The Commonwealth of Massachusetts

DEPARTMENT OF PUBLIC UTILITIES

D.P.U. 18-21 August 2, 2019

Petition of NSTAR Electric Company d/b/a Eversource Energy pursuant to G.L. c. 164, § 72, and G.L. c. 40A, § 3 for approval to construct and operate a new 115 kilovolt overhead transmission line on existing right-of-ways in the City of Westfield, Massachusetts and for exemptions from the operation of the City of Westfield Zoning Ordinance in connection with modifications of an existing substation and the construction of a new switching station.

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I. INTRODUCTION

A. Company Proposal

NSTAR Electric Company d/b/a Eversource Energy ("Eversource" or "Company") proposes to install a new, approximately 3.0-mile-long, 115 kilovolt ("kV") transmission circuit (the "New Circuit") on existing and new overhead transmission structures along an existing Eversource transmission right-of-way ("ROW") from the existing Buck Pond Substation[1] in Westfield, Massachusetts, to a new switching station (the "Atwater Switching Station" or "Switching Station") also in Westfield (Exh. EV-1, at 1, 13). The New Circuit would be located primarily on the vacant side of existing double-circuit structures that support the Company's existing 115 kV 1302 Line (Exh. EV-1, at 11). In addition, the Company proposes to (1) connect its existing 115 kV 1512 Line to the new Atwater Switching Station through the construction of an approximately 0.4-mile-long 115 kV loop line ("Loop Line") and (2) make other minor line and substation modifications (together, the "Project") (Exh. EV-1, at 1). The Project has an estimated cost of $35.6 million, with an accuracy level of +/- 25 percent (Exh. EV-1, at 17).

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[1] Westfield Gas & Electric Light Department ("WG&E") owns the land that Buck Pond Substation occupies, located at 83 Medeiros Way in Westfield, and it also owns the low-voltage, distribution-related equipment within the substation yard (Exh. EV-1, at 3, n.11). The Department notes that G.L. c. 40A, § 3 does not restrict an applicant from seeking a zoning exemption for land or structures that are used, but not owned by an applicant. See Princeton Municipal Light Department, D.P.U./D.T.E. 06-11, at 9 (2007). Eversource owns, operates, and maintains the high-voltage (115 kV) equipment in Buck Pond Substation pursuant to an agreement with WG&E and will own and operate the Project-related facilities at Buck Pond Substation after construction (Exhs. EV-1, at 3, n.1; DPU-G-9).

B. Procedural History

On April 17, 2018, the Company submitted a petition for approval of the New Circuit and the proposed Loop Line pursuant to G.L. c. 164, § 72 ("Section 72 Petition") and a petition pursuant to G.L. c. 40A, § 3 ("Zoning Petition"), requesting individual and comprehensive exemptions from the Zoning Ordinance of the City of Westfield to modify the existing Buck Pond Substation and to construct the new Atwater Switching Station (together, "Petitions").[2] On August 13, 2018, the Department conducted a Project site visit followed by a duly noticed public comment hearing at the South Middle School in Westfield. At the public hearing, one commenter stated that Westfield has had water contamination issues and asked about vegetation management on the Project ROW (Public Comment Hearing Transcript at 14-16).[3] On August 24, 2018, WG&E filed a petition to participate as a limited participant, which the Department granted on September 10, 2018. The Department conducted evidentiary hearings on November 14 and 15, 2018. At the hearings, the Company presented Paul Knapik, senior wetlands consultant at BSC Group, and the following Eversource employees: John P. Richard, project manager; John M. Zicko, director of substation engineering design; Robert D. Andrew, director of system solutions; Carl H.

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2 The Company filed the Petitions on April 17, 2018, as Western Massachusetts Electric Company d/b/a Eversource Energy. On April 24, 2018, the Company filed a letter correcting the name of the Petitioner as NSTAR Electric Company d/b/a Eversource Energy.

3 The Company reported that at its public open houses conducted in Westfield, property owners expressed a range of concerns related to visual, noise, truck traffic, and safety impacts of the Project (Exh. DPU-G-1).

Benker, transmission planning engineer; David Burnham, manager of ISO policy; and Devleena Ghosh-Brower, senior environmental specialist. The Company and WG&E each submitted a brief in support of the Company's Project on December 21, 2018. The record consists of 232 exhibits.

II. REQUEST FOR INDIVIDUAL ZONING EXEMPTIONS PURSUANT TO G.L. C. 40A, § 3

A. Standard of Review

G.L. c. 40A, § 3, provides, in relevant part, that:

> Land or structures used, or to be used by a public service corporation may be exempted in particular respects from the operation of a zoning ordinance or bylaw if, upon petition of the corporation, the [Department] shall, after notice given pursuant to section eleven and public hearing in the town or city, determine the exemptions required and find that the present or proposed use of the land or structure is reasonably necessary for the convenience or welfare of the public.

Thus, a petitioner seeking exemption from a local zoning bylaw under G.L. c. 40A, § 3, must meet three criteria. First, the petitioner must qualify as a public service corporation. NSTAR Electric Company d/b/a Eversource Energy, D.P.U. 17-147, at 5 (2019) ("K Street Substation"); Hopkinton LNG Corporation, D.P.U. 17-114, at 7 (2016) ("Hopkinton LNG"); Save the Bay, Inc. v. Department of Public Utilities, 366 Mass. 667 (1975) ("Save the Bay"). Second, the petitioner must demonstrate that its present or proposed use of the land or structure is reasonably necessary for the convenience or welfare of the public. K Street Substation at 5; Hopkinton LNG at 10; Tennessee Gas Pipeline Company, D.T.E. 01-57, at 4 (2002). Finally, the petitioner must

establish that it requires exemption from the zoning ordinance or bylaw. K Street Substation at 5; Hopkinton LNG at 7; Boston Gas Company, D.T.E. 00-24, at 3 (2001).

1. Public Service Corporation

In determining whether a petitioner qualifies as a "public service corporation" ("PSC") for the purposes of G.L. c. 40A, § 3, the Massachusetts Supreme Judicial Court has stated:

> among the pertinent considerations are whether the corporation is organized pursuant to an appropriate franchise from the State to provide for a necessity or convenience to the general public which could not be furnished through the ordinary channels of private business; whether the corporation is subject to the requisite degree of governmental control and regulation; and the nature of the public benefit to be derived from the service provided.

Save the Bay, 366 Mass. at 680; See also K Street Substation at 6; NSTAR Hopkinton at 6-7.

The Department interprets this list not as a test, but rather, as guidance to ensure that the intent of G.L. c. 40A, § 3, will be realized (i.e., that a present or proposed use of land or structure that is determined by the Department to be "reasonably necessary for the convenience or welfare of the public" not be foreclosed due to local opposition). Save the Bay, 366 Mass. at 685-686; Town of Truro v. Department of Public Utilities, 365 Mass. 407, 410 (1974) ("Town of Truro"). The Department has interpreted the "pertinent considerations" as a "flexible set of criteria which allow the Department to respond to changes in the environment in which the industries it regulates operate and still provide for the public welfare." K Street Substation at 6; Hopkinton LNG at 8; New England Power Company d/b/a National Grid, D.P.U. 14-128/14-129, at 4 (2015); see also

Dispatch Communications of New England d/b/a Nextel Communications, Inc., D.P.U./D.T.E. 95-59-B/95-80/95-112/96-13, at 6 (1998). The Department has determined that it is not necessary for a petitioner to demonstrate the existence of "an appropriate franchise" in order to establish PSC status. K Street Substation at 7; Hopkinton LNG at 9; Berkshire Power Development Inc., D.P.U. 96-104, at 31 (1997).

2. Public Convenience and Welfare

In determining whether the present or proposed use is reasonably necessary for the public convenience or welfare, the Department must balance the interests of the general public against the local interest. Save the Bay, 366 Mass. at 680; Town of Truro, 365 Mass. at 410; K Street Substation at 7. Specifically, the Department is empowered and required to undertake "a broad and balanced consideration of all aspects of the general public interest and welfare and not merely [make an] examination of the local and individual interests which might be affected." New York Central Railroad v. Department of Public Utilities, 347 Mass. 586, 592 (1964) ("New York Central Railroad"); K Street Substation at 7; Hopkinton LNG at 10.

With respect to the particular site chosen by a petitioner, G.L. c. 40A, § 3, does not require the petitioner to demonstrate that its primary site is the best possible alternative, nor does the statute require the Department to consider and reject every possible alternative site presented. Rather, the availability of alternative sites, the efforts necessary to secure them, and the relative advantages and disadvantages of those sites are matters of fact bearing solely upon the main issue of whether the primary site is reasonably necessary for the convenience

or welfare of the public. Martarano v. Department of Public Utilities, 401 Mass. 257, 265 (1987); New York Central Railroad, 347 Mass. at 591; K Street Substation at 7.

Therefore, when making a determination as to whether a petitioner's present or proposed use is reasonably necessary for the public convenience or welfare, the Department examines (1) the need for, or public benefits of, the present or proposed use; (2) the present or proposed use and any alternatives or alternative sites identified; and (3) the environmental impacts or any other impacts of the present or proposed use. The Department then balances the interests of the general public against the local interest, and it determines whether the present or proposed use of the land or structures is reasonably necessary for the convenience or welfare of the public. K Street Substation at 8; Hopkinton LNG at 6; Tennessee Gas Company, D.T.E. 98-33, at 4-5 (1998).

3. Exemptions Required

In determining whether exemption from a particular provision of a zoning bylaw is "required" for purposes of G.L. c. 40A, § 3, the Department makes a determination whether the exemption is necessary to allow construction or operation of the petitioner's Project. K Street Substation at 8; Hopkinton LNG at 10; Tennessee Gas Company, D.P.U. 92-261, at 20-21 (1993). It is a petitioner's burden to identify the individual zoning provisions applicable to the Project and then to establish on the record that exemption from each of those provisions is required:

> The Company is both in a better position to identify its needs, and has the responsibility to fully plead its own case . . . The Department fully expects that, henceforth, all public service corporations seeking exemptions under [G.L.] c. 40A, § 3 will identify fully and in a timely manner all exemptions

> that are necessary for the corporation to proceed with its proposed activities, so that the Department is provided ample opportunity to investigate the need for the required exemptions.
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> New York Cellular Geographic Service Area, Inc., D.P.U. 94-44, at 18 (1995);

K Street Substation at 9; Hopkinton LNG at 10.

B. Public Service Corporation Status

Eversource Electric is an electric company as defined by G.L. c. 164, § 1, and, as such, is a public service corporation. K Street Substation at 9; NSTAR Electric Company d/b/a Eversource Energy and New England Power Company d/b/a National Grid, EFSB 15-04/D.P.U. 15-140/15-141, at 141 (2018) ("Woburn-Wakefield"); Walpole-Holbrook at 92. Accordingly, the Department finds that the Company qualifies as a public service corporation for the purposes of G.L. c. 40A, § 3.

