

March 3, 2005

D.T.E. 04-66 / 04-81

Petitions of New England Power Company and Massachusetts Electric Company pursuant to G.L. c. 40A for Exemptions from the Zoning Ordinance of the City of Haverhill to Expand Facilities at Ward Hill Substation.

ORDER GRANTING ZONING EXEMPTIONS TO NEW ENGLAND POWER COMPANY

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I. INTRODUCTION

A. Description of the Proposed Project

Pursuant to G.L. c. 40A, § 3, New England Power Company (“NEP” or “Company”) and Massachusetts Electric Company (“MECo”), two affiliates of National Grid USA, have filed petitions with the Department of Telecommunications and Energy (“Department”) for exemptions from the Zoning Ordinance of the City of Haverhill (“ordinance”) in connection with proposed expansions of NEP’s existing Ward Hill Substation in Haverhill (Exhs. NEP-1; MEC-1; NEP-JWM at 1).^{1, 2}

NEP’s petition, filed on August 13, 2004, requested zoning exemptions for the construction of additional transmission-level facilities at the substation site (“transmission project” or “Ward Hill expansion”) (Exh. NEP-1). MECo’s petition, filed on August 24, 2004, requested zoning exemptions for the construction of additional distribution-level facilities on the substation site (“distribution project”) (Exh. MEC-1). Although they would be located on the same site, the distribution facilities and the transmission facilities are functionally unrelated (Exhs. DTE-1-B-7; DTE-1-B-8). The NEP petition was docketed as D.T.E. 04-66; the MECo petition was docketed as D.T.E. 04-81. This Order addresses the

¹ The Company explained that the existing 3.51-acre substation is located on a 39-acre parcel of land owned by NEP on Cross Road in Haverhill (Exh. NEP-KMH at 2-4). NEP stated that the substation currently contains one 345/115 kilovolt (“kV”) transformer and six 115 kV circuit breakers (Exhs. NEP-KMH at 2; DTE 1-B-4). Also on the site are a 115/23 kV substation with four transformers, and four feeders each with one 23/13.2 kV transformer (Exh. NEP-KMH at 2).

² The Company indicated that the Department had previously granted zoning exemptions for the Ward Hill Substation in an order issued on July 6, 1994 (Exhs. NEP-1, at 6 and Att. E).

NEP petition only; a separate order will be issued for the MECo petition.

NEP stated that the transmission project is one in a series of projects that are designed to improve its transmission system and increase power import capability for the North Shore area (Exh. NEP-1, at 1). The transmission project would involve the installation of three 345/115 kilovolt (“kV”) transformers, one 115/23 kV transformer, eleven 345 kV circuit breakers³ and twelve 115 kV circuit breakers, as well as two new 95-foot and four new 60-foot transmission line towers for 345 kV lines 394N and 394S, two or more 95-foot lightning shield masts, and two new 75-foot and three new 60-foot transmission line towers for 115 kV lines (id. at 5-6; Exhs. NEP-KMH at 4; DTE 1-T-5; Tr. 1, at 88, 96, 105). NEP stated that it would also construct a pre-engineered building that would be approximately 180 feet long, 64 feet wide, and 36 feet high to house 345 kV gas insulated switchgear (“GIS”), and an attached control house (Exh. NEP-KMH at 3; Tr. 1 at 105). NEP also would move transmission lines, extend a roadway, remove equipment and construct busbars as part of the transmission project (Exhs. DTE 1-B-1, Att. A; DTE 1-T-2, Att. A; Tr. 2, at 177). The Company indicated that it would extend the substation fencing to enclose the 4.42 acres to accommodate both the NEP and MECo expansions (Exh. DTE 1-B-4; RR-DTE-9). Changes in substation acreage and the number of buildings and transformers at the Ward Hill Substation are listed in Table 1, below.

³ The 345 kV breaker bay would have space to install a twelfth breaker, should one be needed in the future (Tr. 1, at 88, 105-106).

Table 1. Changes Proposed for Ward Hill Substation

Element	Existing at Ward Hill	To be Removed	Transmission Project Additions	Distribution Project Additions *	Post-Construction*
Buildings	4	1	1**	1	5
345/115 kV transformers	1		3		4
115/23 kV transformers	4	3	1		2
115/13.2 kV transformers				2	2
23/13.2 kV transformers	4				4
Substation area (inside fenceline)	3.51 acres	NA	0.72 acres	0.18 acres	4.42 acres

Sources: Exhs. MEC-1; NEP-KMH at 2-4; DTE 1-T-5; DTE 1-D-6; Tr. 1, at 109-111; RR-DTE-9.

* Distribution project additions are listed in order to show the cumulative prospect for Ward Hill from the transmission and distribution projects. MECo's petition to do distribution work is not addressed in this Order.

** A GIS building with an attached control house would be added at the Ward Hill site as part of the transmission project.

B. Procedural History

NEP filed its zoning exemption petition on August 13, 2004; MECo filed its petition on August 24, 2004.⁴ The MECo petition was accompanied by a joint NEP-MECO motion to consolidate evidentiary hearings on the two petitions, which was granted by the Department on September 13, 2004.

Pursuant to notice duly issued, the Department held a public hearing on the NEP and MECo petitions on October 6, 2004, in Haverhill and conducted evidentiary hearings on the

⁴ With its petition, NEP filed a motion for a protective order, requesting that the Department afford confidential treatment to a Company transmission system map that was submitted as an exhibit in the proceeding. The motion is pending. In keeping with Department practice, the transmission system map has been treated as a confidential document from the time of its filing with the Department, and will retain that status unless a ruling denying the Company's motion for a protective order is issued.

consolidated petitions on December 9 and 10, 2004 in Boston. In support of their petitions, NEP and MECo presented testimony and exhibits from seven witnesses: John W. Martin, Principal Engineer in the Transmission Planning Department of National Grid USA Service Company⁵; Kathy M. Horelik, Lead Senior Engineer for National Grid USA Service Company, and Project Engineer for the proposed project; Daniel McIntyre, Principal Engineer in the Substation Engineering Group of National Grid USA Service Company; F. Paul Richards, Principal Environmental Engineer in the Environmental Group of National Grid USA Service Company; Andres J. Molina, Principal Engineer with National Grid USA Service Company; Melissa L. Hall, Senior Environmental Engineer with MECo; and David J. Beron, Principal Engineer in the National Grid USA Transmission Line Engineering Department.

