The Commonwealth of Massachusetts

DEPARTMENT OF PUBLIC UTILITIES

D.P.U. 14-128/14-129 August 7, 2015

Petition of New England Power Company d/b/a National Grid pursuant to G.L. c. 172, § 72, for approval to construct two 2.7-mile, 115 kV overhead transmission lines in the Towns of Greenfield and Montague, Massachusetts, and petition pursuant to G.L. c. 40A, § 3, for exemption from the zoning ordinance of the Town of Greenfield and the zoning bylaws of the Town of Montague.

APPEARANCES: David Rosenzweig, Esq.
Erika Hafner, Esq.
Keegan and Werlin, LLP
265 Franklin Street, 6th Floor
Boston, MA 02110
-and-
Lauren Peloquin Shea, Esq.
National Grid USA Service Company, Inc.
40 Sylvan Road
Waltham, MA 02451
FOR: New England Power Company
d/b/a National Grid
Petitioner

TABLE OF CONTENTS

I. INTRODUCTION

A. Description of Proposed Project

New England Power Company d/b/a National Grid ("NEP" or the "Company") proposes to construct and operate two 2.7-mile, 115 kilovolt ("kV") overhead transmission lines to separate and replace the Company's existing double-circuit 115 kV B-128/Y-177 Tap Lines ("Existing Tap Lines") between the Cabot Junction transmission tap in the Town of Greenfield ("Greenfield") and the Montague Substation located in the Town of Montague ("Montague") (Exh. NEP-2, at 1, 8). The Company proposes to: (1) replace the Existing Tap Lines with two new 115 kV tap lines, each on its own set of new transmission structures ("Replacement Tap Lines"); (2) reconnect the replacement of the B-128 Tap Line to the A-127 Main Line at Cabot Junction (and rename it the A-127 Tap Line); and (3) reconductor the Replacement Tap Lines, which would increase the size of the conductor on the A-127 Tap Line (together, the "Project") (id. at 1, 4; Exh. DPU-1-9). The Company would remove the 1930s-vintage lattice structures used for the Existing Tap Lines once the Replacement Tap Lines are energized (Exh. NEP-2, at 1).

The Replacement Tap Lines would use the existing transmission right of way ("ROW") for approximately two miles from Cabot Junction to the south side of the Turners Falls Power Canal ("Power Canal") in Montague (id. at 4). After crossing the Power Canal, the Replacement Tap Lines would be installed in a new 0.75-mile ROW to the Montague Substation (id. at 3-4).[1] The Project would require a total of 58 new structures (id. at 21).

---

[1] The Montague Substation is owned and operated by Western Massachusetts Electric Company ("WMECO") (Exh. NEP-2, at 3).

NEP stated that ISO-New England ("ISO-NE") identified the Project as one element in a set of transmission projects necessary to bring the transmission system in the Pittsfield-Greenfield Area ("PGA") (see Figure 1, below) into compliance with applicable national and regional reliability standards (Exh. NEP-2, at 3-4, 8-10). Specifically, NEP stated that the Project would improve the reliability of electricity supply to customers in Berkshire and Franklin counties, within the PGA (id. at 8).

The Company estimated that the Project would cost $12.97 million, and that, with construction beginning January 2016, the Project would be in service by November 2016 (id. at 5-6).

B. Procedural History

On November 5, 2014, NEP filed two petitions: (1) a petition to construct, operate, and maintain the Replacement Tap Lines pursuant to G.L. c. 164, § 72 ("Section 72 Petition"); and (2) a petition seeking individual and comprehensive exemptions from the zoning ordinances and bylaws of Greenfield and Montague pursuant to G.L. c. 40A, § 3 ("Zoning Petition"). On February 25, 2015, Department staff conducted a Project site visit in Greenfield and Montague followed by a duly noticed public hearing at the Greenfield Middle School. No person or entity filed a petition to be admitted to these proceedings as either a party or as a limited participant.

The Company sponsored the following witnesses at the evidentiary hearing held in Boston on May 21, 2015: Marisa Pizzi, attorney at Bowditch and Dewey; Binoy Koodhathinkal, lead project manager; Dean Latulipe, principal engineer; Daniel White, technical lead and transmission engineer; Paul Knapik, wetlands scientist at BSC Group; and Dawn Travalini, lead environmental scientist (Tr. at 5-12, 41-45, 109, 110). Witnesses who contributed to the

preparation of responses to Information Requests submitted affidavits in support of their responses along with three others: Lindsay Foley, senior project manager; Peter Zschokke, director of regulatory strategy; and Timothy Roughan, director of energy and environmental policy. The Company filed its brief on June 15, 2015.

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.P.U. 13-177/13-178, at 5 (2015) ("Seafood Way"); NSTAR Electric Company, D.P.U. 13-64, at 4 (2014) ("NSTAR Barnstable"); 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. Seafood Way at 5; NSTAR Barnstable at 4; Tennessee Gas Pipeline Company, D.T.E. 01-57, at 3-4 (2002). Finally, the petitioner must establish that it requires exemption from the zoning ordinance or bylaw. Seafood Way at 5-6; NSTAR Barnstable at 4; 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 Seafood Way at 8; NSTAR Barnstable at 4-5; Berkshire Power Development, Inc., D.P.U. 96-104, at 26-36 (1997) ("Berkshire Power").

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. Berkshire Power at 30; Save the Bay 366 Mass. at 685-686; Town of Truro v. Department of Public Utilities, 365 Mass. 407, 410 (1974) ("Town of Truro"); NSTAR Seafood Way at 8. 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." Berkshire Power at 30; Seafood Way at 8; 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. Berkshire Power at 31; Seafood Way at 8; NSTAR Barnstable at 5.

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; Seafood Way at 8. 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"); Seafood Way at 9.

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; Seafood Way at 9.

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 present or proposed use and any alternatives or alternative sites identified; (2) the need for, or public benefits of, the present or proposed use; 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 determines whether the present or proposed use of the land or structures is reasonably necessary for the convenience or welfare of the public. Seafood Way at 9-10; NSTAR Barnstable at 6-7; 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. Seafood Way at 10; NSTAR Barnstable at 7; 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 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.

New York Cellular Geographic Service Area, Inc., D.P.U. 94-44, at 18 (1995); Seafood Way at 10; NSTAR Barnstable at 7.

B. Public Service Corporation Status

NEP is an "electric company" as defined by G.L. c. 164, § 1, which makes it a public service corporation for purposes of G.L. c. 40A, § 3. New England Power Company d/b/a National Grid, D.P.U. 12-02, at 7 (2012) ("Westborough"); New England Power Company d/b/a National Grid, D.P.U. 09-136/09-137, at 7 (2011 ("Auburn/Millbury"). Accordingly, the

Department finds that NEP qualifies as a public service corporation for the purposes of G.L. c. 40A, § 3.

C. Public Convenience and Welfare

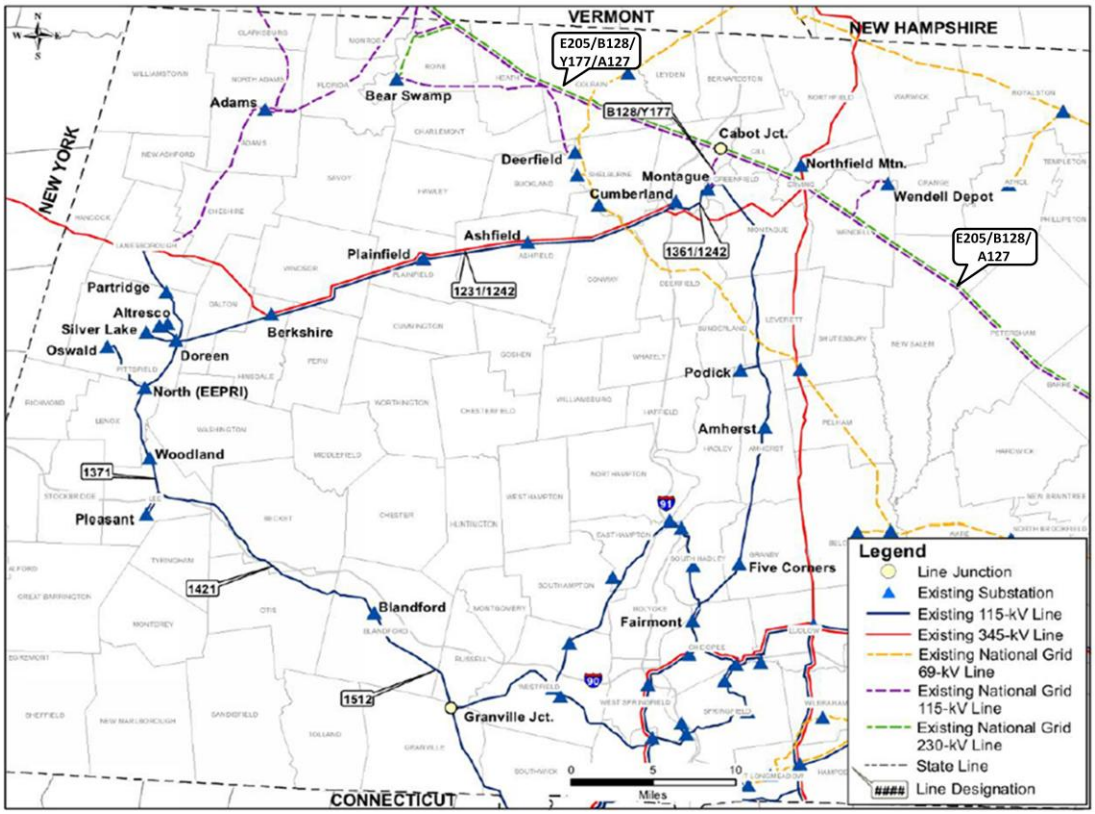
1. Need for or Public Benefit of Use

a. Description of the Existing System

Both the Company and WMECO own transmission facilities in the PGA region of northwestern Massachusetts (Exh NEP-2, at 3). According to the Company, WMECO owns and operates the majority of the PGA transmission system, and serves most of the area's electrical distribution load (id.). NEP owns and operates four transmission lines in the northern portion of the PGA — one 230 kV transmission line (line E-205), and three 115 kV transmission lines (lines B-128, Y-177, and A-127) (id.). The Company stated that these four transmission lines share a ROW that extends from the Harriman Substation in Whitingham and Readsboro, Vermont, southeast towards the Millbury Substation in Millbury, Massachusetts (id.; Tr. at 13). The Existing Tap Lines extend south from this ROW through Greenfield to WMECO's Montague Substation (Exh. NEP-2, at 3).

