

**COMMONWEALTH OF MASSACHUSETTS
ENERGY FACILITIES SITING BOARD**

Petition of NSTAR Electric Company)
d/b/a Eversource Energy)
Notice of Project Change)

EFSB 14-04A/D.P.U. 14-153A/14-154A

TENTATIVE DECISION

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February 28, 2020

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SUMMARY OF THE TENTATIVE DECISION

The Tentative Decision (“TD”) recommends that the Siting Board approve with conditions the Project Change submitted by Eversource that would relocate by approximately 190 feet, a previously approved, proposed new electrical substation in East Boston – from the east side of a City of Boston Parcel (at 338 East Eagle Street) to the northwest corner of the City Parcel, adjacent to Condor Street (at 0 Condor Street). In making this recommendation, the TD finds that, like the Board’s earlier approval of the substation as part of the Mystic-East Eagle-Chelsea Reliability Project (on December 1, 2017), the Company’s Project Change would, on balance, contribute to a reliable energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost. The TD also recommends, as the Board did previously, granting exemptions from City of Boston zoning ordinances as necessary to construct and operate the substation. The TD will be considered by the Siting Board at a public meeting to be held on March 11, 2020, at 5:00 p.m., at the East Boston High School auditorium. The Siting Board will vote on whether to approve, approve with conditions, or reject the Project Change.

In reviewing the proposed Project Change, the TD evaluates a range of environmental considerations including land use, safety, visual impacts, hazardous waste/remediation, noise, traffic, water/wetlands/sea level rise, and magnetic fields, in addition to policies of the Commonwealth, such as Environmental Justice, Language Access, and resource use and development policies. The TD concludes that the Project Change is consistent with these state policies, and that, on balance, the environmental impacts of relocating the substation have been minimized. The TD finds that, due to re-engineering of the substation design and remediation of historical contamination on the new site, the cost of the substation at the new location would increase by an estimated \$6.2 million from the Board’s 2017 approval. The TD finds that \$4.7 million of the additional costs result from MassDEP-required remediation, including the removal and proper off-site disposal of 12,300 tons of contaminated soil (containing lead, cadmium, and arsenic, as well as petroleum hydrocarbons and other pollutants).

The Siting Board considered an intervenor motion to reopen and reconsider the Siting Board’s 2017 decision that the substation is needed to ensure reliable service in the Chelsea/East Boston area. The TD reaffirms an earlier ruling from the Presiding Officer that the intervenors did not provide a sufficient basis for the Siting Board to reopen the record of the 2017 Final Decision in the original proceeding with respect to the need for the substation, and that the substation continues to be needed to ensure reliability in the Chelsea/East Boston area. The 2017 Final Decision found that the need for the substation is immediate, and that the Chelsea/East Boston area is at risk of outages in the event of certain system contingencies, particularly given load additions in the Chelsea/East Boston area. The TD recommends that, based on the substation at the new site providing a reliable supply of energy, with a minimum impact on the environment, at the lowest possible cost, the Board approve the Project Change, with appropriate conditions.

Participants in this proceeding and the public will have the opportunity to submit written comments on the TD to the Siting Board until March 6, 2020.

The Massachusetts Energy Facilities Siting Board hereby [APPROVES], subject to the conditions set forth below, the proposed project change of NSTAR Electric Company d/b/a Eversource Energy regarding the location of the previously approved new 115/14 kilovolt substation in East Boston, Massachusetts.

I. SUMMARY OF APPROVED PROJECT AND PROJECT CHANGE REQUEST

A. Description of Project as Approved

On December 1, 2017, the Energy Facilities Siting Board (“Siting Board” or “Board”) issued a final decision approving the petition of NSTAR Electric Company d/b/a Eversource Energy (“Eversource” or “Company”) to construct an electric transmission project (“Project”) with two primary components: (1) a new 115 kilovolt (“kV”) underground transmission line comprised of two segments: the first, 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 the second, an 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”);¹ and (2) a new 115/14 kV substation (“East Eagle Substation” or “Substation”) that would be located in the Eagle Hill neighborhood of East Boston. The East Eagle Substation, as approved, would be located on a Company-owned parcel located in the

¹ 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) (“Final Decision”) (the Siting Board proceeding in which the Board approved the Project and issued the Final Decision 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. The Company stated that construction of the East Eagle-Mystic Line began in May 2018, and the East Eagle-Chelsea Line in November 2018 (Exh. EV-1, at 5). The Company projected a completion date of December 2020 for the New Lines (see Eversource Condition R Compliance Letter, July 18, 2019).

interior of a larger City of Boston-owned parcel (“City Parcel”) at 338 East Eagle Street in East Boston.

B. Description of Proposed Project Change

On November 15, 2018, Eversource submitted to the Siting Board a notice of project change filing (“Project Change Filing”) in which the Company has requested a change to the location of the East Eagle Substation, from the east side to the west side of the City Parcel. As initially approved, the Substation would be located on a 16,800 square-foot site (“Original Site”) within the City Parcel. Final Decision at 33. The Company now seeks approval from the Siting Board to move the location for the Substation from the Original Site to a 27,389-square-foot site approximately 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 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).²

As part of the Project Change Filing, the Company also seeks individual and comprehensive zoning exemptions from the City of Boston Zoning Code (Exh. EV-1, at 22). As with the construction of the Substation at the Original Site, the Company states that the Substation at the New Site cannot, or may not, meet the substantive requirements of zoning provisions from which exemptions are requested, and without such exemptions, the Company would need to seek variances from the City of Boston Zoning Board of Appeals (id.). The Company requests that the Siting Board grant the requested individual and comprehensive zoning exemptions based on the same reliability, cost and environmental impact considerations

² The Chelsea Creek Crossing was installed in 2011; two duct banks are currently used for distribution lines, while the remaining duct bank can accommodate either distribution or transmission cables. Final Decision at 64 n.75.

evaluated and approved by the Siting Board in the Final Decision (id. at 23).

The possibility of relocating the Substation west of the Original Site was addressed during the Original Proceeding. See Final Decision at 69-70. With respect to a potential change in the location of the Substation, Condition A of the Final Decision provides as follows:

The Siting Board directs the Company 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 and to acquire an easement across the City Parcel, if necessary, for the installation of the New Lines, and to provide an update to the Board on the status of such discussions (preferably, including a letter from the City of Boston regarding its position), within six months of this Final Decision, and prior to the commencement of any construction on the City Parcel.

Final Decision at 167.

The Company indicated that in compliance with Condition A, it entered into discussions with the City of Boston with the goal of relocating the Substation on the City Parcel (Exh. EV-1, at 4).³ The City issued a Request for Proposals (“RFP”) on November 28, 2017, for the property on the western portion of the City Parcel (id.). The Company evaluated the potential of this parcel to accommodate the Substation and, after determining that it would be feasible from both constructability and electrical perspectives, the Company responded to the City’s RFP on December 21, 2017 (id. at 6; RR-GR-2(1) at 3). The conveyance was approved by a vote of the City Public Facilities Commission on March 14, 2018 and, as a result, on July 25, 2018, the City conveyed the New Site to the Company and the Company conveyed the Original Site back to the City (Exh. EV-1, at 4; RR-GR-2(1) at 63).⁴

³ The Company filed a compliance letter with Condition A on May 31, 2018. The compliance filing did not include a letter from the City of Boston.

⁴ The conveyance involved an equal exchange of the properties and property rights with no monetary transaction (Exh. EFSB-G-8).

Figure 1: Location of East Eagle Substation

Source: Notice of Adjudication/Notice of Public Comment Hearing

II. PROCEDURAL HISTORY

A. The Original Project Approval Proceeding

On December 23, 2014, Eversource filed a petition with the Siting Board and two petitions with the Massachusetts Department of Public Utilities (“Department”) relating to the Project. In the first petition, docketed as EFSB 14-04, the Company requested Siting Board approval of the Project pursuant to G.L. c. 164, § 69J (“Petition to Construct”). The second petition, docketed as D.P.U. 14-153, requested approval for the transmission line component of the Project, pursuant to G.L. c. 164, § 72 (“Section 72 Petition”). The third petition, docketed as D.P.U. 14-154, requested certain individual exemptions and a comprehensive exemption from

the City of Boston Zoning Code pursuant to Section 6 of Chapter 665 of the Acts of 1956 (“Zoning Petition”) (together, “Petitions”).⁵

The Siting Board conducted a public comment hearing in the City of Chelsea on July 29, 2015, to receive public comments on the Project. Pursuant to the Presiding Officer’s instructions, Eversource provided a Spanish and Portuguese-speaking interpreter at the public comment hearing. In addition, the Siting Board directed the Company to publish the Notice of Public Comment Hearing/Notice of Adjudication (“Original Notice”) for the Project in English once a week for two consecutive weeks in the East Boston Times-Free Press, the Chelsea Record, and the Everett Independent; the Siting Board also directed the Company to publish the Original Notice in Spanish and in Portuguese once a week for two consecutive weeks in El Mundo and the Brazilian Times, respectively. The Company also was required to place copies of the Original Notice and the Petitions in the Boston, Chelsea, and Everett City Clerk’s offices and in a public library in each municipality.⁶

⁵ On December 23, 2014, the Company filed a motion to consolidate the Petition to Construct, the Section 72 Petition, and the Zoning Petition for review and decision by the Siting Board. Pursuant to G.L. c. 164, § 69H(2), the Chairman of the Department on May 20, 2015, issued a Referral and Consolidation Order referring the Section 72 and Zoning Petitions to the Siting Board for review and decision with the Petition to Construct. The Siting Board accordingly conducted a single adjudicatory proceeding and developed a single evidentiary record with respect to the Petitions. That record has been incorporated by reference into the record of this Project Change proceeding. See Procedural Ground Rules at (4) (April 5, 2019).

⁶ The Final Decision determined that the Project did not exceed any Massachusetts Environmental Policy Act (“MEPA”) environmental notification form review thresholds that would trigger enhanced public participation or enhanced review provisions under either the Environmental Justice Policy of the Executive Office of Energy and Environmental Affairs issued on January 31, 2017, or the prior EJ Policy issued in 2002, in effect at the time the Company filed the Petitions. Final Decision at 145. However, based on a linguistic analysis of the communities in the Project area showing the presence of sizeable Spanish- and Portuguese-speaking populations, the Board required the Company to provide supplemental public notice and participation measures in these languages, as described above.

On September 1, 2015, the Presiding Officer issued an intervention ruling granting intervenor status to two parties: the Channel Fish Company (“Channel Fish”); and Anne R. Jacobs, Trustee, Vernhunt Realty Trust (“Jacobs”).⁷ The ruling granted limited participant status to: Manuel Lopez, on behalf of the 60-Employee Group;⁸ Roseann Bongiovanni, on behalf of the Chelsea Collaborative; four individual residents of East Boston: Mary C. Beringer; Emilio Favorito; Gail Miller; and John Walkey; and an individual resident of Chelsea, Damali Vidot.

Siting Board staff conducted twelve days of evidentiary hearings in the Original Proceeding beginning on January 6, 2016 and ending on March 23, 2016. The parties presented the testimony of 20 witnesses. Eversource, Jacobs, and Channel Fish filed briefs between May and June 2016. The Presiding Officer allowed supplemental briefing by the parties with respect to Project cost. The Company and Channel Fish filed supplemental briefs in August to September 2017.

Siting Board staff prepared a Tentative Decision and distributed it to the Siting Board members and all parties and limited participants for review and comment on November 8, 2017. The Siting Board received timely written comments from Eversource, Channel Fish, Gail Miller, Jessie Purvis, and GreenRoots, Inc. (“GreenRoots”). The Board conducted a public meeting to consider the Tentative Decision on November 30, 2017, at which the parties, limited participants, public officials, other organizations, residents, and businesses presented oral comments.⁹ After

⁷ Channel Fish’s fish-processing business is located adjacent the Original Site for the Substation. Ms. Jacobs has commercial tenants along the preferred transmission line route in Chelsea (Hearing Officer Ruling on Petitions to Intervene and to Participate at 3-4 (September 1, 2015)).

⁸ The 60-Employee Group was comprised of 60 employees of Channel Fish, represented collectively by one of the employees, Mr. Lopez (Hearing Officer Ruling on Petitions to Intervene and to Participate at 8 (September 1, 2015)).

⁹ Although the Siting Board’s regulations address only the opportunity for Intervenors and Limited Participants to present oral comments at a Siting Board meeting (see 980 CMR 1.05), the Chair of the Siting Board provided oral comment opportunity not only to these entities, but other interested speakers present at the Siting Board meeting. See November 30, 2017 Board Meeting Transcript at 4, 114-126. The Siting Board arranged for a

deliberation, the Board directed staff to prepare a Final Decision approving the Petitions, subject to certain conditions. The Siting Board issued its Final Decision in the Original Proceeding on December 1, 2017.¹⁰

B. The Current Project Change Proceeding

As noted above, Eversource submitted its Project Change Filing to the Siting Board on November 15, 2018. On January 10, 2019, the Siting Board sent to Eversource a final Notice of Adjudication and Public Comment Hearing (“Notice”) for publication and service. The Notice stated that the Siting Board would conduct a public comment hearing at the East Boston High School on February 5, 2019. The public comment hearing included simultaneous interpretation in Spanish and Portuguese.¹¹ In connection with publication, posting, and service of the Notice, the Siting Board required Eversource to do the following:

Spanish language interpreter to translate comments made in Spanish to English, and to translate any questions directed to Spanish-speaking commenters, as necessary.

¹⁰ In accordance with applicable statutes, the parties to the Original Proceeding had 20 days from the issuance of the Final Decision to file any appeal of the Final Decision with the Siting Board, and ten additional days to file the appeal with the Massachusetts Supreme Judicial Court. G.L. c. 164, § 69P; G.L. c. 25, § 5; Final Decision at 173. On December 19, 2017, Eversource and Channel Fish (“Movants”) filed a joint motion to extend the appeal period. On December 20, 2017, the Presiding Officer granted the Movants a six-month extension of the appeal period, to June 1, 2018. The purpose of the extension was “to allow [the Movants] to resolve issues between them regarding the currently-approved location of the new substation.” NSTAR Electric Company d/b/a Eversource Energy, EFSB 14-04/D.P.U. 14-153/14-154, Presiding Officer Ruling Re Motion to Extend Final Decision Appeal Period at 3 (December 20, 2017). On May 21, 2018, the Movants filed a motion for a further extension of the appeal period. On May 29, 2018, the Presiding Officer granted a further extension, to December 1, 2018 (Presiding Officer Stamp-Granted Ruling at 1, 6). Accordingly, December 1, 2018 was the last day on which the Movants could have filed an appeal of the Final Decision with the Siting Board. Neither Movant filed an appeal of the Final Decision by that date, nor did either Movant request a further extension of the appeal period by that date. Therefore, the appeal period for the Final Decision has expired.

¹¹ Comments at the public comment hearing focused primarily on environmental and safety matters. Commenters highlighted the proximity of the Substation to a nearby park; its proximity

- Translate the Notice and accompanying cover sheet into Spanish and Portuguese;
- Publish the Notice once a week for a minimum of two consecutive weeks prior to the public comment hearing in the East Boston Times-Free Press; El Mundo (Spanish version); the Boston Herald; and the Brazilian Times (Portuguese);
- Post the Notice for two consecutive weeks in the Boston City Clerk's office and the East Boston Public Library;
- Serve a copy of the Notice in all three languages (English, Spanish, and Portuguese) on all persons on the Service List in the Original Proceeding; the owners of all property abutting the Original Substation Site and the New Substation Site; owners of land directly opposite either site on any public or private street or way; and abutters to abutters within 300 feet of the parcel boundaries, as those owners appear on the most recent applicable tax list, notwithstanding that the land of any such owner is located in another city or town.¹²
- Send a copy in all three languages to the Mayor of Boston, and the Chairs or Directors of the City Council, Planning and Development Agency, Department of Public Works, Zoning Board of Appeals, and Conservation Commission.
- Place a copy of the Project Change Filing in the East Boston Public Library and in the Boston City Clerk's office at least two weeks prior to the February 5, 2019 public comment hearing.
- Post a copy of the Notice in all three languages and the Project Change Filing on Eversource's website.¹³

The Siting Board received one petition to intervene in the proceeding, from GreenRoots, a local environmental nonprofit organization based in Chelsea, Massachusetts. Four persons

to nearby jet-fuel storage tanks; and its location in an area prone to flooding (from both sea level rise and storm surge). Commenters also noted concern about the magnetic fields that will be generated by the Substation when in operation. Commenters voiced significant concerns about locating the Substation in an environmental justice community already burdened by large public infrastructure, such as the airport, the tunnel, and the fuel tanks. Commenters also questioned the procedural adequacy of the review process for the Project, particularly with respect to the opportunity for public participation.

¹² The Notice provisions required by the Siting Board for this Project Change proceeding are also consistent with the requirements under G.L. c. 40A, §11.

¹³ The Siting Board also posted a copy of the notice in all three languages on its website.

petitioned for limited participant status: three East Boston residents residing in the vicinity of the City Parcel – Joseph Aponte, Eric Burkman, and Julia Ivy – and the Conservation Law Foundation (“CLF”), a nonprofit New England-based environmental advocacy organization also filed a petition to participate. On April 5, 2019, the Presiding Officer issued a ruling granting intervenor status to GreenRoots, and granting limited participant status to Mr. Aponte, Mr. Burkman, Ms. Ivy, and CLF.¹⁴

Siting Board staff, Eversource, and GreenRoots conducted written pre-hearing discovery from April to June 2019. On April 5, 2019, Siting Board staff issued a preliminary set of information requests to Eversource, and on April 30, 2019, issued a first set of information requests to the Company. On May 7, 2019, GreenRoots issued a set of information requests to Eversource; on June 14, 2019, Eversource issued a set of information requests to GreenRoots.

Siting Board staff conducted three days of evidentiary hearings, beginning on July 9, 2019, and ending on July 26, 2019.¹⁵ The Company presented the testimony of four witnesses in support of its petitions: David Petersile, Senior Project Manager, Burns and McDonnell Construction Design-Build division; Christopher Soderman, P.E., Manager, Transmission Line and Civil Engineering, Eversource; John M. Zicko, P.E., Director of Substation Design Engineering, Eversource; and Michael J. Zylich, Project Manager and Licensed Site Professional, Eversource.

GreenRoots presented the testimony of five witnesses: Roseanne Bongiovanni, Executive Director, GreenRoots, and resident of Chelsea; John Walkey, Waterfront Initiative

¹⁴ In response to the Company response to GreenRoots’ intervention petition, the Presiding Officer ruled that “I will not limit the scope of GreenRoots’ intervention in this proceeding to the issues or contentions raised in its intervention petition.” Presiding Officer Ruling on Intervention, April 5, 2019.

¹⁵ In response to a request made by GreenRoots during the first day of evidentiary hearings, on July 9, 2019, for real-time Spanish language interpretation of the hearings, the Presiding Officer made provisions for such services during the subsequent evidentiary hearing days, in conjunction with an audio-transmitter and receiver/headphone system distributed at the hearing to interested attendees. See July 23, 2019 email by Presiding Officer to service list re: Real-Time Interpretation; Tr. 2, at 203-205.

Coordinator, GreenRoots, and East Boston resident; Sandra Aleman-Nijjar, member of GreenRoots, and East Boston resident; Dr. Marcos Luna, Professor of Geography, and Coordinator, Geo-Information Sciences, Salem State University, and East Boston resident; and Bryndis Woods, Researcher, Applied Economics Clinic, and Research Fellow, Global Development and Environmental Institute, Tufts University.¹⁶

Eversource, GreenRoots, and CLF filed initial briefs on August 26, 2019. GreenRoots and Eversource filed reply briefs on September 18, 2019.

Siting Board staff prepared a Tentative Decision and distributed it to the Siting Board members and all parties and limited participants for review and comment on February 28, 2020. The parties and limited participants were given until March 6, 2020, to file written comments. [The Siting Board received timely written comments from XXX]. The Siting Board conducted a public Board meeting to consider the Tentative Decision on March 11, 2020, at which the parties, limited participants, and others provided oral comments. Spanish language interpreters were present at the public Board meeting. After deliberation, the Board directed staff to prepare a Final Decision [approving] the Project Change Filing, subject to certain conditions.

III. EVIDENTIARY RULINGS IN THIS PROCEEDING

A. Cross Motions Regarding Project Need

1. Introduction

Consistent with established Siting Board practice, the Siting Board in this Project Change proceeding provided notice to the parties, and to the public, that the issues to be addressed in the proceeding would be limited, and that the need for the Project was not among the issues to be addressed. The Notice, issued in advance of the February 5, 2019 public comment hearing in East Boston, expressly excluded project need from the issues to be addressed during hearings. The Notice provided, in relevant part, that:

¹⁶ The prefiled direct testimony of Ms. Woods was the subject of a Motion to Strike filed by Eversource. See Section III.A.4, below.

The Siting Board will review the Company's Project Change Filing to determine whether the proposed relocation of the Substation within the City Parcel would alter in any substantive way either the assumptions or conclusions reached by the Siting Board in its analysis of the Project's environmental impacts in the original Siting Board proceeding.

The scope of the Siting Board's review in this proceeding is limited to Eversource's proposed Project Change. Specifically, the Siting Board is reviewing potential impacts of relocating the Substation from the Original Site, on the eastern side of the City Parcel, to the New Site, on the western side of the City Parcel, a distance of approximately 190 feet. The Siting Board will not be reviewing matters unrelated to the Project Change, such as the need for the overall Project, Project alternatives, or other matters that were reviewed and decided by the Siting Board in the Final Decision, and are not directly related to or affected by the proposed relocation of the Substation.

(Notice at 1). The Revised Hearing and Witness Schedule, issued on June 27, 2019, provided that:

The substantive scope of a Siting Board project change proceeding is limited. The scope of this proceeding is limited to the potential impacts of relocating the Substation from the Original Site to the New Site. Accordingly, as shown on the Witness Schedule, above, testimony and examination of witnesses shall include Environmental Impacts; Cost; EMF; and Sea Level Rise. Examples of topics outside the scope of this proceeding include project need and project approach.

Hearing and Witness Schedule at 1. See also, Tr. A at 5-6 (transcript of February 5, 2019 public comment hearing; scope of proceeding is limited to impacts of relocating the Substation from one side of the City Parcel to the other).