C. Public Convenience and Welfare

1. Need for or Public Benefit of Use

a. Company's Proposal

In December 2013, ISO New England ("ISO-NE") published an assessment of the reliability of electrical supply in the Pittsfield/Greenfield Area ("PGA"), entitled the *Pittsfield-Greenfield, MA Area 2022 Needs Assessment Study* ("2022 Needs Assessment") (Exh. EV-1, at 26). ISO-NE performed this assessment as part of its ongoing regional system planning process, and it evaluated the reliability performance of the transmission system serving the PGA under 2022 projected conditions for compliance with planning standards and criteria established by the North American Energy Reliability Corporation ("NERC"), the Northeast Power Coordinating Council ("NPCC"), and ISO-NE (Exh. EV-1,

at 21, 26).[4] The 2022 Needs Assessment relied on ISO-NE's 2012 and 2013 Capacity, Energy, Loads, and Transmission ("CELT") report load forecasts, and the energy efficiency ("EE") and demand response ("DR") forecasts contained therein, to project 90/10 summer peak load levels for the PGA (Exh. EV-1, at 26-27).[5]

The Company defined the PGA as an area generally extending from Montague and the north side of Amherst, southwest to Pittsfield, and southeast through Westfield to Agawam (Exhs. DPU-N-2; DPU-N-2(1); RR-DPU-1(1)). The Company also defined the "Westfield Area," as a subsection of the PGA extending from Westfield and Southwick westward into Lee, and also a "Springfield Area" extending from Springfield through Southampton and Holyoke to the south side of Amherst, as well as points east (Exh. DPU-G-7; RR-DPU-1(1)), all shown in Figure 1, below.

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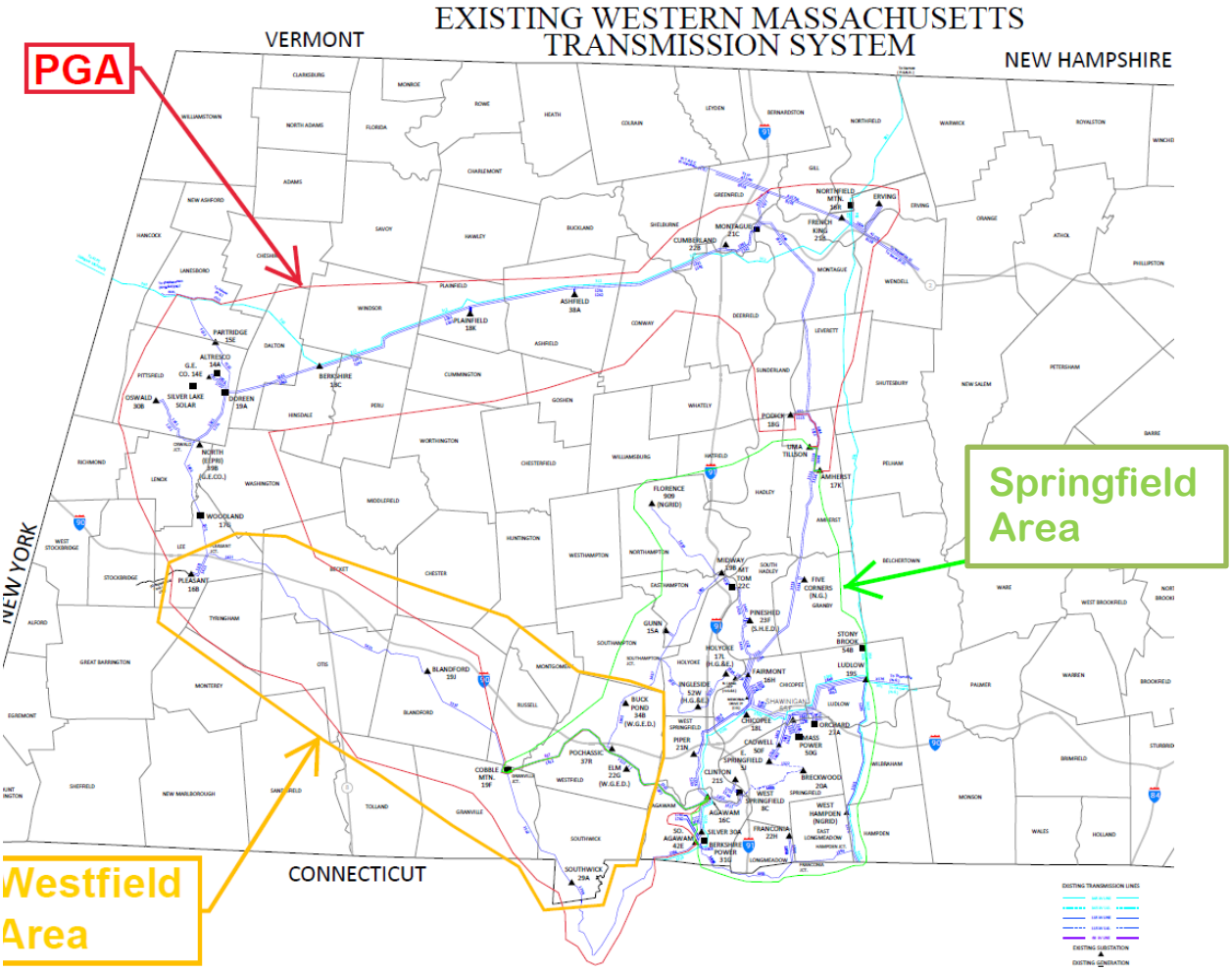
4 For the transmission system to meet the established reliability criteria, there cannot be any instances of equipment exceeding an applicable Long-Time Emergency ("LTE") or Short-Time Emergency ("STE") ratings, or unacceptably high or low voltages following an N-1 contingency (loss of a single transmission element) or N-1-1 contingency (loss of a subsequent non-related transmission element following an initial N-1 event) (Exh. EV-1, at 21, 28-29, n.10). The Company has a goal of maintaining voltages within five percent of nominal voltage, i.e., between 0.95 and 1.05 per unit ("p.u."), but accepts at temporary dip following a contingency to 0.90 p.u., provided it can be corrected to 0.95 p.u. following the action of corrective devices, such as load tap changers or capacitor banks (Exh. EV-1, at 29 n.11; Tr. 1, at 21).

5 The CELT report, a ten-year econometric forecast of loads and resources for the New England region, is the source of many assumptions used in the region's electric power planning and reliability studies, and results from a rigorous stakeholder process that aims to produce a consistent load forecast for ISO-NE's system assessments (Exhs. EV-1, at 23-26; DPU-N-6).

Figure 1. Existing Transmission System Configuration in the Westfield Area



Source: RR-DPU-1(1).

According to the Company, the 2022 Needs Assessment identified several deficiencies in the PGA, including unacceptably low voltages at four substations within the Westfield Area (the Pleasant, Blandford, Southwick, and Elm Substations) following certain N-1 and N-1-1 contingencies of concern (Exh. EV-1, at 5, 28-30).[6] Eversource described these

[6] The Elm Substation is in Westfield and the Pleasant Substation is located in Lee (Exh. DPU-G-8).

contingencies as creating a radial load pocket in the Westfield Area, with only a single, long and heavily loaded transmission line connecting the load pocket to the rest of the electric grid (Tr. 1, at 29-31). Eversource stated that under certain N-1-1 contingencies, the existing transmission system would be unable to maintain adequate voltage levels, and the supply of electricity to approximately 33,500 customers would be interrupted (Exh. EV-1, at 30; Tr. 1, at 56).[7] The Company also stated that, depending on modeled load in western Massachusetts, there may be year-to-year variations in violations for modeled overloads at the four substations that are close to criteria limits (RR-DPU-2).

In October 2015, ISO-NE issued its solutions study for the reliability needs identified in the 2022 Needs Assessment ("2022 Solutions Study") (Exh. EV-1, at 30). According to the Company, as part of the solution study process, ISO-NE reevaluated the needs in the PGA using updated load forecast information from the 2014 CELT, which was the most recent CELT forecast available at the time (Exh. EV-1, at 30-31). Eversource stated that the 2022 Solutions Study confirmed that the post-contingency low-voltage violations at the Pleasant, Blandford, Southwick, and Elm Substations remained, and it also identified post-contingency thermal overloads and low-voltage violations following a certain N-1-1 contingency of concern in the neighboring Springfield Area (Exhs. EV-1, at 31, 33; DPU-N-19; RR-DPU-8).

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[7] Specifically, Eversource identified post-contingency voltage levels of less than 0.8 p.u. following certain N-1-1 contingencies, which the Company stated would likely cause a voltage collapse in the area, interrupting the supply of power to approximately 154 MW of load (Exh. DPU-N-14; Tr. 1, at 31-32; RR-DPU-3; RR-DPU-4).

Given the passage of time since the 2022 Needs Assessment and 2022 Solutions Study were completed, in 2018, Eversource undertook an updated analysis to confirm the reliability needs identified in the Westfield and Springfield Areas remain based on the recent demand forecast projections and current reliability planning standards and criteria (Exhs. EV-1, at 36-39; DPU-N-20; DPU-N-21; Tr. 1, at 40-46; RR-DPU-8). Based on its analysis, Eversource stated that both low voltage and thermal violations remained that must be addressed for the Company to maintain a reliable supply of electricity to the Westfield and Springfield Areas (Exh. EV-1, at 36-39; Tr. 1, at 41-46; RR-DPU-8). Specifically, post-contingency low voltage violations could occur at the Blandford, Southwick, and Elm Substations under summer peak load conditions (RR-DPU-6(S)(1)). In addition, the Company provided a letter dated December 7, 2018, from the ISO-NE which reiterates the need for the Company's Project and asserts that the updated load data set forth in the Company's 2028 Assessment and the 2018 CELT forecast continue to support the need for the proposed facilities (Exh. EV-1, at 36-39; Tr. 1, at 41-46; RR-DPU-8; RR-DPU-9(S1)(1)).

b. Positions of the Parties

WG&E supports the Project to meet reliability needs of WG&E's customers for several reasons. WG&E notes that, by adding an additional 115 kV line and an associated breaker at Buck Pond Substation, WG&E will have a third source of supply (WG&E Brief at 1-2). WG&E notes that this modification at Buck Pond Substation "eliminates the possibility of a complete blackout of the approximately 3,850 WG&E customers served by

the station that currently can occur as a result of the failure of the 115 kV circuit breaker at the substation" (WG&E Brief at 1, citing Exh. EV-1, at 47; see also Tr. 1, at 89-90). WG&E also argues that the proposed Project brings reliability benefits to 14,000 WG&E electric customers because it features a shorter, two-terminal means for the 1981 Line to enter Elm Substation, also located in Westfield, rather than the longer, three-terminal 1512 Line which currently serves that substation (WG&E Brief at 1-2).

c. Analysis and Findings

The record shows that, as presently configured, the electrical transmission grid in the area of Springfield and Westfield has several potential reliability issues. Post-contingency low voltage violations have been identified at three substations in the Westfield Area, and post-contingency low voltage violations and thermal overloads have been identified in the Springfield Area (Exh. EV-1, at 5, 28-30). Post-contingency voltage violations modeled in the Westfield Area are severe enough that, following certain N-1-1 contingencies of concern under summer peak load conditions, the supply of electricity to approximately 33,000 customers would be interrupted (Exh. EV-1, at 30; Tr. 1, at 56).

Eversource is required to eliminate the identified criteria violations in the Westfield and Springfield Areas in order to comply with national, regional, and local reliability standards, and to provide a reliable supply of electricity to customers. The record shows that, based on modeling of potential contingencies, there presently exist both low-voltage and thermal violations that must be addressed to maintain a reliable supply of electricity to the Westfield and Springfield Areas, and the Project would address these violations

(RR-DPU-9(S1)(1)). Accordingly, the Department finds that there is need for the Project and that the construction and operation of the Project would result in public benefits.

2. Company's Project Approach

Eversource considered both non-transmission alternatives ("NTAs") and transmission alternatives to address the identified reliability need (Exh. NEP-1, at 4-2 to 4-30).[8]

a. Non-Transmission Alternatives

To assist the Company in its assessment of NTAs, Eversource engaged London Economics International ("LEI") to evaluate the costs of deploying NTA solutions (Exh. EV-1, at 53). LEI evaluated a number of utility-scale NTAs, including gas turbine generators, solar photovoltaic ("solar PV") (with and without storage), slow and fast-discharge battery storage, and additional EE and DR beyond that already included in the CELT forecast (Exh. EV-1, at 55).