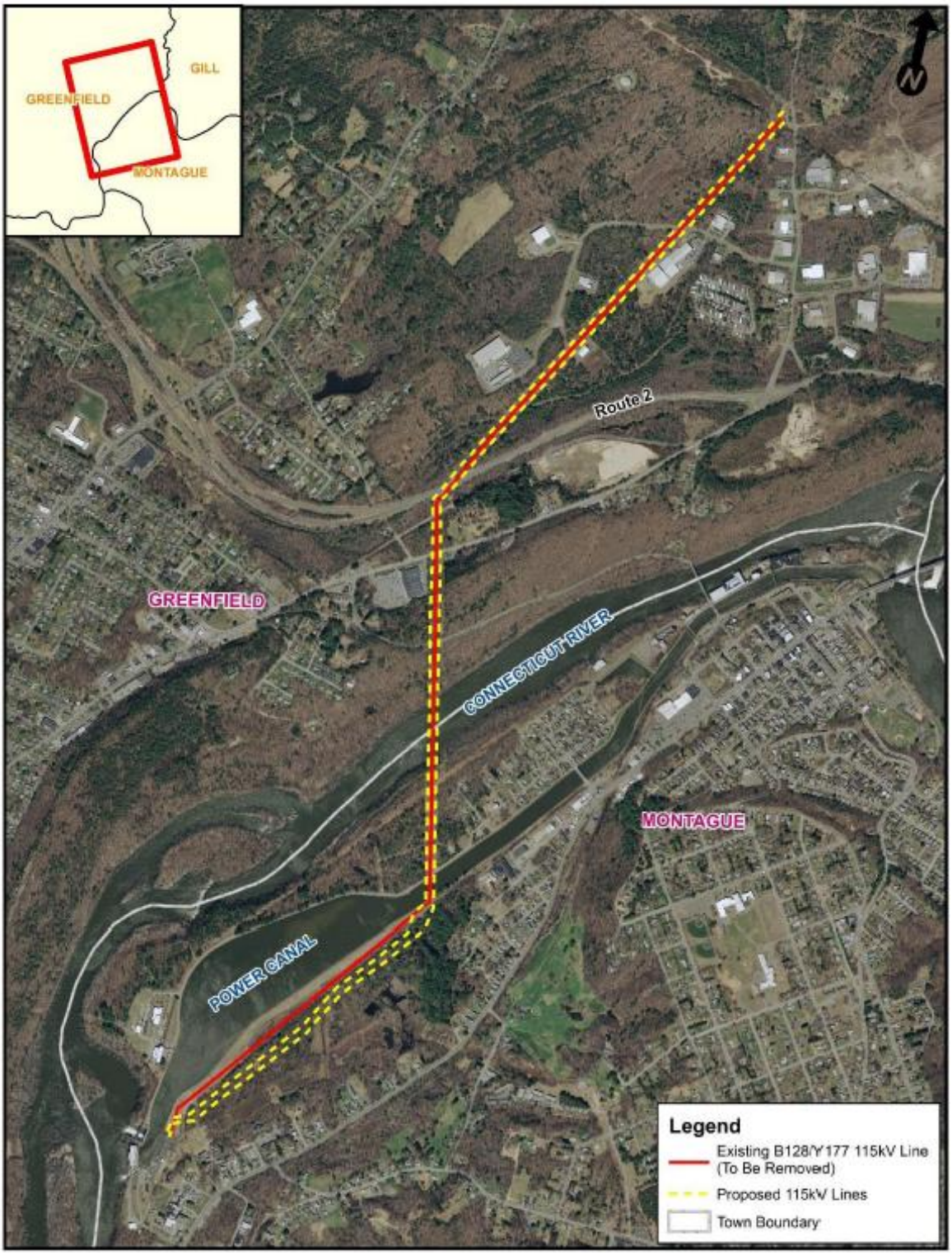
The existing transmission system serving the PGA, including delineation of the infrastructure owned by the Company and WMECO, is provided as Figure 1, below, and a larger-scale map of the Project is provided as Figure 2.

Figure 1. Map of the Existing Transmission System in the PGA



Note: WMECO transmission lines are shown as solid blue and red lines on this figure. Figure adapted from Exh. NEP-2, at 9.

Figure 2. Map of the Existing and Replacement Tap Lines



Source: RR-DPU-1.

b. Reliability of Electrical Supply in the PGA

Beginning in 2010, ISO-NE undertook a series of studies to assess the compliance of the PGA with applicable national and regional reliability standards (Exh. NEP-2, at 3). These reliability standards include standards and criteria established by the North American Electric Reliability Corporation ("NERC"), the Northeast Power Coordinating Council ("NPCC"), and ISO-NE itself (id.). The most recent ISO-NE reliability assessment — the "Pittsfield-Greenfield, MA Area Transmission 2022 Needs Assessment," dated December 2013 ("2013 Needs Study") — identified a number of reliability issues in the PGA, including both thermal and voltage criteria violations (id. at 3, exh. 1.3). On April 28, 2015 ISO-NE presented a summary of the forthcoming "Pittsfield-Greenfield 2022 Solutions Study" ("Solutions Study Presentation") to the ISO-NE Planning Advisory Committee. The Solutions Study Presentation identified the Project as one element of the recommended solution for addressing the reliability needs of the PGA (Exh. DPU-1-13(S); Tr. at 16).

NEP stated that in addition to the ISO-NE assessment, and consistent with industry planning standards, the Company undertook its own assessment of the reliability of the PGA system following the potential loss of certain WMECO-owned 115 kV transmission lines and the double-circuit tower loss of the Existing Tap Lines (Exh. NEP-2, at 4). Such a contingency is referred to as an N-1-1 contingency.[2] The Company's assessment focused on a subset of the PGA system, specifically the "Montague Load Pocket," which includes load served by the

[2] An "N-1" contingency is a circumstance in which there is an unexpected fault or loss of a single electric element. If after the first contingency has occurred, a second non-related transmission or generation outage follows, the two contingencies together are referred to as an "N-1-1" contingency.

following WMECO-owned 115 kV substations: Amherst (north side), Ashfield, Berkshire, Cumberland, Montague, Plainfield, and Podick, as well as the north side of a new WMECO substation, Tillson, which is currently under construction (id. at 10-11; Exh. DPU-1-18; Tr. at 14, 17). Based on this assessment, the Company asserted that the existing electrical system serving the Montague Load Pocket is insufficient to maintain a reliable supply of electricity to customers following certain N-1-1 contingencies (Exh. NEP-2, at 12-13).

According to the Company, NEP assessed two scenarios: (1) forecasted summer 2015 peak demand and existing transmission system infrastructure; and (2) forecasted summer 2022 peak demand with a number of transmission system upgrades assumed to be completed in the PGA (id. at 10-11).[3]

NEP stated that the summer peak demand levels used for the assessment were based on the 90/10 forecast from the 2014 Capacity, Energy, Loads, and Transmission ("CELT") Report (Exh. NEP-2, at 10). According to the Company, the demand forecast incorporated demand response ("DR") resources that cleared Forward Capacity Auction 8, existing energy efficiency ("EE") resources, and a pro-rata share of the ISO-NE EE forecast (id.; Exh. DPU-1-19(S)).[4]

---

[3] The Company assumed that the following key transmission system upgrades identified in the ISO-NE "Pittsfield-Greenfield, MA Area Transmission Solution Study Report," dated March 2012, would be in-service in the 2022 case: (1) a new 345-115 kV autotransformer at Northfield Substation; (2) a new 115 kV transmission line between Northfield Substation and a new Erving Switching Station; (3) 115 kV capacitors at the Amherst, Cumberland, and Podick Substations; and (4) reconductoring of the 115 kV 1361 transmission line between Montague and Cumberland (Exh. NEP-2, at 11). The Company stated that this sensitivity analysis was used to verify that these other upgrades would not be sufficient to address any reliability issues in the Montague Load Pocket associated with the N-1-1 contingencies of concern (id.).

[4] The Company stated that it would be premature to include any impacts of grid modernization or time-varying rates in the demand forecast for projects that are needed in

NEP stated that the 2022 forecast also incorporated forecasted load from the north side of WMECO's Tillson Substation, which is currently under construction (Exhs. NEP-2, at 10-11; DPU-1-18). The Company forecasted that summer peak demand in the Montague Load Pocket would be 151.5 MW in 2015, decreasing slightly to 150.4 MW in 2022 (Exh. NEP-2, at 10-11).