II. 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 by-law 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. Save the Bay, Inc. v. Department of Public Utilities, 366 Mass. 667 (1975) (“Save the Bay”). Second, the petitioner must establish that it requires exemption from the zoning ordinance or bylaw.

⁵ NEP stated that National Grid USA Service Company performs engineering and other services for National Grid USA companies, including NEP (Exh. NEP-JWM at 1).

Boston Gas Company, D.T.E. 00-24, at 3 (2001) (“Boston Gas”). Finally, the petitioner must demonstrate that its present or proposed use of the land or structure is reasonably necessary for the public convenience or welfare. Massachusetts Electric Company, D.T.E. 01-77, at 4 (2002) (“MECo (2002)”); Tennessee Gas Pipeline Company, D.T.E. 01-57, at 3-4 (2002) (“Tennessee Gas (2002)”).

A. 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 (“SJC”) 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 at 680. See also, Boston Gas at 3-4; 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. See Berkshire Power at 30; Save the Bay at 685-686. 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; see also Dispatch Communications of New England d/b/a Nextel

Communications, Inc., D.P.U./D.T.E. 95-59-B/95-80/95-112/96-113, at 6 (1998) (“Nextel”).

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. See Berkshire Power at 31.

B. Exemption 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 looks to whether the exemption is necessary to allow construction or operation of the petitioner’s project as proposed. See MECo (2002) at 4-5; Tennessee Gas (2002) at 5; Western Massachusetts Electric Company, D.P.U./ D.T.E. 99-35, at 4, 6-8 (1999); Tennessee Gas Company, D.P.U. 92-261, at 20-21 (1993). It is the 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).

C. Public Convenience or 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 at 680; Town of Truro v. Department of Public

Utilities, 365 Mass. 407, at 411 (1974). 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”). When reviewing a petition for a zoning exemption under G.L. c. 40A, § 3, the Department is empowered and required to consider the public effects of the requested exemption in the State as a whole and upon the territory served by the applicant. Save the Bay at 685; New York Central Railroad at 592.

With respect to the particular site chosen by a petitioner, G.L. c. 40A, § 3 does not require the petitioner to demonstrate that its preferred 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 preferred 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 at 591.

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. Boston Gas at 2-6; MECo (2002) at 5-6; Tennessee Gas (2002) at 5-6; Tennessee Gas Company, D.T.E. 98-33, at 4-5 (1998).⁶

III. ANALYSIS AND FINDINGS

A. Public Service Corporation Status

New England Power Company is an "electric company" as defined by G.L. c. 164, § 1. See New England Power Company, D.P.U. 92-255, at 2 (1994). Accordingly, the Department finds that NEP qualifies as a public service corporation for the purposes of G.L. c. 40A, § 3.

B. Public Convenience or Welfare

1. Need or Public Benefit of Use

a. Company Position

NEP stated that the Ward Hill expansion is needed to ensure transmission system reliability in the North Shore area⁷ independent of Salem Harbor Station (Exhs. NEP-JWM

⁶ In addition, the Massachusetts Environmental Policy Act 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. § 11.12(5), Section 61 findings are required if the Secretary of Environmental Affairs has required an Environmental Impact Report ("EIR") for the project. The Company stated that no EIR was required for the transmission project (Exhs. NEP-FPR at 7-9; DTE-2-B-7). Accordingly, Section 61 findings are not necessary in this case.

⁷ As defined by the Company, the North Shore import area extends northwards along the coast from Salem and inland to include areas served by distribution substations in Wakefield, East Tewksbury, Methuen, and Ward Hill, part of the load at Broadway
(continued...)

at 4; NEP-JWM-4, at i). NEP stated that North Shore area import capability would need to be increased by approximately 646 megawatts (“MW”) by 2006 if the 700 MW Salem Harbor Station is to be taken out of service;⁸ the need for additional import capacity would increase to more than 700 MW by 2012 (Exhs. NEP-JWM at 4; NEP-JWM-4, at 5-6; DTE 1-T-19; Tr. 1, at 60-64, 79). NEP also asserted that the transmission project is needed for its North Shore area transmission system to conform with Section 3.2(b) of the New England Power Pool (“NEPOOL”) Reliability Standards and Section C.2.3 of National Grid’s Transmission Planning Guide, which require that equipment loadings be within applicable emergency limits following specified contingencies (Exhs. NEP-JWM at 4; NEP-JWM-3; NEP-JWM-5, at 7; Tr. 1, at 55-57).

In support of its petition, NEP provided a study of the North Shore area, dated April 2004, simulating system performance in summer 2006 and summer 2012 (Exh. NEP-JWM-4). The Company’s study showed that, in summer 2006, the existing 345/115 kV transformer at Ward Hill would be overloaded under all-lines-in conditions, if the 700 MW Salem Harbor Station is retired (Exhs. NEP-JWM at 5; NEP-JWM-4, at 5-6, 18;

⁷ (...continued)
Substation in Lawrence, plus load in southern New Hampshire served by Golden Rock Substation (Exhs. JWM-2; JWM-4, at 5; Tr. 1, at 47-54). The four principal bulk supply points for the North Shore area are Salem Harbor Station and the Ward Hill, Golden Hills, and Tewksbury substations (Exh. NEP-JWM at 3-4).

⁸ NEP noted that USGen New England, then the owner/operator of Salem Harbor Station, filed an application with ISO-New England to retire the plant (Exh. NEP-JWM at 4; Tr. 1, at 57).

DTE 1-T-15; Tr. 1, at 58-59).⁹ Overloads would stress equipment or require shedding of load (Tr. 1, at 68, 83-85).