On June 7, 2019, in accordance with the procedural schedule for the proceeding, GreenRoots filed its prefiled direct testimony. Included in the GreenRoots prefiled testimony was testimony on the subject of project need; additionally, GreenRoots' need witness responded to four Information Requests that Eversource issued regarding project need and Eversource responded to four Information Requests that GreenRoots issued regarding project need (together, the "Need Testimony").¹⁷ On July 1, 2019, the Company filed a Motion to Strike the Need

¹⁷ GreenRoots submitted the prefiled direct testimony of Bryndis Woods on June 7, 2019. The four need-related Information Requests that Eversource issued to GreenRoots, filed on June 28, 2019 were: EV-GR-9, EV-GR-10, EV-GR-11, and EV-GR-12. The four

Testimony (“Motion to Strike”).¹⁸ On July 5, 2019, GreenRoots filed an objection to the Motion to Strike, together with a Motion to Reopen the Original Proceeding, seeking “reopener or reconsideration,” to allow introduction of the Need Testimony into the evidentiary record in the Original Proceeding (“Motion to Reopen”) (together, the “Cross-Motions”). On the first day of evidentiary hearings, July 9, 2019, the Presiding Officer heard oral argument from each party on its motion (see Tr. 1, at 107-125). On the third, and final, day of evidentiary hearings, July 26, 2019, the Presiding Officer ruled orally from the bench on the motions, granting the Motion to Strike to the extent that it seeks to strike the Need Testimony from evidence, denying the Motion to Re-Open, and indicating that a written ruling would follow (see Tr. 3, at 537-540). On August 26, 2019, GreenRoots filed its initial brief; on brief GreenRoots “renews” its request that the Siting Board reopen the record in the Original Proceeding to re-examine the need for the Substation (GreenRoots Brief at 6-15).

2. Positions of the Parties on the Cross-Motions

a. Company Position

Eversource maintains in its Motion to Strike that the Presiding Officer made clear, on several occasions and well in advance of hearings, that the subject of project need was not a subject within the allowable scope of this Project Change proceeding (Motion to Strike at 2). The Company moved to strike the Need Testimony proffered by GreenRoots on this ground (id.). The Company stated that the Need Testimony “pertains exclusively to load forecasting and the need for the Substation” and thus is irrelevant to the Board’s review of the potential impacts of

need-related Information Requests that GreenRoots issued to Eversource, filed on May 21, 2019, were: GR-ESRN-1, GR-ESRN-2, GR-ESRN-3, and GR-ESRN-4. The Siting Board notes that while the Company objected to GreenRoots’ need questions, Eversource did provide substantive answers to each one of the four GreenRoots questions.

¹⁸ In its Motion to Strike, Eversource sought to strike only three of the four Information Request responses by GreenRoots. The Company did not include the response to EV-GR-9 (Motion to Strike at 1). The Board nevertheless considers the response to Information Request EV-GR-9 as part of the Need Testimony.

relocating the Substation from one side of the City Parcel to the other (id. at 2-3). The Company argued further that the Need Testimony, even if allowed into evidence, would not alter in any substantive way either the assumptions or conclusions reached by the Siting Board in the Original Proceeding, which is the standard by which the Siting Board determines whether to approve a requested project change (id. at 3).¹⁹

b. GreenRoots Position

GreenRoots acknowledges that the scope of a project change proceeding is much narrower than the scope of an original proceeding in which a proposed facility is approved; is generally limited to the potential impacts of the specific change that is being proposed; and is not intended to allow for re-litigation of issues fully and fairly determined in the original proceeding (Motion to Reopen at 3). With regard to the Project Change, GreenRoots acknowledges that the issue of project need was addressed and decided by the Siting Board in the Original Proceeding (id.). GreenRoots asserts, however, that in seeking to strike the Need Testimony, Eversource “takes an overly cramped view” of the issues that the Siting Board should decide in this proceeding (id.). GreenRoots asserts that the Need Testimony “makes clear” that “the most recent load projections from ISO-New England show that the 2017 [Final Decision’s] rationale for finding a reliability need for the Substation project no longer holds true” because, according to the Need Testimony, “load is projected to decrease for the foreseeable future” (id. at 2). GreenRoots asserts further that the issue of need is not an unimportant or collateral matter; rather “it is a (perhaps the) central issue that the Board must consider as part of its statutory mandate” (id.). GreenRoots states that “[i]f the Substation project is not in fact needed to ensure the

¹⁹ The Company on brief reasserts its position: that the Siting Board properly limited the scope of the proceeding to exclude project need; that GreenRoots misreads the standard for reopening; and that GreenRoots did not meet its burden for reopening (Company Reply Brief at 5-13).

reliability of Massachusetts' energy supply, then the best way to minimize costs and environmental impacts is not to build it in the first place" (id.).²⁰

GreenRoots acknowledges that the Siting Board determined in the Original Proceeding that the Project, including the Substation, is needed for electric reliability reasons, in particular, reliability needs in the Chelsea-East Boston-Lynn load area (id. at 3-5). GreenRoots does not challenge the Siting Board's finding of project need in the 2017 Final Decision; rather, GreenRoots argues, in essence, that the need finding in the Final Decision, based on a petition to construct filed with the Siting Board in 2014, is now out of date and the record in the Original Proceeding should be updated by reopening that proceeding and allowing the Need Testimony into evidence (id.).

GreenRoots asserts that the Siting Board has "inherent authority" to reconsider its previous decisions (Motion to Reopen at 1, 3).²¹ GreenRoots points to the Siting Board's decision in a 2014 project change proceeding as an example of where the Siting Board has allowed re-litigation of issues previously decided in the original proceeding: Motion to Reopen at 3, citing Colonial Gas Company d/b/a National Grid, EFSB 05-02A (2014) ("Sagamore III"). GreenRoots cites Sagamore III for the proposition that "the Board's decisions do not merely adjudicate disputes between adverse parties, but also 'frequently ha[ve] a regulatory component that 'may warrant reexamination in light of changes in regulation, purpose, later decisional law, or applicable on-the-ground facts'" (Motion to Reopen at 3, citing Sagamore III at 9). GreenRoots urges the Siting Board to allow the Need Testimony into evidence, so that the Siting

²⁰ GreenRoots in its briefing continues to argue that the need for the Project should be re-examined in this proceeding, highlighting the public's interest in ensuring that only projects that are truly necessary are approved and built (GreenRoots Brief at 2, 6-15).

²¹ GreenRoots contends on brief that the Presiding Officer's oral ruling was procedurally flawed because it relied solely on the Siting Board's regulations to conclude that "neither the Siting Board's regulations nor practice provide for reconsideration of a final decision" (GreenRoots Brief at 7, citing Tr. 3, at 538-539). The Siting Board notes that in her oral ruling, the Presiding Officer included other reasons for her ruling, including the determination that GreenRoots failed to meet the good cause standard for reopening (Tr. 3, at 537-540).

Board ““may develop[] a record on the issue as to whether reconsideration is appropriate . . .””, “exactly what the Board allowed the intervenor to do in Colonial Gas” with respect to safety and other issues (*id.* at 3-4). GreenRoots also acknowledges, however, that the Massachusetts courts view the ability of an administrative agency to reopen a completed adjudicatory hearing as “a power to be ‘sparingly used’ so that agency decisions ‘retain the resolving force on which persons can rely’” (Motion to Reopen at 1-3, citing Sagamore III at 8, quoting Stowe v. Bologna, 32 Mass. App. Ct. 612, 616 (1992)).²²

3. Motion to Reopen the Record

a. Standard of Review to Reopen a Record

The Board’s procedural regulations permit the reopening of a completed adjudicatory hearing or record only for good cause, and only with respect to evidence that was unavailable at the time of hearing. Specifically, a party seeking to reopen a proceeding must: (1) explain the nature and relevance of the evidence it seeks to present; (2) explain why the evidence was unavailable while the hearing was still open; and (3) demonstrate clearly that good cause exists for reopening. 980 CMR 1.09(1). To demonstrate good cause clearly, a party must show that the new evidence, if allowed into the record, would be likely to have a significant impact on the Siting Board’s decision in the proceeding. Cape Wind Associates, LLC and Commonwealth Electric Company d/b/a NSTAR Electric Company, EFSB 02-2/D.T.E. 02-53, Hearing Officer Ruling on Motion to Reopen (March 21, 2005) (“Cape Wind Ruling on Re-Opening”); in accord, Alliance to Protect Nantucket Sound v. Department of Public Utilities, 461 Mass. 190, 194-195

²² The Siting Board notes that, while it did not file any comments on the Cross-Motions, CLF argued on brief that the record should be opened for reconsideration of need (CLF Brief at 11, 19-20). According to CLF, based on the Need Testimony, the need for the Project has decreased since it was initially approved, which has “likely made the benefits of reliability superfluous” (CLF Brief at 20).

(2011) (“Alliance III”); Box Pond Association v. Energy Facilities Siting Board, 435 Mass. 408, 421-423 (2001) (“Box Pond”). See also NSTAR Electric Company d/b/a Eversource Energy, EFSB 16-02/D.P.U. 16-77, Presiding Officer Ruling on Motion to Re-Open Evidentiary Hearings (April 13, 2018) (“Needham-West Roxbury”); NSTAR Electric Company d/b/a Eversource Energy, EFSB 14-04/D.P.U. 14-153/14-154, Presiding Officer Ruling on Four Post-Hearing Evidentiary Motions (November 8, 2017).

Whether to reopen a completed adjudicatory hearing is, in the first instance, a matter of administrative agency discretion. Alliance III, 461 Mass. at 190, 193-194; Box Pond, 435 Mass. at 408, 420. For a number of reasons, including considerations of due process, efficiency, and finality, an agency’s discretion to reopen a completed hearing is to be exercised sparingly, with circumspection, and for compelling reasons only. See Alliance III, 461 Mass. at 190, 193-195; Covell v. Department of Social Services, 42 Mass. App. Ct. 427, 433-434 (1997); Stowe v. Bologna, 32 Mass. App. Ct. 612, 616 (1992). This is why, in addition to demonstrating unavailability and relevance, a party seeking to reopen the record in a Siting Board proceeding for the purpose of admitting new evidence must also demonstrate good cause, by showing that the evidence, if admitted, would be likely to have a significant impact on the Siting Board’s decision in the proceeding. See 980 CMR 1.09(1); Cape Wind Ruling on Re-Opening at 12-14; Alliance III, 461 Mass. at 190, 194-195.

b. Analysis and Findings on Motion to Reopen

Administrative agencies have broad discretion over procedural matters before them. See Zachs v. Department of Public Utilities, 406 Mass. 217, 227 (1989). This is especially the case when the ruling concerns whether to reopen a proceeding or an administrative record. See Brockton Power Co., LLC v. Energy Facilities Siting Board, 469 Mass. 215, 219 (2014); Alliance III, 461 Mass. at 190; Box Pond, 435 Mass. at 420. A reviewing court should defer to an agency's procedural ruling, reviewing it only for error of law or abuse of discretion, in particular when the ruling concerns whether to reopen a proceeding or an administrative record. Brockton Power Co. v. Energy Facilities Siting Board, 469 Mass. 215, 219 (2014). See also Commercial Wharf East Condominium Association v. Department of Environmental Protection,

93 Mass. App. Ct. 425, 433-434 (2018). The burden is on GreenRoots, and the Siting Board's regulations and standard of review reflect this heavy burden. See NSTAR Electric Company d/b/a Eversource Energy, EFSB 17-02/D.P.U. 17-82/17-83, at 223-230 (2019).

As an initial matter, the Board retains authority over the projects that it has approved. G.L. c. 164, § 69H. The Board may investigate compliance with its decisions and conduct an inquiry into various aspects of a project, including reopening a record where appropriate.²³ In this case, the Board declines to reopen the record based on a number of grounds.²⁴

First, the Siting Board's procedural regulations provide that a party may request the reopening of a Siting Board proceeding, but only *before* a Final Decision has been issued in that proceeding. 980 CMR 1.09(1) (emphasis added). The Siting Board issued a Final Decision in the Original Proceeding on December 1, 2017. Therefore, 980 CMR 1.09(1) does not provide a valid basis for reopening a record of proceeding where, as here, the Siting Board has issued a Final Decision in the proceeding.

Second, even assuming that 980 CMR 1.09(1) allowed for the filing of post-Final Decision motions to reopen, this provision contains a "good cause" requirement, and the Siting

²³ In Sagamore III, the Board determined that it was appropriate to allow an intervenor to develop certain evidence relating to project safety, a topic that was largely absent in the underlying decision in Colonial Gas Company d/b/a National Grid, EFSB 05-2 (2005) ("Sagamore I"). See Sagamore III at 30. Because the issue of safety was not extensively litigated below, the Board took evidence for the limited purpose to determine whether it would be appropriate to reconsider certain findings from the original proceeding. After reviewing the safety-related evidence, the Board decided not to reconsider its prior findings regarding a rejected alternative route. Sagamore III at 30. Unlike the issue of safety in Sagamore I, in the Final Decision for this Project, the issue of project need – a central focus of the Board's statutory and regulatory obligations – was extensively explored and actively litigated in the Original Proceeding, and the Board made detailed and specific findings. See Final Decision at 26-29.

²⁴ GreenRoots suggests that the Siting Board should have reviewed the Need Testimony "so that the Board may at least consider whether reopener or reconsideration is warranted" (Motion to Reopen at 1-3). In fact, the Presiding Officer did conduct a review of the Need Testimony, specifically for the purpose of ruling on the Cross-Motions (see Tr. 3, at 540).

Board finds that GreenRoots has failed to demonstrate good cause to reopen the Original Proceeding. To demonstrate good cause for the reopening of a Siting Board proceeding to allow new evidence into the record, “a party must show that the new evidence, if allowed into the record, would be likely to have a significant impact on the Siting Board’s decision” in the original project-approval proceeding. Cape Wind Ruling on Motion to Re-open Adjudicatory Hearing at 11; NSTAR Electric Company d/b/a Eversource Energy, EFSB 17-02/D.P.U. 17-82/17-83, at 224-225 (2019); NSTAR Electric Company d/b/a Eversource Energy, EFSB 16-02/D.P.U. 16-77, Presiding Officer Ruling on Motion to Re-open Adjudicatory Hearings at 3-4 (April 13, 2018).

Turning to whether the GreenRoots Need Testimony itself establishes good cause for reopening, the Siting Board found in the Final Decision that the Project is needed for two distinct purposes: (1) to resolve an N-1-1 risk of low-voltage criteria violations and resulting load interruptions affecting up to 87,000 customers in the Chelsea/East Boston/Lynn Load Area by 2018, and thereafter;²⁵ and (2) to resolve violations of Eversource’s SYS PLAN-010 reliability criteria indicating that the Chelsea Substation would be unable to reliably serve the projected peak loads in the Chelsea/East Boston area (which includes Logan International Airport).²⁶ Final Decision at 26-29.

²⁵ The Final Decision based its finding of need for the New Lines on the ISO-NE 2015 Needs Assessment, which was presented as evidence by the Company. Final Decision at 27. The Company updated the ISO-NE Needs Assessment during the Original Proceeding to incorporate the 2015 CELT data. Id. at 14-15.

²⁶ The Company developed its own 90/10 peak load forecast for the Chelsea/East Boston area by regressing historical peak demand data for its local distribution company against regional historical economic data and Temperature and Humidity Index (“THI”) values. Final Decision at 19-20. Using these statistical relationships, the Company developed its peak demand forecast for the Chelsea/East Boston area with projected economic data and 90/10 THI values, adjusted to reflect forecasted energy efficiency, photovoltaic deployment, as well as large anticipated “step load” additions in the Chelsea/East Boston area. Id. at 19-20; Exh. EFSB-N-5 from EFSB 14-4. Of significance, the Company anticipated approximately 12 MVA of significant new customer “step load” additions by 2018 in East Boston and Chelsea. Final Decision at 20.

The Final Decision found that the Company's 90/10 peak load forecast for the Chelsea Substation showed a violation of two Eversource's SYS PLAN-010 requirements: (1) that none of the three transformers at the Chelsea Substation should exceed 75 percent of its normal rating (that is, not exceed 46.9 megavolt-amperes "MVA"); and (2) that under an N-1 contingency (where one of three transformers fails) the projected peak load served by the Chelsea Substation should not exceed the combined firm capacity of the remaining two transformers (*i.e.*, 135 MVA). Final Decision at 22-23. The Final Decision noted that load on the Chelsea Substation Transformer 110C reached 47.4 MVA on July 19, 2013, thus exceeding the 75 percent normal rating threshold, and that this violation would continue over the forecast period. Id. at 23, 28. Similarly, the Final Decision found that, under an N-1 contingency (loss of a single transformer), the Chelsea Substation was at risk of shedding at least 8 MVA of load by 2016, growing to 14.9 MVA of load by 2024. Id. at 26.

The Final Decision noted the divergence in forecast uses and methodologies between a broad regional study, such as the ISO-NE 2015 Needs Assessment (incorporating CELT data), and the Company's Chelsea Substation peak load forecast. Final Decision at 27. Both forecasts provide substation-specific forecasts; however, the ISO-NE Needs Assessment was based on the coincident peak load of the entire Greater Boston Area, and included a formulaic apportionment of system-level resources (such as energy efficiency and demand response) to allocate these system-level resources to produce individual substation forecasts. Final Decision at 27. In contrast, the Company's Chelsea Substation forecast was based on more-specific local conditions (such non-coincident peak historic loads and expected area step load additions) that more precisely measure the peak load requirements that the Chelsea Substation must be able to serve, whenever such conditions occur (*i.e.*, a non-coincident peak). Final Decision at 27.

The Siting Board notes that GreenRoots' testimony shares a flaw with an argument made by Channel Fish in the Original Proceeding. In that argument, Channel Fish relied on the ISO-NE 2015 Needs Assessment in asserting that there was no need for the Substation (albeit, at the Original Site). Channel Fish, like GreenRoots in this proceeding, inappropriately relied on a broad regional load study (in GreenRoots' case, the 2019 CELT Report) in attempting to answer a more granular question about the adequacy of an individual substation to serve a smaller

geographic area. See Final Decision at 27. The Siting Board's finding in the Final Decision at 27, that reliance on the ISO-NE regional forecast is not determinative of the Chelsea Substation load, and that the Company's substation-specific assessment is the more relevant forecast, applies equally here.

An additional shortcoming of GreenRoots' Need Testimony is that the discovery responses included in the Need Testimony do not show that the actual additional demand realized from the step load additions is substantially less than predicted by the Company in the Original Proceeding for the Chelsea/East Boston area. These step load additions were a critical component of the load forecasts accepted by the Siting Board that supported the Company's position regarding need for the Substation in East Boston.²⁷

In sum, the Need Testimony does not compel a new conclusion by the Siting Board that a significant reduction in Chelsea/East Boston area peak loads now exists or is likely to take hold in the next few years, thereby obviating the need for the Substation in East Boston. The Need Testimony does not credibly erode the Siting Board's prior findings that there is a risk of load shedding at the existing Chelsea Substation, and that new substation capacity is required, as intended by the Project, to ensure reliable service. The Siting Board finds that, even if it were to be admitted into the evidentiary record of the Original Proceeding, the Need Testimony would not likely have a significant impact on the Siting Board's determination that the Substation remains needed for reliability purposes in serving the Chelsea/East Boston load area. Accordingly, the Siting Board denies the Motion to Reopen on the basis that GreenRoots did not establish good cause for reopening.

Finally, we decline to exercise our discretion to reopen the Original Proceeding, as the courts have made clear that the reopening of a completed adjudicatory proceeding is a measure to be used sparingly, with circumspection, and only in compelling circumstances, as it has

²⁷ In fact, the discovery responses to GreenRoots' questions seem to indicate a possibility of additional future step loads in the East Boston area (see Exhs. GR-ESRN-3; GR-ESRN-4). While this may be the case, there is nothing on the evidentiary record for the Siting Board or parties to evaluate the effect of such additional step loads.

serious implications for the finality of agency decisions and the ability of parties to rely upon that finality in the conduct of their affairs. Additionally, reopening of a completed proceeding, and re-litigation of issues determined in that proceeding, have material impacts on agency and party resources. The need for finality is particularly true where the Siting Board has determined that energy infrastructure is needed to ensure reliability. The Siting Board's mandate is 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, § 69H. Its enabling statutes contemplate review in an expeditious manner. G.L. c. 164, § 69J (requiring the Siting Board to render a decision on a petition to construct in twelve months); but see Box Pond 435 Mass. at (twelve-month statutory language is directory not mandatory). In order for the Siting Board to fulfill its statutory mandate, the Siting Board must be able to conclude its proceedings and render a final decision. To do otherwise would impede construction of needed energy infrastructure. The Siting Board finds that GreenRoots has not established compelling circumstances such that the Board's reopening of the completed Original Proceeding would be a warranted exercise of the Board's discretion.

The Motion to Reopen filed by GreenRoots is denied. The Siting Board denies the Motion to Reopen because GreenRoots has not satisfied applicable standards for the reopening of a completed Siting adjudicatory proceeding and because its Motion to Reopen constitutes a request to relitigate the issue of project need, which was fully and fairly determined in the Original Proceeding, and is outside the scope of this Project Change Proceeding.