NEP indicated that by 2015, certain N-1-1 contingencies involving the loss of the double-circuit towers of the Existing Tap Lines would result in loadings significantly in excess of the Long-Term Emergency ("LTE") rating of either WMECO's 115 kV transmission line 1242 (which runs from the Berkshire Substation to the Montague Substation), or line 1231 (which runs from the Berkshire Substation to the Cumberland Substation), and in low voltage violations at WMECO's Amherst, Cumberland, Montague, and Podick Substations (Exh. NEP-2, at 12). Specifically, NEP modeled line loadings up to 137 percent of the LTE ratings, and substation voltages as low as 0.85 per unit (id. at 12, exh. 2.1). The Company stated that the magnitude of these overloads would not be significantly impacted by changes to the electrical flows on the broader transmission system outside of the Montague Load Pocket (Exh. DPU-1-30). NEP stated that given the line loading levels, the reliability need in the Montague Load Pocket is immediate and not dependent on load growth (Exh. NEP-2, at 12).

NEP indicated that by 2022, certain N-1-1 contingencies involving the loss of the double-circuit towers of the Existing Tap Lines would result in loadings of up to 133 percent of the LTE ratings of WMECO's 115 kV 1241 and 1242 transmission lines between the Berkshire and

---

the near term (Exh. DPU-1-31). The Company noted that implementation of grid modernization and time-varying rates in the PGA region remains uncertain until the Company and WMECO submit such plans to the Department sometime after mid-2015 and the Department approves the Companies' plans (id.).

Montague Substations, and in low voltage violations at WMECO's Amherst, Cumberland, Montague, and Podick Substations (Exh. NEP-2, at 13). According to the Company, approximately 30 MW of capacity reductions would be required to address these thermal and voltage violations (Exh. DPU-1-22).[5]

In addition to the thermal and voltage violations resulting from the N-1-1 contingencies of concern, NEP stated that the 2013 Needs Study identified thermal overloads on four 115 kV transmission lines serving the Montague Substation following certain N-1-1 contingencies (RR-DPU-2; Company Brief at 11-12). The Company stated that while the planned WMECO-owned Erving Switching Station could eliminate these thermal overloads,[6] a relatively direct electrical path between the Erving Switching Station and the Montague Substation also would be required to address this reliability need (RR-DPU-2).

---

5 In response to questions from Department staff, NEP indicated that the Company's demand forecast did not take into consideration projected growth in solar photovoltaics ("solar PV") within the Montague Load Pocket over the forecast period (Exh. DPU-1-22). The Company stated that it was possible to use the data provided in the 2014 Interim Forecast of Solar Photovoltaic Resources developed by ISO-NE's Distributed Generation Working Group to obtain a rough estimate of the impact that solar PV resources would have on the need for the Project (id.). Using this approach, the Company estimated an incremental demand reduction of approximately 4.28 MW by 2022, which the Company argued was substantially less than the 30 MW of demand reduction required to address the identified need (id.).

6 The Erving Switching Station was the subject of a separate Department proceeding (D.P.U. 13-187/188). The Department approved the construction of these facilities on July 14, 2015 (Western Massachusetts Electric Company D.P.U. 13-187/13-188 (July 14, 2015). The Erving Switching Station is expected to be in-service by the end of 2016 (id. at 3).

c. NEP Recommended Solution

NEP's recommended solution to the thermal and low voltage violations affecting the Montague Load Pocket is to: separate the Existing Tap Lines from their present double-circuit tower configuration by replacing the double-circuit tap lines with two individual 115 kV transmission lines on independent structures; reconnect the replacement of the B-128 Tap Line to the A-127 Main Line at Cabot Junction (and renaming it the A-127 Tap Line); and reconductor the Replacement Tap Lines, increasing the size of the conductor on the A-127 Tap Line (Exh. NEP-2, at 4). The Company stated that separating the Existing Tap Lines would eliminate the potential for double-circuit tower contingencies involving the simultaneous loss of the Existing Tap Lines (id. at 13, 15).

Changing the Cabot Tap connection point from the B-128 Existing Tap Line to the A-127 main line would create a direct path between WMECO's new Erving Switching Station and the Montague Substation (Exh. DPU-1-7; RR-DPU-2). According to the Company, if the taps were not swapped, power flow from the new Erving Switching Station would bypass the Montague Substation and fail to eliminate the identified thermal overloads (Exh. DPU-1-7; RR-DPU-2). Installing a larger conductor on the A-127 Replacement Tap Line would provide the necessary capacity to accommodate the resulting increase in electrical flow (RR-DPU-2). According to the Company, a larger conductor would not be required for the Y-177 Replacement Tap Line (Tr. at 26-28). However, consistent with typical Company practice for transmission lines of this age (i.e., over 50 years old), reconductoring the Y-177 Replacement Tap Line would be necessary because using the old conductor would require insertion of new wire splices into the tap line, which have the potential to create failure points in the conductor (id.).

d. Analysis and Findings

In the 2013 Needs Study, ISO-NE indentified numerous potential reliability needs within the PGA. The Project is one element of the recommended solution for addressing these reliability needs. NEP's assessment of the Montague Load Pocket further demonstrates that the existing transmission system would be insufficient to reliably supply customers in the PGA under forecasted summer 2015 peak demand conditions in the event of certain N-1-1 contingencies. The Company has demonstrated that, without the Project, the other transmission reinforcements underway or planned in the PGA would not resolve the potential thermal overloads and low-voltage violations in the PGA forecasted under summer 2022 peak demand conditions. NEP must eliminate the potential for these overloads and violations in order to comply with applicable national and regional reliability standards.

Concurrent with this work, there is also a need to change the current Cabot Tap connection point from the B-128 to the A-127 transmission line and to install a higher-capacity conductor on the A-127 Replacement Tap Line in order to address thermal violations on 115 kV transmission lines serving the Montague Substation. A new conductor is also required for the Y-177 Replacement Tap Line in order to avoid the creation of potential failure points that would otherwise occur from splicing, testing, and re-using the existing over 50 year-old conductor.

On the basis of the immediate and future potential for thermal overloads and voltage violations under certain contingencies in the PGA, and to prevent the creation of vulnerable points in the Y-177 Replacement Tap Line, the Department finds that there is need for the Project, and that by meeting this need the construction and operation of the Project would result in public benefits.

2. Alternatives Explored

In assessing alternative solutions to meet the identified need, NEP considered three approaches: (1) use of non-transmission alternatives ("NTAs") to alter local generation and demand patterns so that thermal overloads and low voltage violations do not arise following the contingencies of concern; (2) separation of the Existing Tap Lines to eliminate the contingencies of concern (including the Project and an alternative transmission approach); and (3) replacement of the existing WMECO-owned 1231, 1242 and 1361 transmission lines to prevent overloading following the contingencies of concern (Exh. NEP-2, at 14).[7]

a. Non-Transmission Alternatives

NEP considered the potential for new utility-scale generation to address the identified need in the Montague Load Pocket (Exh. NEP-2, at 17-18). The Company stated that by 2022, 30 MW of new quick-start generation connected at WMECO's Amherst, Podick, Montague or Cumberland Substations would be required (id. at 17).[8] NEP estimated the cost of such resources at approximately $82.1 million — more than six times the cost of the Project (Exh. DPU-1-42). NEP also noted that this estimate for quick start generation did not include land acquisition costs, financing costs, and siting and permitting costs, which would further increase the cost differential relative to the Project (id.). Additionally, the Company stated that

[7] NEP also explored a no-build approach. However, this approach did not address the identified reliability need of the Montague Load Pocket (Exh. NEP-2, at 14).

[8] NEP stated that a generation alternative must take into consideration ISO-NE's long-term planning assumption that 80 percent of quick-start generation resources will startup successfully when dispatched by ISO-NE (Exh. NEP-2, at 17). Therefore, the Company stated that this 30 MW of generation would need to consist of at least four 10 MW units, or a larger number of smaller quick-start generators (id.).

no projects of this type currently appear in the ISO-NE interconnection queue, and further asserted that, as a Massachusetts transmission owner, NEP is precluded from proposing this type of generation resource in accordance with the requirements of electricity restructuring (Exh. NEP-2, at 18).

The Company also considered the installation of 30 MW of energy storage capacity within the Montague Load Pocket as a means of addressing the identified need (Exh. NEP-2, at 18). NEP noted that additional analysis would be required to determine how frequently storage resources would be brought online and how long the storage resources would need to operate before being recharged, but it assumed for the purposes of the NTA that at least 60 MWh of energy storage (30 MW of capacity, for two hours) would be required (id.). The Company estimated the cost of such a system at approximately $60 million, or more than four times the cost of the Project (id. at 18). NEP also stated that an energy storage alternative would be more operationally complex than the Project, given the dispatch requirements of an energy storage solution (Exh. DPU-1-45).

Finally, NEP stated that a 30 MW peak-demand reduction at the Amherst, Cumberland, Montague, and Podick Substations through the implementation of a targeted demand resource alternative ("TDRA") could potentially address the identified need (Exh. NEP-2, at 18). The Company identified a range of demand-side resources that could be used to achieve this peak demand reduction, including EE, DR, and distributed generation. According to the Company, approximately 30 MW of incremental EE, 40 MW of incremental DR, or 85 MW of incremental solar PV would be required to meet the need for the Project (id. at 18-19). The Company explained that the TDRA was modeled on National Grid pilot programs underway in Rhode

Island and Massachusetts, and developed a cost estimate of approximately $65 million (approximately five times the cost of the Project) based on the assumption that its Rhode Island pilot would be scalable to the Montague Load Pocket (Exhs. DPU-1-49; DPU-1-50). In addition to its higher costs, the Company also asserted that the TDRA would be less reliable and take substantially longer to develop and implement than the Project (Exh. NEP-2, at 19).

b. Separation of the Existing Lines and Reuse Existing Structures Alternative

NEP stated that separating the Existing Tap Lines would address the identified need in the Montague Load Pocket by eliminating the N-1-1 contingencies of concern (Exh. NEP-2, at 14). The Company identified two ways of accomplishing this: (1) the proposed Project, described in Section I.A above; and (2) a "Reuse Existing Structures" Alternative. Under the Reuse Existing Structures Alternative, the Company would relocate the Y-177 transmission line onto a new set of structures, while reusing the existing steel lattice structures to support the B-128 transmission line (id. at 15). Consistent with the proposed Project, both the Y-177 and B-128 Replacement Tap Lines would be reconductored, and the B-128 Replacement Tap Line would be reconnected to the A-127 line at Cabot Junction (id.).