The Company indicated that, even if Salem Harbor is not retired, there would be overloads in the transmission system under all-lines-in conditions if summer 2006 peak loads occurred during outages of 550 MW or more at Salem Harbor Station (Exh. NEP-JWM-4, at 6). Contingency overloads could occur if 75 MW or more of the Salem Harbor generation were off-line during 2006 summer peak load (id.). The Company also suggested that implementation of the Ward Hill expansion would give ISO-NE more latitude in planning scheduled outages in the region (Exh. DTE 1-T-12). The Company concluded that the increased North Shore area import capability provided by the Ward Hill expansion would be needed to ensure system stability during such an outage (id.; Exh. NEP-JWM-4, at i).¹⁰

NEP's long-term analysis showed contingency overloads for the loss of any autotransformer in summer 2012, even with two new Ward Hill transformers (Exh NEP-JWM-

⁹ Contingency losses of transmission system elements would increase the overloads (Exh. NEP-JWM-4, at 6). In particular, the existing 345/115 kV transformer at Ward Hill could be overloaded for the contingency loss of two 115 kV lines, G-133E and B-154N, due to a fault on either line and a failed 115 kV circuit breaker between the two lines (Exh. NEP-JWM at 5). In addition, the 345/115 kV transformers at Golden Hills Substation could be overloaded for the contingency loss of the existing Ward Hill transformer and the G-133E 115 kV line, due to a fault on either element and a failed 115 kV circuit breaker between the two elements (id.).

¹⁰ Initial short-term analysis conducted by the Company, which assumed some portion of Salem Harbor generation would continue to operate, indicated that the installation of one additional transformer at Ward Hill Substation would reduce summer 2006 dependence on Salem Harbor generation to approximately 112 MW, eliminating dependence on Salem Units 3 and 4 (Exh. NEP-JWM-4, at 17-18). The addition of a second new transformer at Ward Hill (for a total of three) was needed to eliminate dependence on Salem Harbor generation in summer 2006 (id. at 19).

4, at 19). NEP therefore analyzed a series of options (discussed below) to meet long-term reliability needs (id. at 19-24). As part of this analysis, NEP assessed the impact of various upgrades on North Shore import limits, and estimated that installing one new transformer at Ward Hill (for a total of two), reconductoring two 115 kV transmission lines, and adding a capacitor bank at Salem Harbor would increase North Shore import limits by 550 MW, while adding three new transformers (for a total of four), together with the reconductoring and capacitor bank improvements, would increase those limits by an additional 150 MW, or 700 MW in all (id. at 23).

NEP also provided ISO-New England's RTEP04 Technical Report, dated October 21, 2004, which states that the North Shore area does not have a sufficient combination of transmission and generating capacity and that this situation will be aggravated if existing generation is unavailable (Exh. NEP-JWM-6, at 19-22; Tr. 1, at 39). The report recommends transmission upgrades in the North Shore area including the installation of three transformers at Ward Hill, subject to final analysis (Exh. NEP-JWM-6). ISO-New England also submitted a brief in support of the Ward Hill expansion (ISO-NE Brief).

NEP stated that the transmission project would add sufficient import capacity to supply the North Shore area without operation of Salem Harbor Station through approximately 2008 to 2010 (Exhs. DTE 1-T-13; DTE 1-T-20; Tr. 1, at 67). The Company's planning study indicates that construction of a 345/115 kV substation at Wakefield Junction would be required to provide a further 150 MW of import capacity after that time (Exh. DTE 1-T-13; Tr. 1, at 63-65). The Company expects that the transmission project, in combination with a new substation at Wakefield Junction, would address import capacity issues in the North Shore area

through 2012 (Tr. 1, at 68-71, 84-85). In addition, the Company asserted that the transmission project could help reduce customer costs related to locational marginal pricing in the NEMA/Boston area (Exh. DTE 1-T-12).

The Company proposed the Ward Hill expansion after considering four packages of transmission upgrades designed to ensure transmission system reliability in the North Shore area through 2012 (Exhs. NEP-JWM at 6; NEP-JWM-4, at 22-24; Tr. 1, at 72-75). These four packages are:

- the proposed Ward Hill expansion, combined with construction of a ring bus at Golden Hills, a capacitor bank at Salem, and a new substation at Wakefield Junction, and reconductoring a line from Ward Hill to East Methuen (Exh. NEP-JWM-4, at 19-20; Tr. 1, at 72-73);
- the construction of a new 345 kV transmission line from Ward Hill to a new 345/115 kV substation to be built in the vicinity of Salem Harbor Station, combined with addition of one 345/115 kV transformer at Ward Hill (Exhs. NEP-JWM at 6; NEP-JWM-4, at 21-23; Tr. 1, at 76-77);
- the construction of a new 345 kV transmission line from Ward Hill to a new 345/115 kV substation to be built in the vicinity of the South Danvers Substation, combined with the addition of one 345/115 kV transformer at Ward Hill (Exhs. NEP-JWM at 6; NEP-JWM-4, at 21-23; Tr. 1, at 77); and
- the construction of a new 345 kV transmission line from Golden Hills to a new 345/115 kV substation to be built in the vicinity of the Salem Harbor Station, combined with the addition of one 345/115 kV transformer at Ward Hill and a new substation at Wakefield Junction (Exhs. NEP-JWM at 6; NEP-JWM-4, at 21-23; DTE 1-T-20; Tr. 1, at 77).

The Company provided preliminary estimates indicating that construction of the Ward Hill expansion and a new substation at Wakefield Junction would cost \$48,700,000, compared to \$62,700,000 for the Ward Hill-to-Salem Harbor package, \$59,000,000 for the Ward Hill-to-South Danvers package, and \$66,400,000 for the Golden Hills-to-Salem Harbor package

(Exh. NEP-JWM at 6; Tr. 1, at 73-76). The Company therefore concluded that the Ward Hill expansion would be the most economical of the four packages (Exh. NEP-JWM at 7).