4. Motion to Strike Need Testimony

a. Standard of Review for a Motion to Strike

The Siting Board's procedural regulations do not expressly provide for the filing of a motion to strike evidence from the evidentiary record of an adjudicatory proceeding. The Massachusetts Rules of Civil Procedure, however, provide that "redundant, immaterial, impertinent or scandalous" material may be removed from the record. See Mass. R. Civ. Proc. 12 (f), 12.19; 6 Mass. Practice (2018); see also NRG Canal 3 Development, LLC,

EFSB 15-06/D.P.U. 15-180, Presiding Officer Ruling on Company's Motion to Strike Portions of the Direct Testimony (August 19, 2016).

b. Analysis and Findings on Motion to Strike

The Need Testimony pertains solely to an issue that is outside the scope of this proceeding; because the continued need for the Project is irrelevant to assessing the potential environmental impacts of the moving the Substation from the east side to the west side of the City Parcel; because the record shows that the Siting Board fully addressed and decided the issue of Project need in the Original Proceeding; and because, after reviewing the Need Testimony proffered in this proceeding by GreenRoots, the Board finds that the substantive content of the Need Testimony, even if it were to be allowed into evidence, would not alter in any substantive way the Siting Board's assumptions or conclusions in the Original Proceeding regarding Project need. Therefore, the Siting Board grants the Company's Motion to Strike the Need Testimony from the evidentiary record. The Need Testimony shall, however, remain in the administrative record for the proceeding.²⁸

B. GreenRoots Request for Official Notice

In its initial brief, GreenRoots cites to and provides web links for, six different documents (the "Documents") that are not in the evidentiary record of this proceeding. GreenRoots acknowledges the extra-record nature of these Documents by asking, in its brief, that the Siting Board take official notice of the Documents. The documents for which GreenRoots requests that the Siting Board take official are: (1) the 2018 NE-ISO CELT Report (GreenRoots Brief at 9, n.4); (2) "ISO-New England Seasonal Peaks Since 1980" (June 6, 2018) (*id.* at 10, n.5); (3) "Gavin Bade, FERC Approves Cost Recovery for Exelon's Mystic Gas Plant" (December 21,

²⁸ In the Presiding Officer's oral ruling during hearings, it may appear that she denied the Company's Motion to Strike in its entirety (Tr. 3, at 540). However, the Siting Board clarifies this ruling to deny removal of the Need Testimony from the administrative record of this proceeding, but to exclude the Need Testimony from the evidentiary record.

2018) (id. at 13, n.7); (4) “Andrew Coffman Smith, ISO New England Prepares for a Post-Mystic Future by Clarifying Market Reentry, S&P Global” (May 9, 2019) (id. at 13, n.8); (5) “Matt Stevens, Rick Rojas, & Jacey Fortin, New York Sky Turns Bright Blue After Transformer Explosion” New York Times (December 27, 2018) (id. at 23, n.16); and (6) “ICNIRP Guidelines” (entire 20-page document, versus one page entered into evidence by the Company) (id. at 28, n.22).

As an initial matter, the Siting Board will allow into evidence Document Six, the ICNIRP Guidelines. One page of this 22-page guidance document has been offered into evidence by Eversource; allowing the entire document into evidence provides context. The Siting Board excludes the other five Documents from evidence. First, the Siting Board’s procedural regulations specifically provide that “[b]riefs may not be used to submit new evidence.” 980 CMR 1.07(1). Rather, “[t]he purpose of briefs is to allow parties and limited participants to provide written argument on the evidence properly admitted into the record.” 980 CMR 1.07(1). Having been offered into evidence via a brief, the remaining five documents are inadmissible into evidence under 980 CMR 1.07(1). Additionally, the remaining five documents could have been introduced into the record during the proceeding; they were not; and GreenRoots does not satisfy the good-cause standard for reopening the record in this proceeding to allow the Documents into evidence. See NSTAR Electric Company d/b/a Eversource Energy, EFSB 16-02/D.P.U. 16-77, Presiding Officer Ruling Regarding Post-Hearing Exhibits at 2-5 (November 8, 2017). Moreover, none of the remaining five documents, especially the proffered newspaper-published or other articles by individual authors, constitute “such matters as might be officially noticed by the courts of the United States or of Massachusetts.” 980 CMR 1.06(7). Additionally, the other parties did not have the opportunity during the proceeding, as required by 980 CMR 1.06(7), “to contest the matters of which official notice is to be taken.” Finally, the Siting Board rejects the admission of Documents 1-4 into evidence, via official notice or otherwise, as they pertain to GreenRoots’ argument that the topic of project need should be reopened and addressed in this proceeding. See Section III.A.4, above.

IV. PROJECT CHANGE STANDARD OF REVIEW AND SCOPE OF REVIEW

A. Standard of Review

An applicant must inform the Siting Board of any proposed change to a jurisdictional energy project that has already been approved by the Board. The Siting Board then determines whether the change would be more than “a minor variation” to the project as approved by the Board. If the change would constitute more than a minor variation, the Siting Board conducts further inquiry regarding the change. As stated in the Final Decision:

A project proponent has an absolute obligation to construct and operate its facility in conformance with all aspects of its proposal as presented to the Siting Board. Therefore, the Siting Board requires Eversource, or its successors in interest, to notify the Siting Board *of any changes other than minor variations* to the proposal so that the Siting Board may decide whether to inquire further into an issue. Eversource or its successors in interest are obligated to provide the Siting Board with sufficient information on changes to the proposed Project to enable the Siting Board to make these determinations.

Final Decision at 170. The Siting Board will not conduct further inquiry regarding a proposed project change if the change would “not alter in any substantive way either the assumptions or conclusions reached in its analysis of the project’s environmental impacts in the proceeding.” Milford Power, LLC, EFSB 17-04, at 9 (2018) (“Milford Power Project Change”); Exelon West Medway, LLC and Exelon West Medway II, LLC, EFSB 15-1A/D.P.U. 15-25A, at 4 (2017) (“Exelon West Medway Project Change”); Berkshire Power Development, Inc., EFSB 95-1, at 11 (1997) (“Berkshire Power Project Change”). The Siting Board also may review impacts other than environmental impacts. In the Sagamore Decisions, the Siting Board noted that “[w]hen presented with a project change filing, the Board . . . will not inquire further about the proposed change if the change does not appear to alter in any substantive way either the assumptions or conclusions reached in the Board’s underlying decision.” See Sagamore III at 7-8; Colonial Gas Company d/b/a National Grid, EFSB 18-05, at 25 (2019) (“Sagamore Certificate and Project Change”).²⁹

²⁹ Although “Project Change” is not a defined term in the Siting Board’s statutory provisions or its regulations, case precedent provides useful guidance in this regard. Project changes typically involve significant alterations in an approved project’s design, construction, performance, or location, and the environmental and other impacts that

The Siting Board will approve a proposed project change if the Board determines that the project, as modified, will meet the Siting Board's statutory mandate to provide a reliable energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost, as required by G.L. c. 164, § 69J. Milford Power Project Change at 10; Exelon West Medway Project Change at 4; Sagamore Certificate and Project Change at 25.

B. Scope of Review

If the Siting Board determines that further inquiry regarding a proposed project change is warranted, the scope of the Board's inquiry is limited to the issues raised by the proposed change. Exelon West Medway Project Change at 4; Cape Wind Associates, LLC and Commonwealth Electric Company d/b/a NSTAR Electric, EFSB 02-2A/D.T.E. 02-53 at 4-17 (2008) ("Cape Wind 2008 Project Change"). The Siting Board does not re-litigate in a project change proceeding issues already fully and fairly determined in the original proceeding. IDC Bellingham LLC Compliance, EFSB 97-5A, at 38-41 (2000); see also Box Pond, 435 Mass. at 419-420.

C. Scope of This Project Change Proceeding

1. Reason for the Project Change

a. Company Position

In the Original Proceeding, the intervenor Channel Fish, an abutter to the City Parcel adjacent to the Original Site, raised concerns about potential impacts of the Substation on Channel Fish's fish-processing operations. Final Decision, at 52. Eversource explained that it is requesting the Project Change because the Company wished to comply with the "spirit and intent

result from such alterations. The Board takes this opportunity to place stakeholders on notice that significant project cost increases, such as those above the ranges referenced in Siting Board approvals, may be viewed, in and of themselves, as a "project change." Such significant changes would trigger the requirement that a proponent notify the Siting Board under the project change provision of the Siting Board decision, may be subject to further inquiry by the Siting Board in future proceedings.

of Condition A of the Final Decision to relocate the Substation on the City Parcel” further away from the Channel Fish facility (RR-EFSB-1). The Company stated that the New Site was the only property on the City Parcel made available by the City (id.). The Company asserts that its proposed relocation of the East Eagle Substation to the New Site arises out of Channel Fish’s intervention in the Original Proceeding, and Channel Fish’s opposition to the location of the Substation near its property (Exh. EV-1, at 5).³⁰

b. GreenRoots Position

GreenRoots asserts that Eversource’s suggestion that Condition A somehow required moving the Substation to the proposed New Site is baseless (GreenRoots Reply Brief at 6). Pointing to the language of Condition A, GreenRoots notes that nothing in Condition A mandated relocation of the Substation; rather only that Eversource speak with the City about potential relocation of the Substation and report back to the Board about the progress of those discussions (id. at 7). GreenRoots asserts that Condition A did not compel Eversource to enter into a land deal, and that the Company proceeded to swap parcels without securing Siting Board approval, and without “commonsense contractual provisions” that would provide the Company recourse to rescind the transaction, or sell the New Site for other (non-substation) uses, should the Board deny the Project Change (id. at 7, 8).

c. Analysis and Findings

Condition A of the Final Decision makes clear that the Siting Board required the Company to explore whether relocation of the Substation on the City Parcel would be of mutual interest to the City of Boston, the owner of the City Parcel, and the Company. The Condition

³⁰ The Company indicated that Channel Fish supports the Project with the proposed relocation of the East Eagle Substation from the Original Site to the New Site (Exh. EV-1, at 5). Channel Fish submitted a letter to the Siting Board on November 5, 2018, in support of: (1) the Project with the Substation located at the New Site; and (2) Eversource’s request for approval by the Siting Board to relocate the East Eagle Substation to the New Site (Exh. EV-1, app. B).

requested an update of the status of discussions between the City and Eversource on this subject, within six months of the issuance of the Final Decision, but no other action. The only prohibition included in this condition is that the Company could not commence construction of the Project on the City Parcel until it filed such update, and the record does not indicate any deviation from this prohibition by Eversource.

Discussions between the City of Boston and Eversource were apparently well advanced, even at the time the Siting Board voted to approve the Tentative Decision with Condition A. Months before the Condition A update was due to the Siting Board, the City of Boston issued an RFP to make an alternative Substation parcel available within the City Parcel, and the Company responded to the RFP. Eversource notified the Siting Board of these developments in its Condition A update filing in May 2018. Eversource completed the land swap/transaction on July 25, 2018, going further than what the Siting Board required in Condition A.

Although GreenRoots has raised valid concerns as to whether the Company negotiated the best possible terms for the swap of the Original Site for the New Site, if the Company wanted the New Site, it was required to follow the City of Boston's process for disposition of the New Site. Because of the timing of the City's RFP, Eversource made a decision to complete the land transaction for the New Site before securing Siting Board Project Change approval, a decision for which Eversource bears the risk that the Board would not approve the Substation on the New Site, due to increased costs, environmental impacts, or other factors. While Eversource appears to have assumed certain contractual obligations with the New Site, the Siting Board retains full authority to review and approve, approve with conditions, or reject the Project Change, as the facts warrant.

2. Environmental Impacts

The Siting Board in this proceeding conducted further inquiry into the potential environmental impacts of relocating the Substation from the Original Site to the New Site within the City Parcel. Specifically, as set forth in Section V.A, below, the Siting Board reviewed 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.

3. Need for the Project

In the Original Proceeding, the Siting Board found both a regional and substation-specific reliability need for the Project. See Final Decision at 8-29. In this Project Change proceeding, GreenRoots asserts that the Siting Board should reopen the record in the Original Proceeding to re-consider, here, the issue of Project need. The Presiding Officer denied the Motion to Reopen during hearings. As set forth in Section III.A, above, the Siting Board finds that the issue of Project need is outside the scope of this Project Change proceeding, on the grounds that: (1) the location of the Substation within the City Parcel has no bearing on the need for the Project; (2) the issue of Project need was fully and fairly litigated in Original Proceeding; and (3) GreenRoots has failed to meet the standard of review for the reopening of a completed Siting Board proceeding in which a Final Decision has already been issued. See Section III,A., above.

4. Project Alternatives

CLF in its brief argues for a wider scope for this proceeding. CLF asserts, for example, that the Siting Board is required here to re-address site selection, project need, and project approach (CLF Brief at 9-11). According to CLF, the Substation on the New Site is so substantially different than the Substation on the Original Site 190 feet away that the Board may not rely on the facts found in the Original Proceeding (CLF Brief at 16). In essence, CLF argues that the relocation to the New Site requires the Board to conduct a new, full review of need and site selection and make an independent determination whether each and every fact in the Original Proceeding applies to the Substation on the New Site (CLF Brief at 9-22). CLF argues that the Board must expand the Project Change Proceeding to consider other sites in addition to the Original Site and make a finding that the New Site is superior to a range of other sites (CLF Brief at 9-11). Also, CLF in effect advocates for a new standard for need, stating that the Board must consider *how much* the Substation is needed for reliability when ruling on the Project Change (CLF Brief at 11, 20-21).

CLF misconstrues the scope of a project change proceeding. CLF seeks to expand the scope of this Project Change proceeding to a full de novo review of the Substation. As discussed in the Ruling above, the Siting Board finds that such topics are generally outside the scope of a project change proceeding, and are clearly outside the scope of this Project Change proceeding, as they are not relevant to the relocation of the Substation 190 feet to the west of the original location within the City Parcel.

5. Conclusion on Scope of Project Change Proceeding

The Siting Board has determined that further inquiry in this Project Change proceeding is not warranted with respect to project need, alternative approaches, or site selection. The Siting Board finds that further inquiry is warranted 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 reviews Project cost and potential land use, safety, visual, hazardous waste, noise, traffic, sea level rise, water and wetlands, and magnetic fields impacts in Section V, below.

V. ANALYSIS OF PROPOSED PROJECT CHANGE

A. Environmental Impacts

1. Land Use

a. Company Description

The Company stated that the New Site, like the Original Site, was once part of the City Parcel and that, accordingly, the land use of the New Site and Original Site is virtually identical (Exh. EV-1, at 12). The New Site is generally level, clear of structures, and sparsely vegetated (*id.* at 7). The Company attempted to configure the New Site to accommodate the City of Boston's planned construction of a new East Boston Police Station on the corner of Condor and East Eagle Streets on the City Parcel immediately south of the New Substation Site (*id.* at 12). The Company indicated that the City is still in the feasibility phase regarding plans for the balance of the City Parcel, but intends to continue use of the land as a Boston Public Works

Department yard and eventually for an Emergency Medical Services facility (Exh. EFSB-LU-4).³¹

The New Site abuts Condor Street to the west, directly adjacent to the sidewalk; the American Legion Playground is located across Condor Street (Exh. EV-1, app. A). The Condor Street Urban Wild is located to the north and northwest of the New Site (Exh. EFSB-HW-1(1) at 46, fig. 2; RR-EFSB-7). Both the New Site and Original Site are in close proximity to residential neighborhoods, located south and west of the City Parcel, across East Eagle and Condor Streets, respectively (Exh. EV-1, at 12). The Channel Fish facility and other industrial uses are located to the east of the City Parcel, and are approximately 200 feet closer to the boundaries of the Original Site than the New Site (*id.*). There are 17 residential buildings within 300 feet of the New Site in comparison with twelve residential buildings at the Original Site (*id.*; Final Decision at 86). The nearest residential abutter is 246 feet away from the New Site, whereas the nearest residential abutter is 233 feet away from the Original Site (Exh. EV-1, at 12).

The Company stated that no Project-related construction impacts to public access, parking, and recreational uses of the American Legion Playground or Urban Wild are expected during construction of the Project or operation of the Substation (Exhs. EFSB-LU-2, EFSB-LU-3). The only impact anticipated by the Company would be to pedestrians upon the closure of the Condor Street sidewalk along the property line during construction, which is necessary for public safety (Exh. EFSB-LU-2). Depending upon the City's preferences, the Company would provide signage notifying pedestrians of the sidewalk detours, or a temporary sidewalk in the street along the curb line (*id.*). Upon completion of Project construction, the Company will reconstruct the Condor Street sidewalk adjacent to the New Site property line to meet City standards (Exh. EFSB-V-4).

³¹ The Company notes that it has been informed by the City of Boston that the current plan for the City Parcel does not include a soccer field; an earlier City of Boston site plan for the Parcel filed in the Original Proceeding included a soccer field (Exh. EFSB-LU-4). The Company maintains that its Substation on the New Site is not incompatible with an adjacent soccer field (*id.*).

b. Positions of the Parties

CLF asserts that the New Site causes a more dramatic change in land use than the Original Site, because the relocation of the Substation by Eversource has caused the City of Boston to shelve plans to build a soccer field on the City Parcel (CLF Brief at 17, citing Tr. 2, at 350). CLF also contends that the New Site is also deficient because it is in proximity to the American Legion Playground and the Urban Wild, and to 17 residential units, which exceeds the number for the Original Site (CLF Brief at 17). GreenRoots argues that the use of the New Site for a Substation is inconsistent with previous commitments made by the City that the area would be developed into green space for the community (GreenRoots Brief at 3). As noted by GreenRoots, neighborhood residents' concerns primarily address health and safety of the New Site, and visual impacts, and are described in sections below.

c. Analysis and Findings

The New Site is located only 190 feet west of the Original Site and remains within the boundaries of the City Parcel. The New Site itself consists of the same land use characteristics; it is previously disturbed with limited vegetation. The location of the New Site is approximately the same distance from residences. It is closer to the American Legion Playground and Condor Street Urban Wild but does not require installation of transmission lines in streets in East Boston. Related issues are discussed below under safety, visual, noise and traffic.

As with the Substation at the Original Site, the Siting Board finds that the land use impacts of the relocation of the Substation to the New Site would be minimized.

2. Safety

a. Company Description

The Company indicated that it is proposing all of the same design and safety measures for the New Site as proposed for the Substation on the Original Site, and that the Substation would adhere to all federal, state and local regulations, as well as industry standards and guidelines established for the protection of the public (Company Brief at 38-39, citing

Exh. EV-1, at 19). Eversource stated that the general public would be prevented from accessing the Substation by fencing that meets or exceeds the National Electric Safety Code as well as a 25-foot-high solid wall along Condor Street (Exh. EFSB-G-6; Company Brief at 39). The Facility would have a fire suppression system to extinguish any potential transformer fires; the Company asserts that the Substation would not pose a risk of a fire to the jet fuel storage on East Eagle Street because of safe design of the Substation, and the distance between the Substation and the fuel tanks (Company Brief at 38, citing Exhs. EFSB-G-6, GR-SS-05).³²

During construction, the Company would require each contractor to submit a Project Safety Plan that meets the safety requirements of Eversource as well as the Occupational Safety and Health Administration (“OSHA”) and other regulatory agencies (Company Reply Brief at 21, citing Exhs. EV-1, at 19, EFSB-HW-7). The Company stated that during remediation and construction, the site will be monitored by a construction company or Eversource representative and will be secured by fencing; the access gates will be locked during all non-working and overnight hours (Exhs. EFSB-HW-7; EV-1, at 20).

The design for the New Site has a 25-foot high concrete wall to shield the transformers along Condor Street, a 12-foot-high concrete wall topped with a 13-foot-high fiberglass panel screens to shield the control house along Condor Street, and an approximately 12-foot-high fiberglass fence along the remaining portions of the site (the eastern and southern site boundaries and most of the northern boundary) (Exhs. EFSB-V-1(S1); EV-1, app. E; RR-EFSB-11). With regard to the northern fenceline, the Company proposed continuing the 25-foot-high concrete wall only along the area where the transformer is situated, at the northwest corner; the majority

³² The Company stated that the closest jet fuel storage tank is located 450 feet from the edge of the New Site, which the Company described as far exceeding the 80-foot distance permitted under the Massachusetts Comprehensive Fire Safety Code based on the minimum required safety distance calculation (Exh. GR-SS-05; Company Reply Brief at 20-21). The Original Site is approximately 300 feet from the same jet fuel storage tank. Final Decision at 51.

of the northern boundary would consist of a 12-foot-high fiberglass fence (for approximately 120 feet) (Exh. EV-1, app. E; RR-EFSB-3).³³

In response to staff questioning, the Company evaluated four options, each of which would both block views of the Substation from the north, and prevent trespassers from accessing the Substation across approximately 120 feet of the north fenceline (Tr. 1, at 87-92; RR-EFSB-3).³⁴ The four options for replacing the originally proposed design of the 12-foot-high fiberglass fencing along the northern fenceline beyond the transformer and their estimated costs are: (1) continuing the 25-foot high concrete wall (\$1,140,000); (2) installing a 12-foot high concrete wall (\$515,000); (3) installing a 12-foot-high concrete wall with an additional 13-foot-high fiberglass fence on top (\$595,000); and (4) installing a 25-foot-high fiberglass fence (\$175,000) (RR-EFSB-3; Tr. 1, at 87-92). Based on the attributes and cost, the Company indicated that installing a 12-foot high concrete wall with an additional 13 feet of fiberglass fence (for a total height of 25 feet) is the best of the four options as it provides reasonable screening and an extra measure of security at the northern fenceline (Tr. 2, at 394-395).

b. Positions of the Parties

GreenRoots and CLF assert that the design of the proposed Substation poses safety and security risks for nearby residents because unauthorized persons would be able to access the site, including children and adolescents using the nearby American Legion Playground and adjacent Urban Wild public park (Exh. GR Combined PFT at 5-8; ³⁵ Tr. 2, at 356-57, 359-360; GreenRoots Brief at 21). GreenRoots contends that the potential for access to the site might

³³ The transformers are required by code to be surrounded by 25-foot-high concrete walls, which are fire resistant (Tr. 1, at 76; RR-EFSB-9).

³⁴ GreenRoots noted that currently there is access via a pathway along the northern portion of the City Parcel, beginning at Condor Street, where the proposed Substation would be located (Tr. 2, at 360).

³⁵ The GR Combined PTF is the joint prefiled testimony of Roseann Bongiovanni, John Walkey, and Sandra Aleman-Nijjar.

result in serious injury or death due to exposure to dangerous, high-voltage electrical equipment (GreenRoots Brief at 21, citing Exh. GR Combined PFT at 6, Tr. 2, at 357).

GreenRoots asserts that the 12-foot-high perimeter fence consisting of half-inch by half-inch diamond-shaped mesh is not “non-scalable” as the Company contends (GreenRoots Brief at 22). GreenRoots notes that Eversource conceded that it has neither performed nor commissioned any human-factor analysis to support its belief that the fence is non-scalable (id., citing Tr. 1, at 170). Further, GreenRoots notes that the Substation would have no permanent on-site personnel for six out of seven days of the week (id., citing Tr. 1, at 33, 166).