NEP asserted that while the Reuse Existing Structures Alternative would meet the identified need, it would likely cause greater environmental impacts compared to the Project, and would be unlikely to result in cost savings (Exh. NEP-2, at 15-16). The Company stated that the Reuse Existing Structures Alternative would require an additional 2.4 acres of new ROW

compared to the Project,[9] would require the replacement of 15 of the 24 existing lattice structures to meet conductor clearance requirements, and would cost approximately $13.7 million, excluding the cost of new land rights (id.; Exh. DPU-1-37). Therefore, the Company determined the Reuse Existing Structures Alternative inferior compared to the Project (Exh. NEP-2, at 16, 20).

c. Replacement of the Existing 1231, 1242 and 1361 Transmission Lines

Finally, NEP considered an alternative in which WMECO would replace the transmission lines modeled to overload following the contingencies of concern (Exh. NEP-2, at 16). The Company stated that this alternative would thus remove the full length of WMECO's existing 1231/1242/1361 115 kV transmission lines and replace them with a new 26-mile high-capacity single-circuit 115 kV transmission line (id.). The Company estimated the cost of this new line at approximately $158.3 million – more than ten times the cost of the Project (id.). Additionally, the Company stated that this new line would have significantly greater potential environmental impacts, as it would involve crossing 75 wetlands, 26 perennial streams, and 26 mapped Priority or Estimated Habitats of state-listed rare or endangered species (id.).

d. Analysis and Findings

The evidence shows that the Project is superior to the alternatives assessed by the Company. An NTA would be significantly more costly and complex than the Project. Additionally, no centralized generation of the type necessary to address the identified need is

[9] Maintaining the existing lattice structures would cause the final configuration of the transmission lines to be off center within the existing ROW, thus requiring the acquisition of additional ROW.

currently listed in the ISO-NE interconnection queue, and there is a high level of uncertainty associated with the achievement of sufficient peak-demand reductions through the implementation of a TDRA. The Company showed that separating the Existing Tap Lines and reusing the existing transmission structures would result in greater environmental impacts than the Project, and would be unlikely to result in cost savings. Finally, the Company demonstrated that replacing the existing 1231/1242/1361 transmission lines would have substantially greater cost and environmental impacts than the Project.

Accordingly, the Department finds that the Company's decision to pursue the Project rather than the alternatives is reasonable.

3. Impacts of the Proposed Use

a. Land Use Impacts

As described in Section I.A, the Project would be located within approximately two miles of existing ROW between Cabot Junction and the south side of the Power Canal, and 0.75 miles of new ROW between the south side of the Power Canal and the Montague Substation (Exh. NEP-2, at 21). The Existing Tap Lines, which currently occupy double-circuit steel lattice structures centered within the ROW, would be removed following energization of the Replacement Tap Lines (id.).

NEP stated that the A-127 Replacement Tap Line would require 29 new structures, consisting of 26 single-circuit steel monopoles on concrete foundations, one three-pole dead-end tap structure, and two H-frame dead-end structures at Cabot Junction (Exhs. NEP-2, at 21; DPU-1-55(s); Tr. at 67-68). The Y-177 Replacement Tap Line would also require a total of 29 new structures, consisting of 13 single-circuit direct-embed steel monopoles, 13 single-circuit

monopoles on concrete foundations, one three-pole dead-end tap structure, and two H-frame dead-end structures at Cabot Junction (Exhs. NEP-2, at 21; DPU-1-55(S); Tr. 67-68).

With regards to the portion of the Project proposed within the existing ROW, the Company stated that the ROW is in active utility use, and is maintained in a mixed herbaceous and scrub-shrub state in accordance with NEP's 2014-2018 Five Year Vegetation Management Plan ("VMP") (Exh. NEP-2, at 21, 40). According to the Company, post-Project land use would be consistent with the current land use in the ROW (id. at 21).

The Company stated that the existing ROW contains 16 state-listed rare plant and wildlife species, and that a "take" would likely be required for three of the identified plant species in order to establish a safe work area for line crews (Exhs. NEP-2, at 40; DPU-1-83; DPU-1-84). In areas with high concentrations of these species, the Company would install raised platforms to avoid direct contact with the rare plants (Exh. DPU-84; Tr. at 58-59). Additionally, the Company would remove invasive shrub species currently found within the ROW and use trap rock to encourage the growth and development of these rare plant species (Exh. DPU-1-83; Tr. at 59). The Company stated that it is working with the Natural Heritage and Endangered Species Program ("NHESP") to develop a Conservation and Management Plan to identify site-specific measures to avoid and minimize disturbance to rare plant species (Exh. DPU-1-83).

The Company stated that between the south side of the Power Canal and the Montague Substation the Existing Tap Lines would be removed, and a new approximately 0.75 mile long (18.8-acre) ROW would be established to accommodate the Replacement Tap Lines (Exh. NEP-2, at 4, 21). According to the Company, a new ROW would be required because the Federal Energy Regulatory Commission ("FERC") has classified the Power Canal as a high

hazard structure, and placing transmission lines on the Power Canal dike, or any drainage structure associated with the dike, would be inconsistent with this classification (Exhs. NEP-2, exh. 1.10, at 6; DPU-1-61). The Company further stated that FirstLight Power Resources ("FirstLight"), the owner of the Power Canal, would provide NEP with a new ROW on its property to accommodate the relocation (Exh. NEP-2, exh. 1.10, at 6; Tr. 78).

According to the Company, the new ROW would average 200 feet in width, of which, approximately 140 feet would be cleared (Exh. NEP-3, appendix C, at 2). Development would result in the permanent alteration of approximately 16.7 acres of land from undeveloped mixed open and forested land, to land for power line/public utility use (Exhs. NEP-2, at 22, 32; NEP-3, at 6). NEP stated that vegetation clearing would be required in order to provide sufficient clearance for construction, reliability, maintenance and operation of the Project (Exh. NEP-3, at 13).

The Company further stated that after construction is complete NEP would promote the establishment of desirable low-growing plant species by selectively applying herbicide to control the growth of tree saplings and invasive shrub species, consistent with NEP's 2014-2018 VMP (Exh. NEP-2, at 33). The Company stated that no Priority Habitat of Rare Species and/or Estimated Habitat of Rare Wildlife, as designated by NHESP, would be located within the proposed new ROW (Exh. NEP-3, at 40). The Company contends that the Project's creation of additional scrub-shrub habitat is a positive long-term effect because such habitat has ecological value and is declining across New England (Exh. NEP-2, at 33).

NEP stated that the Project is located within and adjacent to two areas used for recreation or conservation: (1) a 5.69-acre property in Greenfield owned by the Massachusetts Department

of Conservation and Recreation ("DCR"); and (2) a portion of the Canalside Rail Trail that runs along the west side of the Power Canal in Montague on FirstLight-owned property that is leased to DCR (Exh. NEP-3, at 11).

According to the Company, the 5.69-acre DCR-owned parcel is undeveloped and contains a walking trail that does not appear to be heavily utilized (Exh. NEP-3, at 22). NEP stated that during active construction periods, use of the trail would be temporarily restricted, causing minimal impacts to recreational users (id.).

NEP stated that the Canalside Rail Trail is managed by DCR, and that an approximately 0.75 mile portion of the trail runs adjacent to the existing ROW along the west side of the Power Canal (id. at 22-23). According to the Company, the Canalside Rail Trail is a popular destination for bicycling, jogging, and passive recreation, with peak use occurring during the summer months (id. at 22). NEP stated that during construction of the Project, temporary restrictions to this portion of the Canalside Rail Trail would be required (id. at 23). NEP committed that each closure would last no more than 48 hours, and that the majority of the work requiring closures would take place during the winter months to minimize disruptions to path users (Exh. DPU-1-90; Tr. at 53-57). NEP would implement an alternative route, provide signage and a police detail whenever closures were required (Exh. DPU-1-90; Tr. at 54-55). The Company stated that following Project construction NEP would assess and restore the trail to pre-construction conditions (Exh. NEP-3, at 24; Tr. at 53).

The Company also committed to take precautions to avoid and minimize any potential effects on historic or archaeological resources in the Project area, including consulting with the U.S. Army Corps of Engineers, the Massachusetts Historical Commission, and consulting parties

as appropriate (Exhs. NEP-2, at 45; NEP-3, at 51). NEP stated that based on investigations performed to date, the Company anticipates avoiding any impacts to historic and cultural resources (Exh. NEP-3, at 51).

The Company argued that the construction and operation of the Project would not significantly impact land use within the existing or new ROW, and that by siting the Project primarily within existing ROW, the Company had taken steps to minimize land use impacts (Exh. NEP-2, at 33).

b. Wetland and Water Resource Impacts

The Company identified eight wetlands, three perennial streams, and six intermittent streams within the Project ROW (Exh. NEP-2, at 35; Tr. at 145). NEP stated that the wetlands typically consist of scrub-shrub, emergent marsh, or wet meadow communities (Exh. NEP-2, at 35). NEP also stated that forested wetlands are found where the existing ROW has not been cleared to the full width (id.). One certified vernal pool was identified within the Project area, adjacent to the Stone Farm Lane access road (Exh. NEP-2, exh. 1.8; Tr. at 87). The Company stated that measures would be taken to mitigate any impacts to the vernal pool, including the installation of a temporary construction mat with an underpass that would allow for the protected migration of amphibian species (Tr. at 88).