According to the Company, the first step in LEI's assessment was to identify which NTA technologies had the performance characteristics necessary to respond within 30 minutes of the occurrence of the first contingency and resolve the identified low voltage and thermal violations (Exh. EV-1, at 55).[9] LEI then evaluated the potential costs to

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[8] Eversource also explored a no-build approach. However, this approach did not address the identified reliability need in the Westfield and Springfield Areas and, therefore, the Company did not pursue this approach (Exh. EV-1, at 41).

[9] For example, the Company stated that based on the most recent demand forecast information available (the 2018 CELT Report), approximately 50 MW of gas-fired generation or approximately 200 MW of solar PV would be required to address the identified need (RR-DPU-13). In addition, the Company indicated that electric

ratepayers of the technically feasible NTAs based on the gross and net levelized cost of entry for each technology (Exh. EV-1, at 54).[10] LEI concluded that the least-cost NTA technology would be a peaker aeroderivative gas-fired generator with direct cost to ratepayers of on the order of $10.8 million annually (Exh. EV-1, at 57; Tr. 1, at 143).[11] In comparison, the Company estimated the cost to ratepayers of the Project to be approximately $4.3 million annually (Tr. 1, at 48-49).

In addition to the higher cost of an NTA solution, Eversource identified a number of practical challenges associated with a generation NTA, including the necessary development time, as well as land and infrastructure requirements (Exh. EV-1, at 56). The Company indicated that in order to effectively address the reliability needs in the Westfield and Springfield Areas, an NTA solution would need to be electrically connected to the Southwick Substation (Exh. EV-1, at 54-55). Further, Eversource noted that, to date, no generation projects of sufficient size have been proposed in this location, and the Company stated that development of a new generation project in the region would require, among other things, the

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demand would have to be reduced by 50 MW locally to address the identified need (id.).

10 LEI's calculation of the net levelized cost to ratepayers of an NTA included consideration of future revenues from the ISO-NE energy and capacity markets, as well as from the sale of renewable energy credits (Exh. EV-1, at 54).

11 LEI also assessed solar and storage alternatives but concluded that these technologies would be four times more expensive than a gas fired generation solution (Exh. EV-1, at 57-58). The Company updated the amount of NTA resources necessary in RR-DPU-14 and concluded that even with 2018 updated load estimates, NTA would more than double the cost of the Project (RR-DPU-14).

identification of an appropriate site, completion of permitting and siting processes, completion of ISO-NE interconnection studies, and a sufficient fuel supply (Exh. EV-1, at 56; Tr. 1, at 149). Eversource asserted that these requirements would make it impractical to develop a generation NTA solution within the necessary time frame (Exh. EV-1, at 56). Eversource also questioned whether land suitable for the development of an NTA solution was available in the vicinity of the Southwick Substation, and it noted that a gas supply lateral to the closest natural pipeline would need to be constructed for any new gas-fired generation (Exh. EV-1, at 56-57). Eversource opined that any generation solution in the area might also require transmission system upgrades in order to interconnect and/or to allow for delivery of the energy to where it is needed (Exh. EV-1, at 57). Overall, Eversource concluded that, due to the higher cost and practical challenges associated with an NTA, such a generation solution would be inferior to the Project (Exh. EV-1, at 58).

b. Transmission Alternatives

With respect to transmission alternatives, Eversource stated that, consistent with the 2022 Solutions Study, two distinct approaches to addressing the identified reliability need were considered: (1) strengthening the transmission network in the Westfield Area so that a smaller portion of the system would be radially supplied following the contingencies of concern; and (2) adding voltage support through the injection of reactive power into the area (Exh. EV-1, at 41-43; Tr. 1, at 29). Eversource identified two transmission alternatives – the Project and an alternative transmission design – that would strengthen the existing transmission network and address the post-contingency low-voltage and thermal violations

identified in the Westfield and Springfield Areas (Exh. EV-1, at 42). The Company's assessment of these two transmission alternatives is described below, followed by a description of the alternative that would add voltage support.

i. The Project

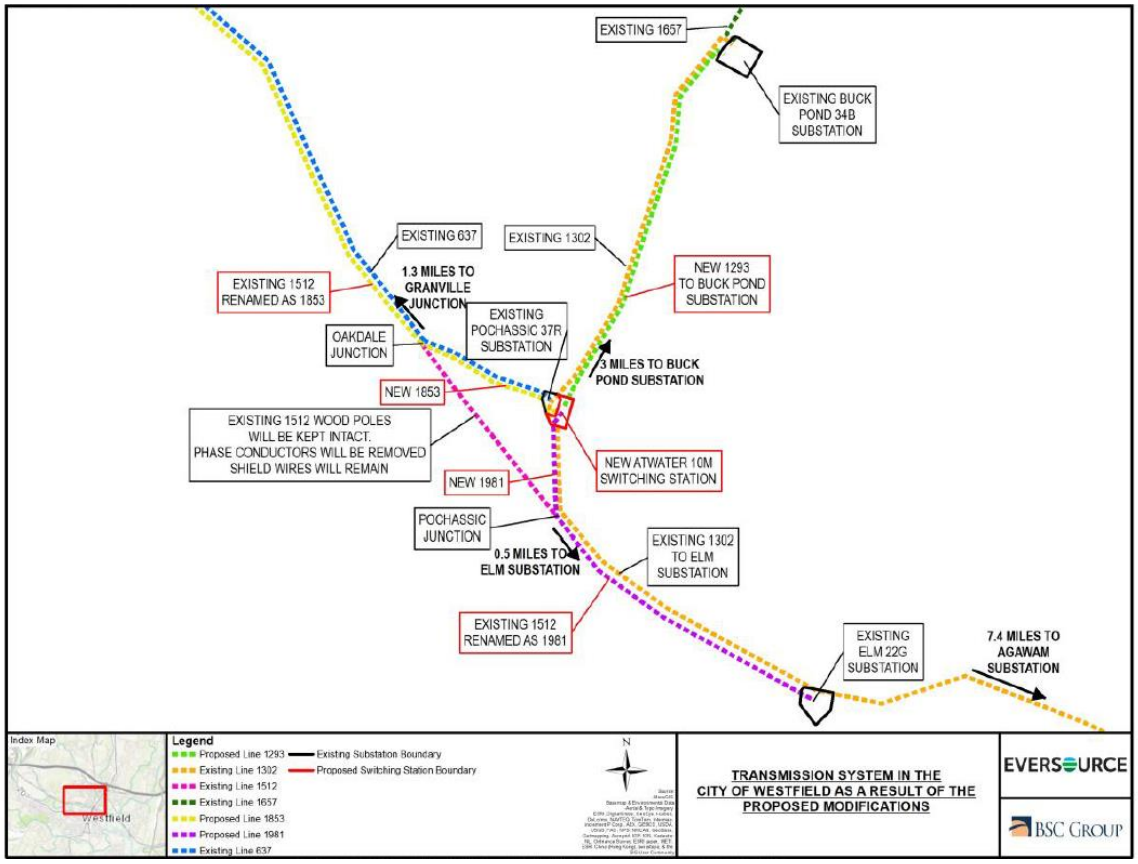
As described in Section I.A., above, the Project would consist of (1) the new Atwater Switching Station, (2) a new 115 kV line extending from the new Atwater Switching Station to the existing Buck Pond Substation (with an associated new breaker at the Buck Pond Substation) on existing structures (the New Circuit), and (3) connecting the existing 1512 Loop Line into the new Atwater Switching Station (the Loop Line) (Exh. EV-1, at 42). The proposed Atwater Switching Station would be located on the vacant southern and eastern portions of a Company-owned property directly abutting Eversource's existing Pochassic Substation (Exh. EV-1, at 4; Tr. 1, at 173-175). The Company would extend the existing 17-foot-tall fence that surrounds the Pochassic Substation to encompass the Atwater Switching Station yard (Exh. EV-1, at 16, exh. C; Tr. 1, at 173-174). The Atwater Switching Station would include the following elements:

- a three-breaker ring bus arrangement with gas-insulated circuit breakers;
- terminations for the proposed New Circuit from the Buck Pond Substation;
- terminations for the proposed Loop Line;
- two A-frame conductor support structures, each approximately 78 feet in height;
- a 28-by-60-foot control building approximately 13 feet in height; and
- a gravel access drive from Oakdale Avenue (Exh. EV-1, at 16).

To complete the Loop Line, the Company's existing 115 kV 1512 Line, which currently traverses west-to-east approximately 500 feet south of the Switching Station site, would be brought into and out of the Atwater Switching Station along an existing Eversource transmission ROW (Exh. EV-1, at 11-12 and exh. H at 7). In the new configuration, a 0.35-mile long section of the existing 1512 Line would be removed from service between Pochassic Junction and Oakdale Junction (see Figure 2, below);[12] a new approximately 0.17-mile long section of transmission line would be installed between Pochassic Junction and the Atwater Switching Station (the "1853 Line"); and a new approximately 0.3-mile long section of transmission line would be installed between the Atwater Switching Station and Oakdale Junction (Exh. EV-1, at 11-12 and exh. H at 7, 9; Company Brief at 6). The new line between the Atwater Switching Station, as well as the existing 1512 Line between Oakdale Junction and the Company's Blandford Substation in Blandford, would both be referred to as the "1853 Line" following completion of the Project (Exh. EV-1, at 11-12).

[12] The Company proposes to remove the existing 115 kV conductor from the section of the 1512 Line to be taken out of service between Pochassic Junction and Oakdale Junction, but to leave the three existing wood poles and shield wire in place (Exh. EV-1, at 15).

Figure 2. Proposed Transmission System Configuration



Source: Exh. EV-1, at 11, fig. 3.

ii. Alternative Transmission Design

Eversource also assessed an alternative transmission design similar to the Project, including the Atwater Switching Station but without the New Circuit, which was included in the ISO-NE's Solutions Study (Exh. EV-1, at 32). The Company's design of this alternative added the separation of circuits carried by seven double-circuit towers between Fairmont Substation and Pineshed Substation to eliminate the possibility of a single event causing both circuits to trip offline (Exh. EV-1, at 42). Eversource estimated the approximate cost of this alternative at $31.5 million (Exh. EV-1, at 45). Relative to the proposed Project, Eversource

assessed the alternative transmission design as having many of the same operational and performance deficits as the static volt-ampere reactive compensator ("SVC") alternative, described below (Exh. EV-1, at 44-47). The Company stated that the alternative transmission design is essentially equivalent to the Project with respect to environmental impacts (Exh. EV-1, at 52).