GreenRoots also raises concerns regarding the risk of fire or explosion at the Substation particularly given: (1) the large quantity of jet fuel located several hundred feet away from the site; and (2) the large number of non-English speaking residents nearby that would need to be notified in the case of an emergency (GreenRoots Brief at 23, citing Tr. 2, at 357, 358).

GreenRoots cites incidents at substations in Massachusetts and other states to illustrate this risk (GreenRoots Brief at 23; Exhs. GR-SS-4; GR Combined PFT at 6; GR-11; GR-12).

c. Analysis and Findings

The Company is proposing the same design and safety measures as were proposed for the Substation at the Original Site. The Siting Board found in the Final Decision that there was nothing in the record to support a conclusion that construction of the Substation, as proposed by the Company, would pose an undue safety risk to the East Eagle Street neighborhood; the Board did find that potential safety impacts associated with the Project would be minimized. Final Decision at 113. The distance from the Substation to the jet fuel tanks far exceeds the minimum distance required by the Massachusetts Comprehensive Fire Safety Code. Further, the Siting Board notes here that the jet fuel depot is located approximately 150 feet further away from the New Site than from the Original Site.

GreenRoots asserts that the new location, closer to both the American Legion Playground and the Urban Wild, coupled with an inadequate security design, is a safety concern. GreenRoots points specifically to the placement of the proposed 12-foot-high mesh fence that it asserts is potentially scalable, in areas accessible to children and the general population. While

there is no evidence in the record that the 12-foot fiberglass fence proposed by the Company could be scaled, the use of a 12-foot concrete wall coupled with the 13-foot fiberglass fence on top creates an enhanced security wall that would serve to prevent access into the Substation property. Given the proximity to the Urban Wild, as well as other areas that are traversed by the public to the north, the Siting Board directs the Company to install a 12-foot high concrete wall with a 13-foot fiberglass fence on top along the northern portion of the Substation site, which borders areas that could be potentially accessible by the public.

The Siting Board finds that, with implementation of the condition pertaining to the northern wall, the safety impacts of the relocation of the Substation to the New Site would be minimized.

3. Visual

a. Company Description

The Company asserts that although the Substation would be more visible from Condor and East Eagle Streets at the New Site than at the Original Site, the New Site is not inconsistent with the existing industrial nature of the area to the east of the New Site (Company Reply Brief at 22). Further, the Company noted that the new East Boston Police Station proposed for the southwest corner of the City Parcel would likely obscure most of the views of the Substation from East Eagle Street at Condor Street and from Shelby Street at East Eagle Street (Exhs. EV-1, at 13 and app. E; EFSB-V-3; EFSB-LU-4).

The Company explained that the screen design, materials and components from the Original Site are unchanged and have been carried over and incorporated into the architectural renderings of the New Site, with no significant difference between the two designs (Exh. EFSB-V-2; RR-EFSB-9).³⁶ The Company asserted that the visual impacts from the Substation at the New Site would be mitigated in the same manner as proposed at the Original Site (Company

³⁶ The design at the New Site will incorporate a vehicle entrance gate in the 25-foot-high precast concrete wall along Condor Street that was not required in the Original Site design (RR-EFSB-2).

Brief at 15, citing Exh. EV-1, at 12).³⁷ However, the Company stated that, as the screening design has been adapted to the New Site, it has continued to develop an architectural detailing strategy suitable for the more directly visible location as viewed from the public way (RR-EFSB-2). The Company stated during evidentiary hearings that the aesthetic design elements for the concrete and fiberglass walls have not yet been finalized for the New Site (Tr. 2, at 390; RR-EFSB-9). The Company asserted that any aesthetic design must meet Eversource operations and security compliance requirements as well as be approved by the Boston Planning and Development Agency (“BPDA”); the approval would be in the form of a letter from the BPDA finding the design is acceptable (Tr. 1, at 36, 42-44; RR-EFSB-19).³⁸

The Company recently outlined a proposed series of events to solicit input on the design of the Substation from the community (RR-EFSB-19). The community input process as proposed is as follows: (1) the Company to hold a focus group meeting with ten to fifteen members, including community members;³⁹ (2) based on input from the focus group discussion, the Company would develop conceptual design plans; (3) the conceptual design plans will be reviewed at a follow-up focus group meeting; (4) an Open House will be held for the community

³⁷ Given the location of the Substation, the Company indicated that there are no landscaping plans as the Substation fencing and architectural screening would be placed along the New Site western property line, and there is no space available for landscaping (Exh. EFSB-V-4).

³⁸ The minutes of a December 18, 2018 meeting with the BPDA, at which renderings of the Substation design were discussed, included BPDA staff comments with regard to architecture and design including: “the new location requires more careful consideration of appearance due to proximity to public uses” and “likes the patterning of concrete walls” (Exh. EFSB-V-2(1)).

³⁹ The Company suggests the following groups as attendees of the focus group: BPDA, State Senator Joseph Boncore’s Office, Representative Adrian Madaro’s Office, Boston City Councilor Lydia Edwards’ Office, Boston Mayor’s Office of Neighborhood Services, Boston Public Facilities Department, Boston Public Works Department, Boston Parks and Recreation Commission, Utile Design, Eagle Hill Civic Association, and GreenRoots (RR-EFSB-19).

to view and provide feedback on the design plans; and (5) following the Open House, the Company will work with BDPA to select a final design (id.).⁴⁰

b. Positions of the Parties

GreenRoots describes the proposed design of the Substation as unsightly and out of character with the surrounding community (GreenRoots Brief at 24, citing RR-EFSB-6). Specifically, GreenRoots asserts that the design appears to be more appropriate for the new Seaport or South Boston Waterfront and is not consistent with the East Boston and Chelsea Creek historic marine industrial architecture and design (RR-EFSB-6).

GreenRoots and CLF point to the lack of community input to date on any aesthetic plan for the Substation (Tr. 3, at 529-530; GreenRoots Brief at 24; CLF Brief at 27). CLF notes that Eversource has committed to working with the BPDA, Boston Public Works, and the City’s architects for the police station and other agencies – but asserts that this input cannot function as a proxy for neighborhood input (CLF Brief at 27).⁴¹ GreenRoots asserts that, even though the current undeveloped City Parcel is presently aesthetically unappealing, the neighborhood would choose the present undeveloped site with minimal public safety risks over the proposed Substation (GreenRoots Brief at 25). See Section V.A.2, above for GreenRoots safety concerns.

⁴⁰ After evidentiary hearings, the Company provided information indicating that it has begun this process (RR-EFSB-19(S1); RR-EFSB-19(S2)). The Siting Board received comments from community members who were not satisfied with the process and outcome. See Letter of Joshua M. Daniels dated January 31, 2020; email comments from limited participants Eric Burkman and Julia Ivy.

⁴¹ Both GreenRoots and CLF point out that in the closing documents for the New Parcel, the City of Boston agreed that “in any public or private forum, [the City would not] interfere with, object to, appeal or otherwise, directly or indirectly, oppose, or support those opposing, the issuance of any required permits, licenses or approvals with respect to the [Eversource] Project” (GreenRoots Brief at 3 and CLF Brief at 27, citing RR-GR-2(1) at 11).

c. Analysis and Findings

As discussed above, the relocation of the Substation from the Original Site to the New Site would result in the Substation being sited on the western side of the City Parcel versus the eastern side of the City Parcel, but approximately the same distance north of East Eagle Street. Because the distances to residents are essentially unchanged, the scale of visual impact from residences would be similar. Further, the proposed location of the police station would likely largely obscure views of the Substation from East Eagle Street. However, the views of the Substation from Condor Street, specifically from the American Legion Playground and the Condor Street Urban Wild, would be more pronounced.

The initial visual treatments submitted in this proceeding for the Substation on the New Site were virtually the same as the design submitted for the Substation at the Original Site despite the closer proximity to the recreational areas along Condor Street. The Company stated it has not finalized the design for the proposed Substation, specifically for the western wall that abuts Condor Street. Further, the Company has now provided a proposal to conduct an expanded public process to address concerns about the visual impacts in the immediate neighborhood due to the relocation of the Substation.

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 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 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 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. 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.

In Section V.A.2, above, the Siting Board directed the Company to install a 12-foot-high concrete wall with a 13-foot fiberglass fence on top along the northern portion of the Substation site to minimize safety impacts. This wall would also contribute to the minimization of visual impacts as it would screen views of Substation equipment from the north.

The Siting Board finds that, with implementation of the above condition, the visual impacts of the relocation of the Substation to the New Site would be minimized.

4. Hazardous Waste/Remediation

a. Company Description

The location of the New Site on the City Parcel consists of two sub-parcels of land within the City Parcel, numbered 0 Condor Street and 338 East Eagle Street (Exhs. EFSB-P-3; EFSB-HW-2(1)). The entire 0 Condor Street Parcel, regulated and defined by the Massachusetts Department of Environmental Protection (“MassDEP”) Massachusetts Contingency Plan (“MCP”) 310 CMR 40.000, is subject to G.L. Chapter 21E under Release Tracking Number (RTN 3-30299),⁴² and is subject to an Administrative Consent Order (“ACO”) issued by MassDEP on December 6, 2016 (Exhs. EFSB-P-3; EFSB-HW-2(1)).⁴³ The 0 Condor Street Parcel includes both the New Site, owned by Eversource, to the north, and a portion owned by the City of Boston to the south; it is considered a State-listed hazardous waste site under the MCP (Exhs. EFSB-P-3; EFSB-HW-2(1)).⁴⁴ Eversource asserted that the contaminants at the

⁴² RTN 3-30299 contaminants include petroleum hydrocarbons, polycyclic aromatic hydrocarbons, volatile organic compounds, and metal-impacted soil (arsenic, cadmium, chromium, lead, and zinc), and metal-impacted groundwater concentrations above applicable MassDEP Reportable Concentrations (Exhs. EFSB-HW-1(1) at 5-3; EFSB-HW-1(2) at 1-1).

⁴³ The 338 Condor Street portion of the New Site was issued RTN 3-33978, a separate tracking number not subject to the ACO (Exh. EFSB-P-3).

⁴⁴ Four reports on the City Parcel site have been prepared by Weston and Sampson for the City of Boston as of March 2019: (1) Phase II Comprehensive Site Assessment Report

New Site are similar to those identified at the Original Site but noted that the levels are several orders of magnitude higher; further, the Company stated that the Original Site did not require any remediation under MCP rules (Exhs. EV-1, at 15; EFSB-HW-2; Tr. 2, at 288-289, 399-400). The volume of soil requiring remediation is 12,300 tons on the New Site, including both RTN parcels (Exh. EFSB-P-3; Tr. 2, at 288-289).⁴⁵ The Company estimates the cost of the remediation for the New Site at \$4.7 million (Exh. EV-1, at 21).⁴⁶

(July 2016); (2) Supplemental Phase II Comprehensive Site Assessment Report (January 2018); (3) Revised Phase III Remedial Action Plan (January 2018); and (4) Phase IV Remedy Implementation Plan (March 2018) (Exhs. EFSB-HW-1(1); EFSB-HW-1(2); EFSB-HW-1(3) at ES).

⁴⁵ In the Phase IV Remedy Implementation Plan for RTN 3-30299 (0 Condor Street) (which is the last remedial action plan prepared by the City of Boston prior to the land swap with Eversource, which encompasses the New Site) the document describes the overall objective of the plan as being “to reduce potential exposure to site contaminants and achieve a condition of NSR [No Significant Risk] to human health, safety, public welfare and the environment for current and foreseeable site uses” (Exh. EFSB-HW-1(3) at 14). The general approach for achieving and maintaining these objectives includes: (1) construction of an engineered impermeable barrier over the entire Site; (2) construction of a new public facilities building [police station] on a portion of the Site with a slab-on-grade foundation that meets MCP engineered barrier requirements; (3) excavation and off-site disposal of contaminated soil as necessary to construct the engineered barrier, new public building and clean utility corridors; and (4) the placement of an AUL [Activity Use Limitation] across the entire Site. The Phase IV Remedy Implementation Plan anticipates excavating and disposing of approximately 2,000 tons of contaminated soil off-site (*id.* at 15). The City’s Phase IV plan focuses on preventing water infiltration of the contaminated soil by site grading to divert surface water runoff and stormwater away from the engineered barrier, and installation of stormwater conveyance infrastructure (*e.g.*, sub-drains, swales, etc.) to collect water draining from the barrier’s geo-composite drainage layer (*id.* at 13). The Phase IV plan includes remediation design and miscellaneous site work on the adjacent 338 East Eagle Street property (documented under RTN 3-33978) (*id.* at 14-15).

⁴⁶ The Company based this figure on the nature of the contamination (mainly due to urban fill); Eversource does not expect to have any recourse to recover the cost of remediation from prior owners (RR-EFSB-18).

The Company stated constructing the Project would require excavating significant quantities of soil and that the soil contamination present at the New Site poses a potential risk to human health for construction/utility workers, and therefore, pre-construction remediation is required (Exhs. EFSB-P-3, at 2; EFSB-P-4). The construction activities at the New Site will be conducted as a Release Abatement Measure (“RAM”); the RAM plan/document identifies the limits of the remediation, details the goals of the remediation, and is submitted to MassDEP for approval (Exh. EV-1, at 15; Tr. 1, at 97). The Company has determined that excavation and off-site management of the contaminated soil is the preferred remediation method (Exh. EFSB-P-4).⁴⁷ The Company considered construction of an engineered barrier/cap, but concluded that it would not address the contaminated source material in the soil that is leaching into groundwater at the New Site, and would therefore be unlikely to achieve a Permanent Solution Statement under the MCP (Exhs. EFSB-P-4; EFSB-HW-4).⁴⁸ Perimeter air and dust monitoring would be conducted continuously during working hours; if the air monitoring shows exceedance of air quality standards, the Company would implement water controls to moisten the soils (Exh. EFSB-HW-7; Tr. 1, at 131). The remediation contractor would also be required to submit and implement a Health and Safety Plan in accordance with OSHA requirements and a decontamination plan (Exh. EFSB-HW-7).

The Company anticipates that excavation of the contaminated soil and dewatering would improve groundwater quality at the New Site and would ultimately allow for a Permanent Solution Statement (Exh. EFSB-P-4). The Company reported that the remediation at the New Site was to begin in the 3rd quarter of 2019 and the Company anticipated that a Permanent

⁴⁷ The remediation is conducted under the supervision of a licensed site professional (“LSP”) (Exh. EFSB-HW-6). The LSP for the Eversource portion of the remediation is Tighe and Bond and the LSP for the City of Boston portion is Weston and Sampson (id.; Tr. 1, at 99).

⁴⁸ Several of the site assessment reports confirmed the presence of contaminated groundwater (Exh. EFSB-HW-1(2) at 17, 22). However, the reports also indicate that the contaminated groundwater is not presently being used as a source of drinking water and that the groundwater contaminants of concern do not appear to be migrating to nearby surface water (Chelsea Creek) (Exh. EFSB-HW-1(3) at 7, 13).

Solution Statement with Conditions would be filed with MassDEP by the end of the 1st quarter of 2021 (Exhs. EFSB-HW-5; GR-HW-5; Tr. 1, at 129).⁴⁹ The Company reported that its obligations under the MCP and the ACO to remediate the site are tied to the ownership of the site, and that the Company must conduct the remediation regardless of whether the New Site is developed as a substation (Exh. EFSB-P-5).

b. Positions of the Parties

GreenRoots asserts that potential environmental impacts as a result of undertaking remediation of the New Site are necessarily greater than at the Original Site (which required no remediation) and includes the risk that contaminants such as lead, cadmium, and arsenic would be released in the form of fugitive dust or leach into the groundwater (GR Reply Brief at 9, citing Tr. 2, at 286-290). GreenRoots contends that when Eversource agreed to the land swap for the New Site, Eversource knew that remediation would be required, but that the Company went ahead with the agreement even though it had no idea of the extent of the cleanup costs because it didn't have "an opportunity to do subsurface investigations and testing of the subsurface soils at the time" (id. at 4, citing RR-EFSB-1; Tr. 1, at 21).

c. Analysis and Findings

As a result of the relocation of the Substation site and the land swap with the City of Boston, the Company is required to remediate a large portion of the New Site consistent with the ACO between MassDEP and the City of Boston and to follow other regulatory requirements under the MCP. The remediation will be overseen by an LSP and conducted in accordance with MassDEP regulations concerning hazardous waste remediation under the MCP. The remediation contractor would be required to submit and implement a Health and Safety Plan in accordance

⁴⁹ The Company indicated that in order to achieve a Permanent Solution it must ensure a condition of No Significant Risk for soil and groundwater through implementing required Comprehensive Remedial Actions (Exh. EFSB-HW-1(1) at ES-1; Tr. 1, at 105-106). As part of its Permanent Solution, the Company anticipates that the site would have an AUL under the MCP (Tr. 1, at 105-106).

with OSHA and a decontamination plan, and the Company's construction activities will be conducted in accordance with a RAM. The goal is to attain a Permanent Solution through excavation of the contaminated soils and improvement to the groundwater.

Given the location of RTN-3-30299 on the City Parcel, and the existing ACO signed in 2016, the 0 Condor Street Parcel must be remediated, and the mitigation methods are well defined. The record shows that with the transfer of title to Eversource, and with its new remediation plan, Eversource now intends to excavate and remove approximately an additional 10,300 tons of contaminated soil relative to the last remediation plan prepared by the City of Boston in March of 2018, when it owned the New Site. With its remedial plan, Eversource anticipates achieving reductions in contaminant concentrations in soil and groundwater sufficient for it to submit to MassDEP, by the end of the first quarter of 2021, a Permanent Solution Statement with Conditions. The record indicates that, compared to only installing an engineered barrier, the Company's plan for more extensive pre-construction remediation would likely lead to an earlier Permanent Solution Statement and attainment of "no significant risk" to health, safety, public welfare, or the environment, as defined under the MCP.

The Siting Board finds that with implementation of the compliance measures listed above, and compliance by the Company with all applicable local, state, and federal requirements pertaining to the remediation of the New Site, the hazardous waste impacts of the relocation of the Substation to the New Site would be minimized.

5. Noise

a. Company Description

The Substation at the New Site will contain the same components, including two transformers, as were proposed and approved at the Original Site (Exh. EV-1, at 6, 14). The Company conducted an Updated Noise Study in May 2018 to assess the impact of the transformers at the new location (*id.* at 14).⁵⁰ The Updated Noise Study used the ambient sound

⁵⁰ The Updated Noise Study, as well as the original noise analysis, was based on the operational noise level of three transformers, as the design included the ability to

levels and locations established in 2014, which the Company stated were suitable for the updated analysis (*id.* app. F at 4-1).⁵¹ Each of the transformers would be located within a three-walled bay with the open sides facing towards the east property boundary, which is in the interior of the City Parcel (*id.* app. F at 5-2 and fig. 5-1). The Company stated that based on the Updated Noise Study, operation of the Substation at the New Site would have minimal noise increase and, in most cases, would not be audible, and further would comply with MassDEP as well as the City of Boston noise regulations (*id.* at 15). The Company's Updated Noise Study, based on the measurement points from 2014, indicated that the maximum noise level increase beyond the property lines would be less than three dBA (*id.* app. F at 5-4, Table 5-2).

Given the proposed relocation of the Substation to the New Site, at the request of the Siting Board staff, the Company refined the noise modeling at two locations to the north and west of the New Substation (RR-EFSB-5; Tr. 1, at 151-157). The Company modeled an additional property line receptor that reflected a point at the western boundary along the Condor Street sidewalk, just outside the northernmost transformer enclosure (RR-EFSB-5; Tr. 1, at 155-159). The Company reported that the increase over ambient would be less than two dBA at this new location (RR-EFSB-5). At a fenceline location along the northern property line that abuts vacant land owned by the City of Boston, the Company modeled that there would be a noise increase over ambient of approximately 10 dBA (Tr. 2, at 384; RR-EFSB-5; RR-EFSB-7).⁵² Where the Company mapped the Urban Wild 75 feet to the north, Project noise would be

accommodate the addition of a third transformer (Tr. 2, at 226, 310). See Final Decision at 33, n.41.

⁵¹ The ambient sound measurements were taken at six locations (Exh. EV-1, app. F at 4-1). Receptor MP6 is located along Condor Street – the closest location to the New Site to the west; receptor MP4 is located closest to the New Site to the east; receptor MP3 is the closest location to the north of the New Site; and receptor MP5, located along East Eagle Street, is the closest location to the south of the New Site (*id.* app. F at fig. 4-1).

⁵² Somewhat inconsistently, the Company also provided information suggesting that the boundary of the Urban Wild area extends into the City Parcel up to the New Site (Exh. EFSB-HW-1(1) at 46).

10 dBA less than at the northern fenceline (RR-EFSB-5; RR-EFSB-7).⁵³ The Company indicated that the use of a 12-foot concrete wall with 13-foot of fiberglass fencing on top (as required above) would attenuate noise impacts (RR-EFSB-8; Tr. 2, at 384).

With regard to construction noise, the Company indicated that abutters may experience elevated noise levels associated with a typical construction site, but that the impacts would be temporary (Exh. EV-1, at 15). The Company further asserted that the nearest residential abutters are further away from the New Site (246 feet) than from the Original Site (233 feet) (*id.* at 12, 15). The western fence line of the New Site, along Condor Street, is 50 feet away from the American Legion Playground and Recreation Area which is on the other side of Condor Street (Exh. EFSB-NO-2).

The Company indicated that it expects to work at the New Site from 7:00 a.m. to 6:00 p.m., Monday through Saturday (Exh. EFSB-NO-1; Tr. 1, at 133). The Company stated it has not yet discussed these construction hours with the City of Boston, where the permitted hours are 7:00 a.m. to 6:00 p.m., Monday through Friday (Exh. EFSB-NO-1; Tr. 1, at 133). The Company explained that it would make a weekly request to the City of Boston Inspectional Services Department for extended hours in the event that it needs to work beyond the normal City of Boston work hours (Tr. 1, at 133-134). The Company stated that it will comply with applicable City of Boston noise regulations to reduce construction noise impacts (Exh. EFSB-NO-2). In the event that the construction levels exceed the regulated thresholds, the Company stated it could install sound blankets as a noise barrier along the perimeter fencing (*id.*; RR-EFSB-4). The Company noted it has used sound blankets on other projects to effectively reduce sound where the barrier was between the line of sight of the receptor and the sound source (RR-EFSB-4).⁵⁴

⁵³ The Company noted that that this increase is based on the ambient measurements at two nearby locations, which may possibly result in the measured increased noise levels being greater than actual noise levels (RR-EFSB-5).