With respect to environmental impacts, NEP noted that the three alternative packages would involve construction of new transmission lines and new substations, rather than the expansion of an existing substation (id.). Specifically, NEP indicated that the Ward Hill-to-Salem Harbor and Ward Hill-to-South Danvers packages would require clearing of right-of-way and construction of a new 345 kV substation; new overhead transmission lines for these alternatives would include a section from Ward Hill to Route 128 where the route would traverse 135 wetlands and 22 streams and pass close to 39 vernal pools (Exh. DTE 1-T-21). NEP indicated that the Golden Hills-to-Salem Harbor package would require construction of 11 miles of new overhead line, a transition from overhead to underground, and 2 miles of underground line; the route would cross the Saugus River, several ponds, Lynn Woods, and the Breakheart Reservation (id.). The Company asserted that the environmental impacts of the Ward Hill expansion would be considerably less than the impacts of the three alternatives (id.; Tr. 1, at 123-126).

Finally, NEP indicated that the component-based reliability of the Ward Hill expansion would be superior to that of the other alternatives because the components would have less exposure (Tr. 1, at 127-129). The Company indicated that the four packages would have similar construction durations (Exh. NEP-JWM-4, at 22).

b. Analysis

NEP has provided analyses of its North Shore area transmission system in 2006 demonstrating that it would not be able to comply with NEPOOL and National Grid guidelines

for component operating limits following operating contingencies and without the generation provided by Salem Harbor Station. In addition, the analyses show that thermal limits on key components of the transmission system would be exceeded under a variety of contingencies, which could result in customer outages. The record indicates that approximately 700 MW of additional import capacity into the North Shore area would be needed to maintain transmission system reliability without operation of Salem Harbor Station, while a smaller increase would be needed if Salem Harbor Station continues to operate. The Company also has argued that some additional import capacity would be needed if certain Salem Harbor Station units are retired or are taken out of service for an extended period of time for upgrades.

The Department recognizes that the future operation of Salem Harbor Station is uncertain beyond 2006. The Department agrees that, in these particular circumstances, it is appropriate for NEP to plan for retirement of Salem Harbor Station, as well as for the possibility that one or more units may be taken out of service for an extended period either for equipment upgrades or repowering. The transmission project is needed for North Shore area transmission reliability in the event that Salem Harbor Station closes. In addition, the record suggests that the additional import capacity provided by the Ward Hill expansion would provide some reliability benefits, and likely would lower customer costs related to locational marginal pricing, even if Salem Harbor Station continues to operate in its current configuration.

The record shows that NEP considered alternative means of addressing transmission needs in the North Shore area, including: (1) construction of a new 345 kV transmission line from Ward Hill to Salem, with a new 345/115 kV substation at the Salem end; (2) construction

of a new 345 kV transmission line from Ward Hill to the South Danvers area, with a new 345/115 kV substation at South Danvers; and (3) construction of a new transmission line from Golden Hills to Salem, with a new 345/115 kV substation at the Salem end. The record shows that the Ward Hill expansion is more cost-effective and has substantial environmental advantages over the three alternatives considered by the Company. Therefore, the Department finds that construction of the Ward Hill expansion would serve the general public interest by contributing to the reliability of the transmission system in the North Shore area.

2. Impacts of the Proposed Use

a. Land Use

NEP indicated that there is a railroad right-of-way along the eastern edge of the site, and electric and natural gas rights-of-way immediately surrounding the site to the south, west, and east (Exhs. NEP-1, Att. A; NEP-FPR at 3; DTE-1-B-1, Att. A, Sheet 1). NEP provided maps and an aerial photograph showing a mixed residential and commercial area further to the east; a wooded bank descending to the Merrimack River to the west; woodlots and farm fields to the north; and additional woodland to the south (Exhs. NEP-1, Att. A; NEP-KMH-1R; DTE 1-1, Att. A; RR-DTE-6, Att. A). In combination with the proposed distribution project, the transmission project would increase the size of the Ward Hill Substation from 3.51 to 4.42 acres, as defined by the substation fenceline, by incorporating adjacent areas to the south and to the north (Exhs. KMH-1R, DM-3(R), Sheet 1; DTE 1-B-4).

NEP indicated that the substation would be extended into areas of low-growing shrubs, and that no clearing of woodland would be required for the transmission project (Exh. KMH-1; Tr. 2, at 167-168). The Company stated that most of the substation site has previously been

disturbed and that there are no known historic sites in the area (Exh. NEP-FPR at 9).

A response to the Company from the Massachusetts Historical Commission indicated that the transmission project is unlikely to affect significant archeological resources (id. at 8; Exh. NEP-FPR-3). The Company stated that the 11th edition of the Massachusetts Natural Heritage Atlas, prepared in 2003, shows no upland habitat for any species designated as rare under the Natural Heritage and Endangered Species Program (“NHESP”) at the Ward Hill Substation (Exh. NEP-FPR at 8; Tr. 1, at 121-122).

b. Wetlands

The Company stated that 0.012 acres of Bordering Vegetated Wetlands (“BVW”) would be filled to construct the transmission project (Exh. NEP-FPR at 3). NEP described this BVW as a narrow drainage ditch and seep with red maple saplings, cattail, loosestrife, and soft rush (Exh. DTE 1-B-33). Buffer zone to BVW and riverfront area also would be graded and filled (id.). The transmission project also would disturb 1.1 acres of buffer zone to BVW and 0.35 acres of riverfront along the Merrimack River; these two acreages overlap (Exh. DTE 2-B-12; DTE 2-B-12, Att. A; DTE 2-B-12, Att. B). NEP proposes to replicate 0.014 acres of wetlands with plantings of alder, red-osier dogwood, winterberry, ferns, soft rush, and sedge (Exhs. NEP-FPR at 4; DTE 1-B-33, Att. A at 3 of 8 and A-3).

c. Water Resources

NEP stated that the Merrimack River, flowing approximately 150 feet west of the Ward Hill Substation, is designated as estimated and/or priority habitat for shortnose sturgeon and bald eagle by the Massachusetts NHESP (Exhs. NEP-FPR at 4; DTE 1-B-34; Tr. 1, at 87). NEP asserted that the Merrimack River would not be adversely affected by the transmission

project, due to the use of erosion controls and the distance to the river (Exh. NEP-FPR at 4).

NEP stated that there are no known public water supply sources within one-half mile of the Ward Hill Substation (RR-DTE-4). NEP stated that the City of Haverhill has no record of private water supply wells within one-half mile of the Ward Hill Substation (id.).