ISO-NE identified the Project as operationally superior to the alternative transmission design given its additional lines, which make it easier to schedule system outages needed to perform routine maintenance, and its ability to better detect faults (Exhs. EV-1, at 43-48; DPU-PA-4; DPU-PA-6; Tr. 1, at 80-91, 154-156). In reiterating its preference for the Project over the alternatives identified in the Solutions Study, ISO-NE noted that the cost differences among the three identified transmission solutions were relatively small, and the already-incurred design costs associated with the Project would be incurred a second time should an alternative be selected, in effect eroding any potential cost advantage of the alternatives (Exh. DPU-PA-3(S1)(1)).

iii. Alternative Reactive Solution

To mitigate the low voltage violations, the Company considered the installation of a SVC to inject reactive power at the Southwick Substation as an alternative to the Project (Exh. EV-1, at 32-33). Eversource estimated the cost of this alternative as approximately $29.9 million based on the 2022 Solutions Study (Exh. EV-1, Att. G, at 69). Subsequently, the Company revised the design of this alternative to incorporate equipment elements to better address the Springfield reliability concerns, as well as land costs in Southwick, which

increased the cost to approximately $33.3 million (Exh. EV-1, at 43, 45). This alternative, however, was assessed as inferior in terms of operational flexibility, system performance, and reliability benefits to WG&E customers given the single circuit line connecting the Buck Pond Substation to the Atwater/Pochassic area, as well as less robust fault protection and equipment durability (Exh. EV-1, at 44-47). In addition, the need for high-frequency automated controls and the expected shorter service life for the SVC equipment would reduce reliability and increase costs (Exh. EV-1, at 47-48). Compared to the Project, the Company indicated that the SVC alternative would require the development of additional property to implement, but that it is otherwise similar to the Project with respect to environmental impacts (Exh. EV-1, at 52).

c. Analysis and Findings

The record shows that there are alternative transmission solutions with costs and environmental impacts similar to that of the Project. However, the record shows that the proposed Project provides a range of additional operational and reliability benefits in comparison with the alternative solutions. Further, the record shows that there are no feasible NTAs for which customer costs would be comparable to the Project. Accordingly, the Department finds that the Company's decision to pursue the Project rather than the alternatives is reasonable.

3. Impacts of Proposed Use

Following a description of construction methods, Eversource evaluated potential Project impacts on the environment and described measures the Company plans to undertake to avoid, minimize, and/or mitigate those impacts.

a. Construction Methods

Construction at the existing Buck Pond Substation would include a new breaker and line terminal structure and a shift in location of two existing lines to connect to new terminal locations (Exh. DPU-CM-2). Eversource would construct the new Atwater Switching Station on vacant portions of the Company's Pochassic Substation site (Exh. DPU-CM-2). Construction is expected to take approximately five months to construct the new Atwater Switching Station and three months for changes to the Buck Pond Substation (Exh. DPU-G-5(1); Tr. 1, at 162-164).

The Company would construct the transmission facilities on Eversource-owned property or within the limits of existing ROWs (Exh. EV-1, at 58). However, the Company would acquire new access easements to construct and maintain the lines at approximately eight locations that would allow for a reduction of impacts to agricultural land and sensitive environmental resources (Exhs. EV-1, at 62, 68; DPU-CM-3; RR-DPU-17). The Company stated that its construction would comply with federal, state, and local requirements, including the Massachusetts Natural Heritage and Endangered Species Program ("NHESP") and the Massachusetts Historical Commission ("MHC") (Exh. EV-1, at 62).

Eversource stated that the conductor and shield wire components of the New Circuit and Loop Line can be installed using either ground-mounted equipment or a helicopter (Exh. EV-1, at 65; Tr. 1, at 159). The Company identified two locations, I-90 (the Massachusetts Turnpike) and Powdermill Brook, which would most likely require the use of a helicopter (Tr. 1, at 159). The Company plans to place three conductors and one optical ground wire across the Massachusetts Turnpike next to the existing wires (Exh. DPU-T-2). The stringing process would be completed pursuant to a traffic management plan submitted to the Massachusetts Department of Transportation ("MassDOT"), which would incorporate the use of a traffic detail provided by the Massachusetts State Police (Exh. DPU-T-2). Eversource estimates that pulling the wires across the Mass Pike would take two days (Exh. DPU-T-2).

Both the transmission lines and the construction activities in the switching and substations will require vegetation removal, erosion/sedimentation control in wetland areas, workpads for overhead construction and installation activities, dewatering during excavation, and removal of certain existing structures (Exh. EV-1, at 58-66). Restoration activities following construction include final grading, installation of permanent erosion and sedimentation control devices, disposal of construction debris, reseeding and other soil stabilization techniques, and reconstruction of pre-existing drainage patterns, ditches, roads, walls, and fences as appropriate (Exh. EV-1, at 66). Environmental permitting and regulatory requirements would be monitored by a designated environmental monitor throughout construction (id.).

The Westfield Conservation Commission ("WCC") requires pre-approval of the environmental monitor consultant to be retained by the Company (RR-DPU-31(1) at 18). The WCC requires that the environmental monitor submit weekly written reports to the WCC for review (RR-DPU-31(1) at 18-19). In addition, Eversource will designate a construction representative responsible for conducting daily inspections to ensure work complies with all regulatory approvals and conditions, including environmental requirements (Exh. EV-1 at 66-67).

Eversource provided a copy of its Best Management Protection ("BMP") Manual with the submission of its Environmental Notification Form ("ENF") to the Massachusetts Environmental Policy Act ("MEPA") office (Exh. EV-1, exh. K). The BMP Manual identifies mitigation measures and procedures for dust control, slope excavation, management of stockpiles and vegetation management that employees must follow during construction (RR-DPU-15(1) at 6). In its Order of Conditions issued November 27, 2018, the WCC specified numerous requirements applicable to the Company's activities in wetland areas, pursuant to the Massachusetts Wetland Protection Act, G.L. c. 131, §40, and the Westfield Wetlands Protection Ordinance (#1109) (RR-DPU-31(1)). The WCC requires its prior approval of all erosion control measures and related wetland activities (RR-DPU-31(1) at 17).

b. Environmental Impacts

i. Land Use

The Company stated that the Project would not result in any permanent change in land use (Exh. EV-1, at 68-69). The Loop Line traverses residential areas, Sadie Knox Park

(including a ballfield over which the line crosses), and wooded areas; other Project ROWs also traverse some agricultural areas (Exhs. EV-1, exh. H; DPU-LU-1; DPU-G-2). The proposed site of the Atwater Switching Station is bordered by dense residential development to the east (Exhs. EV-1, at 69; DPU-LU-3). Buck Pond Substation is located next to commercial/industrial development and woods (Exhs. EV-1, at 68; DPU-NO-1). Noise, traffic, and visual impacts associated with the construction and operation activities for residences in the vicinity of the Project are addressed in the following sections below.

A public baseball field and playground, Sadie Knox Park, is located to the north of the Atwater Switching Station (Exh. EV-1, at 69). The existing transmission line crosses above the baseball field and trees will be cleared in the vicinity of the ballfield and playground to accommodate the New Circuit (Exh. DPU-V-3(2)(8)). There is one agricultural parcel subject to an Agricultural Preservation Restriction which will be impacted by construction (Exh. DPU-LU-3). The Company has committed to improve the existing access road for farm vehicle use at the agricultural parcel to offset temporary impacts from construction (id.).

ii. Historic and Archaeological Resources

An archeological consultant conducted an assessment of the Project work area to identify cultural resources in the ROW and within a one-kilometer distance of the proposed Project (Exh. EV-1, at 78). The study, which evaluated available Massachusetts Historical Commission resources, found no Native American or historical period sites within the Project work areas (Exh. EV-1 at 79). The Company's archeological consultant provided MHC with

a report, which recommended no further investigation (Exh. EV-1, at 80). The MHC concurred that no further investigation was warranted (id.).

Eversource stated that if any archeological sites are discovered during construction, work would be halted for an archeological assessment and all finds, even those not characterized as archeologically significant by the consultant, would be reported to the MHC (Exh. DPU-LU-9). Further, if during construction, the site is deemed significant by the consultant, the consultant will develop an approach in conjunction with MHC to appropriately address the site (Exh. DPU-LU-9). Eversource has concluded that, in light of the surveys conducted and the results of the assessments to date, the Company does not expect that any Native American or historical period sites will be encountered during construction (Exh. DPU-PA-7).

iii. Endangered and Rare Species

The Project is located within the regional habitat area of northern long-eared bat, a threatened and endangered species, based on federal and state classifications, respectively (Exh. DPU-LU-4). In compliance with the Federal Endangered Species Act, Eversource filed a consultation form with the U.S. Fish and Wildlife Service but was not required to take further action (id.).

The Project also is located within habitat areas identified by NHESP for eastern box turtle and wood turtle (Exh. DPU-LU-5). Eversource completed a habitat assessment for these species and provided a report to NHESP (Exh. DPU-LU-5). The Company has met with NHESP to discuss avoidance and minimization measures and participated in site walks

to determine such measures (Tr. 1, at 181-182). As a result, the Company developed a protection plan to perform all ground-disturbance work, such as swamp mat placement and excavation for foundations for structures, during the November to April period when the species are inactive (Tr. 1, at 181-182). NHESP conditionally approved the protection plan and issued a determination that the activities would not result in a take of eastern box turtle or wood turtle (Exh. EV-6; Tr. 1, at 181-182). Eversource stated its intent to finish work before April or use helicopters to perform work in the habitat area to meet NHESP objectives (Tr. 1, at 184). Once the matting used for the line work is removed, NHESP requested that the Company remove vegetation to bare soil and create a preferential nesting habitat for turtles (Tr. 1, at 187-188). The Company stated that Project activities with a potential impact on the habitat area are temporary and would not substantially change the nature of the vegetative and wetland characteristics in the ROW area locations (id.).

iv. Wetland and Water Resources

No new transmission structures would be installed in wetlands (RR-DPU-15(1) at 3). However, construction of the Loop Line would have temporary and permanent impacts to seven wetland resource areas (Exh. EV-1, at 73). The construction will cause 35,060 square feet of temporary impacts, primarily from placement of swamp mats in wetland areas (Exh. EV-5; Tr. 2, at 244). The Company projected 895 square feet of permanent impacts in the vicinity of Brickyard Brook, associated with crossing the wetland with a permanent access road (Exh. EV-5; Tr. 2, at 243). The design of the Brickyard Brook crossing would include box culverts to avoid temporary wetland impacts and provide hydrological connection

(RR-DPU-15(1) at 5). As well, approximately 1,652 square feet (0.3 acres) of direct wetlands impacts will occur from tree clearing (RR-DPU-16).

Mitigation measures will include restoring preconstruction contours, revegetating and stabilizing impacted areas, and installing sedimentation and erosion controls (RR-DPU-15(1) at 5). The Company will restore or replace 700 square feet of wetlands as compensation for the permanent wetlands impacts in addition to the replacement of the existing undersized culverts at Brickyard Brook (Exh. DPU-W-2; Tr. 2, at 255-256). The Company will remove Japanese knotwood, an invasive species, as part of the mitigation measures approved by the WCC (RR-DPU-31(1) at 18). The WCC's Order of Conditions includes various wetlands replication and mitigation requirements (RR-DPU-31(1) at 19).

v. Vegetation Management

Installation of transmission lines would require side trimming of overhanging limbs and selective tree clearing within the Company's ROWs to meet required clearances from line conductors (Exh. EV-1, at 60). For the entire Project, the Company estimated approximately 2.16 acres of tree and overhanging limb removal in upland areas (RR-DPU-16). Mowing and vegetation removal would be required in order to access the existing structures, install work pads, facilitate passage of equipment, and maintain required clearances between vegetation and transmission line conductors (Exh. EV-1, at 60).

After construction is completed, the Company will allow areas to regrow with scrub-shrub and herbaceous cover types pursuant to the Company's 5-Year Vegetation Management Plan (Exh. EV-1, at 78). The Company aims to preserve desirable species,

such as native grasses, herbaceous flowering plants, ferns and low growing shrubs that do not encroach within the minimum distances of overhead electric conductors or impede physical or visual access along the ROW (Exh. DPU-LU-7). In general, the Company's practice is to ensure a clear and accessible area to inspect, operate, and maintain its facilities (Exh. DPU-LU-6). The Company intends to maintain a ten-foot clearing around the perimeter of substation fences, with the exception of landscaped vegetation (id.).