⁵⁴ The Company recently used sound blankets in South Boston to mitigate sound during horizontal directional drilling for a transmission line (RR-EFSB-4). The Company

b. Analysis and Findings

Similar to the operational noise impacts of the Substation at the Original Site, the record shows that operation of up to three transformers at the New Site would increase noise levels by less than three dBA compared to existing conditions at all locations identified as receptors in the Original Proceeding, including the sidewalk along Condor Street. Further, operational noise would not create any pure tone condition as defined by MassDEP at these same locations. The operational noise impact of the Substation at the New Site along the Condor Street sidewalk (closest to the transformers) is two dBA, which would result in even lower (and minimal) noise impacts across the street at the American Legion Playground. However, given the new location, another receptor location along the northern Substation property line within the City of Boston Parcel was modeled, with an increase of approximately 10 dBA. While the modeled noise increase is approximately 10 dBA at the northern fenceline of the New Site, it would diminish to near zero dBA at the active part of the Urban Wild, some 75 feet further north. Accordingly, Project noise would have little effect on total noise levels in this area. In addition, the installation of the 12-foot high concrete wall with the 13-foot fiberglass fence on top, as directed above, as opposed to just the 12-foot high fiberglass fence that was modeled, would help further minimize noise impacts.

With regard to construction noise at the New Site, the Company proposes a six day-per-week construction schedule from 7:00 a.m. to 6:00 p.m., Monday through Saturday. The City of Boston construction regulations are the same hours but confined to Monday through Friday, with the provision that applicants may request an extension of permitted hours from the Boston Inspectional Services Department. The Company has not yet approached the City of Boston to discuss the possibility of Saturday construction. Given the relocation of the Substation to the New Site where the Substation is now in closer proximity to the American Legion Park and the Condor Street Urban Wild, the Siting Board directs the Company to limit construction of the

estimated the cost for installing sound blankets for the 183 linear feet along Condor Street is \$39,100 (id.).

Substation to Monday through Friday, from 7:00 a.m. to 6:00 p.m. Work that necessarily has a longer required continuous duration than normal construction hours allow shall be exempted from the above weekday and Saturday limitations with approval by the City. Should the Company need to extend construction work beyond these hours and days, see Final Decision at Condition B, last two paragraphs; first paragraph of Condition B is superseded by Condition V, below. Further, the Siting Board directs the Company to place sound blankets on the existing perimeter fence along the western side of the New Site during construction, prior to the installation of the 25-foot-high concrete wall.

The Siting Board finds that, with implementation of the above conditions, the noise impacts of the relocation of the Substation to the New Site would be minimized.

6. Traffic

a. Company Description

As discussed above, the location of the New Site is on the western portion of the City Parcel, above where the existing Chelsea Creek Crossing infrastructure is located (Exh. EV-1, app. A).⁵⁵ The Company explained that the New Lines would now be able to connect directly to the Substation within the property limits of the New Site without having to be routed onto public streets (Exhs. EV-1, at 8; EFSB-G-4). Specifically, the 650 feet of the New Lines that were to be located beneath East Eagle Street and Condor Street to interconnect the Substation at the Original Site to the Chelsea Creek Crossing are no longer necessary (Exhs. EV-1, at 8; EFSB-G-4). The Company asserts that use of the New Site will therefore reduce construction

⁵⁵ The Chelsea Creek Crossing consists of three sets of conduits under Chelsea Creek, beginning at the City Parcel and crossing northward to a parking lot at the corner of Willow and Marginal Streets in Chelsea (Original Petition at 4-5). The Chelsea Creek Crossing consists of seven 8-inch high-density polyethylene (“HDPE”) conduits in each duct bank (for a total of 21 conduits) (id.). The outer two duct banks are currently occupied by distribution circuits (id.). The middle duct bank is available for the Project (id.).

duration on public streets and lessen traffic impacts, especially on East Eagle Street (Company Brief at 9, citing Exh. EV-1, at 8).

The Company stated that when construction of the Substation is completed, its personnel would access the New Site via a gate in the 25-foot-high concrete wall along Condor Street (Exh. EFSB-LU-1(R); Tr. 1, at 31). The Company had originally intended post-construction access to the Substation to be via the existing driveway from Condor Street onto an easement on the City Parcel, and then through a gate on the City Parcel (Tr. 1, at 31-33). However, the Company stated that the City of Boston would not grant the easement to the Company, necessitating the direct access to the New Site from the gate along Condor Street (id. at 31-33). During construction of the Substation, the Company indicated would be able to use the existing driveway from Condor Street through the City Parcel (id. at 39-40).

b. Analysis and Findings

The use of the New Site allows the Company to interconnect the Chelsea Creek Crossing with the Substation without the need to install the New Lines in East Eagle Street and Condor Street, minimizing construction-related traffic impacts. During construction, an existing driveway on Condor Street would be the access point for construction vehicles and equipment. During operation, any Company vehicles would be accessing the New Site through a gate in the wall along Condor Street. Given the location of the American Legion Playground and the Urban Wild, and the pedestrian and vehicle traffic associated with use of these recreation areas, the Siting Board directs the Company to develop and implement a Substation traffic mitigation plan relating to the egress and ingress of construction and operational vehicles on Condor Street, and submit such plan to the Siting Board 30 days prior to commencing construction. In developing the traffic mitigation plan, the Company is directed to consult with the City of Boston and to take into account the use of nearby properties such as the American Legion Playground and Urban Wild.

The Siting Board finds that, with implementation of the above condition, the traffic impacts of the relocation of the Substation to the New Site would be minimized.

7. Water and Wetlands/Sea Level

a. Background on Original Site

In the Final Decision, the Siting Board noted that the proposed East Eagle Substation would be located on lands subject to G.L. c. 91 (“Chapter 91”) jurisdiction, including filled tidelands within the Chelsea Creek Designated Port Area (“DPA”). Final Decision at 128. Eversource had begun the process of seeking approval for the Project under Chapter 91; as part of the MassDEP Chapter 91 proceeding for the Project, MassDEP had issued a Determination that the Project constitutes a Water-Dependent Use Project as defined under Chapter 91. Id.

The Siting Board also noted that a portion of the Original Site is located within the buffer to wetlands resource areas, requiring the filing of a Notice of Intent with the Boston Conservation Commission. Final Decision at 128. Eversource committed to developing a Stormwater Pollution Prevention Plan (“SWPPP”) and implementing sedimentation and erosion control measures during Project construction and operation to minimize potential impacts to adjacent water bodies and protect against shoreline erosion. Id. Compliance with the Massachusetts Stormwater Standards would also result in an improvement to stormwater management at the Substation site. Id. Thus, the Siting Board concluded that the Substation was unlikely to exacerbate shoreline erosion on the City Parcel, or to impede shoreline stabilization efforts. Id.

The Siting Board noted further that the Substation’s original proposed location near Chelsea Creek warranted consideration of the potential for adverse impacts from future sea level rise. Final Decision at 129. The Final Decision notes that the Company calculated a design flood elevation (“DFE”) for the Original Site of 20.21 feet above mean lower low water (“MLLW”), by combining predictions for a 500-year storm event with 16.21 feet above MLLW, sourced from a Federal Emergency Management Agency (“FEMA”) Flood Insurance Study (“FIS”); with another three feet from sea level rise projections for the 40-year design lifespan of

the Project, and at least a one-foot gap between floodwaters and electrical equipment.⁵⁶ Id. at 125, 129. For the Original Site, the Company selected a combination of site grading and concrete equipment foundations reaching 22 feet relative to MLLW, in order to raise electrical equipment at the Substation above the DFE of 20.21 feet. Id. at 125-126, 129. The Siting Board concluded that the Company appropriately addressed risks associated with sea level rise by positioning electrical equipment above any anticipated flood level. Final Decision at 129.

The Siting Board found that impacts to wetlands and waterways along the Primary Route would be minimized, assuming the issuance of various Chapter 91 approvals and implementation of the Company's proposed mitigation measures. Id. at 129.

b. Company Description

i. Wetland and Tideland Impacts

The New Site is located adjacent to Condor Street just south of Chelsea Creek. The Company stated that while portions of the Original Site were located within jurisdictional resource areas under the Massachusetts Wetlands Protection Act ("WPA"), including the 25-foot Riverfront Area adjacent to Chelsea Creek, the 100-foot buffer zones to coastal bank and coastal beach, and the Chelsea Creek DPA, the New Site does not involve direct impacts to wetland resource areas and will be designed and constructed to meet applicable performance standards under the WPA Regulations (Exhs. EV-1, at 16; GR-ZLU-3).⁵⁷

⁵⁶ Eversource provided information about the existing and proposed lowest elevation of the Original Site, relative to the 500-year base flood level and historical data, all expressed relative to MLLW. Final Decision at 126, n.123. According to the Company, the 500-year base flood elevation is, as noted, 16.21 feet; the highest water level at Boston Harbor recorded by the National Oceanic and Atmospheric Administration ("NOAA") was 15.10 feet; the lowest current elevation of the Original Site is 18.85 feet; and following construction, the lowest elevation of the Original Site would have been 19.42 feet. Id. The final site elevation would thus have been 3.21 feet higher than the FEMA 500-year flood elevation (and 4.32 feet higher than the highest NOAA recorded measurement). Id.

⁵⁷ At its closest point, the New Site is approximately 70 feet from the Chelsea Creek top of bank (Exh. EV-1, app. G, at 2-1).

A portion of the New Site is located within the 100-foot Buffer Zone to Coastal Bank associated with Chelsea Creek and the Chelsea Creek DPA (Exh. EV-1, at 16). The Company proposed to establish a clear limit of work and appropriate best management practices (“BMP”) to minimize the potential for any indirect impacts to wetland resource areas (Id.; Exh. GR-ZLU-3). The Company stated that there would be no direct temporary or permanent impact to wetland resource areas or the nearby Chelsea Creek resulting from the construction of the Substation on the New Site (Company Brief at 22, citing Exh. EV-1, at 16).

The Project will require a license pursuant to Chapter 91 because, as with the Original Site, the New Site is located within filled tidelands (Exhs. EV-1, at 17; EFSB-P-2). In November 2014, the Company had filed an application for a Chapter 91 license for the Project at the Original Site, which detailed the Project’s compliance with the applicable standards under MassDEP’s waterways regulations at 310 CMR 9.00. (Exhs. EV-1, at 9; EFSB-P-2). The Chapter 91 application process was put on administrative hold during the pendency of the Original Proceeding and, on November 15, 2018, the Company re-initiated MassDEP’s review of its Chapter 91 license application and presented information regarding the New Site (Exh. EV-1, at 9; Tr. 1, at 24). MassDEP confirmed its finding that construction of the Project at the New Site is a “Water Dependent Use” (Company Brief at 22-23, citing Exhs. EFSB-G-2; EFSB-P-2; EFSB-P-2(1); GR-PL-1). The Chapter 91 license application review process is ongoing, with the next step being the submittal of a WPA Notice of Intent (“NOI”) for Substation construction to the Boston Conservation Commission, which will be submitted once the Company has completed final engineering design for the Substation (Exhs. EFSB-G-2; EFSB-P-2; EFSB-W-6; Tr. 1, at 24). The Company stated that it would meet all applicable standards and requirements under MassDEP’s waterways regulations at 310 CMR 9.00 for construction of the Substation at the New Site (Exhs. EV-1, at 17; EFSB-P-2; EFSB-P-2(1); GR-PL-1).

ii. Design Flood Elevation for the New Substation

Eversource decided to review flood elevation information and determine an appropriate DFE for the New Site, due to the New Site’s proximity to Chelsea Creek, engaging the

engineering firm Burns & McDonnell to assist with this work (Exh. EV-1, app. G at 1-1; Company Brief at 23). The Company defines the DFE for the New Site as the lowest elevation at which Substation equipment should sit on the site (i.e., the top of foundations) to ensure that any rise in base flood elevation will not affect the operation of the Substation (Company Brief at 23, citing Exhs. EV-1, at 17; EFSB-W-3). The Company maintains that choosing the proper DFE for the placement of substation equipment is critical not only to ensure the continued operation of the Substation during storm and flood events, but also to protect the Company's investments in the Substation (Company Brief at 23). As described in some detail below, the Company selected a DFE of 23 feet 0 inches above MLLW, which it argues is more conservative (a higher elevation) than is required by state, regional, and local agencies (id. at 24).⁵⁸ The Company argues further that use of this DFE will protect Substation equipment from potential inundation from floodwaters (id.). The Company's responsibility to ensure that no stormwater runoff from the Substation will create or exacerbate adjacent neighborhood flooding is discussed in Section V.A.7.b.iii, below.

(A) Determination of Design Flood Elevation

While the New Substation Site is outside the one percent (100-year) and 0.2 percent (500-year) annual chance floodplains, the Company stated that it considered sea level rise impacts on the Substation in determining the DFE because of the New Site's proximity to Chelsea Creek and Boston Harbor (Exh. EV-1, at 17 and app. G at 1-2).⁵⁹

⁵⁸ The tops of foundations of Substation equipment on the New Site are proposed to be approximately one foot higher than the tops of the foundations for equipment as proposed for the Original Site (Final Decision at 126; Company Brief at 30).

⁵⁹ According to FEMA FIRM Map No. 25025C0019J (Panel 19 of 176) for Suffolk County, Massachusetts, dated (prepared) March 16, 2016, and exported (available through) February 23, 2018, the New Site is determined to be in "Area of Minimal Flood Hazard / Zone X," unshaded, outside the 0.2 percent annual chance floodplain (Exh. EV-1, app. G, at 1-3 and sub-app. A of app. G).

Information collected by Burns & McDonnell in a 2018 Updated Flood Study provides the following elevations germane to the New Substation Site:

Table 1. Reference Point Elevations for New Site (MLLW Vertical Datum, in feet)

Highest elevation of the New Site (existing)	23.74
Lowest elevation of the New Site (existing)	16.57
Storm drain catch basin/northern elbow of Condor Street	15.75
0.2% annual chance flood elevation (500-year flood)	15.71
NOAA highest record water elevation (Boston Harbor gauge)	15.16
1% annual chance flood elevation (100-year flood)	14.91
Mean highwater line of Chelsea Creek	9.90

Source: Company Brief at 25, citing Exh. EV-1, app. G, at 1-3, 2-7; RR-EFSB-15(1).

The Company stated that the information provided in Table 1 shows that the New Site is above the 100-year and 500-year expected flood elevation lines as well as the highest water level ever recorded at Boston Harbor (National Oceanic and Atmospheric Administration (“NOAA”) tidal gauge station 8443970), which occurred in the winter of 2018 (Exh. EV-1, app. G, at 2-7 to 2-10; Company Brief at 25).

Accounting for storm tides, projected sea level rise, “freeboard,” and existing elevations of the New Site, Eversource indicated that it added 3.0 feet for sea level rise through 2070, and 1.0 foot of freeboard to the FEMA 500-year flood elevation of 15.71 MLLW, which gives a subtotal of 19.71 feet MLLW (Exh. EV-1, app. G, at 1-5; Company Brief at 28). The Company then selected 23 feet 0 inches as its DFE in order to match the highest existing elevation at the site, with proposed yard grading varying from 22 to 24 feet MLLW and the tops of concrete foundations for equipment at 23 to 25 feet MLLW (Exh. EFSB-W-3; Company Brief at 28).

Eversource provided comparisons to other Boston-area DFE guidance, which are summarized in Table 2, below.

Table 2. Guideline Reference Point Elevations (MLLW Vertical Datum, in feet)

Eversource Selected Elev.	Elev.	Notes on Derivation
New Site: Top of Foundations	23.00	Assumed 3 feet sea level rise (“SLR”) but selected this level with consideration of existing grades
Original Site: Top of Foundations	22.00	<u>Final Decision</u> at 125-126
Guideline or Comparison	Elev.	Notes on Derivation
MassPort DFE	22.58	500-year flood projected to 2070, plus 3 feet of freeboard; applies to Logan, South Boston port
Boston Planning and Development Agency	20.52	100-year flood projected to 2070, with high emissions assumed, plus 2 feet of freeboard
Climate Ready Boston ⁶⁰	18.52	100-year flood projected to 2070 with high emissions assumed; no freeboard
ISO-New England stakeholder-approved advice	17.91	Either: (a) 100-year flood plus 2 feet SLR or (b) 500-year flood plus 1 foot SLR
FEMA	17.91	Either: (a) 100-year flood elevation plus 3 feet of freeboard or (b) 500-year flood elevation
Am. Society of Civil Eng’rs (ASCE-SEI 24-14)	16.91	Either: (a) 100-year flood elevation plus 2 feet or (b) 500-year flood elevation
MassDOT Central Artery / Tunnel Project	16.48	Year 2013 tide level plus 3.2 feet SLR plus 2.5 inches

Note: most figures are calculated for Boston or converted to MLLW by Burns & McDonnell, rather than being published in source materials.

Sources: Final Decision at 126; Company Brief at 29, citing RR-EFSB-15(1)

The Company’s brief refers to two additional sources of guidance, neither of which Eversource incorporated into the above table. First is the Sea, Lake, and Overland Surges from

⁶⁰ The Company evaluated the sea level recommendations from the City of Boston’s Climate Ready Boston initiative, in particular the Boston Research Advisory Group’s (“BRAG”) study entitled “Climate Change and Sea Level Rise Projections for Boston” dated June 1, 2016 (“BRAG Report”) (Exh. EV-1, app. G, at 1-4). The BRAG Report depicted a range of sea level rise heights over time based on several greenhouse gas emissions scenarios (referred to in the report as “representative concentration pathways” or “RCPs”) (id. app. G, at 36-40 of 75). Based on the BRAG Report, by 2070 there is a potential sea level rise of 0.6 feet up to a maximum of 4.8 feet, with the likely range as 1.5 feet to 3.1 feet (id. app. G, at 1-4 and 2-4).

Hurricanes (“SLOSH”) model from the National Weather Service. The Company considered but rejected the SLOSH model on the basis that the SLOSH model does not accommodate sufficient detail and does not address the primary cause of coastal flooding in Boston Harbor (Company Brief at 27-28, n.7).⁶¹ Second, is an on-line calculator available from the U.S. Army Corps of Engineers (“USACE”) that models future sea level rise for specified coastal locations (Tr. 3, at 460-462.). Eversource did not use the USACE model but stated that its selected DFE is more conservative than USACE model results (Company Brief at 29, n.9, citing Tr. 3, at 460-462).

To guide its determination of the appropriate DFE, the Company reviewed and relied on the above-tabulated resources to account for the possible effects of anticipated sea level rise in Boston Harbor over the design life of Substation equipment (Company Brief at 23-24, 32; Exhs. EV-1, app. G, at 1-4, 2-4 to 2-11, EFSB-W-5(1)). The Company estimates that the lifespan of the Substation equipment, though not the Substation yard, is approximately 40 years (Company Brief at 23-26, 26 n.5, citing Exh. GR-G-1; Tr. 3, at 443-444, 478). When a piece of equipment nears the end of its useful life, the Company stated it will evaluate whether the Substation itself is still needed and, if so, replace the aged equipment, and will evaluate then-known information about sea level rise projections and incorporate such updated information into its evaluation of DFE for the replacement equipment (Company Brief at 26, n.5, citing Tr. 3, at 443-444, 478, 494).

⁶¹ The Company maintains that the accuracy and level of detail of the SLOSH model is inadequate for analyzing a complex area such as Boston Harbor, which more frequently experiences the weather effects from northeasters rather than hurricanes (Company Brief at 27-28 n.7, citing Exhs. EFSB-W-5, EFSB-W-5(1) at 30-31, Tr. 3, at 456-457, 563). The Company further maintains that multiple agencies are basing new development and planning on the Boston Harbor Flood Risk Model and that the Company did not use the SLOSH model in its updated flood study in order to maintain consistency with the planning and regulatory purposes of these agencies (Company Brief at 27, n.7, citing Exh. EFSB-W-5). GreenRoots argues that certain state and federal agencies continue to use the SLOSH model, and the Company should consider this model as it incorporates “low-probability, worse-case scenario[s]” (GreenRoots Reply Brief at 2, citing Luna PFT at 6).

Eversource stated it is confident that the selected elevation for the placement of Substation electrical equipment foundations will withstand potential sea level rise and flood levels over the 40-year life of the Substation equipment (Company Brief at 26, n.5, 32).⁶² The Company also stated that there would be no impacts to the structural support of the Substation based on any potential increase in the groundwater table (*id.* at 30, n.10, *citing* RR-EFSB-13).⁶³ The Company estimates equipment at the East Eagle Street Substation will not begin to be susceptible to flooding until the 2090-2095 time-frame due to the selected DFE (Company Brief at 31-32, *citing* RR-EFSB-15).⁶⁴

⁶² Eversource stated that if flooding impacts equipment despite the Company's conservative design to avoid such impacts, certain equipment in the Substation, such as the main transformer, gas insulated switchgear and cable, could continue to operate, depending on the depth of the water (Exh. EFSB-W-2). In the event of water inundation from any cause, the Company has the option of deploying barriers and pumps to keep the water away from sensitive equipment, shutting portions of the Substation down or shutting the entire Substation down (*id.*; Tr. 3, at 485-487). The Company stated that there are no safety implications to the surrounding neighborhood associated with the Substation in the event of run-off and flooding from elevated sea level, as protective systems would detect and remove any faulted piece of equipment from service (Exh. EFSB-W-2).

⁶³ Eversource stated that all Substation equipment will be supported by concrete foundations, which in turn will be supported by helical piles (Exh. EFSB-W-4). The piles would be installed to a depth where all the helices will be in the very stiff clay layer and the upper helix is more than two feet below the top of the clay; also, the piles would be galvanized for corrosion protection (RR-EFSB-13). The Substation ground surface will be finished with a specified thickness of gravel (Exh. EV-1(G) at 2-2).