Table 1 below summarizes the temporary and permanent wetland and waterway impacts presented by the Company.

Table 1. Summary of the Wetland and Waterway Impacts Identified by NEP

Resource Area	Temporary Impacts	Permanent Impacts
Bordering Vegetated Wetlands ("BVW")	Approximately 208,650 square feet of swamp matting for access roads, construction work envelopes and pull pad work envelopes.	Approximately 173,539 square feet, including: • Fill for structure foundations (606 square feet). • Conversion of forested wetlands to scrub-shrub wetlands (172,933 square feet).
Bank	Approximately 570 linear feet of swamp mat bridge spans to access structure sites.	N/A
Riverfront Area	Approximately 81,682 square feet for swamp mat installation.	Approximately 234 square feet, including: • Land alteration for structure installation and construction work envelopes. • Stabilization material in expanded sections of existing access roads.
Bordering Land Subject to Flooding ("BLSF")	Approximately 37,511 square feet for stabilization of work envelopes during construction.	Approximately 84 square feet/14 cubic yards of fill for structure foundations.

Source: Exh. NEP-2, at 36; RR-DPU-8.

NEP stated that all work would be completed in compliance with applicable mitigation requirements in the Order of Conditions issued by the towns of Greenfield and Montague, and the U.S. Army Corps of Engineers § 404 permit (Exh. NEP-2, at 39). Mitigation measures to be implemented by the Company would include the use of construction best management practices (e.g., use of swamp mats), restoration of temporary construction impacts to pre-construction conditions, and enhancement of proposed conditions within and adjacent to wetlands impacted by tree removal by leaving and/or creating snags and placing woody debris along the edge of the ROW to create wildlife cover (id. at 39-40; Exh. NEP-3, at 29-35, 72). The Company asserted

that, with the implementation of these mitigation measures, the impacts of the Project to wetlands and waterways would be minimized (Exh. NEP-2, at 40).

c. Visual Impacts

NEP stated that the existing visual environment in the vicinity of the Project is affected by the Existing Tap Lines — steel lattice towers ranging in height from 47 to 56 feet tall — and at some locations, distribution circuits on wood poles approximately 40 feet tall (Exh. NEP-2, at 34). As described in Section I.A above, the Company stated that a total of 58 new structures, primarily of weathered steel-monopole construction, would be required for the Project (id. at 21; Exh. NEP-1, exh. 9). According to the Company, the new structures would range in height from approximately 50 feet to 110 feet tall, with the majority of the structures between 80 feet and 110 feet tall (Exh. DPU-1-67; Tr. at 78-79).

The Company indicated that there are six residential dwellings and eight commercial buildings within 300 feet of the edge of the existing ROW, and no residential dwellings or commercial buildings within 300 feet of the proposed new ROW (Exh. DPU-1-59). The Company stated that only modest changes to the visual environment would result from the installation of taller structures and the development of the new ROW due to the relatively undeveloped nature of the surrounding area, the location of the Project primarily within an existing ROW, and the generally limited views of the ROW from the surrounding area (Exh. NEP-2, at 34-35; Tr. at 79-80). The Company noted that in locations where the Project ROW would parallel the Canalside Rail Trail, the transmission structures would be moved farther away from the bike path than the Existing Tap Lines are currently, improving views from the trail (Exh. NEP-2, at 35).

The Company committed to work with abutters on a case-by-case basis to mitigate visual impacts either by relocating structures, or, where tower relocation would not be feasible, through post-construction restoration and landscape mitigation (id.). With the implementation of these measures, the Company asserted that the visual impact of the Project would be modest and appropriately minimized (id.; Tr. at 79-80).

d. Noise Impacts

The Company stated that the Project would be located in an area generally characterized by rural and suburban environments, where ambient sounds levels are largely dictated by nearby roads and highways, and commercial and industrial zones (Exh. NEP-2, at 35). The Company stated that operation of the Project would not result in any permanent adverse noise impacts, or create new sources of long-term noise generation (id.).

The Company stated that construction would typically occur Monday through Saturday, from 7:00 a.m. to 5:00 p.m., with work outside of these hours potentially required under unusual circumstances, such as road crossings (Exh. NEP-2, at 28). The Company committed to notify the towns of Greenfield and Montague if extended work hours were required (Exh. DPU-1-57).

NEP stated that construction related noise would be short-term in nature, and would range from approximately 67 to 85 A-weighted decibels ("dBA") at a distance of 50 feet from the Project ROW, and 57 to 75 dBA at a distance of 150 feet (roughly the distance from the Project ROW to the closest residential abutter) (Exhs. NEP-2, at 35; DPU-1-59(1); RR-DPU-9).[10] The Company committed to implement measures to minimize

[10] Two clusters of residential abutters were identified, one just north of the Power Canal and the other near the French King Highway (Route 2A) (receptor locations R1 and R6) (Exh. DPU-1-59(1)).

construction-related noise, including properly muffled construction equipment, not allowing the operation or unnecessary idling of equipment near noise-sensitive receptors, and where practical, adjusting working hours to be consistent with any concerns of impacted residents (Exhs. NEP-2, at 35; DPU-1-73). The Company asserted that with the implementation of these measures noise impacts from the Project would be minimized (Exhs. NEP-2, at 35; DPU-1-73).

e. Air Impacts

NEP stated that the Company would adhere to Massachusetts anti-idling law and regulations (G.L. c. 90, § 16A; G.L. c. 111, §§ 142A – 142M; 310 C.M.R. 7.11), and limit vehicle idling to five minutes with certain exceptions, such as for safety or vehicle repair (Exh. NEP-3, at 72). 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 to be used for 30 or more days over the course of the Project (id.). The Company also committed to deploying dust suppression measures appropriate to site conditions, such as using track pads at access points and watering during dry periods (id.).

f. Traffic Impacts

The Project would cross five public roadways: (1) Silvio O. Conte Drive; (2) Massachusetts State Highway Route 2; (3) Gill Road; (4) French King Highway (Route 2A); and (5) Turners Falls Road (Exh. NEP-2, at 28). The Company stated that no road closures are anticipated, but that lane closures would be required when crossing Massachusetts State Highway Route 2 (Tr. at 98-101). The Company committed to coordinate with local authorities for work on local streets and roads, and stated that its contractor would coordinate closely with

the Massachusetts Department of Transportation ("MassDOT") to develop acceptable traffic management plans for work within state highways (Exh. NEP-2, at 28).

NEP stated that the Company has a secure, fenced laydown area in an industrial area off of Butternut Street in Greenfield that would likely be used as a laydown and show-up area for the crews for this Project (Exh. DPU-1-54; RR-DPU-6; Tr. at 63). The Company stated that the final determination on the location of the laydown and show-up area would be made once a contractor is selected for the Project, but that the Butternut Street site has been used for previous projects in the area (Exh. DPU-1-54; Tr. at 63-65).

g. Magnetic Fields

NEP retained Exponent, Inc., to assess changes in the magnetic fields associated with the construction and operation of the Project in the vicinity of the Existing Tap Lines and the Replacement Tap Lines (Exh. NEP-2, at 41). The Company stated that magnetic field levels would be affected by both the proposed change in configuration of the area transmission lines and by changes in line loadings resulting from the connection of WMECO's proposed Erving Switching Station (Exh. NEP-2, at 41). The calculated magnetic field levels along the edge of the ROW presented by the Company, assuming the construction of the new Erving Switching Station, are shown below in Table 2.

Table 2. 2022 Calculated Magnetic Field Levels (milligauss) for Pre- and Post-Project Configurations Assuming Construction of the Erving Switching Station

ROW Section	Modeled Conditions	100 Feet from the Western Edge of the ROW	Western Edge of the ROW	Eastern Edge of the ROW	100 Feet from the Eastern Edge of the ROW
Section 1-1	Pre-Project	0.8	4.2	4.5	0.8
	Post-Project	3.2	34.9	3.0	1.0
Section 1-5	Pre-Project	0.7	3.5	5.0	0.8
	Post-Project	3.0	34.1	1.4	0.8
Section 2-1	Pre-Project	0.7	3.5	3.8	0.7
	Post-Project	3.5	33.8	2.2	0.9
Section 2-4	Pre-Project	0.8	4.0	4.2	0.8
	Post-Project	2.1	10.8	4.8	1.4

Source: RR-DPU-11.