Vegetation maintenance includes the use of pre-emergent herbicide treatment to the trap-rock surface area within the fence of the substations and switching station (RR-DPU-18). In addition, the Company uses mechanical cutting and selective herbicide management (Tr. 1, at 188-191). The Massachusetts Division of Agricultural Resources ("MDAR") regulates the Company's use of herbicides through its review and approval of Eversource's annual operational plan and five-year Vegetation Management Plan (RR-DPU-18). The MDAR limits the type of herbicides that may be used, particularly with regard to drinking water resource areas, wetlands, and species habitat (id.).

The Company's screening of invasive species is largely focused in wetland areas but also encompasses upland species (Tr. 1, at 193-194). To control invasive species in the wetland areas, prior to construction, Eversource will identify any invasive species, and ensure that soils removed in that area are not reused for soil stabilization elsewhere; equipment used in the area will be cleaned prior to leaving the area to prevent potential transfer of invasive species to other areas (Exh. LU-8; Tr. 1, at 192-193).

vi. Visual

Eversource characterized the overall visual impacts of the Project as "moderate" (Exh. EV-1, at 51). Eversource stated that the primary visual impacts would occur from the construction of the proposed new Atwater Switching Station and the addition of the new structures around the Switching Station for the Loop Line (Exh. EV-1, at 72). The Company stated that because of selective tree clearing and the addition of new electrical equipment, construction of the new Switching Station would result in additional visual impacts to adjacent property owners, which the Company characterized as largely consistent with the visual nature of the existing Pochassic Substation (Exh. EV-1, at 72; Tr. 2, at 205-206). In response to abutters' concerns, the Company would make the proposed 17-foot-high fence around the Switching Station opaque, using vinyl slats inserted into the chained-link fence (Exh. DPU-V-1; Tr. 2, at 225-226). The Company stated that it is working with the abutters to further mitigate the visual effects of the new Atwater Switching Station by maintaining some of the existing vegetative buffer and offering other replacement options such as low fencing and new plantings beyond the perimeter fence (Exhs. EV-1, at 49, 73; DPU-V-1; Tr. 2, at 226-227, 311).

The Company anticipates visual impacts from installation of new line support structures,[13] conductors, shield wires, and associated hardware within the existing 100-foot

[13] The Company would add monopoles at angle locations, but stated that these would be mostly away from residential areas (Tr. 2, at 213). The Company would replace four structures and add two new structures between Buck Pond Substation and Atwater Switching Station, and it would replace six structures and add seven new structures on

ROW between the Buck Pond Substation and the Atwater Switching Station (Exh. EV-1, at 59, 60; Tr. 2, at 335).[14] Removal of trees would also increase the visibility of transmission lines from locations along the right-of-way including from Sadie Knox Park, where there is a ballfield and playground (Exh. EV-1, at 72; Tr. 2, at 209, 268). The Company stated it would develop a landscaping plan for the Atwater Switching Station with input from nearby residents after completing Project construction (Exh. DPU-V-6).

As previously noted, the New Circuit would be installed on the vacant (east) side of the existing structures (Exh. EV-1, at 71). Illustrations provided by Eversource show that a new monopole located outside Buck Pond Substation and closer to Medeiros Way than the existing structures would be more visible (Exh. DPU-V-3(1) at 2; Tr. 2, at 209). At Sadie Knox Park, the Company's illustrations show some clearing of trees and additional conductors on existing substantial monopoles (Exh. DPU-V-3(2) at 1-2). South from Lockhouse Road, the Company's illustrations indicate removal of some white pines along the right-of-way (Exh. V-3(4) at 2; Tr. 2, at 210). Overall, however, the Company stated that adding wires for the New Circuit to the vacant side of the existing double circuit structures would generally result in only minor visual impacts (Exh. EV-1, at 71-72). The Company

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the Loop Line and in the vicinity of the Atwater Switching Station (Exh. EV-1, at 13-15).

[14] The Company would leave in place the existing wood poles along the section of the 1512 Line from Oakdale Junction to Pochassic Junction along with the shield wire (Exh. EV-1, at 66).

indicated that it would provide reasonable local visual mitigation upon request of abutting property owners, on a case-by-case basis (Tr. 2, at 211, 215).

With regard to lighting, the Company stated that some uplighting would be installed at both the Atwater Switching Station and the Buck Pond Substation to allow workers to see overhead bus works and disconnect switches at night (RR-DPU-28). However, the Company noted that, to reduce lighting spillover, the stations would only be lit when required and when employees are on site (RR-DPU-28).

vii. Noise

Project construction activities would cause short-term increases in noise levels near work sites (Exh. EV-1, at 70). Such construction noise sources include earth-moving vehicles, truck traffic, jackhammers, and structure erection equipment (id.). The Company stated that two residences are within 25 feet of the proposed Atwater Switching Station; the closest residence is 14 feet from the property line (Exh. DPU-NO-1; RR-DPU-19).[15] Anticipated noise levels from construction of the Switching Station range from 80 to 85 dBA at 50 feet and 94 to 99 dBA at 10 feet (Exh. DPU-NO-1). The Company stated that 29 residences are within 50 feet of the transmission line ROW; the closest residence is two feet from the ROW (Exhs. DPU-NO-1; LU-1).[16] Anticipated noise levels from construction

[15] The closest residence to Buck Pond Substation is 4,100 feet and, therefore, no construction noise impacts are expected (Exh. DPU-NO-1).

[16] There are 23 residences within 50 to 100 feet of the ROW and 62 residences within 100 to 200 feet of the ROW (Exh. DPU-LU-1).

of the transmission line, which includes wire pulling, range from 85 to 95 dBA at 50 feet and 99 to 109 dBA at 10 feet (Exh. DPU-NO-1).

The Company generally plans for construction work Monday through Saturday, between 7:00 a.m. and 7:00 p.m. (Exh. EV-1, at 71). The Company stated that whenever possible it would schedule the majority of construction activities Monday through Friday in residential areas (Exh. DPU-NO-2). The City of Westfield has a noise ordinance,[17] which allows construction from 7:00 a.m. to 9:00 p.m. Monday through Saturday and on Sundays from noon until 9:00 p.m. with noise levels limited to 85 dBA at 50 feet from the source (Exhs. DPU-Z-13; DPU-Z-13(1) at 16). This limit is not applicable to trucks, pile drivers, pavement breakers, scrapers, concrete saws, and rock drills (Exh. DPU-Z-13(1) at 16). The Company acknowledged that noise from some Project equipment may exceed 85 dBA at 50 feet and does not fall into the City's "not applicable" category such as noise from mowers and bulldozers (RR-DPU-29). Representatives from Eversource have met with representatives from the City of Westfield, and they discussed potential compliance issues with Westfield Noise Ordinance Section 10-32, and Eversource reported that they agreed to work with Eversource to review methods to allow the use of certain equipment, if necessary, that may exceed the maximum sound level (RR-DPU-29). The ordinance provides that a permit for construction activities out of the prescribed hours may be granted by application to

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[17] Westfield Code of Ordinances, Chapter 10, Article II, Section 10-32 ("Westfield Noise Ordinance") (Exh. DPU-Z-13).

the City of Westfield's superintendent of buildings and the police chief (Exhs. DPU-Z-13; DPU-Z-13(1) at 17).

During construction of the Atwater Switching Station, the Company plans to use sound blankets to limit noise levels for residential abutters (RR-DPU-24). The Company committed to working with any abutters within a quarter mile of the substation to provide noise mitigation measures during construction, and to provide prior notice regarding any potentially loud or disruptive construction activities (Tr. 2, at 284-290). In addition, Eversource committed to working closely with its contractor with respect to work hour limitations when working in a densely populated residential area (Exh. DPU-G-1). In a December 7, 2018, letter affirming support for the requested zoning exemptions, the City of Westfield indicated that it had communicated to the Company concerns relating to noise, vibration, and lighting issues from the proposed Project (RR-DPU-25(S1)(1)).

viii. Traffic

Eversource stated that construction equipment typically would access the ROW from public roadways and adjacent access roads (Exh. EV-1, at 69). According to the Company, some intersections in the general vicinity of the Project are heavily traveled and commonly experience backups in the morning rush hour, including the intersection of Medeiros Road (aka Summit Lock Road) and Southampton Road (Route 10), the intersection of Route 10 and Massachusetts Turnpike ramps, and the intersection of Pochassic Street and North Elm Street in downtown Westfield(Exh. DPU-T-1). The Company projects that, with an estimated

maximum number of 38 Project workers, the Project would not substantially worsen traffic at these intersections (Exh. DPU-T-1; Tr. 2, at 229).

To minimize disruptions to vehicular traffic along public roads, Eversource or its Project contractor will work with representatives of the City of Westfield and the Massachusetts Department of Transportation ("MassDOT") where potential traffic issues are identified (Exh. EV-1, at 69; Tr. 2, at 229-230). The Company would schedule delivery of oversized equipment to avoid rush-hour traffic impacts, where possible (Exh. DPU-T-3; Tr. 2, at 230-231). The construction contractor will be responsible for posting and maintaining construction warning signs along public roads near work sites and for coordinating the use of flaggers or police personnel to direct traffic, as necessary (Exh. EV-1, at 69). Eversource's contractor will coordinate closely with MassDOT to develop acceptable traffic management plans to install conductors across the Massachusetts Turnpike, which may include having the Massachusetts State Police enforce traffic control measures needed to allow for safely stringing the conductors (Exhs. EV-1, at 69; DPU-T-2).

ix. Air, Hazardous, and Solid Waste

In comments on the ENF, the MassDEP Bureau of Air and Waste stated that the Company should implement measures to alleviate dust, noise, and odor nuisance conditions during construction activities (RR-DPU-15(1) at 13). The Company committed to use USEPA-verified (or equivalent) emission control devices, such as oxidation catalysts or other comparable technologies, in all diesel-powered non-road construction equipment rated 50 horsepower or above that would be used for 30 or more days over the course of the

Project (Exh. EV-1, at 80). The Company also indicated that non-road construction vehicles used for the Project would be fueled with ultra-low sulfur diesel ("ULSD") (RR-DPU-15(1) at 13). Eversource will comply with MassDEP regulations limiting length of vehicle idling set forth at 310 CMR 7.11(1)(b) (Exh. DPU-A-2). Eversource will use sulfur hexafluoride ("SF_6") gas as an insulating and arc extinguishing gas for its new electrical equipment (Exh. DPU-A-1). The new equipment will have an annual emission rate of 0.1 percent, which is below the annual limit established by MassDEP in 310 CMR 7.72 of 1.0 percent (id.).

Eversource would maintain an oil and hazardous materials release notification and contingency plan for the Project (Exh. DPU-HW-1(1) at 5). The plan requires employees to take immediate steps to contain a spill, assess potential damage, and notify the appropriate agencies as needed (Exh. DPU-HW-1(1) at 7).

Eversource will generate solid waste during the construction of the Project. The materials will include packaging waste as well as demolition-related debris (Exh. DPU-HW-4). MassDEP waste ban materials will not be sent to landfills (id.). Dumpsters and roll offs on site to collect trash and debris will be covered at the end of each workday to reduce leakage during storm events and will be located away from wetlands storm drains, culverts and inlets to channels, and swales (Exh. DPU-HW-4).