⁶⁴ Eversource stated that under the most aggressive sea level rise projection, the 8.5 RCP, with a DFE of 23.00 feet MLLW, its Substation equipment would not be affected until at least 2090, with a projected four-foot-rise in sea level (RR-EFSB-15). Equipment at the lowest elevations includes the gas insulated switchgear control cabinets, capacitors, fire pump, and station service transformers (*id.*). The metal clad switchgear could withstand another twelve inches of rise over DFE as there are metal rails that keep the gear above the top of foundation, while the main transformers could withstand another 24 inches of rise over DFE until the water reaches the control cabinets (*id.*).

iii. Stormwater Management

Eversource states that its Substation design incorporates features to ensure that there will be no stormwater runoff from the Substation that will create or exacerbate the risk of flooding to the neighborhood (Company Brief at 23, citing Exhs. EV-1, at 8, GR-F-7; Tr. 3, at 410, 495).

The Company stated that design for the Substation will be in accordance with the Massachusetts Stormwater Handbook and Boston Water and Sewer Requirements, which require no increase in postconstruction peak flow rates (Exh. GR-F-7; Tr. 3, at 410-411, 495). The Company will develop a SWPPP describing measures it will use to prevent stormwater from going into catch basins and Chelsea Creek (Company Brief at 33; Exh. EV-1, at 9; Tr. 2, at 265).

The New Site will be graded to drain to a new catch basin in the central area of the site (Exh. GR-F-7). The catch basin will connect to an underground infiltration system sized to meet Boston Water and Sewer Commission requirements (Exhs. EV-1, at 11; RR-GR-8; Tr. 3, at 501). Eversource stated that it has coordinated grading and drainage design with the design of the new City of Boston police station in order to avoid cross-lot drainage (Exh. GR-F-7). The underground infiltration system includes detention galleries that hold the stormwater and allow it to percolate slowly into the groundwater table on the Site (Tr. 3, at 496).⁶⁵ The detention galleries on the Site will retain 1.5 inches of rainfall, and then any overflow from that will go into the storm drainage system on Condor Street (Tr. 3, at 496-499). The underground infiltration system has an outlet control structure and discharge pipe connecting to the existing drainage system in Condor Street for larger storm events, which generate runoff in excess of the infiltration capacity (Exh. GR-F-7; Tr. 3, at 496-499). According to the Company, the stormwater design will not alter drainage patterns or increase peak flow rates into Condor Street and thus, the new Substation will not increase the amount of stormwater off-site (Exh. GR-F-7; Tr. 3, at 411).

⁶⁵ There is no indication in the record that the City's remediation plans for the New Site included use of sub-surface stormwater detention galleries to reduce runoff into the adjacent storm drainage system on Condor Street, as proposed in the Company's plans for the New Site (See Section V.A.4, above).

c. GreenRoots Position

GreenRoots states that “the evidence proves that the proposed location for the Substation, near the Chelsea Creek, is already prone to inland flooding” (GreenRoots Brief at 20).

GreenRoots argues that the East Eagle Street site faces an excessive and unacceptable risk of flooding and is an inappropriate site to place the proposed electrical Substation, due to among other things “the known and projected risks of flooding due to sea level rise, as well as extreme weather events” (*id.* at 16, citing Luna PFT at 3). GreenRoots argues further that Eversource has failed to account for, let alone to adequately mitigate, these potential flood risks (GreenRoots Brief at 16). In particular, GreenRoots argues that Eversource inappropriately constrains the time horizon and range of flood projections that it considers (*id.* at 17, citing Luna PFT at 4).

GreenRoots argues that, given that there is no indication that Eversource would retire the Substation by 2070, even if equipment proposed at this time for the Substation is no longer in service, there is nothing to prevent Eversource from replacing that equipment and continuing to operate the Substation at the proposed site thereafter (GreenRoots Brief at 17-18, citing Tr. 3, at 478-481).⁶⁶ Therefore, GreenRoots argues that the Company should design the Substation to withstand water levels that might ensue beyond the design period (*i.e.*, after 2070) (GreenRoots Brief at 18, citing Luna PFT at 4-5; GreenRoots Reply Brief at 3-4). GreenRoots also argues that Eversource’s assumptions regarding the rate of SLR represent the bottom of the range of possible SLR (GreenRoots Brief at 18-19; see also GreenRoots Reply Brief at 2-3). GreenRoots notes, for instance, that the BRAG predicts, under its highest-GHG emissions scenario, the “likely range” of SLR in Boston through 2100 is from 3.2 to 7.4 feet (GreenRoots Brief at 18-19, citing Exh. EV-1(G) at 17, 39; Tr. 3, at 492-494). GreenRoots suggests that the Project is not prepared for such an eventuality (GreenRoots Brief at 19).

In sum, GreenRoots argues that the New Substation Site will be subjected to serious and

⁶⁶ GreenRoots characterizes this approach as presenting “serious tension” with ISO-NE flood-planning guidance (GreenRoots Reply Brief at 3 n.4).

increasing risk of both inland flooding and coastal flooding due to sea level rise, both as result of climate change, that Eversource has failed to account for or mitigate either of these risks, and that the Company “has not even tried to assess or plan for the synergistic risk posed by the combination of SLR, precipitation, and storm surge events, including at high tide” (GreenRoots Brief at 21, citing Luna PFT at 6, 9-10; Tr. 3, at 502-504).

In addition, GreenRoots points out that Eversource’s Project Change Filing does not separately analyze any risk of inland or urban flooding from precipitation events (GreenRoots Brief at 16-17, citing Tr. 3, at 494-496; GreenRoots Reply Brief at 4-6). GreenRoots points out that construction of the Substation will increase impervious surface area at the New Site, and that the proposed detention galleries only have capacity to retain up to 1.5 inches of rainfall, so any excess rainfall would be directed to the existing storm drainage system on Condor Street (GreenRoots Brief at 17, citing Exh. GR-F-7; Tr. 3, at 496–497). GreenRoots suggests that rainfall in excess of this amount would be expected to occur relatively frequently (as in a 10-year storm) and that excess runoff would be shunted to the “already overburdened and poorly maintained,” “outmatched” Condor Street drainage system (GreenRoots Brief at 20, citing Exh. EV-GR-8(S1)(1); GreenRoots Reply Brief at 4-5). GreenRoots argues further that both the frequency of severe precipitation events and the severity of such events are increasing and that, given climate change effects, “everyone should expect both to continue to increase” (GreenRoots Brief at 20, citing Tr. 3, at 439; Exh. GR-5, at 40-41).

d. Company Response

Eversource rejects GreenRoots’ criticism of the Company’s commitment to ensuring that the Substation components are protected from floodwaters (Company Reply Brief at 17-18). The Company contends that choosing the proper DFE for the placement of Substation equipment is critical, not only to ensure the continued operation of the Substation during storm and flood events, but also to protect the Company’s significant investments in the Substation and to serve its customers (id., citing Tr. 3, at 489).

Eversource argues that its planning focus on 2070, that is, the design life of the proposed Substation equipment, is appropriate because the Company would at such time in the future

evaluate then-known sea level rise projections and incorporate such updated information into determining a DFE for the replacement equipment, if still needed (Company Reply Brief at 17-18, citing Tr. 3, at 443-444, 478, 494).⁶⁷ In the meantime, the Company maintains that the elevation of Substation equipment is consistent with the more aggressive scenario from BRAG's 2016 study and Massachusetts DOT Boston Harbor Flood Risk Model projections of the most likely sea level rise through 2090 (Company Reply Brief at 14-17, citing RR-EFSB-15; see Exh. EV-1, app. A of app. G, at 12).⁶⁸

Eversource maintains that GreenRoots' claims that the Company failed to account for inland or urban flooding are also "without merit" (Company Reply Brief at 18). The Company notes several photographs submitted by GreenRoots "for dramatic effect" that show water accumulation after a storm event on East Eagle Street near Channel Fish and at the corner of East Eagle Street and Condor Street (id., citing Exh. EV-GR-8(S1); Tr. 2, at 362-369). The Company disputes the relevancy of these photographs to the Project, arguing, based on New Site

⁶⁷ The Company also evaluated for the Substation at the New Site, the cost, benefits and feasibility of measures taken by Consolidated Edison at its East 13th Street Substation in Manhattan after flooding from Superstorm Sandy damaged equipment and caused an explosion at the facility (RR-EFSB-17). These measures included: (1) the height of the original flood walls and flood gates was increased; (2) high capacity dewatering pumps were installed; (3) moats and barrier walls were installed inside the substation; (4) control cabinets were elevated; and (5) the new control room was installed on an upper elevation (id.). Eversource contends that, the Project Substation, unlike the ConEd substation, does not require such costly measures as it will be at a safe DFE from the outset to avoid flooding (id.). The Company asserts that the DFE for the East Eagle Street Substation is at the 500-year flood level plus three feet of sea level rise plus one foot of freeboard, which is more conservative than the DFE for the Con Ed substation, even with above improvements (id.).

⁶⁸ The Climate Ready Boston Report shows three scenarios of carbon emissions. For the highest of these, "8.5 RCP," the report predicts sea level rise in 2030, 2050, 2070, and 2100; for each of these it gives a likely range, with median and other estimates (Exh. EV-1, app. G at 39 of 75). For year 2070, the low, median, and high likely estimates are 1.5, 2.2, and 3.1 feet (id.). For year 2100, the same estimates are 3.2, 4.9, and 7.4 feet, respectively (id.). No specific predictions are provided in the report for 2090 (id., app. B of app. G at 12).

elevations relative to Condor Street, that the New Site is above any immediate inland flooding threat (Company Reply Brief at 18-19, citing Exhs. EV-1, app. G, at 1-3, RR-EFSB-15(1); Tr. 3, at 409-410).

Finally, Eversource asserts that GreenRoots downplays the Company's representations that its Boston Water and Sewer Commission-approved stormwater infiltration and detention system would result in no additional runoff (Company Reply Brief at 19, referencing GreenRoots Brief at 19). The Company points out that the design for the Substation must comply with the Massachusetts Stormwater Handbook and Boston Water and Sewer Requirements, which require no increase in post-construction peak runoff flow rates (Company Reply Brief at 19, citing Exhs. EV-1, at 8; GR-F-7; Tr. 3, at 410, 495). The Company avers that the stormwater design will not alter drainage patterns or increase peak flow rates into Condor Street and that the New Site is not currently subject to inundation by storm or urban flooding (Company Reply Brief at 20, citing Tr. 3, at 411, 496-499). The Company therefore dismisses arguments that the Substation would increase the amount of stormwater flowing off-site (Company Reply Brief at 19-20, citing Tr. 3, at 411, 496-499).

e. Analysis and Findings

As with the Original Site, the proposed New Site would be located on lands subject to Chapter 91 jurisdiction, including filled tidelands within the Chelsea Creek DPA, and MassDEP has issued a Determination that the Project constitutes a Water-Dependent Use Project as defined under Chapter 91.

The record shows that a portion of the New Site would be located within the buffer zone to wetlands resource areas. Eversource will file a Notice of Intent with the Boston Conservation Commission and construct the Project in accordance with any conditions contained in the resulting Order of Conditions. Eversource has committed to developing a SWPPP and implementing sedimentation and erosion control measures during Project construction and operation. Such measures will minimize potential impacts to adjacent water bodies and protect against shoreline erosion. The record also shows that the Project would not alter drainage

patterns or increase peak flow rates into Condor Street and that the Substation at the New Site would not increase the amount of stormwater flowing from the New Site to off-site areas.

The Substation's location requires consideration of the potential for adverse impacts from future sea level rise. The Siting Board accepts as reasonable the Company's decision to design the Substation at the New Site to be resilient with respect to SLR through 2070, which is expected to protect the proposed Substation equipment at least through its 40-year design life. Furthermore, 2070 is a reasonable planning horizon because of increased uncertainty about electrical system needs and sea level trends further into the future. Considering the tidal fluctuations, the severity of a 500-year storm, and sea level rise projections for the design life of the proposed Substation equipment, and also seeking at least a one-foot gap between floodwaters and electrical equipment, the Company calculated a DFE for the Substation of 23 feet above MLLW. A combination of site grading to 22 to 24 feet above MLLW and concrete equipment foundations with tops of 23 to 25 feet above MLLW would raise electrical equipment at the Substation above the DFE. The Company's approach is fairly conservative and consistent with or more conservative than agencies developing or reviewing Boston area projects, such as MassPort and MassDOT, and also within or above reference point elevations recommended by planning groups such as BPDA, BRAG, Climate Ready Boston, ISO-New England, FEMA, and the American Society of Civil Engineers (see Table 2, above). Building the Substation at a higher elevation would likely add costs to Project development and provide unclear benefits at this time.

As with the Original Site, the Siting Board concludes that the Company has appropriately addressed risks associated with sea level rise by positioning electrical equipment above any anticipated flood level at least through at least the 40-year design life of the Substation equipment.

Assuming the issuance by MassDEP of the Chapter 91 approval required for the Project, and implementation of the Company's proposed mitigation measures, the Siting Board finds that impacts to wetlands and waterways and impacts from sea level rise due to relocation of the Substation to the New Site would be minimized.

8. Magnetic Fields

a. Background

As described in the Original Proceeding, electrical transmission lines operating with 60-hertz (“Hz”) alternating current create a 60-Hz alternating magnetic field proportional to the current in the lines. Final Decision at 113, citing Exh. EV-2, app. 5-7(R), at 4. Some epidemiological studies have suggested a statistical correlation between exposure to magnetic fields and incidence of childhood leukemia. NSTAR Electric Company d/b/a Eversource Energy, EFSB 17-02/D.P.U, 17-82/17-83 at 153 (2019) (“Sudbury-Hudson”); Needham-West Roxbury at 63; New England Power Company d/b/a National Grid, EFSB 13-2/D.P.U. 13-151, at 83 (2014) (“Salem Cables”). According to a 2007 World Health Organization (“WHO”) report, “the evidence for a causal relationship is limited, therefore exposure limits based upon epidemiological evidence are not recommended, but some precautionary measures are warranted.” Sudbury-Hudson at 153-154; Needham-West Roxbury at 64; Salem Cables at 83.

The United States has no federal standards limiting occupational or residential exposure to power-frequency magnetic fields. Final Decision at 113-114, citing Exh. EV-2, app. 5-7(R), at 4. The Company identified in the Original Proceeding a number of advisory limits, which it stated “should not be viewed as demarcation lines between safe and dangerous levels of EMF, but rather, levels that assure safety with an adequate margin of safety to allow for uncertainties in the science.” Id. Among the cited advisory limits referenced by the Company is a power-frequency magnetic field limit of 2,000 milligauss (“mG”) from the International Commission on Non-Ionizing Radiation Protection (“ICNIRP”). Final Decision at 113-114, citing Exh. EV-2, app. 5-7(R), at 5.

In past decisions, the Siting Board has recognized public concern about power-frequency magnetic fields and has encouraged the use of low-cost measures that would minimize magnetic fields along transmission rights-of-way. Sudbury-Hudson at 154; Needham-West Roxbury at 64; Salem Cables at 88. The Siting Board concluded that magnetic field impacts from construction and operation of the Project (using the Primary Route) would be minimized. Final Decision at 123.

b. Company Description

Eversource engaged Gradient to provide an estimate of magnetic field impacts at the perimeter fenceline of the New Site (Exh. EV-1, at 17). The Company stated that magnetic fields associated with the Substation, at locations outside the New Site derive principally from electrical current in the transmission and distribution lines connecting into the Substation (id. at 17-18).⁶⁹

The Company stated that, for the Original Site, magnetic fields on the perimeter of the site, where distribution and transmission lines would exit, would range from 16 to 55 mG (Exh. EV-1, at 18). For the New Site, fenceline magnetic fields were calculated to be highest near distribution lines, such as along the west edge of the New Site and extending south to East Eagle Street (Exh. EFSB-MF-1(S1)(1)). Gradient's modeling showed the highest on-site magnetic field ranging above 50 mG, levels elsewhere on the City Parcel are lower but range above 25 mG, and levels off-site, including along East Eagle Street, are yet lower but exceed 10 mG at some locations along 13.8 kV circuits (Exh. EFSB-MF-1(S1)(1)). Magnetic fields on the west fenceline along Condor Street were estimated to range from 4 to 16 mG, decreasing beyond Condor Street to below 0.5 mG (Exh. EV-1, at 18). Along the north and east fencelines, magnetic fields were estimated at 2.5 to 5 mG and 3 to 8 mG, respectively (id.). The Company described these levels as low and also below the international health-based standard of 2,000 mG for general public exposure to 60-Hz MF, at which adverse health effects are not expected, as set by ICNIRP and as endorsed by the World Health Organization ("WHO") (id.).

Away from the influence of distribution lines entering and leaving the Substation at the site driveway, the Company stated that magnetic fields fall below a typical ambient level of 1 milligauss ("mG") between 12 feet and 36 feet beyond the Substation fence (Exh. EV-1, at 18). However, the Company provided a map showing modeled magnetic fields exceeding 5 mG along distribution lines exiting the Substation including along East Eagle Street (Exh. EFSB-MF-1(S1)(1); Tr. 2, at 302-307). At the playing fields, the magnetic field contribution from the

⁶⁹ Eversource stated that further south on Condor Street approaching East Eagle Street, the distribution lines become the dominant sources of MF (Tr. 2, at 337).

Substation and distribution feeders will be less than 1 mG and much of this area will be less than 0.1 mG (Exh. EFSB-MF-1(S1)). For the homes along East Eagle Street, the modeled magnetic fields from these sources will be at approximately 1 mG or less (Exh. EFSB-MF-1(S1)). For the walkway between the Substation site and Chelsea Creek, the magnetic fields will also be less than 0.1 mG (id.).

Eversource asserted that, given the low levels of magnetic fields that would be produced at the Substation, the underground placement of the distribution lines would provide sufficient magnetic field mitigation (Exh. EV-1, at 19). According to Eversource, the distribution cables would be arranged such that the three phase conductors are as close together as possible and also rotated to continuously transpose the phase conductors, designs which reduce magnetic fields (id.). In addition, within the Substation, the use of gas-insulated switchgear and metal clad switchgear places the bus bars (phase conductors) as close as is practicable, ensuring mitigation of magnetic fields from substation internal circuitry (id.).

c. Positions of the Parties

CLF argues that residents and community leaders fear that the Substation poses risks to young people of exposure to electromagnetic radiation (CLF Brief at 24). GreenRoots similarly argues that community residents are concerned that the operation of the Substation may pose human-health risks, as a result of EMF exposure (GreenRoots Brief at 25, citing to GR Combined PFT at 7-8). GreenRoots argues that the Board's precedents recognize that this concern has empirical epidemiological support, as well as the propriety of "minimiz[ing] exposures to magnetic fields" (id., citing Salem Cables at 88). GreenRoots argues that "the evidence here" shows that the community's concerns cannot be easily dismissed (GreenRoots Brief at 25).

GreenRoots states that the potential magnetic field exposure due to the Substation and its associated distribution feeder lines is undisputed here, with magnetic field levels from those components along most of the Condor Street sidewalk next to the Substation would be at least 5 mG, increasing to 10 mG by the time one reaches the corner of Condor and East Eagle Streets (GreenRoots Brief at 25, citing Exh. EFSB-MF-1(S1)(1) at 1; Tr. 2, at 336, 338–340). Since that

sidewalk is directly across the street from the American Legion playground, GreenRoots argues that it is reasonable to expect that many of the people using that sidewalk will be children, and that those children consequently will be exposed to those magnetic field levels (id., citing Tr. 2, at 339-340). Referring to the Company's statement that it has not performed any studies concerning the current ambient levels of magnetic fields in the East Boston Area surrounding the New Site, GreenRoots states that the Siting Board should understand these exposures to represent at best a minimum, not a fully cumulative exposure (id. at 25-26, citing Exh. GR-EMF-2).

According to GreenRoots, the record shows that these exposure levels warrant concern (GreenRoots Brief at 26). Epidemiological studies have found an association between magnetic fields exposure and leukemia in children that, although "weak," warrants limited concern, according to the U.S. National Institute for Environmental Health ("NIEHS") (id., citing Exh. GR-16).⁷⁰ GreenRoots also points to a more recent opinion of the European Scientific Committee on Emerging and Newly Identified Health Risks ("SCENIHR") 2015 Opinion on Potential Health Effects of Exposure to Electromagnetic Fields (EMF), which maintains that organization's endorsement of the assessment of the International Agency for Research on Cancer ("IARC") classifying ELF [extremely low-frequency] magnetic fields as possibly carcinogenic to humans due to consistently observed increase childhood leukemia risk in epidemiological studies (id., at 27-28, citing RR-GR-6(1) at 159).⁷¹

⁷⁰ The Siting Board notes that NIEHS surveyed existing research on EMF and that the NIEHS report stated: "After reviewing all the data, [NIEHS] concluded in 1999 that the evidence was weak, but that it was still sufficient to warrant limited concern" (NIEHS, 2002 (Exh. GR-16)). Pooled analyses circa 2000 provided "weak evidence for an association (relative risk of approximately 2) at exposures above 3 mG; however, few individuals had high exposures in these studies; therefore, even combining all studies, there is uncertainty about the strength of the association" (id.).

⁷¹ The Siting Board notes that SCENIHR surveyed existing research on EMF; and that the SCENIHR report concludes: "Overall, existing studies do not provide convincing evidence for a causal relationship between ELF MF exposure and self-reported symptoms. The new epidemiological studies are consistent with earlier findings of an increased risk of childhood leukemia with estimated daily average exposures above

Finally, GreenRoots dismisses the Company's reference to the ICNIRP guideline of 2,000 mG for public exposures on the basis that ICNIRP states that it did not account for potentially carcinogenic effects of EMF exposure ("because no causal connection between the two has yet been identified"); GreenRoots argues that the ICNIRP guidelines do not and were never meant to address child leukemia risk from EMF exposure, so the comparison does not dispel concern (GreenRoots Brief at 28-29, citing RR-GR-4 / ICNIRP Guidelines at 824, 830).⁷²

GreenRoots concludes that "the Substation will expose untold numbers of children using the sidewalks adjacent to it to levels of EMFs that, according to two decades of 'robust' international epidemiological research, threatens to double their risk of developing leukemia" (GreenRoots Brief at 29, citing RR-GR-6, at 158). GreenRoots notes that Eversource's witness has also testified that he knows of no reliable means of mitigating this exposure through additional changes to the Project's design (GreenRoots Brief at 29, citing Tr. 2, at 341-346). GreenRoots argues that "siting the Substation in this location thus threatens to seriously compromise the health of children living in an environmental justice community," and that, "on the basis of the Precautionary Principle alone, the Board should not allow that to happen" (GreenRoots Brief at 29).

d. Company Response

Eversource responds to GreenRoots claims by arguing that there is no current empirical epidemiological support for concerns that the operation of the Substation may pose human-health risks from exposure to magnetic fields (Company Reply Brief at 23). The Company also notes that GreenRoots chose to provide no expert testimony supporting its position (id.). Eversource argues that GreenRoots relies on "selectively chosen citations from a 17-year-old study,"

[3 mG to 4 mG]. As stated in the previous Opinions, no mechanisms have been identified and no support is existing from experimental studies that could explain these findings, which, together with shortcomings of the epidemiological studies prevent a causal interpretation" (SCENIHR, 2015 (RR-GR-6(1) at 7)).