As shown in Table 2, modeled magnetic fields levels are generally higher along the western edge of the ROW. The Company indicated that there are no residences within 300 feet of the western edge of the ROW, and no residences closer than 147 feet from the eastern edge of the ROW (Exh. DPU-1-59(1)). NEP stated that it has proposed reasonable and prudent measures to reduce magnetic field levels through the use of aggregate optimal phasing and greater ground clearances than required by the National Electrical Safety Code (Exh. NEP-2, at 43).

h. Hazardous Waste

NEP stated that typical construction activities do not require the use or storage of large quantities of oil or hazardous materials ("OHMs") (Exh. DPU-1-98). The Company stated that limited quantities of OHMs may be required to support construction or vehicle operations (id.). The Company committed to implement appropriate best management practices during Project construction, including storage and refueling greater than 100 feet from resource areas;

maintenance of spill response equipment at work locations; and training for on-site personnel for spill cleanup response for incidental releases of OHM (id.).

i. Safety

NEP stated that the Company would design, build, and maintain the Project facilities so that the health and safety of the public are protected (Exh. NEP-2, at 46). The Company would use signage, temporary barriers, and work site monitoring to prevent unauthorized individuals from entering active construction areas (Exh. DPU-1-94). The Company would also use police details during work along public roadways and in pedestrian high-traffic areas (id.). Following construction, all transmission structures would be clearly marked with warning signs to alert the public of potential hazards if climbed or entered (Exh. NEP-2, at 47).

j. Analysis and Findings

The Project would use an existing ROW for approximately two miles and a new ROW, on electric utility-owned property, for approximately 0.75 miles. Development of the new ROW would facilitate rehabilitation of the Power Canal dike, which FERC has classified as a high hazard structure. The Company has committed to undertaking measures that would minimize potential impacts to sensitive land use features in the Project area, including the use of raised work pads to prevent direct contact with state-listed rare plant species, and the removal of invasive plant species from the Project ROW. The Company has also committed to limit closures of the Canalside Bike Path to 48 hours or less, to conduct the majority of the work requiring closures during the winter months, and to restore the trail to pre-construction conditions following completion of the Project. Given the active use of the Canalside Bike Path, and to ensure that the Company's mitigation ensures access to this recreational resource, the

Department directs NEP to submit for approval a construction plan that details the dates of construction and proposed mitigation for periods of interrupted public access to the Canalside Bike Path. With the implementation of this condition, and other mitigation measures described in Section II.C.3.a above, the land use impacts of the Project would be minimized.

With respect to wetland and water resources, one certified vernal pool was identified within the Project area. The Company would take steps to mitigate any impacts to the vernal pool, including the installation of a temporary construction mat that would permit the safe migration of amphibian species. The Company also committed that all work would be completed in compliance with the Order of Conditions issued by the towns of Greenfield and Montague, and the U.S. Army Corps of Engineers § 404 permit. With the implementation of these mitigation measures the impacts of the Project to wetlands and waterways would be minimized.

The Project would result in the installation of 58 new transmission structures, primarily of steel-monopole construction, the majority of which would be 80 feet to 110 feet tall. The visual impacts of the Project would be limited due to the relatively undeveloped nature of the surrounding area and the generally limited views of the Project ROW.

The Company proposes to use a six-day per week construction schedule, from 7:00 a.m. to 5:00 p.m. Monday through Saturday, with the option to work outside of those hours under unusual circumstances. Given that there are two clusters of residences abutting the Project, performing construction five days a week in these specific locations would minimize construction noise impacts. The Department approves the Company's proposed construction schedule for the Project, with the exception of construction activities to be performed in the

residential areas immediately north of the Power Canal and near the French King Highway (Route 2A), where the Department directs the Company to work Monday through Friday from 7:00 a.m. to 5:00 p.m. Should the Company need to extend construction work beyond those hours and days (with the exception of extraordinary and unforeseeable circumstances on a given day that necessitate work beyond such times[11]), the Company is directed to seek written permission from the relevant town authorities prior to the commencement of such work and to provide the Department with a copy of such permission. If the Company and town 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 towns with a copy of such request.

The Project is subject to idling restrictions imposed by the Massachusetts Department of Environmental Protection, and the Company has committed that 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 would be retrofitted.

The Project would cross five public roadways. Working closely with local authorities and developing a traffic management plan in partnership with the MassDOT would minimize potential impacts to vehicle flow on local roadways.

With the completion of the Project, magnetic field levels would be 3.5 milligauss or less 100 feet from the edge of the ROW. The closest residential abutter is 147 feet from the Project ROW. The use of aggregate optimal phasing and greater ground clearances than required by code would minimize magnetic field impacts from the Project.

---

[11] The Company must inform the Department in writing within 72 hours of such an event.

The record shows that the Company has plans prepared for potential spills of oil or other potentially hazardous material. The Company would also design, build, and maintain the Project facilities so that the health and safety of the public are protected.

The Department concludes that based on 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 stated it will implement during Project construction and operation; and (3) the Department's conditions as discussed above and set forth below, the impacts of the Project will be minimized.

4. Conclusion on Public Convenience and Welfare

Based on the foregoing analysis of: (1) need for or public benefit of use; (2) alternatives explored; and (3) impacts of the proposed use, the Department finds that the benefits of the Project exceed adverse local impacts and, thus, that the proposed use is reasonably necessary for the public convenience or welfare.

D. Exemptions Required

1. Individual Exemptions

NEP is seeking exemption from eight individual provisions of the Greenfield Zoning Ordinance and nine individual provisions of the Montague Zoning Bylaw (Exh. NEP-1, at 17, 18, 24, 25). The Company is also seeking comprehensive exemptions from the Greenfield Zoning Ordinance and the Montague Zoning Bylaw (id. at 25-27).

2. Company's Position

Table 3 below presents: (1) each of the specific provisions of the Greenfield Zoning Ordinance and from which the Company seeks exemption; (2) the relief available through the

Town's local zoning process; and (3) the Company's argument as to why it cannot comply with the identified zoning provision or why the available zoning relief is inadequate. Table 4 presents the same information for the exemptions sought from the Montague Zoning Bylaw.[12]

[12] The Petition mentions that there are seven sub-sections of section 5.2 from which an exemption is sought (Exh. NEP-1, at 19, 20). In the interests of simplicity and clarity, we consider this as one issue and not seven. Therefore, in Table 4, below, the exemption from section 5.2 of the Montague Zoning Bylaw is treated as one exemption.

Table 3. Company Position: Requested Individual Exemptions from the Greenfield Zoning Ordinance

Section of the Zoning Ordinance	Available Relief	Why Exemption Is Required: Company's Position
Nonconforming Use Section 200-6.1	**Special Permit**	The Existing Tap Lines constitute a pre-existing nonconforming use in several of the zoning districts through which they pass (Exhs. NEP-1, at 12 n. 4; DPU 1-100). The Company could apply to the Greenfield Zoning Board of Appeals ("GZBA") for a Special Permit on the grounds that the Replacement Tap Lines constitute an "extension, alteration, or change" of such a pre-existing nonconforming use (Exhs. NEP-1, at 12 n. 4; DPU-1-100). The "extension, alteration, or change" of such a use does not generally encompass the construction of new structures, such as the new utility poles (Exhs. NEP-1, at 12 n. 4; DPU-1-100, at 2, 3).
Use Regulations Article IV	**Special Permit**	A "public or private utility," which would likely include the Project, is allowed in several of the districts in which the Project would be located only upon the issuance of a special permit (Exhs. NEP-1, at 11, 12; DPU-1-100). A special permit may only be granted by the GZBA upon a finding that the proposed use or structure will not adversely impact adjacent properties, the neighborhood, the Town, or the environment (Exh. NEP-1, at 12). The Company argues that the subjective nature of this finding creates both legal uncertainty and the opportunity for lengthy and costly appeals (Brief at 49).
Floodplain District Section 200-4.13.F	**Special Permit**	Various replacement structures would require excavation and installation within the Floodplain District (Exhs. NEP-1, at 13; DPU-1-99, at 2). Such excavation and construction requires a Special Permit (Exh. NEP-1, at 13). Ten separate conditions are listed in § 200-4.13.G for the granting of a Special Permit (Exh. NEP-1 exh. 2, at 40). The Company argues that the subjective nature of these conditions creates both legal uncertainty regarding the obtaining of a special permit and the potential for adverse rulings, appeals, and consequent delays and expenses (Brief at 50).
Corridor Overlay District Section 200-4.16.E(2)	**Variance**	A portion of the Replacement Tap Lines would lie in the French King Highway Overlay District ("Overlay District") (Exhs. NEP-1, at 13; DPU 1-101). This section requires that all utility lines in the Overlay District be placed underground (Exh. NEP-1, at 13, and exh. 2, at 47). The standard for obtaining a variance would be difficult or impossible for the Company to meet (Exh. NEP-1, at 13-14). Furthermore, variances are a legally disfavored form of relief and, even if granted, may be appealed, which could result in significant delay and expense (id. at 14; Exh. DPU-1-106).
Dimensional Requirements Article V	**Variance**	The Project cannot be constructed without exemptions from two dimensional requirements: height and setback (Exh. NEP-1, at 14). It would be difficult, if not impossible, for the Company to meet the criteria for the issuance of the required variances (id. at 14, 15).

Parking Requirements Sections 200-6.5 and 200-6.6A	**Variance**	Section 200-6.6A requires adequate off-street loading "be provided for all business, commercial, industrial, or institutional uses" (Exh. NEP-1, at 16). Furthermore, section 200-6.5.E requires that off-street parking for any new structure, or any expansion of an existing structure, be provided in accordance with the terms of the Table of Off-Street Parking Spaces ("Table") (Exh. NEP-1, exh. 2, at 58). No parking or loading facilities are being proposed as part of the Project (Exh. NEP-1, at 22).
Site Plan Review Section 200-8.4.B(1)	**Site Plan Approval**	This section provides that site plan review and approval is required for all uses that would require a special permit (Exh. NEP-1, at 16, exh. 2, at 109-100). Site plan review, however, could interfere with the Company's discretion to design the Project and its layout in a manner that would: (1) be consistent with established utility standards; and (2) ensure reliable operation (Exh. NEP-1, at 18).