Soil from excavations will remain within the station yard (Tr. 2, at 274). As part of soil excavations at the Project sites, Company personnel will evaluate possible contamination through lab testing (id.). The Company will isolate and protect any contaminated soils with

geotextile fabric to limit further contamination, prior to transport to an approved facility (Tr. 2, at 275).

x. Magnetic Fields

Magnetic fields are created when current flows in a conductor (Tr. 2, at 232-233). Eversource modeled magnetic fields that would result from current flowing in overhead wires to be constructed for the Project, and it compared total transmission-related magnetic fields before and after Project construction for the edge of the ROW (Exh. EV-1, at 82; Tr. 2, at 233). The current on each line will vary depending on where electricity is being generated and where it is being consumed, so it will vary throughout any particular day and over the course of a year (Tr. 2, at 233). The Company obtained base-case system power-flow models from ISO-NE representing the expected New England transmission topology for the year 2022, with all lines in service (Exh. EV-1, at 81). The Company modeled magnetic field levels for expected maximum and average currents for 2022 (Exh. EV-1, at 81). Average modeled magnetic field levels for 2022 are shown in Table 1, below, for the ROW from Buck Pond Substation to Atwater Switching Station and for the two sections of ROW used for the Loop Line.

Table 1. Calculated Average Magnetic Field Levels, With and Without Project Comparison (in milligauss ("mG"))

ROW Section	Modeled Conditions, Year 2022	Edge of the ROW	Maximum on ROW	Edge of the ROW
Buck Pond to Atwater	Pre-Project	West: 1.3	5.0	East: 2.2
	Post-Project	West: 1.8	7.0	East: 2.3
Atwater to west 1500'	Pre-Project	North: 0.1	0.2	South: 0.1
	Post-Project	North: 1.4	5.5	South: 2.4
Atwater to south 890'	Pre-Project	West: 2.2	5.0	East: 1.3
	Post-Project	West: 3.0	7.0	East: 1.6

Sources: Exhs. EV-1, at 11, 12, 81, 82; Tr. 2, at 235. Field strengths were modeled at one meter above the ground.

In addition, Eversource evaluated magnetic fields created at Atwater Switching Station and indicated that magnetic field levels under its assumed average annual load condition would increase at the closest residences to 0.6 to 2.7 mG with the Project (Exh. DPU-MF-2). The Company plans to arrange electrical phases such that predominant flows between Buck Pond and Pochassic Substations would tend to cancel each other; such an arrangement was used in the Company's magnetic field modeling (Tr. 2, at 238). The Company stated that phase optimization is one of the ways to minimize magnetic fields consistent with 2007 recommendations from the World Health Organization to apply low cost measures that reduce magnetic fields (Tr. 2, at 238). The Company stated that other methods of reducing magnetic fields from the Project would not be low-cost (Tr. 2, at 238-239). The Company noted that calculated magnetic field levels associated with the Project are far below international guidelines and, Eversource concluded, in the context of reference levels

magnetic fields, that the Project would not have a significant effect on magnetic fields (Exh. EV-1, at 82; Tr. 2, at 239-240).

c. Analysis and Findings

i. Land Use

Given that the Project would not expand the ROW and would require tree clearing only along the ROWs, the land use impacts of the transmission lines would be generally similar to the existing conditions along the ROWs. However, work on the New Circuit would be located through, and in the immediate vicinity of, the Sadie Knox ballfield and playground. Therefore, the Company is directed to avoid construction through, and in the immediate vicinity of, the Sadie Knox ballfield and playground during scheduled recreational activities whenever possible, and it is further directed to seek permission from relevant municipal officials at least one week in advance of construction through this recreation area. Land use impacts of work at the Buck Pond Substation would similarly be negligible. Land use impacts of building the Atwater Switching Station would be greater, but the Switching Station directly abuts the existing Pochassic Substation, reducing the amount of discernable change in some directions. Specific impacts related to the Atwater Switching Station are discussed below.

ii. Historic and Archeological Resources

Eversource conducted an archeological survey of the Project area and did not find significant artifacts. However, in light of nearby sites with historic and archeological value, the Company has committed to halt work for an archeological assessment if there are

indications uncovered during groundwork related to construction that require further investigation. The Company's archeological consultant will report all finds even those not archeologically significant to the MHC.

iii. Endangered and Rare Species

Eversource has received conditional approval from NHESP to undertake construction activities during the November to April period, when the identified protected turtles are inactive, and to create conditions that provide a preferential nesting habitat for the species.

iv. Wetland and Water Resources

The Project will have both temporary and permanent impacts on wetland resource areas. Construction in the ROW for the transmission facilities has temporary impacts of 35,060 square feet, primarily from the use of matting related to the installation of new conductors and wires. Permanent impacts are limited as no new transmission structures will be installed in wetland resource areas, and the construction of new culverts associated with the permanent road crossing will provide an improved hydrological connection. The WCC has issued an Order of Conditions which requires mitigation measures to limit impacts to wetland resources as well as the restoration/replication of wetlands in compensation for areas of permanent impacts.

v. Vegetation Management

The Company's Vegetation Management Plan as applied to both wetland and non-wetland areas uses mechanical cutting and selective herbicide management. Eversource submits its plan to MDAR for review and approval. MDAR limits the types of herbicides

included in such plans to protect sensitive areas such as drinking water resource areas, wetlands and species habitat. The WCC, in its Order of Conditions, requires removal of invasive species.

vi. Visual

The general visual appearance of the ROW would not be altered as a result of the Project. The Project would be constructed within an existing 100-foot-wide ROW and utility-owned property. Addition of a second circuit within the ROW, with three conductors and associated insulator chains on existing structures, would not appreciably change the visual character of the ROW. The addition of several new structures would be discernable but would not change the visual character of the ROW significantly for the majority of the route. Improvements to the access roads would also have limited visual impacts.

With regard to visual impacts from the Atwater Switching Station, the Company has discussed the installation of an opaque fence and the development of a landscaping plan, as well as continuing discussions with abutters. The Department directs the Company to provide a final rendering of the perimeter fence selection and a landscaping plan for the entire Atwater Switching Station site, as applicable; the final plans shall include documentation of abutter concerns and collaboration between Eversource and the abutters to address those concerns.

Given the above, the Department directs the Company to work with individual landowners to provide off-site screening in a reasonable manner on properties where the Project affects the landowner's viewshed.

vii. Noise

Operational noise from the Project would be minimal. The City of Westfield's noise ordinance permits a construction schedule of 7:00 a.m. to 9:00 p.m. Monday through Saturday and 12:00 p.m. to 9:00 p.m. Sundays. Eversource has stated that construction will be limited to Monday through Saturday between 7:00 a.m. to 7:00 p.m., with the exception of certain limited special circumstances. The Company committed to working with abutters and municipalities to coordinate the timing of construction activities and accommodate alternative work hours. Nonetheless, as the Company acknowledged, the Atwater Switching Station is located in a dense residential area and, therefore, it would be appropriate to limit construction to Monday to Friday, given the abutting landowners concerns. The closest residence to the Atwater Switching Station is only 14 feet from the property line, and construction noise levels are significant (up to 85 dBA at 50 feet and 95 dBA at 10 feet). The Company plans to use sound blankets at the Atwater Switching Station. However, the New Circuit is also located in close vicinity to a number of residences and the construction noise levels are even higher (up to 95 dBA at 50 feet and 109 dBA at 10 feet). In fact, given the noise level ranges presented by the Company, there is the likelihood that the Company will not comply with the City of Westfield's Noise Ordinance. Given the above, the Department directs the Company to follow a construction schedule of Monday through Friday from 7:00 a.m. to 6:00 p.m., and Saturdays from 9:00 a.m. to 5:00 p.m., with the exception of areas with nearby residential abutters. In areas with residential abutters within 100 feet of

construction work areas or activities, the Department directs the Company to limit construction to Monday through Friday from 7:00 a.m. to 6:00 p.m.

Should the Company need to extend construction work beyond those hours and days (with the exception of emergency circumstances on a given day that necessitate work beyond such times), the Company is directed to seek written permission from the City of Westfield prior to the commencement of such work and to provide the Department with a copy of such permission. If the Company and the City are not able to agree on whether such extended construction hours should occur, the Company may request prior authorization from the Department and shall provide the City with a copy of any such request.

The Company shall inform the Department and the relevant municipal authorities in writing within 72 hours of any work that continues beyond the hours allowed by the Department, or, if granted extended work hours in writing by the City of Westfield, work that continues past the extended hours allowed. The Company shall also send a copy to the Department, within 72 hours of receipt, of any authorization for an extension of work hours. Furthermore, the Company shall keep a record of the dates, times, locations, and durations of all instances in which work continues beyond the hours allowed by the Department, or, if granted extended work hours in writing by the City of Westfield, work that continues past the extended hours allowed, and must submit such record to the Department within 90 days of Project completion.

The Company's plan to coordinate construction timing and scheduling, work hours, communication, and traffic control with municipal officials should further mitigate

construction-related impacts, including traffic and noise, of the Project. Nonetheless, in order to ensure that information about construction and operation of the Project is disseminated more widely within the community, the Department directs the Company, in consultation with the City of Westfield, to develop a community outreach plan for Project construction and operation. The outreach plan should, at a minimum, identify procedures for providing prior notification to affected residents of (1) the scheduled start, duration, and hours of construction; (2) any construction that must take place outside the hours or days indicated below; (3) any operation the Company intends to conduct that could result in unexpected community impacts due to unusual circumstances; and (4) complaint and response procedures including contact information.

viii. Traffic

Traffic is not expected to be substantially affected by the Project because of the estimated maximum number of 38 construction workers and because large deliveries would be scheduled away from peak traffic times. Where there is a potential impact, such as delivery of large items, and stringing cable across the Massachusetts Turnpike, the Company would coordinate with the City of Westfield or MassDOT, as applicable.

ix. Air, Hazardous, and Solid Waste

The Company committed to four actions that will reduce air emissions otherwise associated with the construction of the Project. First, the Company committed to use USEPA-verified (or equivalent) emission control devices in all diesel-powered non-road construction equipment rated 50 horsepower or above to be used for 30 or more days over

the course of the Project. Second, Eversource will comply with the recommendation from MassDEP that diesel-powered non-road construction equipment use ULSD to mitigate emissions. Third the Company's vehicle operators will restrict idling time in compliance with MassDEP regulations. Lastly, Eversource will use new electrical equipment with a low emission rate of SF_6.

The Company's Project will generate solid waste in the form of demolition debris and packing materials for new equipment. Eversource has put in guidelines that provide for the appropriate containment, minimization, and disposal of those solid waste materials during the construction process.

x. Magnetic Fields

Eversource modeled magnetic field levels associated with the current flowing through overhead wires associated with the Project, based on load flow modeling data for 2022. The record shows that the Company plans to arrange electrical phases such that predominant flows between Buck Pond and Pochassic Substations would tend to cancel each other, which is consistent with 2007 recommendations from the World Health Organization to apply low cost measures that reduce magnetic fields. With this action, the Company will minimize magnetic field impacts of the Project. The predicted post-project magnetic field levels show minimal changes from pre-project levels, and they are relatively low compared with other projects approved by the Department and the Energy Facilities Siting Board. See, e.g., Merrimack Valley Reliability Project, D.P.U. 15-44, D.P.U. 15-45, at 47 (2016) (MVRP);

NSTAR Harwich Tap, D.P.U. 14-08, at 22 (2015); Needham-West Roxbury, EFSB 16-02/D.P.U. 16-77, at 65 (2018).

xi. Conclusion

The City has expressed support for the Company's proposed Project.[18] The Department expects that Eversource will continue to work cooperatively with the City with regard to the noise and lighting concerns raised by the City (see Section II.D.3., below), and provide public outreach to the community. The Department concludes that the impacts of the Project will be minimized by the Project's compliance with (1) all applicable federal, state, and local laws and regulations; (2) the avoidance, minimization, and mitigation measures that the Company has described and committed to implement during Project construction and operation; and (3) the Department's conditions as discussed above and set forth below in this Order.