⁷² "The absence of established causality means that [leukemia risk] cannot be addressed in the basic restrictions" is the ICNIRP text (ICNIRP Guidelines at 830).

whereas according to the Company, a full and complete reading of that study does not support a causal relationship between exposure to magnetic fields and childhood leukemia (id., citing Exh. GR-16, at 20).

With respect to GreenRoots' argument that the ICNIRP guidelines are mainly protective of acute health effects, and not intended to protect against childhood leukemia risk, the Company cites to a statement on the first page of the ICNIRP Guidelines that "[t]he main objective of this publication is to establish guidelines for limiting exposure to electric and magnetic fields (EMF) that will provide protection against all established adverse health effects" (Company Reply Brief at 25, n.12, citing RR-GR-4 (ICNIRP Guidelines, at 818)). The Company also maintains that the main conclusion from reviews by WHO is that EMF exposures below the limits recommended in the ICNIRP international guidelines do not appear to have any known consequence on health (Company Reply Brief at 25, citing RR-GR-5(1)).

Eversource notes that the issue of potential adverse health effects from magnetic fields has been raised frequently in proceedings before the Siting Board and that, with the benefit of expert testimony in numerous prior proceedings, the Siting Board has consistently found that although some epidemiological studies suggest a statistical correlation between exposure to magnetic fields and childhood leukemia, there is no evidence of a cause-and-effect association between magnetic field exposure and human health (Company Reply Brief at 23-24, citing Exh. GR-16, at 20 and Cambridge Electric Light Company, 12 DOMSB 305, EFSB 00-3/D.T.E. 00-103, at 37 (2001)).

Eversource argues that in this case, the primary source of magnetic fields is from the distribution feeders, not the Substation itself, and distribution feeders are already in existence in the vicinity of the Substation Site as well as most urban areas (Company Reply Brief at 26, citing Exh. EV-1, at 17-18; Tr. 2, at 345). According to the Company, because the Substation does not alter consumer electrical demand and only provides as much electric current on the distribution circuits as is demanded by customers, it is likely that magnetic field levels from East Boston distribution circuits will not change very much at all, except in instances where the pathway of the current is changed (Company Reply Brief at 27, n.15, citing Tr. 2, at 318-319). The Company argues further that even at the sidewalk closest to the Substation, magnetic field levels

range would be similar to the existing magnetic fields from existing distribution lines serving the local area load (Company Reply Brief at 26-27, citing Exh. EFSB-MF-1(S1)(1); Tr. 2, at 318-319, 335-336).⁷³

Eversource argues that all of these modeled magnetic field levels are far below national and international guidelines for public exposure (Company Reply Brief at 27, citing Exh. EV-1, at 18). The Company also argues that the truncated routing of the proposed transmission line reduces the length of the route that will be near residences (id., citing Exh. EV-1, at 18-19). Recognizing the Siting Board's encouragement of the use of practical and low-cost design to minimize magnetic fields along transmission rights-of-way, the Company states that it will also minimize potential magnetic field levels by the design and configuration of the new distribution lines (id. at 28, citing Exh. EV-1, at 19). There will be a three-phase system and all the distribution circuits that come out of the Substation will be in a common conduit; placing the cables close together will achieve substantial cancellation of magnetic fields (Company Reply Brief at 28; Tr. 2, at 342). In addition, the Company will use triplexed cable, where the phase conductors rotate around each other along the length of the cable, which will also reduce magnetic fields below what was predicted in the modeling. (Company Reply Brief at 28; Tr. 2, at 342-343). The Company argues that, based on the relatively low modeled magnetic fields, further mitigation is neither warranted nor practical (Company Reply Brief at 28). The Company argues further that magnetic field impacts associated with the Project have been properly minimized (id.).

e. Analysis and Findings

Although epidemiological studies have been inconsistent, some prior studies appear to show a statistical association between magnetic fields from transmission lines and human health effects. Sudbury-Hudson at 153; Needham-West Roxbury at 63; Salem Cables at 83. The WHO

⁷³ Along East Eagle Street, closest to residences, Eversource states that modeled magnetic field levels range from 1 to 5 mG, which is slightly lower than the levels that would have occurred if the Substation were located at the Original Site (Company Reply Brief at 27, citing Exh. EFSB-MF-1(S1)(1); Tr. 2, at 320).

has stated that the evidence for a causal relationship between magnetic field exposure and childhood leukemia is limited; the WHO therefore does not recommend exposure limits based on the epidemiological evidence, but does recommend taking some precautionary measures. Sudbury-Hudson at 153; Needham-West Roxbury at 64; Western Massachusetts Electric Company, EFSB 08-2/D.P.U. 08-105/08-106, at 85 (2010) (“GSRP”); Salem Cables at 83. Consistent with the WHO recommendations, the Siting Board continues to look for low cost measures that would minimize exposures to magnetic fields from transmission lines. In prior Siting Board decisions, the Board has recognized public concern about magnetic fields and has encouraged the use of practical and low-cost measures to minimize magnetic fields along transmission rights-of-way. Sudbury-Hudson at 156; Needham-West Roxbury at 70; Salem Cables at 88.

GreenRoots has argued that the Siting Board has recognized that public concern about magnetic fields has empirical epidemiological support and recognized as well the propriety of minimizing exposures to magnetic fields, referencing Salem Cables, as noted above. In Salem Cables, the Siting Board specifically noted that the WHO recommendation above. This WHO conclusion is similar to the overall conclusions of agencies such as NIEHS and SCENIHR, whose reports were referenced by GreenRoots.

The record in the Original Proceeding showed that there are various theoretical ways to reduce magnetic fields from transmission lines, including changing the voltage or installing ferromagnetic shielding, but no low-cost means of reducing the magnetic fields that are applicable to the Project, beyond close positioning of the three phases, as proposed by the Company. Final Decision at 122. The record in this case shows that the predominant source of magnetic fields from the Project in the area of the Substation would be distribution lines, rather than Substation equipment or the transmission lines. Magnetic field levels from distribution lines fed from the Substation would be similar to magnetic field levels along existing distribution lines in the immediate area and elsewhere in the city. The record in this case also shows that close positioning of distribution cable phases and triplex rotation of the distribution phases will reduce magnetic fields in the immediate vicinity of the New Site.

The Siting Board finds that magnetic field impacts of the relocation of the Substation to the New Site would be minimized.

B. Cost

1. Company Description

The Company stated that the cost of the Substation at the New Site would be approximately \$6.2 million more than the cost of the Substation at the Original Site (Exh. EV-1, at 21). In 2017, the Company estimated the cost of the Substation at the Original Site to be \$59.8 million and the cost of the entire Project at \$129.9 million, both based on a +/-25 percent level of accuracy. Final Decision at 3. The Company stated that the cost increase for the Substation at the New Site is due primarily to two factors: (1) engineering and design revisions at an additional cost of \$1.5 million; and (2) environmental remediation, including demolition and additional site work, due to existing contamination at the New Site, at an additional cost of \$4.7 million (Exh. EV-1, at 21). The Company stated that it considered the cost of remediation for the New Site to be consistent with its past practice of remediating Company sites and reasonable in the context of the overall Project cost (Company Reply Brief at 29, citing RR-EFSB-1; Tr. 1, at 12-14).

The Company indicated that it has no other sites available on which to locate the Substation in East Boston, and reiterated that an East Boston location remains appropriate (Tr. 2, at 255-257). The Company noted that placing the Substation at any other East Boston location would inherently involve additional cost for the increased length of the transmission lines that would be needed on the East Boston side of the Chelsea Creek Crossing (id. at 257). In contrast, the Company noted that on the New Site, the Substation would be directly over transmission lines after they make landfall into East Boston, decreasing the potential costs and construction disruption of building longer transmission lines to a different site further away from the Chelsea Creek Crossing (id.). The Company maintained that, in addition to the reliability benefit for East Boston residents that would result from locating the Substation in East Boston, using the New Site would also benefit the community by removing contaminated soil and improving groundwater conditions on the City Parcel (Tr. 3, at 518-519).

2. Positions of the Parties

GreenRoots points out that the additional cost of \$6.2 million would increase the cost of the new Substation by more than ten percent, and the cost of the Project as a whole by almost five percent (GreenRoots Brief at 30). GreenRoots argues that the Siting Board in the Final Decision previously suggested that a nine percent increase in total Project costs is potentially significant (*id.*, citing Final Decision at 61-62). GreenRoots adds that the additional \$6.2 million is just the beginning of cost increases, as this estimate does not include costs to address security, aesthetic, and flooding concerns (*id.*, citing Tr. 1, at 173-174; RR-EFSB-3; RR-EFSB-6). Further, GreenRoots asserts that future repair costs due to constructing in an area prone to flooding are difficult to quantify (*id.* at 31, citing Tr. 3, at 483). GreenRoots also notes that Eversource has incurred expenses on behalf of the City, such as nominal clearing of land outside of the Substation site, and also argues that Eversource “came out well behind” in the land swap with the City (GreenRoots Brief at 31-32). GreenRoots concludes that these costs will be passed on to ratepayers and that the Legislature has directed the Board to ensure a reliable energy for the Commonwealth while minimizing both environmental impact and cost (*id.* at 32, citing G.L. c. 164, §§ 69H and 69J).

3. Analysis and Findings

The record in this proceeding shows that the cost of constructing the Substation on the New Site is expected to exceed the cost of the constructing the Substation on the Original Site by approximately \$6.2 million. Approximately \$4.7 million of this amount is attributable to remediation of soil and groundwater contamination from prior uses of the site and fill materials deposited many years ago, with the remaining \$1.5 million attributable to necessary re-design

and engineering work.^{74,75} As noted by GreenRoots, the Project cost estimate reflected in the Final Decision is a “planning grade” cost of approximately \$129.9 million for the entire Project and \$59.8 million for the Substation at the Original Site with +/- 25 percent range; GreenRoots also correctly notes that the increased cost for the relocation of the Substation to the New Site represents an increase of approximately five percent of the total Project cost, and nine percent of the cost for constructing the Substation. While the absolute dollar amount of the cost increase is not insignificant, the Siting Board finds that, as a percentage of either the Project cost or the original Substation cost, the increase is well within the cost range understood by the Siting Board at the time it approved the Final Decision, and therefore not inconsistent with the Board’s prior approval of the Project.

The environmental remediation expense associated with use of the New Site would produce a benefit to the surrounding community by removing an incremental 10,300 tons of contaminated soil and mitigating an on-going source of groundwater contamination, as compared to remediation plans developed by the City of Boston when it owned the New Site. With the transfer of title and remediation responsibility, the Company is now proposing a more extensive remediation approach that also allows for re-use of the New Site as the location of the

⁷⁴ The record indicates that this portion of the City Parcel constitutes historically filled tidelands; was used for both chemical and fertilizer works facilities in the late 1800s; previously contained a 1,000-gallon underground gasoline storage tank; and has been used by the City as a public works storage area for salt, gravel, asphalt, cold patch, and other street maintenance materials and equipment from at least 1988 to 2011 (Exh. EFSB-HW-1(3) at 2-1). In connection with the Chelsea Creek Crossing reconstruction in 2011, NSTAR’s environmental consultant (TRC) submitted to MassDEP a URAM Plan for management of soil and groundwater during construction at the New Site; the New Site has been under investigation and testing since that time (id. at 2-2). MassDEP issued an ACO pertaining to the remediation of the New Site and other areas covered by RTN 3-30299 on December 6, 2016 (Exhs. EFSB-P-3; EFSB-HW-2(1)).

⁷⁵ Given the nature of the contamination on the New Site from urban fill, the Company stated that it does not believe there are prior owners of the New Site to which the Company would have recourse to recover its remediation expenses (Tr. 3, at 519-521; RR-EFSB-18).

Substation. As discussed below, this outcome is also consistent with the Commonwealth's Smart Growth/Smart Energy and its Sustainable Development Principles that encourage redevelopment of brownfield site locations to productive uses.

While we reject both GreenRoots' and CLF's calls to expand the scope of this proceeding in the search for other possible locations for the Substation, we note that the New Lines, as approved, terminate at the New Site after making landfall in East Boston. Moving the Substation to any other East Boston location would inevitably increase the length, and therefore the cost, of the transmission lines that would feed the new Substation.

Despite the apparent increased cost of relocating the Substation to the New Site, the Siting Board views the added cost as commensurate with the added benefits and value associated with the Project Change. These benefits include: (1) a more extensive remediation solution for the New Site than was initially contemplated by the City, that removes an additional 10,300 tons of contaminated soil, and thereby is likely to achieve an earlier Permanent Solution than would have otherwise occurred; (2) the productive re-use of the New Site for a needed energy infrastructure project, consistent with the Commonwealth's Brownfield Policy (see Section V.C.5, below); (3) the elimination of transmission line construction under Condor and East Eagle Streets, and associated disruption; and (4) the likelihood that any other site location would now impose additional costs and delays relative to use of the New Site, given the proximity of the New Site to the Chelsea Creek Crossing, and the typical costs associated with any new relocation activity (such as site investigation/remediation, land acquisition, project engineering, design, and permitting, among others). In addition, the Project Change is in part a response to concern expressed in the Original Proceeding regarding additional distance of the Substation from the Channel Fish facility, noted by the Board in adopting Condition A in the Final Decision.

In view of the above findings, the Siting Board finds that, on balance, relocation of the Substation to the New Site provides 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.

C. Consistency With Policies of the Commonwealth

1. Standard of Review

G.L. c. 164, § 69J requires the Siting Board to determine whether plans for construction of an applicant's new facilities are consistent with current health, environmental protection, and resource use and development policies as adopted by the Commonwealth.

2. Findings in Final Decision

In the Final Decision, the Siting Board found that the Project is consistent with the Commonwealth's health and safety policies (Final Decision at 144); its environmental protection policies, including its Environmental Justice Policy (Final Decision at 145-146); and its resource use and development policies (Final Decision at 146). As described above, the Siting Board finds that with the implementation of additional specified conditions and mitigation, potential land use impacts, safety impacts, visual impacts, hazardous waste impacts, noise impacts, traffic impacts, water and wetland impacts, and magnetic field impacts associated with the relocation of the Substation to the New Site have been minimized. As such, the Siting Board finds the relocation of the Substation to the New Site continues to be consistent with the Commonwealth's health and safety policies; its environmental protection policies, including its Environmental Justice Policy (see below); and its resource use and development policies (see below).

3. Environmental Justice Policy

The Executive Office of Energy and Environmental Affairs ("EEA") and the agencies and divisions that fall within its purview, including the Siting Board, are subject to EEA's 2017 Environmental Justice Policy ("EJ Policy") (EJ Policy at 1). The EJ Policy defines environmental justice as "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" (EJ Policy at 3). EJ Populations are those segments of the population that EEA has determined to be most at risk of being unaware of or

unable to participate in environmental decision-making or to gain access to state environmental resources or are especially vulnerable (EJ Policy at 5).

EJ Populations are defined as neighborhoods (i.e., U.S. Census Bureau census block group data for minority criteria, and American Community Survey (“ACS”) data for state median income and English isolation criteria) that meet one or more of the following criteria: (1) 25 percent of households within the census block group have a median annual household income at or below 65 percent of the statewide median income for Massachusetts; or (2) 25 percent or more of the residents are minority; or (3) 25 percent or more of the residents have English Isolation (EJ Policy at 5). According to detailed maps prepared by EEA based on U.S. Census and ACS data for the purpose of identifying EJ Populations to be serviced by the EJ Policy, the neighborhood that includes the Substation at the New Site, meets the definition of an EJ Population for each EJ criterion (EJ Policy at 8).⁷⁶ The Siting Board notes that the neighborhood in proximity to the Substation has a substantial population that meets the definition of English Isolation, in particular, residents that are Spanish-speaking and speak English “less than very well.”

In this Project Change proceeding, the Siting Board took multiple steps to comply with the letter and spirit of the EJ Policy’s agency public involvement and community engagement activities. EJ Policy at ¶ 15. Specifically, the Siting Board: (1) scheduled the public comment hearing in the evening in the community; (2) required translation of the Notice of public comment hearing into Spanish and Portuguese, and publication of the Notice in foreign-language media outlets; (3) provided Spanish and Portuguese language interpreters at the public comment hearing; (4) required a repository of documents in the community; and (5) provided timely notice to abutters to the Substation in English, Spanish, and Portuguese, and posted these notices in the local library. The Siting Board also engaged in many of the same activities during the Original

⁷⁶ See <https://www.mass.gov/info-details/environmental-justice-communities-in-massachusetts>. In addition, according to U.S. Census Bureau and ACS information over the 2013-2017 period, for Census Tract 509.01 (a neighborhood that includes the Substation location) the residents also appear to meet each of the three EJ criteria noted above. See <https://factfinder.census.gov/>

Proceeding. Final Decision at 4-5, 145. In addition, the Siting Board provided additional language access services in this proceeding. See Section V.C.4, below.

As with the original Project, the Company stated that the proposed Project Change does not exceed any MEPA reporting thresholds and does not require the filing of an Environmental Notification Form (“ENF”) or any other documents with the MEPA Office (Exh. EFSB-P-1).⁷⁷ In the Final Decision the Board found that the Project “does not exceed any MEPA environmental notification form review thresholds that trigger the enhanced public participation or enhanced review provisions” under the EJ Policy first issued by the Secretary of the Executive Office of Environmental Affairs (“EOEA”) on October 9, 2002, or the updated version of the EJ Policy, issued by the Secretary of the Executive Office of Energy and Environmental Affairs (“EEA”) on January 31, 2017. Final Decision at 145 n.138.⁷⁸

Neither GreenRoots nor CLF identifies any environmental impact triggers exceeded by the Project, which would require enhanced public participation or enhanced review under the EJ Policy. With regard to the Project Change Proceeding, GreenRoots and CLF remain silent on whether any violations of the EJ Policy, *per se*, occurred. However, both organizations take issue with Siting Board’s and Eversource’s performance under the Commonwealth’s Language Access Policy, as described below.

⁷⁷ The Company stated that MassDEP determined that the Substation at the New Site, similar to its location at the Original Site, would constitute a water-dependent use (Company Brief at 22-23, citing Exhs. EFSB-G-2; EFSB P-2; EFSB-P-2(1); GR-PL-1). In the Original Proceeding, the Company indicated that the “water-dependent” determination by MassDEP was a key factor in the Project not being required to file an ENF, or undergo further MEPA review. Final Decision at 125 n.122, citing Original Proceeding Tr. 8, at 1327-1329.

⁷⁸ Massachusetts Environmental Justice Policies are here: https://www.mass.gov/files/documents/2017/11/29/2017-environmental-justice-policy_0.pdf, and <https://www.mass.gov/files/documents/2017/11/29/ej%20policy%202002.pdf>.

Given, the absence of any ENF filing requirement for the proposed Project Change, the Board's prior finding in the Final Decision that neither enhanced public participation nor enhanced review provisions under the EJ Policy were triggered applies similarly to the Project Change. Accordingly, the Siting Board finds that the Project Change does not trigger either enhanced public participation or enhanced review provisions of the EJ Policy. The Siting Board notes that the Commonwealth's Language Access Policy, which shares some legal underpinnings with the EJ Policy, but is a distinct set of policies, is germane to the Project Change proceeding, and a separate matter addressed below.

4. Language Access Policy

a. Description

Massachusetts's prohibition on discrimination (including discrimination based on national origin) is in G.L. c. 151B and a series of executive orders promoting non-discrimination, equal opportunity, and diversity. The Executive Office of Administration and Finance ("A&F") ensures compliance through its Office of Diversity and Equal Opportunity. Language Access Policy and Implementation Guidelines were issued by Office of Access and Opportunity in March of 2015 pursuant to A&F Administrative Bulletin #16.⁷⁹ The Siting Board does not have its own LAP but is subject to the Department's LAP. The Department's 2018 LAP requires the Department to make a determination on a case-by-case basis whether language interpreters are needed for a public hearing based on non-English speaking residents in the affected area and level of local interest in attending the public hearing.

⁷⁹ The A&F Bulletin is at <https://www.mass.gov/administrative-bulletin/language-access-policy-and-guidelines-af-16>. The DPU 2018 LAP is at <https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/11858397>

b. Positions of the Parties

i. GreenRoots

In its argument to reopen the Original Proceeding and reconsider the issue of need in the current proceeding, GreenRoots alleges that “serious inadequacies that characterized the public process resulting in the 2017 decision” further justify this action (GreenRoots Brief at 13). GreenRoots faults the Siting Board for holding a public comment hearing during the Original Proceeding in Chelsea, rather than East Boston, where the Substation would be located (id. at 14). GreenRoots argues that, “by statute, the Board must ‘conduct a public hearing on every petition to construct a facility...within six months of the filing thereof,’ and such hearings ‘shall be held in each locality in which a facility would be located’ ” (id., citing G.L. c. 164, §69J). In addition, GreenRoots faults the Siting Board for failing “to provide language access for non-English speakers, who make up a substantial segment of the affected East Boston community” (id. at 15). GreenRoots contends that the Siting Board failed to live up to its enabling legislation as well as its regulations, which “mandate that its public process include meaningful public notice and opportunities for the community to weigh in” (id.).

With regard to this Project Change Proceeding, GreenRoots supports CLF’s contention that meaningful public participation and opportunity for comment has not occurred (GreenRoots Reply Brief at 11). GreenRoots contends that the Company’s outreach for the Project Change has been “simply to inform the community about changes that Eversource plans to impose on them, rather than allowing community residents to influence the decision-making process” (id. at 11-12).