The Company stated that the expanded substation would not generate additional wastewater (Exhs. NEP-FPR at 8; DTE 1-B-39). The Company stated that underground infiltration chambers would be constructed for the dispersal of stormwater from the GIS building roof (Tr. 1 at 120-121). The Company indicated that the area of pavement at the Ward Hill Substation would increase from 0.85 to 1.26 acres and that the total area of impervious surface would increase from 0.93 to 1.59 acres (Exh. DTE 1-B-4). The Company stated that rainfall onto the driveway, concrete, and other impermeable surfaces would sheet off to areas of crushed stone and infiltrate into the soil (Exh. NEP-DM at 2; Tr. 1, at 121).

d. Visual

NEP proposes to build two new 95-foot tall transmission line towers, two or more 95-foot tall lightning shield masts, two new 75-foot tall transmission towers, several 60-foot tall transmission line towers, and a 180-foot long building that is 36 feet high (Exh. NEP-1, at 5-6; Tr. 1, at 96). These structures would be visible from the mixed residential and commercial area east of the Ward Hill substation (Exh. DTE 1-B-36, Att. B).

The Company noted that the new transmission facilities would be located on parts of the substation site away from the residential/commercial area (Exhs. NEP-FPR at 5; DTE 1-T-2, Att. A). The Company stated that the expanded substation facilities, when viewed from off-site, would appear more extensive and more crowded than at present, but that an

existing overhead steel lattice frames closer to the residences would be removed from the view (Tr. 2, at 172-177). The tallest structure at the site would continue to be an existing microwave communication tower (Exhs. DTE 1-B-36, Att. A; DTE 1-B-36, Att. B).

Shadows on an aerial photo provided by the Company indicate that there is an irregular line of small trees between the railroad line and the residential/commercial area east of the Ward Hill Substation (Exh. NEP-KMH-1R). Another photo shows some low brush between the substation and the railroad line (Exh. DTE-1-B-36, Att. A). The Company stated that existing vegetative screening is not located on property of NEP or MECo, and that maintenance of this visual screening is not under either company's control (Exhs. DTE 2-B-1(c); RR-DTE-6, Att. A).

The Company indicated that 30 cluster floodlights would be installed at the substation as part of the transmission project; however, the floodlights would have manual switches and would be used only for emergencies (Exhs. NEP-KMH at 5; DTE 2-B-8).

e. Noise

NEP indicated that transformers would be the principal source of noise from the expanded substation; secondary sources would include wall fans and climate control for buildings (Exh. NEP-KMH-7, at 12). Noise from these sources was modeled by Black & Veatch Corporation, accounting for wave divergence, absorption, and attenuation of generated noise (id. at 12). At partial load on the transformers, typical of normal operations, the modeling projected that, with the expansion, noise from the Ward Hill substation would be 41 and 44 sound decibels on the A-weighted scale ("dBA") at the two closest residences (id. at 13; Tr. 2, at 185-189). The Company estimated that the transmission project would cause

the lowest hourly background (L_{90}) sound level at the nearest residence, measured at 43 dBA, to increase to 47 dBA, and that the L_{90} would increase to 48 dBA from the transmission and distribution projects together (Exh. NEP-KMH-7, at 17; RR-DTE-9).

f. Traffic

The Company estimated that average daily traffic flow, including workforce commuters and delivery trucks, would be 20 vehicles per day over the construction period, with a peak of 30 vehicles per day (RR-DTE-1). Trucks would deliver fill, concrete, building material, pole structures, and electrical equipment (Exh. DTE 1-B-30; Tr. 1, at 113). The Company indicated that traffic coming from Interstate 495 to the site would travel 1.2 miles on Route 125, a four lane road, and 0.3 miles on local streets (Exh. DTE 1-B-30). The Company indicated that Route 125 typically has 16,000 vehicles passing per day (RR-DTE-3). Also, the Company stated that no parking or queuing would be necessary on Cross Road (id.). The Company indicated that construction hours would be 7 a.m. to 7 p.m., Monday through Saturday, in accordance with local law (Tr. 1, at 89). The Company indicated that it would provide police details or signage at the driveway entrance during the site preparation phase, if required by the Haverhill Police Department (Exh. DTE 3-11).

g. Safety

The Company stated that it would maintain fencing around the substation during construction, in order to maintain site security and safety during the construction period (Exh. DTE 1-B-32). The Company stated that it would post several safety signs around the substation fenceline, and post the work area with “No Trespassing” signs (id.).

h. Wastes and Chemicals

The Company stated that it would update its Spill Prevention Control and Countermeasures (“SPCC”) plan for the site (Exh. NEP-DM at 4). The Company stated that mineral oil dielectric fluid (“MODF”) in existing transformers that are to be removed would be handled as waste oil under Massachusetts regulations (Tr. 1, at 112). In addition, after existing Transformer 2A is removed in the course of the transmission project, the Company expects to remove soil that was previously contaminated by a release of MODF at the location of Transformer 2A (id. at 142-148).

The Company stated that construction wastes from the proposed project, including materials such as waste concrete, sheet metal, and excess wire, would be hauled to an approved landfill (Tr. 1, at 111-112). The Company stated that sulfur hexafluoride would be used at the site as an insulating gas in new gas insulated switches, and that sulfur hexafluoride is classified as hazardous by the U.S. Department of Transportation by virtue of an asphyxiation hazard from displacement of oxygen, but that there is no risk of general public exposure (Exh. NEP-FPR at 6-7). The Company stated that another hazardous material, battery acid, would be present at the substation, but that the battery acid would be contained in battery packs, behind a shallow berm, within the control building (Exh. NEP-FPR at 7). The Company stated that 80,000 gallons of MODF would be used as an insulating oil in the 345/115 kV transformers at the substation and that the Company would design the new transformer foundations especially to provide secondary containment for the MODF (Exhs.

NEP-DM at 3; DTE-1-B-28).¹¹

i. EMF

The Company projected changes in magnetic field strengths in milligauss (“mG”) along the right-of-way southeast of Ward Hill Substation (leading towards South Danvers) and the right-of-way northwest of Ward Hill Substation (leading towards Tewksbury), as shown in Table 2, below.