4. Conclusion on Public Convenience and Public Interest

Based on the foregoing analysis of (1) the need for or public benefit of the proposed use, (2) alternatives explored, and (3) impacts of the proposed use, the Department finds that the Project is necessary for the purpose alleged, the benefits of the Project to the general public exceed the local impacts, and the Project is reasonably necessary for the convenience or welfare of the public and is consistent with the public interest.

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[18] See RR-25(S)(1).

D. Zoning Exemptions Required

1. Eversource Request

Eversource is seeking individual exemptions from individual sections of the Westfield Zoning Ordinance (the "Zoning Ordinance") and a comprehensive zoning exemption (Exh. EV-1, at 95-108). Eversource asserts that both individual and comprehensive relief is required because the Project is needed immediately to continue to provide reliable electric service (id. at 107).

The Company asserts that legal uncertainty and the potential for adverse interpretations, delay, burden, and undue expense associated with the permitting process and any appeals therefrom are factors which underlie its request for zoning relief from the Department rather than pursuing permitting and variance requests from the City of Westfield. The Company notes that the need for the Project is immediate and that the potential delay associated with pursuing zoning relief as provided through the provisions of the Zoning Ordinance would not allow for the timely, efficient, and consistent construction of the Project contrary to the public interest (Exh. EV-1, at 107-108).

In addition to the general reasons cited above, Tables 2 and 3, below, summarize the provisions of the Zoning Ordinance from which Eversource seeks exemptions for the Atwater Switching Station and the Buck Pond Substation, respectively; the relief available, if any, from the Zoning Ordinance; and the Company's argument as to why the Project cannot comply with the identified zoning provisions.

Table 2. Requested Individual Exemptions for the Atwater Switching Station: Summary of Company's Position

Section of the Zoning Ordinance	Local Zoning Relief Available	Why Exemption is Required: Company's Position
Residence A District Section 3-50 Use	None Available	Proposed Atwater Switching Station is not allowed in the Residence A District and there is no provision for a variance or special permit process (Exh. EV-1, at 97). Accordingly, an exemption is *per se* required.
Residence A District Section 3-50.6 Heights	Variance	Several structures will exceed the 35 feet maximum height limits in the Residential A District. Variances would be required, are difficult to obtain as limited to reasons related to soil condition or shape or topography conditions, and are susceptible to challenge (Exh. EV-1, at 98).
Residence A District Section 3-50-5 Area and Density Regulations	Variance	Proposed Atwater Switching Station does not have a minimum lot width/frontage of 125 feet. In particular, two structures (single A-frame structure and the control enclosure) do not conform to front, rear, or side lot setbacks. Landscaping requirements have insufficient space. To construct the Switching Station as proposed would require a variance. To avoid the uncertainty and delay associated with seeking a variance, and any appeals therefrom, the Company seeks an exemption from the density regulations in Section 3-50-5 (Exh. EV-1, at 98-100). Landscaping requirements cannot be met due to the uncertainty over land requirements (RR-DPU-26; RR-DPU-27).
Other Permitted Uses Section 5-10D Earth removal Section 7-10 Parking	Special Permit Variance	This section requires that all non-residential development requiring earth removal obtain a special permit from the Planning Board. Special Permit conditions and the issuance of special permits are subjective and discretionary (Exh. EV-1, at 100). This section limits off-street parking and loading based on employees on site. The station will be unmanned, requiring no designated spaces at the site. Therefore, the Company needs a variance. To avoid the uncertainty and delay associated with seeking a

Section of the Zoning Ordinance	Local Zoning Relief Available	Why Exemption is Required: Company's Position
		variance, and any appeals therefrom, the Company seeks an exemption from the provisions of Section 7-10 (Exh. EV-1, at 100-101).
Site Plan Approval Article VI	Site Plan Approval	Site plan approval is required for any use in a residential district where the use in question is subject to off-street parking requirements, as set forth in Article VII, Section 7-10.2. Subsection 23, which relates to "Public Utility Use," is not defined, and therefore the Project may require site plan approval (Exh. EV-1, at 101). Site plan approval by the Westfield Planning Board is subject to criteria that are subjective and could result in burdensome conditions being imposed by Board (Exh. EV-1, at 101).
Prohibited Uses and Performance Standards Section 4-120	None Available	Uses that are determined to be noxious and offensive (odor, noise, electro-magnetic, hazardous materials) and intermittent vibration associated with construction may be deemed to be prohibited or not in compliance. (Exhs. EV-1, at 105; DPU-Z-7, DPU-Z-8).
Lighting Section 4-121		The lighting requirements for certain equipment during operation may not meet the lighting standard (Exhs. DPU-Z-8; DPU-1; RR-DPU-28).

Sources: Exhs. EV-1, at 104-105; EFSB-Z-7; DPU-Z-8; DPU-1; RR-DPU-28.

Table 3. Requested Individual Zoning Exemptions for Modifications to Buck Pond Substation: Summary of Company's Position

Section of the Zoning Ordinance	Local Zoning Relief Available	Why Exemption is Required: Company's Position
Pre-existing Non-Conforming Structures Section 4-10(3)	Special Permit for Pre-Existing Non-Conforming Structures	A special permit from the Zoning Board of Appeals is required for extensions or alterations of a pre-existing non-conforming structure that are greater than ten percent. It is not known whether the existing Buck Pond Substation complied with zoning when originally constructed, and, therefore, a special permit for the proposed modifications would ensure compliance with the Zoning Ordinance (Exh. EV-1, at 102).
Area and height regulations Section 3-130.6(5)	Special Permit	This section restricts building and structure height in the Industrial A District to a maximum of 60 feet. A special permit would be required to allow heights in excess of the maximum allowable height. The Company seeks an exemption from the maximum height requirement because of the legal uncertainty in obtaining a special permit, and the potential for adverse interpretations, delay, burden and undue expense associated with the permitting process and appeals therefrom (Exh. EV-1, at 102-103).
Site Plan Approval Article VI	Site Plan Approval	The modifications to Buck Pond Substation will result in an increase in lot coverage of more than 25 percent; site plan approval is required where a project results in an increase in "floor area of 25 percent or more." If floor area, which is not defined, is interpreted to be the same as lot coverage, then the increase could be greater than 25 percent or more. Site plan approval would be required, and the criteria are subjective and could result in potentially burdensome conditions (Exh. EV-1, at 103).

Prohibited Uses and Performance Standards Section 4-120	None Available	Uses that are determined to be noxious and offensive (odor, noise, electro-magnetic, hazardous materials) may be deemed to be prohibited or not in compliance (Exh. EV-1, at 105). Vibration that may be experienced during construction on an intermittent basis may be prohibited (Exh. DPU-Z-8).
Lighting Section 4-121		The lighting requirements for certain equipment during operation may not meet the lighting standard (Exhs. DPU-Z-8; DPU-1; RR-DPU-28).

Sources: Exhs. EV-1, at 102-105; DPU-Z-8; DPU-1; RR-DPU-28.

2. Analysis of Individual Exemptions

As described above, the record shows that construction of the Project at the Atwater Switching Station and Buck Pond Substation would require the Company to obtain certain variances. The Department accepts the Company's argument that the criteria for obtaining a variance are difficult to fulfill. See G.L. c. 40A, § 10; see also, 28 Mass.Prac.Series, Real Estate Law, § 23.24 (4th ed.) ("[e]stablishing each one of the three requirements [for obtaining a variance] is a very difficult task"). Additionally, we note that the granting of a variance may be appealed. See G.L. c. 40A, § 17, see also, 28 Mass.Prac.Series, Real Estate Law, § 23.24 (4th ed.) ("it is not surprising that few variances stand up when challenged in court"). Consequently, requiring the Company to obtain variances could, at a minimum, result in significant Project delay. Similarly, the Company's contentions regarding the ability to obtain special permits and site plan approvals present legitimate concerns regarding delay. Finally, the Company has identified certain provisions without a process to obtain relief in the zoning requirements, which require action outside the normal confines of the local zoning procedures to secure an exemption.

The Company maintains that the Department should grant the Company's requested exemption from Section 4-120 (prohibited uses and performance standards) for both the construction and ongoing operation of the Project (Company Brief at 74). However, the Company also acknowledges that it can meet all of the items listed in the performance standards, with the exception of vibration, which could occur only intermittently and only during construction activities (Exh. DPU-Z-8; Company Brief at 74). The Department notes that it has not generally granted exemptions from zoning bylaws or ordinances relating to environmental aspects of the ongoing operation of a proposed project. Woburn Substation at 36-37; MVRP at 65-66; Electric Avenue at 34-35. The Department previously has expressed its concern that granting such exemptions would prevent a city or town from exercising control over the on-going operation of a project. Further, the Company itself has acknowledged that it is able to comply with all of the performance standards during operation of the Project (Company Brief at 74). Accordingly, the Department is not persuaded that an exemption is necessary from the Performance Standards in Section 4-120 for the ongoing operation of the Project. An exemption is granted from these provisions as they relate to the *construction* of the Project only.

The record shows that construction of the Project would require the Company to obtain exemptions from the provisions of the Zoning Ordinance as set forth in Tables 2 and 3, above. Accordingly, the Department finds that exemptions from the identified provisions of the Zoning Ordinance to allow the Company to construct and operate the Project are required within the meaning of G.L. c. 40A, § 3, as set forth in the tables above.

3. Consultation with Municipality

Prior to seeking zoning relief from the Department, the Company conducted outreach to both local residents and local officials. The Company stated that on May 11, 2017, representatives of the Company met with City of Westfield officials, including department heads/designees from the Water Department, Department of Public Works, Engineering, WG&E, Fire Department, Conservation Commission, Planning, Building Inspector, Legal and Community Development (Exhs. EV-1, at 17; DPU-Z-1). At this meeting, the Company discussed the regulatory process, the applicability of the Zoning Ordinance to the new Switching Station and Substation modifications, and the Company's proposal to seek both individual and comprehensive zoning exemptions from the Department instead of obtaining local zoning relief (Exh. EV-1, at 18). At the City of Westfield's request, a follow-up meeting was held on May 31, 2017, with the ward councilor and the community development director (Exh. EV-1, at 18). The Company also conducted an open house on June 15, 2017, at Westfield High School to present the Project to members of the public (Exh. EV-1, at 18).

By letter to Eversource dated June 2, 2017, Mayor Brian P. Sullivan, City of Westfield, indicated his support of the Project's request for individual and comprehensive zoning relief from the Department (id. at exh. C). The City reiterated its support for the Company's request for individual and comprehensive zoning relief in a letter dated December 7, 2018 (RR-25(S)(1)), while noting concerns related to noise, vibration, and lighting impacts related to the Project.

a. Analysis of Municipal Consultation

The Department continues to favor the resolution of local issues on a local level whenever possible to reduce concern regarding any intrusion on home rule. Hopkinton LNG at 70; Eversource Woburn at 37-39; Russell Biomass at 60-65. The Department believes that the most effective approach for doing so is for applicants to consult with local officials regarding their projects before seeking zoning exemptions pursuant to G.L. c. 40A, § 3. NEP Cabot Taps at 41-42; NSTAR Belmont at 41; Seafood Way at 36.

The record shows that, before filing its Zoning Petition with the Department, the Company consulted with local officials on more than one occasion. As a result of those discussions, the Mayor of Westfield has provided letters that express support for the Company's request for a grant of individual and comprehensive zoning exemptions for the Project. Accordingly, we find that the Company made a good faith effort to consult with municipal authorities and that the Company's communications have been consistent with the spirit and intent of Russell Biomass and the other cases cited above.