Table 4. Company Position: Requested Individual Exemptions from the Montague Zoning Bylaw

Section of the Zoning Bylaw	Available Relief	Why Exemption Is Required: Company's Position
Nonconforming Use Section 5.1.4	**Special Permit**	Construction of the Replacement Tap Lines would constitute the change or extension of a pre-existing nonconforming use (Exhs. NEP-1, at 20, n. 6, 24; DPU-1-105). Therefore, the Company would most likely need to obtain a special permit to undertake such construction (Exhs. NEP-1, at 20 n. 6, 24; DPU-1-105). Special permits may only be granted upon a finding that "such permitted use will not be of substantial harm to the neighborhood, or to the natural resources or infrastructure of the Town, will not derogate from the intent of the bylaw and that nuisance, hazard or congestion will not be created by the issuance thereof" (Exh. NEP-1, exh. 3, at 4). The subjective nature of these findings, which were not established with public utility electric facilities in mind, creates legal uncertainty, and the possibility of lengthy and costly appeals even if the Company is initially successful in obtaining the special permit, and resulting delay and expense (Exh. NEP-1, at 19).
Permitted Uses in Multiple Zoning Districts Section 5.2	**Special Permit**	The Replacement Tap Lines would be located in seven different zoning districts (Exh. NEP-1, at 19). This section provides that public utility use is allowed in every zoning district, but only upon the issuance of a special permit which, as mentioned above, is dependent upon several subjective findings (id.).
Dimensional Requirements (Height) Section 5.4.6	**Variance**	The proposed monopole structures will exceed maximum building heights in all zoning districts (Exh. NEP-1, at 20). Consequently, the Company would need to obtain a variance (Exh. NEP-1, at 21). The criteria for granting a variance are difficult, if not impossible, to meet and, even if granted, variances are a legally disfavored form of relief and susceptible to appeal (id.; Exh. DPU-1-106).

Dimensional Requirements (Setback) Sections 5.3.1 and 5.4	**Variance**	The Company believes that construction of the Project would require the Company to obtain a variance from the minimum setbacks for front, side, and rear yards for each lot in several of the zoning districts in which the Project would be located (Exh. NEP-1, at 21).
Earth Removal Regulations Section 7.2	**Special Permit**	This section would require the Company to obtain a special permit for the soil excavation and removal associated with the Project (Exh. NEP-1, at 22). As mentioned above, the grant of a special permit is dependent upon several subjective findings (id.).
Parking Requirements Sections 6.2.1 and 6.2.3	**Variance**	Section 6.2.1 sets forth minimum requirements for the creation of parking spaces in connection with new construction (Exh. NEP-1, at 22, exh. 3, at 22). In addition, section 6.2.3 requires adequate off-street loading facilities and space to service all needs created by new construction (Exh. NEP-1, at 22, exh. 3, at 23). No parking or loading facilities are being proposed as part of the Project (Exh. NEP-1, at 22). The Company believes, and the Montague Building Inspector agrees, that construction of the Project could require the Company to obtain variances from these two provisions (id.).
Site Plan Review Section 8	**Site Plan Approval**	This section requires that all uses that involve the construction or alteration of three acres of land or more (which would include the present case) are subject to an environmental impact and site plan review by the Montague Zoning Board of Appeals (Exh. NEP-1, at 23, exh. 3, at 34, 35). Site plan review is discretionary and can result in the imposition of burdensome or restrictive conditions (Exh. NEP-1, at 23). These conditions could impair the Company's ability to construct the Project in accordance with state and industry standards relating to the construction of electric transmission facilities (id.).

3. Analysis and Findings

a. Variances

The record shows that construction of the Project would require the Company to obtain a total of six separate variances from the two towns. 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.

Accordingly, we find that exemptions from the identified provisions of the Zoning Ordinance and the Zoning Bylaw that would require the Company to obtain a variance to construct and operate the Project are required within the meaning of G.L. c. 40A, § 3. Specifically, exemptions are granted from the following provisions of the Greenfield Zoning Ordinance: section 200-4.16.E(2) (Corridor Overlay District), Article V (Dimensional Requirements), and sections 200-6.5 and 200-6.6A (Parking Requirements); and the following provisions of the Montague Zoning Bylaw: section 5.4.6 (Dimensional Requirements – Height), sections 5.3.1 and 5.4 (Dimensional Requirements – Setback), and sections 6.2.1 and 6.2.3 (Parking Requirements).

b. Special Permits and Site Plan Review

The record shows that construction of the Project would require the Company to obtain a total of six separate special permits from the two towns. In addition, Project construction would also require exemptions from the site plan approval requirements of the Greenfield Zoning Ordinance and the Montague Zoning Bylaw.

Section 200-8.3.F of the Greenfield Zoning Ordinance sets forth ten criteria for the issuance of a special permit. In the Montague Zoning Bylaw, sections 5.2, 6.3.2.3, 7.2.2, and 9.7 each set forth the special permit criteria for the various bylaw sections. Consequently, the Company would encounter a number of ordinances and bylaws, each with its own set of criteria, if it attempted to obtain all of the special permits necessary for construction. This complexity alone could cause delay. In addition, we concur with the Company's argument that the special permit criteria are at least to some extent subjective in nature, and this introduces uncertainty into the permitting process. Furthermore, we note that the grant of a special permit is appealable.

See G.L. c. 40A, § 17. Consequently, requiring the Company to obtain the special permits necessary for construction of the Project could result in significant Project delay and uncertainty.

Accordingly, we find that the exemptions from the special permit requirements are required within the meaning of G.L. c. 40A, § 3. Specifically, exemptions are granted from the following provisions of the Greenfield Zoning Ordinance: section 200-6.1 (Change in a Pre-existing Nonconforming Use), Article IV (Use Regulations), and section 200-4.13.F (Floodplain District); exemptions are also granted from the following provisions of the Montague Zoning Bylaw: section 5.1.4 (Change of a Pre-existing Nonconforming Use), section 5.2 (Permitted Uses in Multiple Zoning Districts), and section 7.2 (Earth Removal Regulations). In addition, we also find that exemptions from Greenfield Zoning Ordinance section 200-8.4.B(1) (Site Plan Review) and Montague Zoning Bylaw section 8 (Site Plan Review) are also required in order to avoid the potential for the imposition of burdensome conditions or significant delay or both of these.

4. Consultation with Municipalities

a. Introduction

Prior to seeking zoning relief from the Department, the Company conducted outreach to both local residents and local officials. In the spring of 2014 the Company mailed an informational flier to all abutters within 300 feet of the Project (Exh. NEP-1, at 9). The abutters were given the opportunity to request meetings with the Company to discuss the Project and to provide feedback (Exh. NEP-1, at 9). Additionally, the Company also sent invitations to abutters to attend a public open house on June 18, 2014, and it advertised this event in the Greenfield Recorder (Exh. NEP-1, at 9).

The record shows that Company representatives met at least four separate times with a number of Greenfield and Montague officials in the spring, summer, and fall of 2014 (Exh. NEP-1, at 9, 10). It would appear, based on the record in this proceeding, that the meetings were productive for the Company and the Project. By letter dated October 1, 2014, the Greenfield building inspector, expressed the Town of Greenfield's support for the Company's request for both various individual zoning exemptions and for a comprehensive exemption from the Greenfield Zoning Ordinance (Exh. NEP-1, at 10, exh. 4). Similarly, by letter dated February 2, 2015, the Town of Montague conveyed its support for both various individual zoning exemptions and for a comprehensive exemption from its zoning requirements (Exh. NEP-1, exh. 9).[13]

b. Analysis and Findings

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. NSTAR Electric Company, D.P.U. 14-55/14-56, at 41 (May 26, 2015) ("NSTAR Belmont"); NSTAR Electric Company, D.P.U. 14-03, at 48 (April 13, 2015) ("NSTAR Mashpee"); Russell Biomass LLC/Western Massachusetts Electric Company, 17 DOMSB 1, EFSB 07-4/D.P.U. 07-35/ 07-36, at 60-65 ("Russell Biomass"). The Department believes that the most effective approach for doing so is for applicants to consult with local officials regarding their projects before seeking

[13] The Town of Montague premised its support on four areas agreed to by NEP: (1) minimal disruption to the bike path during construction; (2) contractor secured separate laydown area to ensure no parking or loading in public roads or parking spaces; (3) adherence to the visual representation of the heights and elevations of monopole structures as presented; and (4) replacement of the existing lattice structures with weathered steel monopoles (Exh. NEP-1, exh. 9).

zoning exemptions pursuant to G.L. c. 40A, § 3. NSTAR Belmont at 41; NSTAR Mashpee at 48-49; Seafood Way at 36.

The record shows that the Company consulted with multiple local officials. Furthermore, all of these meetings took place well before the Company filed its zoning exemption petition with the Department. In addition, the Company also reached out to Greenfield and Montague residents during this time. As a result of those discussions, both towns have expressed their support for the granting of individual zoning exemptions. 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.

5. Conclusion on Request for Individual Zoning Exemptions

As described above, the Department finds that: (1) NEP is a public service corporation; (2) the proposed use is reasonably necessary for the public convenience and welfare; and (3) the specifically identified zoning exemptions are required for purposes of G.L. c. 40A, § 3. Additionally, we find that the Company engaged in good faith consultations with the Towns of Greenfield and Montague. Accordingly, we grant the Company's request for the individual zoning exemptions listed above in Tables 3 and 4, subject to any conditions set forth in this Order.

III. REQUEST FOR COMPREHENSIVE EXEMPTIONS

A. Standard of Review

The Department considers requests for comprehensive zoning exemptions on a case-by-case basis. Seafood Way at 37-38; NSTAR Barnstable at 34-35; 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. Seafood Way at 37-38; NSTAR Barnstable at 35; NSTAR Carver at 51-52.