Table 2. Summer Peak Load Magnetic Field Strengths at Edges of ROWs

Location	Pre-Expansion, 2004	Post-Expansion, 2006
ROW to the Southeast of Ward Hill Substation		
North Edge of ROW	13 mG	21 mG
South Edge of ROW	68 mG	68 mG
ROW to the Northwest of Ward Hill Substation		
East Edge of ROW	177 mG *	172 mG *
West Edge of ROW	36 mG	32 mG

Sources: Exhs. NEP-1, Att. A; NEP-KMH-R-1; NEP-KMH-6, at 2; Tr. 1, at 129-132; Tr. 2, at 158-159. All values have been rounded.

* The higher values in the table are primarily due to 23 kV lines at the east edge of the right-of-way (Tr. 1, at 136).

j. Analysis

The record shows that the transmission project facilities would be located in a mixed use area, with mixed residential and commercial uses to the east, across an active railroad line; the Merrimack River to the west; mostly agricultural land to the north; and partly forested land with utility easements to the south. As discussed below, the record indicates that the transmission project would result in wetlands, visual, noise, and construction traffic impacts

¹¹ According to the Company, MODF is not classified as a hazardous material by the U.S. Department of Transportation (see Exhs. NEP-FPR at 5; DTE 1-B-35)

but would have minimal impacts on land use, water resources, safety, waste, and EMF.

The record shows that there would be no significant land use impacts of the transmission project, since the existing substation is being expanded into an area of disturbed shrub vegetation, and no cultural or outstanding natural resources were identified. Although a small wetland depression would be filled as part of construction, the Company would replicate a similar area of wetland. With respect to water resources, the record shows that the Merrimack River is designated as priority habitat for shortnose sturgeon and bald eagle. The record indicates that this habitat would not be adversely affected by the transmission project. Further with respect to water resources, the record indicates that infiltration chambers would be constructed to accommodate an increase in runoff from impervious roof surfaces.

The record indicates that the transmission and distribution projects, together, would cause an increase in noise levels of approximately 5 dBA at the closest residence during quiet periods. This is close to projected noise increases accepted in previous zoning exemption cases. See Boston Edison Company, EFSB 96-1/D.P.U. 96-35/D.P.U. 96-36 (1997); New England Power Company, D.T.E. 04-4 (2004).

With respect to visual impacts, the record indicates that views of the expanded substation from the adjacent residential and commercial area would be generally comparable to existing views. While some existing clutter would be removed, the expanded substation would appear more dense than at present. The Company did not discuss or propose additional means for improving the visual aspect of the substation site.

The record indicates that construction traffic would be limited to twenty to thirty vehicles per day delivering machinery and workers. However, the record indicates that this

traffic could be accommodated by the existing road network, and that the Company would arrange special traffic management when required by City officials.

The record shows that various substances would be present at the site, including MODF, sulfur hexafluoride, and battery contents, and that the Company has plans to provide containment for these materials. Therefore, contamination of soil and groundwater would be improbable. The record indicates that the Company will update its SPCC plan for the Ward Hill Substation. The record also indicates that the site will remain secured during construction. The Department concludes that waste, chemical, and safety issues are being adequately addressed by the Company.

The record shows that, along the two right-of-ways carrying 345 kV lines, peak load magnetic field strengths along two right-of-way edges would decrease following the Ward Hill expansion, would stay the same on one right-of-way edge, and would increase modestly along the fourth edge.

The Department finds that local adverse environmental impacts of the transmission project would be modest. Based on the foregoing, the Department finds that the general public interest in implementing the transmission project at Ward Hill Substation would outweigh any adverse local impacts of the project. Consequently, the Department finds that the transmission project is reasonably necessary for the convenience and welfare of the public.

C. Need for the Requested Zoning Exemptions

NEP seeks exemption from twelve individual provisions of the ordinance (Exh. NEP-1,

at 3-6).¹² The Company also seeks a comprehensive exemption from the ordinance as a whole (Company Brief at 7-8).¹³

1. Individual Zoning Exemptions

a. Physical Conflicts With the Project as Proposed

The record indicates that construction of the transmission project as described by NEP would conflict directly with three provisions in the ordinance. These provisions pertain to structure height, fence height, and the posting of signs in an RH district.

(i) Structure Height

The Company stated that the Ward Hill Substation is located in a Residential High Density (“RH”) district (Exh. NEP-1, at 4). Table 2 of the ordinance provides that the maximum allowable height of any permitted use in an RH district is 35 feet (id. at 5 and Att. D, Table 2, at 1). The Company stated that several components of the transmission project would exceed 35 feet in height, including: (1) four new 60-foot high terminal structures and two new 95-foot high terminal structures for 345kV lines; (2) three new 60-foot high terminal structures and two new 75-foot high terminal structures for the 115kV lines; (3) the 36-foot high building that will house the gas insulated switchgear; and (4) two or more 95-foot high lightning masts (Exh. NEP-1, at 5-6; Tr. 1, at 96). NEP thus asserted that,

¹² Attachment D to Exhibit NEP-1 is a copy of the Haverhill Zoning Ordinance. This copy of the ordinance has been certified by the City Clerk, in accordance with G.L. c. 233, § 74, and as required by the Department’s Zoning Exemption Checklist.

¹³ The Company stated that it met with City of Haverhill officials regarding the Company’s plan to obtain a zoning exemptions from the Department and that the officials voiced no objections to the transmission project (Exh. DTE 2-B-4).

without a zoning exemption, the project would require a variance from the height restrictions presented in Table 2 of the ordinance (Exh. NEP-1, Att. D at § 255-75; Company Brief at 13).

(ii) Fence Height

Table 1 of the ordinance allows fences as of right in an RH district if they do not use barbed wire or exceed six feet in height; fences up to ten feet in height are allowed by special permit (Exh. NEP-1, Att. D, Table 1, at 22). The Company stated that its standard substation fence, for security reasons, is seven feet high and topped with one foot of barbed wire (Exh. NEP-1, at 5). NEP asserted that, without a zoning exemption, installation of the substation fence would require a special permit from the Zoning Board of Appeals (*id.*, Att. D at § 255-75; Company Brief at 12).

