy A. Coul

ATTACHMENT 14

NSTAR ELECTRIC COMPANY D/B/A EVERSOURCE ENERGY, EFSB 22-01

CERTIFICATE OF ENVIRONMENTAL IMPACT AND PUBLIC INTEREST

APPROVAL IN LIEU OF A STREET OCCUPANCY PERMIT FROM THE CITY OF CHELSEA DEPARTMENT OF PUBLIC WORKS

- 1. Pursuant to its authority under G.L. c. 164, §§ 69K-69O, the Energy Facilities Siting Board (the "Siting Board") hereby grants to NSTAR Electric Company d/b/a Eversource Energy ("Eversource" or the "Company") an Approval in lieu of a Street Occupancy Permit from the City of Chelsea Department of Public Works. This Approval authorizes occupancy of a portion of Willow Street in Chelsea for access to a manhole in connection with the construction and operation of a new electric substation on a Company-owned lot in East Boston, which is a part of the Mystic-East Eagle-Chelsea Reliability Project, and has been approved by the Siting Board in NSTAR Electric Company d/b/a Eversource Energy, EFSB-14-04/D.P.U. 14-153/14-154 (2017); NSTAR Electric Company d/b/a Eversource Energy, EFSB 14-04A/D.P.U. 14-153A/14-154A (2021); and NSTAR Electric Company d/b/a Eversource Energy, EFSB 22-01 (2022).
- 2 This Approval is issued subject to the Conditions in the Certificate of Environmental Impact and Public Interest that is appended as Exhibit A to the Final Decision in NSTAR Electric Company d/b/a Eversource Energy, EFSB 22-01 (2022).
- 3. Eversource shall maintain ongoing communication with the City of Chelsea Department of Public Works, as appropriate, regarding the work undertaken pursuant to the Siting Board's Certificate and this Approval.

Bethany A. Card, Chair

APPROVED by a vote of the Energy Facilities Siting Board at its meeting on November 29, 2022, by the members present and voting. Voting for the Tentative Decision as amended: Bethany A. Card, Secretary of the Executive Office of Energy and Environmental Affairs, Siting Board Chair; Matthew Nelson, Chair of the Department of Public Utilities; Cecile M. Fraser, Commissioner of the Department of Public Utilities; Patrick C. Woodcock, Commissioner of the Department of Energy Resources; Jonathan Cosco, General Counsel and designee for the Secretary of the Executive Office of Housing and Economic Development; Joseph C. Bonfiglio, Public Member; Brian Casey, Public Member; voting against the Tentative Decision as amended: Crystal Johnson, Public Member.

Bethany A. Card, Chair

Energy Facilities Siting Board

Dated this 30th day of November, 2022

Appeal as to matters of law from any final decision, order or ruling of the Siting Board may be taken to the Supreme Judicial Court by an aggrieved party in interest by the filing of a written petition praying that the order of the Siting Board be modified or set aside in whole or in part. Such petition for appeal shall be filed with the Siting Board within twenty days after the date of service of the decision, order or ruling of the Siting Board, or within such further time as the Siting Board may allow upon request filed prior to the expiration of the twenty days after the date of service of said decision, order or ruling. Within ten days after such petition has been filed, the appealing party shall enter the appeal in the Supreme Judicial Court sitting in Suffolk County by filing a copy thereof with the clerk of said court. Massachusetts General Laws, Chapter 164, Sec. 69P; Chapter 25, Sec. 5.