E. Conclusion on Request for Individual Zoning Exemptions

As described above, the Department finds that (1) Eversource is a public service corporation; (2) the proposed use is reasonably necessary for the public convenience and welfare; and (3) as provided herein, the specifically identified zoning exemptions are required for purposes of G.L. c. 40A, § 3. Additionally, the Department finds that the Company engaged in good faith consultations with the City of Westfield. Accordingly, the Department grants, with the exception of Section 4-120 as this section relates to the ongoing operation of

the Project, the Company's request for the individual zoning exemptions listed above in Tables 2 and 3, subject to the conditions set forth in this Order.

III. REQUEST FOR COMPREHENSIVE EXEMPTIONS

1. Standard of Review

The Department considers requests for comprehensive zoning exemptions on a case-by-case basis. Hopkinton LNG at 73; Woburn Substation at 37; NSTAR Hopkinton at 44; NEP Cabot Taps at 42; NSTAR Electric Company, D.P.U. 07-60/07-61, at 50-51 (2008) ("NSTAR Carver"), citing Princeton Municipal Light Department, D.T.E./D.P.U. 06-11, at 37 (2007). The Department will not consider the number of exemptions required as a sole basis for granting a comprehensive exemption. Rather, the Department will consider a request for comprehensive zoning relief only when issuance of a comprehensive exemption would avoid substantial public harm. NSTAR Hopkinton at 43; NEP Cabot Taps at 43; NSTAR Carver at 51-52.

2. The Company's Position

Eversource has requested a comprehensive exemption from the provisions of the Zoning Ordinance (Exh. EV-1, at 105). The Company asserts that there is an immediate need for the Project to avoid potential outages (Exh. DPU-Z-9). Therefore, the Company argues that the construction and operation of the Project must avoid delay to prevent substantial public harm (id.) Eversource also states that a comprehensive zoning exemption would exempt the Project from any future zoning provisions that could have the potential to jeopardize the Project and ensure its timely construction, particularly if a Project design

change is required (Exh. EV-1, at 106-107). According to the Company, a comprehensive zoning exemption goes beyond the provisions in the current Zoning Ordinance (from which an individual zoning exemption may be granted), to exempt the Project from any future zoning enactment that comes into effect that has the potential to jeopardize the Project (Exh. EV-1, at 106).

3. Westfield Gas & Electric Position

WG&E, the municipal electric and gas company that provides electric service to the City of Westfield, supports the Company's request for zoning relief based on the reliability benefits offered to WG&E's customers (WG&E Brief at 1-2).

4. Analysis and Findings

The grant of a comprehensive exemption is based on the specifics of each case. Compared to the grant of individual zoning exemptions, which are tailored to meet the construction requirements of a particular project, the grant of a comprehensive exemption serves to nullify a municipality's zoning code in its entirety with respect to the project under review. Thus, compared to the grant of individual zoning exemptions, a comprehensive zoning exemption constitutes a broader incursion upon municipal home rule authority. In the absence of a showing that substantial public harm may be avoided by granting a comprehensive exemption, the granting of such extraordinary relief is not justified. NSTAR Electric Company, D.P.U. 13-126/13-127, at 34-35 (2014) ("Electric Avenue") at 37; New England Power Company d/b/a National Grid, D.P.U. 12-02, at 35-37 (2012); NSTAR Electric Company, D.P.U. 08-1, at 35-37 (2009). Department and Siting Board

cases that have considered and granted comprehensive exemptions have often involved projects that were time sensitive and that dealt with the zoning ordinances of multiple municipalities, where conflicting interpretations could arise. Hopkinton LNG at 73; NEP Cabot Taps at 45; New England Power Company d/b/a National Grid, EFSB 12-1/ D.P.U. 12-46/12-47 (2014).

In this case, the Project does not span more than one municipality. However, construction of the Project is necessary immediately for system reliability, thereby making the Project time sensitive. Moreover, the Company has consulted extensively with the City of Westfield, which has provided two letters of support for the Department granting a comprehensive zoning exemption.

Consequently, the Department concludes that the comprehensive zoning exemption, with the exception of Section 4-120 as this section relates to the ongoing operation of the Project, requested by Eversource from the Zoning Ordinance, is warranted and necessary to avoid substantial public harm. Accordingly, the Department grants a comprehensive zoning exemption for the Project.

IV. SECTION 61 FINDINGS

MEPA provides that "[a]ny determination made by an agency of the commonwealth shall include a finding describing the environmental impact, if any, of the project and a finding that all feasible measures have been taken to avoid or minimize said impact" ("Section 61 findings"). G.L. c. 30, § 61. Pursuant to 301 CMR 11.01(3), Section 61 findings are necessary when an Environmental Impact Report ("EIR") is submitted to the

Secretary of Energy and Environmental Affairs ("Secretary"), and should be based on such EIR. Where an EIR is not required, Section 61 findings are not necessary. 301 CMR 11.01(3). The Secretary, in a certificate dated April 20, 2018, determined that an EIR was not required and that the Project's environmental impacts will be avoided, minimized and/or mitigated to the extent practicable (RR-DPU-15; RR-DPU-15(1)). Accordingly, Section 61 findings are not necessary in this case.

V. REQUEST FOR AUTHORITY TO CONSTRUCT AND USE TRANSMISSION LINE(S) PURSUANT TO G.L. C. 164, § 72

A. Standard of Review

General Laws c. 164, § 72, requires, in relevant part, that an electric company seeking approval to construct a transmission line must file with the Department a petition for:

> authority to construct and use ... a line for the transmission of electricity for distribution in some definite area or for supplying electricity to itself or to another electric Company or to a municipal lighting plant for distribution and sale ... and shall represent that such line will or does serve the public convenience and is consistent with the public interest .... The [D]epartment, after notice and a public hearing in one or more of the towns affected, may determine that said line is necessary for the purpose alleged, and will serve the public convenience and is consistent with the public interest.[19]

The Department, in making a determination under G.L. c. 164, § 72, considers all aspects of the public interest. Boston Edison Company v. Town of Sudbury, 356 Mass.

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[19] Pursuant to G.L. c. 164, § 72, an electric company must file with its petition a general description of the transmission line, a map or plan showing its general location, an estimate showing in reasonable detail the cost of the line, and such additional maps and information as the Department requires.

406, 419 (1969). Among other things, Section 72 permits the Department to prescribe reasonable conditions for the protection of the public safety. Id. at 419-420.

In evaluating petitions filed under G.L. c. 164, § 72, the Department examines (1) the need for, or public benefits of, the present or proposed use; (2) the present or proposed use and any alternatives identified; and (3) the environmental impacts or any other impacts of the present or proposed use. NEP Cabot Taps at 47-48; Northfield/Erving at 59-60; NSTAR Electric Company/New England Power Company d/b/a National Grid, D.P.U. 11-51, at 6 (2012). The Department then balances the interests of the general public against the local interests and determines whether the line is necessary for the purpose alleged and will serve the public convenience and is consistent with the public interest.

B. Analysis and Findings

In evaluating petitions filed pursuant to G.L. c. 164, § 72, the Department relies on the standard of review established for G.L. c. 40A, § 3, for determining whether the Project is reasonably necessary for the convenience or welfare of the public. Based on the record in this proceeding and the analysis provided in Section II above, compliance with the directives and mitigation discussed in Section II, and compliance with all applicable federal, state, and local laws and regulations, the Department finds, pursuant to G.L. c. 164, § 72, that the proposed transmission line is necessary for the purpose alleged, will serve the public convenience, and is consistent with the public interest.

VI. ORDER

Accordingly, after due notice, hearing, and consideration, it is hereby

ORDERED: That the petition of Eversource seeking individual exemptions set forth in Tables 2 and 3 from the operation of the City of Westfield Zoning Ordinance pursuant to G.L. c. 40A, §3, is granted, as provided herein; and it is

FURTHER ORDERED: That the petition of Eversource seeking a comprehensive exemption from the operation of the City of Westfield Zoning Ordinance pursuant to G.L. c. 40A, §3, is granted, as provided herein; and it is

FURTHER ORDERED: That Eversource avoid construction through, and in the immediate vicinity of, the Sadie Knox ballfield and playground during scheduled recreational activities whenever possible, and is further directed to seek permission from relevant municipal officials at least one week in advance of construction through this recreation area; and it is

FURTHER ORDERED: That Eversource provide a final rendering of the perimeter fence selection and a landscaping plan for the entire Atwater Switching Station site, as applicable; the final plans shall include documentation of abutter concerns and collaboration between Eversource and the abutters to address those concerns; and it is

FURTHER ORDERED: That Eversource work with individual landowners to provide off-site screening in a reasonable manner on properties where the Project affects the landowner's viewshed; and it is

FURTHER ORDERED: That Eversource follow a construction schedule of Monday through Friday from 7:00 a.m. to 6:00 p.m., and Saturdays from 9:00 a.m. to 5:00 p.m., with the exception of areas with nearby residential abutters. In areas with residential abutters within 100 feet of construction work areas or activities, the Department directs the Company to limit construction to Monday through Friday only from 7:00 a.m. to 6:00 p.m. Should the Company need to extend construction work beyond those hours and days (with the exception of emergency circumstances on a given day that necessitate work beyond such times), the Company is directed to seek written permission from the relevant City of Westfield authorities prior to the commencement of such work and to provide the Department with a copy of such permission. If the Company and City of Westfield officials are not able to agree on whether such extended construction hours should occur, the Company may request prior authorization from the Department and provide the City of Westfield with a copy of such request; and it is

FURTHER ORDERED: That the Company shall inform the Department and the City of Westfield in writing within 72 hours of any work that continues beyond the hours allowed by the Department, or, if granted extended work hours in writing by the City of Westfield, work that continues past the hours allowed. The Company shall also send a copy to the Department, within 72 hours of receipt, of any authorization for an extension of work hours. Furthermore, the Company shall keep a record of the dates, times, locations, and durations of all instances in which work continues beyond the hours allowed by the Department, or, if granted extended work hours in writing by the City of Westfield, work that continues past the

hours allowed, and must submit such record to the Department within 90 days of Project completion; and it is

FURTHER ORDERED: That Eversource and its contractors and subcontractors comply with all applicable federal, state, and local laws, regulations, and ordinances for which the Company has not received an exemption; and it is

FURTHER ORDERED: That Eversource obtain all other government approvals necessary for the Project; and it is

FURTHER ORDERED: That Eversource and its successors in interest notify the Department of any changes other than minor variations to the Project so that the Department may decide whether to inquire further into a particular issue; and it is

FURTHER ORDERED: That because the issues addressed in this Order relative to this Project are subject to change over time, construction of the Project commence within three years of the date of this Order; and it is

FURTHER ORDERED: That within 90 days of Project completion, the Company must submit a report to the Department documenting compliance with all conditions in this Order, noting any outstanding conditions yet to be satisfied and the expected date and status of such resolution; and it is

FURTHER ORDERED: That Eversource and its successors in interest shall comply with all other directives contained in the Order; and it is

FURTHER ORDERED: That the Secretary of the Department transmit a certified copy of this Order to the Mayor of Westfield, and that the Company transmits a certified copy of this Order to the Westfield City Council, Westfield Planning Board, and the Westfield Zoning Board of Appeals within five business days of its issuance, and that the Company certify to the Secretary of the Department within ten business days of its issuance that such service has been accomplished; and that said certification be served upon the Hearing Officer to this proceeding.

By Order of the Department

Matthew H. Nelson, Chair

Robert Hayden, Commissioner

Cecile M. Fraser, Commissioner

An appeal as to matters of law from any final decision, order or ruling of the Commission 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 Commission be modified or set aside in whole or in part. Such petition for appeal shall be filed with the Secretary of the Commission within twenty days after the date of service of the decision, order or ruling of the Commission, or within such further time as the Commission 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. G.L. c. 25, § 5.