(iii) Signs

Section 255-28 of the ordinance limits the number of signs per parcel in any Residential district to one (Exh. NEP-1, at 4 and Att. D, § 255-28). NEP stated that construction and installation of its substation safety signs is governed by the National Electric Safety Code (“NESC”), which requires the posting of signs at approximately 50-foot intervals along the entire length of a substation fence (Exh. DTE 2-B-3(c), Att. A). Thus, NEP asserted that, in the absence of a zoning exemption, it would be required to seek a variance from the requirements of § 255-28 (Exh. NEP-1, Att. D at § 255-75; Company Brief at 11).

b. Potential Delay in Construction Schedule

The Company does not assert that requiring it to comply with the other nine provisions of the ordinance from which it has requested an exemption would categorically preclude construction or operation of the transmission project. Rather, NEP asserted that obtaining

special permits and variances can be time-consuming and could delay completion of the project (Company Brief at 10). NEP stated that both special permits and variances may be appealed by third parties to the Land Court, Superior Court, Housing Court or District Court, and that “[b]ecause of the uncertainties associated with appeals, the potential time delays associated with an appeal would virtually assure that NEP and/or MECo could not construct the project according to schedule” (*id.*). NEP noted further that “for projects such as these that also would conflict with other provisions of the Zoning Code, securing a Special Permit would not eliminate the need for variances from those provisions” (*id.*).¹⁴

(i) Zoning Board Proceedings

The Company stated that the existing substation is a nonconforming use, and seeks exemption from Section 255-53 of the ordinance, which limits the extent to which a nonconforming use may be expanded or altered (Exh. NEP-1, at 4 and Att. D at § 255-53). This section provides that nonconforming uses may be extended or altered only if the Zoning Board of Appeals issues a finding that the proposed changes will “not be substantially more detrimental than the existing nonconforming use to the neighborhood or environment in which it is sited” (Exh. NEP-1, Att. D at § 255-53, par. 1). NEP asserted that, without a zoning exemption, construction of the project would require a variance (Company Brief at 11).

Section 255-13 of the ordinance provides that unless a use is specifically designated as a permitted use in a given zoning district, the use is prohibited (Exh. NEP-1, at 4 and Att. D

¹⁴ NEP asserted that, without a zoning exemption, the project would require variances from Sections 255-13; 255-28; 255-53; 255-62; 255-63; 255-64; 255-65; 255-82; 255-85; and Table 2 of the ordinance (Company Brief at 1 to 13).

at § 255-13). The Company stated that the substation is considered a private utility under the ordinance, and is an allowed use in an RH district only by special permit (id. at 4 and Att. D, Table I at 4, and Article XI). Obtaining a special permit requires a hearing before the Zoning Board of Appeals (Exh. NEP-1, Att. D at § 255-76A). NEP asserted that, without a zoning exemption, construction of the project would require a variance from the requirements of Section 255-13 (Company Brief at 11). NEP noted that it would still need to obtain a building permit for the GIS building under Haverhill's building code (Tr. 2, at 197).

(ii) Planning Board Review

Section 255-64 of the ordinance provides that all applications for zoning permits must be accompanied by a site plan (Exh. NEP-1, Att. D at § 255-64). NEP stated that site plan review requires a proceeding before the Haverhill Planning Board, which NEP asserted could delay the project (Exh. NEP-1, at 5; Company Brief at 12). NEP asserted that, to avoid this delay, the Company would need to obtain a variance unless an exemption from this section was granted (Company Brief at 12).

(iii) Building Inspector Approvals

Section 255-62 of the ordinance prohibits the construction or alteration of a structure without a building permit issued by the City building inspector (Exh. NEP-1, Att. D at § 255-62). This section imposes certain prerequisites on the obtaining of such a permit and requires certain findings by the building inspector (id.). NEP asserted that because this provision "does not contemplate construction of substations or construction pursuant to a zoning exemption" the Company would, in the absence of a zoning exemption, need to seek a variance (Company Brief at 11).

Pursuant to Section 255-63 of the ordinance, certain types of approvals issued by the Zoning Board of Appeals and the City Council (e.g., special permits and variances) must be recorded in the Registry of Deeds before the building inspector may issue a building permit (Exh. NEP-1, Att. D at § 255-63). NEP asserted that, because it would not obtain the specific approvals listed in Section 255-63, it would be necessary to obtain a variance unless an exemption from this section were granted (Company Brief at 11).

Section 255-65 of the ordinance prohibits the use or occupancy of any structure or lot requiring a zoning permit until the building inspector has issued a certificate of use and occupancy (Exh. NEP-1, Att. D at § 255-65). NEP stated that the building inspector may take up to 14 days to issue a certificate of use and occupancy, and “given the aggressive schedule” for the project, this two-week period would unacceptably delay construction (Company Brief at 12). For this reason, NEP argued that, in the absence of a zoning exemption, it would need to obtain a variance from the requirements of Section 255-65 (id.).

(iv) Environmental Standards

Section 255-82 of the ordinance contains environmental performance standards applicable to air emissions, flammable and explosive materials storage, radioactivity, water discharges, vibration, and lighting (Exh. NEP-1, Att. D at § 255-82). This section applies to “[a]ny use permitted by right, special permit and/or variance in any district” (id.).

NEP stated that the proposed transmission project will be constructed in accordance with all applicable federal, state, and local environmental laws, and argued that requiring the Company to comply the environmental performance standards would result in duplicative

regulation (Exh. NEP-1, at 5).¹⁵ In addition, the Company stated that its ability to meet one of the performance standards (prohibiting direct or sky-reflected glare from floodlights) could be an issue because emergency lighting would be located on the substation site (id.). NEP stated that “[b]ecause of vague language that prevents the precise determination of how the provisions in subsections A, B, and F may be enforced” the Company, if not exempted from this section, would need to obtain a variance (Company Brief at 12).

Section 255-85 of the ordinance imposes conditions on the filling of waterbodies and “wet areas” where the amount of fill or the size of the area to be filled exceeds certain thresholds (Exh. NEP-1, Att. D at § 255-85). NEP asserted that, based upon the amount of filling the Company proposes to do in BVW, it would require a variance if a zoning exemption were not granted (Company Brief at 13).