In a joint letter with CLF to the EEA Secretary, dated August 8, 2019, GreenRoots asserts that, after making an oral request at the first day of evidentiary hearings in the Project Change Proceeding for the provision of Spanish language interpretation services (at subsequent evidentiary hearings), the interpretation services provided by the Board were “plagued by technical issues, insufficient staffing, and staffing with insufficient training, resulting in substandard interpretation” (August 8, 2019 letter, at 6). While noting that “we appreciate the resources and time that went into accommodating the request from GreenRoots and arranging for Spanish-language interpretation, the interpretation services were inconsistent and often

inadequate, hindering the ability of Spanish-speaking residents to participate meaningfully in the hearings...” (*id.*).

ii. CLF

CLF recounts that it became involved in this proceeding “when it became increasingly clear that public participation had been curtailed, notably by the [Board’s] refusal to provide interpretation services at the Siting Board public meeting on the Tentative Decision in the Original Proceeding – a barrier to meaningful participation of Spanish-speaking residents in a majority Spanish-speaking environmental justice community” (CLF Brief at 6-7). CLF contends that the Company’s outreach to the East Boston community in the Original Proceeding was “paltry” compared to notice to and engagement with Chelsea and Everett resident (*id.* at 24-25). CLF contends that the Board did not deem it necessary to hold a public comment hearing in East Boston, in the Original Proceeding, despite the statutory requirement that such hearings “shall be held in each locality in which a facility would be located” (*id.* at 25, citing G. L. c. 164, § 69J). CLF contends that the quality of Eversource’s public engagement has lacked substance as Eversource seems to view public hearings as simply a place to provide information, not to gather it from the stakeholders who have the greatest insight into and understanding of on-the-ground conditions (*id.* at 26). CLF argues that a lack of meaningful public notice and opportunities for public input in the Original Proceeding amount to a failure by Eversource to provide a record that is substantially accurate and complete in this proceeding (CLF Brief at 22-23).

iii. Company

The Company recounts a number of steps taken on its own (or as directed by the Presiding Officer) to accommodate the Spanish- and Portuguese-speaking population residing in proximity to the Project (see Company Brief at 4-5, 7, 11).

The Company asserts that, although not relevant to the request for reopener, GreenRoots’ and CLF’s arguments “perpetuate the entirely false claim that the East Boston community has been ignored” and that the language access services provided were insufficient (Company Reply Brief at 12). Eversource contends there was no lack of due process or opportunities to

participate in the Original Proceeding (id.). The Company also notes that during the entire course of the underlying evidentiary proceedings, there were no requests for translation or interpretation services (id. at 13).

With regard to the Project Change Filing, the Company maintains that it also conducted extensive public outreach to East Boston residents, including the use of various language access measures (Company Brief at 10-12). See Section II.B, above. The Company claims that the long list of outreach meetings conducted in East Boston refute assertions made by GreenRoots and CLF that East Boston residents were ignored about the proposed Substation relocation (Company Reply Brief at 13).

c. Analysis and Findings

As an initial matter, GreenRoots and CLF raise concerns regarding the process provided by the Siting Board in the Original Proceeding, including the location of the public comment hearing in Chelsea,⁸⁰ the lack of simultaneous interpretation at the Board meeting in November

⁸⁰ Both GreenRoots and CLF argue that the Siting Board was required to conduct a public comment hearing in East Boston in the Original Proceeding. G.L. c. 164, § 69J states: “The board shall conduct a public hearing on every petition to construct a facility or notice of intention to construct an oil facility within six months of the filing thereof. Such hearing shall be an adjudicatory proceeding under the provisions of chapter thirty A. In addition, a public hearing shall be held *in each locality* in which a facility would be located . . .” (emphasis added). The Board has interpreted this requirement in its regulations at 980 CMR 1.04(5): “Public Comment Hearing. When required by statute or otherwise determined appropriate by the Presiding Officer, the Board shall hold a public comment hearing in one or more of the affected cities or towns.” The Siting Board has consistently applied its regulations to provide a public comment hearing in the locality of a project, but not necessarily in each municipality, especially in the case of a transmission line which can traverse multiple municipalities. The SJC has stated that it accords “substantial discretion to an agency to interpret the statute it is charged with enforcing . . .” Alliance to Protect Nantucket Sound, Inc. v. Energy Facilities Siting Board, 457 Mass. 663, 681 (2010). The Board’s regulations on public procedure are reasonable. See, Craft Beer Guild, LLC v. ABCC, 481 Mass. 506, 525, 527 (2019) (Court is generous in deference to administrative agencies in interpretation of their own regulations, ensuring only that interpretation is reasonable). Therefore, the Board’s

2017, and dissatisfaction with the Company's outreach to the East Boston community.⁸¹ The Siting Board outlined the notice and language access provided in the Original Proceeding in the Final Decision at 4-5, 145. The Siting Board also noted the Company's communications regarding Project-related concerns of other interested parties, including neighborhood, organizations and local environmental advocacy organizations, and that the Company committed to continue to communicate with the City and interested parties throughout the permitting and construction of the Project. Final Decision at 160. The Siting Board also outlined the Company's consultations with the City of Boston, and found that Eversource engaged in good faith consultations with the City. Final Decision at 159-160. Finally, the Siting Board required Eversource to develop a comprehensive community outreach plan for construction of the Project. Final Decision at 106.

Ultimately, no party appealed the Siting Board's Final Decision, and the appeal period is long past. G.L. c. 25, § 5, and G.L. c 164, § 69P. The Siting Board procedure for the Original Proceeding met all requirements of due process. See Section II.A., above. The Siting Board therefore addresses GreenRoots and CLF's concerns regarding this Project Change proceeding.

Both GreenRoots and CLF fault the Company's outreach to the community regarding the Project Change, arguing that Eversource did not include the community in decision-making

public comment hearing in the Original Proceeding was fully consistent with statutory and regulatory requirements.

⁸¹ Correspondence between participants in this proceeding and the Massachusetts Executive Office of Energy and Environmental Affairs ("EEA") referencing community outreach and language access matters has occurred during the course of the proceeding. This correspondence is in the docket for the proceeding and includes: Letter to EEA Secretary Mathew Beaton from GreenRoots, Inc. (November 28, 2018); Letter to Secretary Beaton from GreenRoots, CLF, and Lawyers for Civil Rights (November 30, 2018); Letter from Secretary Beaton to GreenRoots and CLF (December 20, 2018); Letter to EEA Secretary Kathleen Theoharides from GreenRoots and CLF (August 8, 2019); Letter from Secretary Theoharides to GreenRoots and CLF (October 22, 2019). Similar correspondence has continued since the conclusion of evidentiary hearings and is also in the docket. See e.g., Letter from GreenRoots to Presiding Officer, Energy Facilities Siting Board (January 14, 2020).

concerning the new Substation. While the Company maintains that it reached out to and considered language access needs of the community, such efforts have not measured up to the expectations of the community. We encourage the Company to continue to find ways to engage with the community during design, construction, and operation of the Substation.

The Siting Board takes seriously its Language Access Policy obligations under the respective policies of A&F and the Department, and has endeavored in this proceeding (and the Original Proceeding) to provide the language services necessary to allow for meaningful participation by the East Boston community. The Siting Board required translation of notice and certain regulations, and provided full interpretation services to the East Boston community during the public comment hearing in this Project Change proceeding. During the evidentiary hearings, upon request of GreenRoots on July 9, 2019, for real-time Spanish language interpreters to be present for the balance of the evidentiary hearings, the Siting Board promptly procured such services, and deployed its recently acquired transmitter/headphone audio system for use with the contracted interpreters.

While GreenRoots and CLF fault the caliber of the interpretation services and audio systems provided by the Board, the services provided were appropriately procured professional interpretation services, at considerable expense, and demonstrated a good faith effort by the Siting Board to meet GreenRoots' request. This also marked the first use of interpretation services during a Siting Board evidentiary hearing, providing the Board with both the challenge and opportunity to develop new procedures and deploy new equipment to ensure the best possible interpretation services provided under the circumstances. In short, the Siting Board's actions are consistent with both the letter and spirit of applicable Language Access Policy requirements – although evidently not to GreenRoots' and CLF's complete satisfaction. While its performance in this proceeding was fully compliant, the Board will continue to strive to improve its Language Access Policy implementation practices in future proceedings.

5. Resource Use and Development Policies

In 2007, pursuant to the Commonwealth's Smart Growth/Smart Energy policy, EEA established Sustainable Development Principles. Among the principles are: (1) supporting the

revitalization of city centers and neighborhoods by promoting development that is compact, conserves land, protects historic resources and integrates uses; (2) encouraging reuse of existing sites, structures and infrastructure; and (3) protecting environmentally sensitive lands, natural resources, critical habitats, wetlands and water resources and cultural and historic landscapes.

The Company's obligation to remediate the subsurface and groundwater at the New Site, while costly, is consistent with the Commonwealth's Smart Growth/Smart Energy policy, and EEA's Sustainable Development Principles. As noted above, the Company's proposed remediation approach would allow for redevelopment of the New Site, a long-contaminated property, consistent with the Commonwealth's policies for brownfield site redevelopment. Additionally, the Company has appropriately addressed risks of the Project Change from sea level rise associated with the Substation's proximity to the Chelsea Creek by proposing to place equipment 23 feet above MLLW. The New Site has also addressed stormwater runoff risks to the adjacent existing City sewer system with the inclusion of stormwater detention facilities on the New Site.

The Commonwealth seeks to preserve and protect the rights of the public, and to guarantee that private uses of tidelands and waterways serve a proper public purpose, through the Massachusetts Public Waterfront Act (Chapter 91). The Commonwealth has also established Designated Port Areas (including the Chelsea Creek Designated Port Area), to promote and protect water-dependent industrial uses. As discussed in Section V.7, above, MassDEP has determined the Substation at the New Site remains a Water Dependent Use Project, and therefore is consistent with this policy.

Subject to the specific mitigation and the conditions set forth in this Decision, the Siting Board finds that the Company's plans for construction of the Project Change are consistent with the current resource use and development policies of the Commonwealth.

D. Conclusion

In the Final Decision, the Siting Board comprehensively analyzed the environmental impacts of the Project, consisting of the New Lines along the Primary Route, and the East Eagle Substation at the Original Site located on the City Parcel, and found that with the implementation

of specified conditions and mitigation, and compliance with all local, state, and federal requirements, the environmental impacts of the Project along the Primary Route, with a new substation on the Original Site, would be minimized. Here, the Siting Board analyzed environmental impacts associated with moving the East Eagle Substation 190 feet to the west of the Original Site, remaining within the City Parcel. As described above, the Siting Board has found that with the implementation of additional specified conditions (see also below) and mitigation, potential land use impacts, safety impacts, visual impacts, hazardous waste impacts, noise impacts, traffic impacts, water and wetland impacts, and magnetic field impacts associated with the relocation of the Substation to the New Site have been minimized. The Siting Board finds therefore that the environmental impacts of relocating the Substation to the New Site would be minimized.

As further discussed above in Section IV.C.3, the Siting Board found in the Final Decision that the Project is needed. Final Decision at 26-29. Specifically, the Siting Board concluded that, for the Chelsea/East Boston/Lynn Load Area, there is a risk of: (1) an excessive amount (over 300 MW) of consequential load loss; and (2) inadequate post-contingency voltage performance. Final Decision at 28. The Siting Board further concluded that the Chelsea Substation: (1) has pre- and post-contingency capacity constraints; and (2) poses an increasing risk of post-contingency load shedding beginning in 2016. Id. at 28-29. On the basis of both an identified regional need and an identified substation-specific need, the Siting Board found that additional energy resources are needed to maintain a reliable supply of electricity in the Chelsea/East Boston/Lynn Load Area. Id. at 28-29. Further, as discussed above, the need for the Project is not related to, or affected in any way by, relocation of the Substation within the City Parcel. In the ruling on GreenRoots renewed request to reopen the question of need, the Board denied the Motion to Reopen because GreenRoots had not satisfied the standard for the reopening of an evidentiary hearing and because its Motion to Reopen constituted a request to relitigate the issue of Project need. GreenRoots did not establish good cause to reopen the record to reexamine this finding. See Section III.A, above.

The Substation, on either the Original Site or the New Site, is an integral part of the Project as approved and is required to serve the reliability needs of East Boston and Chelsea, as

the Project as a whole is needed to serve the reliability needs of East Boston, Chelsea, and Everett. The record does not support a conclusion that the Project with a Substation on the New Site would be any less reliable than with the Substation on the Original Site. As a brownfield redevelopment, the Substation is a suitable use for the New Site. As noted above, the New Lines are currently under construction. The residents of East Boston, Chelsea, and Everett are entitled to a reliable electric system and any additional delay in construction of the Substation will also delay the reliability benefits of the entire Project. The Siting Board acknowledges that the cost of constructing the East Eagle Substation on the New Site is more than the cost of the constructing the Substation on the Original Site, and while the cost increase is not insignificant, the Siting Board has found that the increase is well within the cost range understood by the Siting Board at the time it approved the Final Decision, and therefore not inconsistent with the Board's prior approval of the Project. The Siting Board also has found that the incremental costs of the MassDEP-required environmental remediation of the New Site will produce community benefits associated with the removal of longstanding contaminated soil and improving groundwater conditions at the New Site.

Given that the reliability need for the Project found in the Final Decision remains; that environmental impacts of the Project Change have been minimized; that the incremental costs of constructing the Substation on the New Site are not inconsistent with the range of total Project costs referenced in the Final Decision; and that New Site remediation would produce a benefit to the community, the Siting Board finds that the Company's plans for implementation of the Project Change would, on balance, contribute to a reliable energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost. G.L. c. 164, § 69H.

VI. ZONING

A. Original Proceeding

In the Original Proceeding, the Company requested, and the Siting Board granted, exemptions from five individual provisions of the City of Boston Zoning Code ("Boston Zoning

Code”).^{82, 83} Final Decision at 147-161. The Company asserted with respect to four of these zoning provisions that the Project physically could not, or might not be able to, meet the substantive requirements of these provisions, and that, without exemption from them, the Company would need to seek variances from the City of Boston Zoning Board of Appeal, which are difficult to obtain. Final Decision at 151-152.⁸⁴ The Company also requested, and the Siting Board granted, a comprehensive exemption from the Boston Zoning Code. Final Decision at 161-163.

With respect to the Company’s request for exemption from individual provisions of the Boston Zoning Code, the Siting Board found that the Company satisfied the three criteria contained in the Department’s standard of review for the granting of such exemptions: (1) the Company demonstrated that it qualifies as a public service corporation (Final Decision at 147-149); (2) the Company demonstrated that the proposed use of the land or structure is reasonably necessary for the convenience or welfare of the public (Final Decision at 147, 149-151); and (3) the Company established that it requires exemption from the zoning ordinance or bylaw (Final Decision at 147-148, 151-158). Additionally, the Siting Board found that Eversource engaged in good faith consultations with the City of Boston with respect to the Company’s zoning exemption requests, another element of the Department’s review of a project proponent’s request for exemptions from local zoning requirements. Final Decision at 159-161.

⁸² The Siting Board most commonly reviews requests for exemption from local zoning ordinances or bylaws pursuant to the Department’s authority to grant such exemptions under G.L. c. 40A, § 3. The provisions of G.L. c. 40A, § 3, however, do not apply to the City of Boston. The Department has the authority to grant exemptions from the Boston Zoning Code by Special Act of the Legislature. See Section 6 of Chapter 665 of the Acts of 1956. Final Decision at 147.

⁸³ The Siting Board granted the Company’s requests for exemption from Sections 53-15 and Use Table C; 15-13; 53-17; 53-18; 11-2(b). Final Decision at 151-158.

⁸⁴ The Company asserted a different basis for seeking an exemption from the fifth provision (Section 53-13). Final Decision at 152. As discussed below, however, the Company does not seek the fifth exemption for the New Site (Exhs. EFSB-Z-2; EFSB-Z-3).

With respect to the Company's request for a comprehensive exemption from the Boston Zoning Code, the Siting Board found that the issuance of comprehensive zoning exemption could avoid substantial public harm by serving to prevent a delay in the construction and operation of the Project, consistent with the Department's standard of review for the granting of a comprehensive zoning exemption. Final Decision at 161-163.⁸⁵

B. Project Change Proceeding

The Company stated in its Project Change Filing that the New Site for the Substation is in the same zoning district as the Original Site: the Eagle Square Waterfront Manufacturing Subdistrict of the East Boston Neighborhood District (Exh. EV-1, at 22). The Company stated further that, with one exception, construction of the Substation on the New Site requires the same zoning exemptions as construction on the Original Site (id.; Tr. 3, at 577). Construction on the New Site would actually require one less exemption; the Company stated that it is no longer seeking an exemption from Section 53-13 (applicable standards for City recommendation regarding Chapter 91 review), as the time period for the City's submission for such a recommendation has lapsed (Exhs. EFSB-Z-2; EFSB-Z-3). The Company noted that the City of Boston supported the Company's requested zoning exemptions for the Original Site and supports the granting of the requested exemptions for the New Site as well (Exh. EV-1, at 22-23, and app. H; Tr. 3, at 577).

⁸⁵ Most commonly, project proponents seeking a comprehensive zoning exemption seek exemption from the applicable local zoning by law or ordinance in its entirety. Here, Eversource in the Original Proceeding limited its request for a comprehensive exemption to exemption from Articles 1 through 25 and Article 53 of the Boston Zoning Code. Final Decision at 162, citing Exh. EFSB-Z-20 in the Original Proceeding. Accordingly, based on the Company's statement that it seeks in this proceeding the same exemptions that it sought in the Original Proceeding (with the exception of an exemption from Section 53-13), the Siting Board's consideration here of the Company's request for a comprehensive exemption also is limited to these Articles of the Boston Zoning Code.

C. Analysis and Findings

The record shows, and the Siting Board found in the Original Proceeding that construction of the Substation on the Original Site required exemption from five individual zoning exemptions, and a comprehensive exemption from the Boston Zoning Code. The Company in this Project Change proceeding seeks four of the same individual exemptions and a comprehensive exemption for construction of the Substation on the New Site. The Siting Board finds that nothing in the record of this proceeding changes the Board's conclusions or findings in the Original Proceeding with respect to the Company's need for these exemptions to construct the Substation. Therefore, the Siting Board finds 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 exemption from the zoning ordinance or bylaw. In addition, the Siting Board finds that the Company engaged in good faith negotiations with the City of Boston regarding the zoning exemptions requested. Because the New Site is on a different parcel within the City Parcel than the Original Site, the Siting Board hereby grants anew the four requested individual exemptions and the requested comprehensive exemption from the Boston Zoning Code for the Substation on the New Site. Specifically, the Siting Board grants the Company an exemption from Section 53-15 and Use Table C (prohibited uses); Section 53-17 (open space requirements); Section 53-18 (waterfront yard requirements); and Section 11-2(b) (signage) of the Boston Zoning Code. The Siting Board also finds that the issuance of comprehensive zoning exemption could avoid substantial public harm by serving to prevent a delay in the construction and operation of the Project, and grants the Company a comprehensive exemption from the Zoning Code; the comprehensive exemption is limited to Articles 1 through 25 and Article 53 of the Zoning Code.

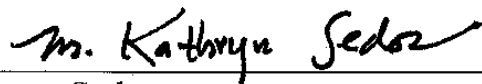
VII. DECISION

The Siting Board approves the proposed changes to the Project, consisting of the relocation of the East Eagle Substation to the New Site, as presented in the Company's November 15, 2018, Project Change Filing and in the record of this proceeding. The approval is

conditioned on Eversource's compliance with (1) the seven conditions below, Conditions T, U, V, W, X, Y, and Z; (2) all applicable conditions in the Final Decision, and (3) all representations by the Company in the combined record of the Original Proceeding and this Project Change proceeding.

- T. The Siting Board directs the Company to install a 12-foot high concrete wall with a 13-foot fiberglass fence on top along the northern portion of the Substation site, which borders areas that could be potentially accessible by the public.
- U. 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 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 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 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. 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.
- V. The Siting Board directs the Company to limit construction of the Substation to Monday through Friday, from 7:00 a.m. to 6:00 p.m. Work that necessarily has a longer required continuous duration than normal construction hours allow shall be exempted from the above weekday and Saturday limitations with approval by the City. Should the Company need to extend construction work beyond these hours and days, see Final Decision at Condition B, last two paragraphs; first paragraph of Condition B is superseded here by Condition V.
- W. The Siting Board directs the Company to place sound blankets on the existing perimeter fence along the western side of the New Site during construction, prior to the installation of the 25-foot-high concrete wall.

- X. The Siting Board directs the Company to develop and implement a traffic mitigation plan relating to the egress and ingress of construction and operational vehicles on Condor Street, and submit such plan to the Siting Board 30 days prior to commencing construction. In developing the traffic mitigation plan, the Company is directed to consult with the City of Boston and to take into account the use of nearby properties such as the American Legion Playground and Urban Wild.
- Y. The findings in this Decision are based upon the record in the Original Proceeding and the record in this case. The Company and its successors in interest have an absolute obligation to construct and operate the Project Change in conformance with all aspects of the Project Change and all applicable aspects of the Project as presented to the Siting Board in the Original Proceeding.
- Z. The Siting Board requires the Company and its successors in interest to notify the Siting Board of any changes other than minor variations to the Project as approved in this Project Change proceeding, so that the Siting Board may decide whether to inquire further into a particular issue. The Company and its successors in interest are obligated to provide the Siting Board with sufficient information on any modifications to the proposed Project Change in order to enable the Siting Board to make these determinations.



M. Kathryn Sedor
Presiding Officer

Dated this 28th day of February 2020

As voted by the Energy Facilities Siting Board at its meeting on [March 11, 2020] by the members present and voting. Voting [for/against/abstain] the Tentative Decision as amended: Kathleen A. Theoharides, Secretary of the Executive Office of Energy and Environmental Affairs and Siting Board Chair; Matthew H. 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; Gary Moran, Deputy Commissioner and designee for the Commissioner of MassDEP; Jonathan Cosco, General Counsel and designee for the Secretary of the Executive Office of Housing and Economic Development; Shalanda Baker, Public Member; and Brian Casey, Public Member.

Kathleen A. Theoharides, Chair
Energy Facilities Siting Board

Dated this [XX] day of March 2020

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 25, Sec. 5; Chapter 164, Sec. 69P.