B. The Company's Position

In addition to the individual exemptions discussed above, the Company has also requested comprehensive exemptions from the Greenfield Zoning Ordinance and the Montague Zoning Bylaw (Exh. NEP-1, at 25). In support of its position, the Company asserts that there are four factors that the Department and the Siting Board have articulated as relevant to deciding whether to grant comprehensive exemptions. They are whether: (1) the project is needed for system reliability; (2) the project is time-sensitive; (3) there are multiple municipalities involved that could have conflicting zoning provisions that might hinder the uniform development of a large project spanning these communities; and (4) the communities affected by the project have demonstrated their support for a comprehensive zoning exemption (Exh. NEP-1, at 25-27; Company Brief at 66 citing New England Power Company d/b/a National Grid and Western Massachusetts Electric Company, 18 DOMSB 323, EFSB 10-1/D.P.U. 10-107/10-108, at 89-90 (2012) ("Hampden County Reliability Project"); NSTAR Electric Company, EFSB 10-2/D.P.U. 10-131/10-132, at 110-111 (2012) ("NSTAR Lower SEMA"); Western Massachusetts Electric Company, 18 DOMSB 7, EFSB 08-2/D.P.U. 08-105/08-106, at 136-137 (2010) ("GSRP Decision")).

Addressing the first two criteria, the Company argues that the Project is needed in order to improve system reliability and that this need is time-sensitive because thermal and voltage criteria violations exist at pre-2013 load levels (Company Brief at 66-67, citing Exhs. NEP-2, at 12-13; RR-DPU-13). Consequently, the need for the Project is immediate (Company Brief at 67, citing RR-DPU-13).

With respect to the last two criteria, the Company notes that the Project would be located in two different municipalities, and that both of them have submitted written support for NEP's requests for a comprehensive zoning exemption (Company Brief at 67, citing Exhs. NEP-1, exh 4; NEP-1, exh. 9; Tr. at 1, 115-116, 118-120, 131). Consequently, the Company argues, all four of the criteria used for assessing whether a comprehensive zoning exemption is needed have been met (Company Brief at 66).

Furthermore, the Company argues that the Department's grant of comprehensive zoning exemptions would allow NEP to achieve finality in its local permitting (id. at 68, Exh. NEP-1, at 27). For example, it is possible that a zoning provision could be enacted prior to the Project's completion, but that the Company is not currently aware that such a provision is contemplated and therefore cannot include it in the list of individual exemptions sought. If such a provision were enacted, comprehensive zoning exemptions would enable the Project to go forward without delay (Company Brief at 68, citing Exh. NEP-1, at 27). In addition, the grant of comprehensive zoning exemptions would enable the Company to address and implement design changes and other Project changes, if they should become necessary, without spending significant amounts of time obtaining modifications to zoning permits and approvals (id.).

C. 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 is 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.P.U. 12-02, at 7 (2012) ("Westborough") at 35-37; NSTAR Electric Company Waltham, D.P.U. 08-1, at 35-37 (2009).

Department and Siting Board cases that have considered and granted comprehensive exemptions have typically involved projects that were time sensitive and that dealt with the zoning ordinances of multiple municipalities, where conflicting interpretations could arise. New England Power Company d/b/a National Grid, EFSB 12-1/D.P.U. 12-46/12-47 (2014); New England Power Company d/b/a National Grid, 18 DOMSB 173, EFSB 09-1/D.P.U. 09-131/09-132 (2011) ("NGrid Worcester"); GSRP Decision at 136.

Even when a comprehensive zoning exemption is granted, however, one class of zoning ordinances or bylaws is often excluded: zoning restrictions relating to environmental aspects of the ongoing operation of the proposed project. Western Massachusetts Electric Company and New England Power Company d/b/a National Grid, D.P.U. 13-187/188, at 50, 51, 59 (July 14,

2015) ("Northfield/Erving Decision"); Electric Avenue at 34-35; Barnstable at 32. In the present case, section 200-6.8 of the Greenfield Zoning Ordinance prohibits "sound, noise, vibration, odor, or flashing" that is observable more than 450 feet from the "boundaries of the originating premises" in a General Industry District, or more than 200 feet from said boundaries in a Commercial District, or more than 40 feet from said boundaries in any other district (Exh. NEP-1, exh. 2, at 72). Consequently, were the Department to include Greenfield Zoning Ordinance section 200-6.8 in the grant of a comprehensive exemption, the Town of Greenfield could not exercise control over the on-going operations of the proposed Project with respect to these important environmental impacts. Northfield/Erving Decision at 50-51; Electric Avenue at 35.

Although the Department grants request for zoning exemptions to facilitate construction and avoid unnecessary delay or adverse zoning outcomes, the Department also believes that once such facilities are operational they should comply with local zoning requirements relating to environmental aspects of the ongoing operation of the proposed Project, such as those found in Greenfield Zoning Ordinance section 200-6.8. Northfield/Erving Decision at 51; Electric Avenue at 34-35.

The Project does span more than one municipality, and there is the possibility that Greenfield and Montague could conflict in their interpretation of their zoning bylaws. Furthermore, the Company has consulted extensively with both towns, and each town assents to the granting of a comprehensive exemption. Construction of the Project is also necessary immediately for system reliability, and such construction is time-sensitive, as noted above. Consequently, the Department concludes that the comprehensive exemptions requested by NEP

from the Montague Zoning Bylaw and the Greenfield Zoning Ordinance, with the exception of Greenfield Zoning Ordinance section 200-6.8, may indeed avoid substantial public harm and merit the Department's approval.

IV. 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.[14]

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. 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 environmental impacts or any other impacts of the present or proposed use; and (3) the present or proposed use and any

---

[14] Pursuant to G.L. c. 164, § 72, the 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.

alternatives identified. Northfield/Erving at 59- 60; Seafood Way at 41; 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.C.3.j above, compliance with the directives and mitigation discussed in Section II.C.3.j 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.

V. SECTION 61 FINDINGS

The Massachusetts Environmental Policy Act ("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 C.M.R. § 11.01(4), Section 61 findings are necessary when an environmental impact report ("EIR") is submitted to the Secretary of Energy and Environmental Affairs, and should be based on such EIR. Where an EIR is not required, Section 61 findings are not necessary. 301 C.M.R.

§ 11.01(4). The record indicates that a Single Environmental Impact Report ("SEIR") was required for NEP's proposed transmission Project and, therefore, a finding under G.L. c. 30, § 61 is necessary in this case (Exh. NEP-2, at 7). The SEIR was submitted in May 2015, and the Secretary's Certificate determining that the SEIR adequately and properly complies with MEPA and its implementing regulations was issued on June 12, 2015 (Exhs. NEP-3; DPU-1-12 (S)).

The Department recognizes the Commonwealth's policies relating to GHG emissions, including G.L. c. 30, § 61 and the Executive Office of Energy and Environmental Affairs Greenhouse Gas Emission Policy and Protocol. The Department notes that the Project would have minimal GHG emissions as it is an overhead transmission line.[15] As such, the Project would not have direct emissions from a stationary source or indirect emissions from energy consumption. In Section II.C.3 above, the Department conducted a comprehensive analysis of the environmental impacts of the proposed transmission line. Based upon the record in this case, implementation of the required mitigation measures, and compliance with all applicable federal, state, and local laws and regulations, the Department finds that the Company has taken all feasible measures to avoid or minimize the environmental impacts of the Project.

VI. ORDER

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

ORDERED: That the petition of New England Power Company d/b/a National Grid ("NEP") seeking the specific exemptions set forth in Tables 3 and 4 from the operation of the

---

[15] The Secretary's Certificate on the Expanded Environmental Notification Form issued on July 18, 2014 states: "The [P]roject is subject to the MEPA Greenhouse Gas Policy and Protocol (GHG Policy) because it exceeds thresholds for a mandatory EIR. Given the nature of the [P]roject, I have concluded that this project falls under the de minimis exemption." Exh. NEP-1, exh. 1.11, at 11.

Greenfield Zoning Ordinance and the Montague Zoning Bylaw pursuant to G.L. c. 40A, § 3, is granted; and it is

FURTHER ORDERED: That the petition of NEP seeking comprehensive exemptions from the operation of the Greenfield Zoning Ordinance and the Montague Zoning Bylaw pursuant to G.L. c. 40A, § 3, is granted with the exception of Greenfield Zoning Ordinance section 200-6.8; and it is

FURTHER ORDERED: That the petition filed by NEP seeking approval to construct and operate a transmission line pursuant to G.L. c. 164, § 72, is granted; and it is

FURTHER ORDERED: That NEP limit Project construction to Monday through Saturday from 7:00 a.m. to 5:00 p.m., with the exception of construction activities to be performed in the residential areas immediately north of the Power Canal and near the French King Highway (Route 2A), where NEP shall limit Project construction to Monday through Friday from 7:00 a.m. to 5:00 p.m. Should the Company need to extend construction work beyond those hours and days (with the exception of extraordinary and unforeseeable circumstances on a given day that necessitate work beyond such times), the Company is directed to seek written permission from the relevant town authorities prior to the commencement of such work and to provide the Department with a copy of such permission. If the Company and town 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 towns with a copy of such request; and it is

FURTHER ORDERED: That NEP shall submit for approval a construction plan that details the dates of construction and proposed mitigation for periods of interrupted public access to the Canalside Bike Path; and it is

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

FURTHER ORDERED: That NEP and its successors in interest notify the Department of any significant changes in the planned timing, design, or environmental impacts of 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 contained 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 the Secretary of the Department transmit a certified copy of this Order to the towns of Greenfield and Montague, and that the Company serve a copy of this Order on the Greenfield Board of Selectmen, the Greenfield Planning Board, the Greenfield Zoning Board of Appeals, the Montague Board of Selectmen, the Montague Planning Board, and

the Montague Zoning Board of Appeals within five business days of its issuance and to 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 and all parties to this proceeding.

By Order of the Department:

/s/
Angela M. O'Connor, Chairman

/s/
Jolette A. Westbrook, Commissioner

/s/
Robert Hayden, 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.