2. Comprehensive Exemption

NEP states that it is seeking a comprehensive zoning exemption from the Department, in part, because the Department has previously granted zoning exemptions to the Company for work at the Ward Hill Substation, and the Company wishes “[t]o maintain consistency in permitting” (id. at 10). Citing to earlier Department orders in zoning exemption proceedings, NEP also asserts that comprehensive zoning relief for the transmission project is appropriate because the project otherwise would require numerous individual zoning exemptions (id. at 8).

¹⁵ NEP indicated that, pursuant to the Wetlands Protection Act, the Company has already received an Order of Conditions from the Haverhill Conservation Commission approving the transmission project (Exh. DTE 2-B-4).

3. Conclusion on Requested Exemptions

Based on the record, the Department concludes that requiring compliance by NEP with the three provisions of the ordinance pertaining to structure height, fence height and signs would be likely to preclude construction and operation of the proposed transmission project, because the project could not comply with these provisions on their face. Accordingly, the Department finds that exemption of the transmission project from Table 1, Table 2, and Section 255-28 of the ordinance is necessary within the meaning of G.L. c. 40A, § 3.

The record shows that requiring NEP to comply with the nine remaining provisions of the ordinance from which it seeks an exemption would require the Company's participation in a number of zoning proceedings, including special permit or variance proceedings before the Zoning Board of Appeals, site plan review by the Planning Board, and project review by the City of Haverhill building inspector. NEP does not assert that allowing local review of the transmission project under the ordinance would result in denial of the project. However, the record supports a finding that requiring such review would be almost certain to delay, perhaps significantly, the Company's timetable for completion and start-up of the new transmission facilities.

In Section III.B.1, above, the Department has found that, without the project, the North Shore area will likely violate NEPOOL and National Grid reliability guidelines in summer 2006, depending on operation of Salem Harbor Station. The record shows that ISO-New England concurs that the proposed transmission upgrades are necessary for system reliability reasons, and that expeditious construction and operation of the transmission project is necessary "because, under stressed circumstances, the North Shore electric system could

suffer service threatening voltage problems in 2006” (ISO-NE Brief at 6). Accordingly, because requiring the Company to comply with the nine remaining zoning provisions from which it seeks exemption from would be likely to delay completion and operation of the transmission project, perhaps significantly, and because the record demonstrates that such delay could prevent completion of the project in time to avoid system reliability issues in the North Shore area in summer 2006, the Department finds that exemption of the transmission project from Sections 255-53, 255-13, 255-28, 255-64, 255-62, 255-63, 255-65, 255-82, and 255-85 of the ordinance is necessary within the meaning of G.L. c. 40A, § 3.

The Department has previously noted that petitions for comprehensive zoning relief are infrequently granted, but may be appropriate in certain circumstances. The Department will consider the issuance of comprehensive relief where numerous exemptions are required or where the issuance of a comprehensive exemption could avoid substantial public harm by serving to prevent delay in the construction and operation of the proposed use. New England Power Company, D.T. E. 04-4 at 32-33 (2004); USGen New England, D.T.E. 03-83, at 34 (2004); Tennessee Gas Pipeline Company, D.T.E. 01-57, at 11 (2002). The record shows that NEP has proposed an expedited construction schedule in order to meet its desired operational date for the transmission project (summer 2006), and that a zoning-related delay could significantly interfere with this schedule. The record shows that achieving the summer 2006 goal could have significant benefits for the transmission system in the North Shore area and, by implication, for customers in that area. Thus, granting the Company a comprehensive zoning exemption could have a significant public benefit by serving to prevent delay in the construction and operation of the transmission project. Conversely, in the absence of a

comprehensive exemption, the record indicates that the Company may be unable to complete the transmission project in time to avoid the potential system reliability issues identified in this proceeding may be rendered more difficult. Under these circumstances, we conclude that granting NEP a comprehensive zoning exemption in this case is warranted.¹⁶

IV. ORDER

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

ORDERED: That New England Power Company's petition for an exemption from Table 1, Table 2, and Sections 255-28, 255-53, 255-13, 255-64, 255-62, 255-63, 255-65, 255-82, and 255-85 of the City of Haverhill Zoning Ordinance is allowed for this project; and it is

FURTHER ORDERED: That New England Power's request for a comprehensive exemption from the City of Haverhill Zoning Ordinance is allowed for this project; and it is

FURTHER ORDERED: That New England Power Company shall obtain all other governmental approvals necessary for this project before construction commences; and it is

FURTHER ORDERED: That the Secretary of the Department shall transmit a certified

¹⁶ The Department has the authority to issue comprehensive zoning exemptions. Planning Board of Braintree v. Department of Public Utilities, 420 Mass. 22 (1995). The Department did so in Braintree Electric Light Department, D.P.U. 90-263 (1991) ("BELD"), where the applicant sought both individual exemptions and a comprehensive exemption in its initial petition. BELD, D.P.U. 90-263, at 1. Here, the Company's initial petition requested individual zoning exemptions, and the Company added a request for comprehensive relief later in the proceeding. While we grant all relief requested in this case, we will expect in future that all zoning relief sought in a proceeding under G.L. c. 40A, § 3 be identified fully in an applicant's initial petition. The Department will amend its zoning exemption checklist to require that any applicant seeking comprehensive zoning relief must so indicate at the time of its petition, and must describe the nature of the proof that it plans to make to demonstrate that comprehensive zoning relief is warranted.

copy of this Order to the Haverhill City Clerk; and that New England Power Company shall serve a copy of this order on the Clerk of the Haverhill City Council, the Haverhill Planning Board, the Haverhill Board of Health, and the Haverhill Zoning Board of Appeals within five business days of its issuance and shall certify to the Secretary of the Department within ten business days of its issuance that such service has been accomplished.

By order of the Department,

/s/ _____
Paul G. Afonso, Chairman

/s/ _____
James Connelly, Commissioner

/s/ _____
W. Robert Keating, Commissioner

/s/ _____
Judith F. Judson, Commissioner

/s/ _____
Brian Paul Golden, 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.