

# The Commonwealth of Massachusetts

## DEPARTMENT OF PUBLIC UTILITIES

D.P.U. 08-103

DATE: October 29, 2009

Petition of New England Power Company, d/b/a National Grid, pursuant to G.L. c. 164, § 72, for approval to relocate a portion of two transmission lines in the City of Lynn

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## I. INTRODUCTION

#### A. Description of the Proposed Project

On October 17, 2008, the Petitioner, New England Power Company d/b/a National Grid ("National Grid" or "Company") filed a petition with the Department of Public Utilities ("Department") pursuant to G.L. c. 164, § 72 for a determination that the proposed relocation of a segment of two existing 115 kV overhead transmission lines onto a new right-of-way in the City of Lynn ("relocation project" or "project") is necessary, will serve the public convenience, and is consistent with the public interest (Exh. NG-1, at 1).

The Company requests approval to relocate a portion of two existing lines, known as the Q-169 Line and the A-179 Line, extending from the General Edwards Bridge in Lynn to the Lynn #21 Substation (id. at 3). The two existing 115 kV transmission lines, currently in service, are in the general vicinity of the Lynn South Harbor waterfront and would be relocated landward of their current location. The length of the two relocated lines, from turning point to turning point, would be approximately 1.04 miles (id. at 4). Approximately 0.91 miles of the lines would lie within a new transmission corridor or right-of-way to be acquired by the City of Lynn (id.). The remaining 0.13 miles would lie within portions of the existing transmission corridors in the vicinity of each turning point (id.). A total of 21 single and double wooden poles would be removed and replaced with a total of 16 new single steel poles (Exh. NG-RAS at 3, 12).

The proposed project is the result of a partnership between National Grid and the City of Lynn. With implementation of the project, if approved and timely completed, the Company

would not implement a pre-existing plan to reconductor, in place, that portion of the Q-169 line to be relocated as part of the proposed project. The proposed project would be implemented at no cost to National Grid, except for \$800,000 that National Grid will credit to the City of Lynn, corresponding to the estimated cost of the earlier planned Q-169 reconductoring project (Exh. NG-RAS at 17).

## B. Procedural History

On December 9, 2008, the Department issued a Notice of Filing and Public Hearing that established Wednesday, January 14, 2009 as the date for a public hearing in the proceeding, and January 21, 2009 as the deadline for petitions to intervene or for limited participant status. The Department conducted a public hearing at the Northshore Community College in Lynn and a site visit on January 14, 2009.

In support of its petition, the Company presented the pre-filed testimony of : (1) Robert Andrew Schneller, Project Manager for National Grid USA Service Company; (2) James M. Cowdell, Executive Director of the City of Lynn Economic Development and Industrial Corporation; (3) Joshua B. Holden, Lead Environmental Engineer for National Grid; and (4) Peter A. Valberg, Principal Health Scientist for Gradient Corporation. The Company responded to a total of fifty-four (54) information requests issued by the Department.

Seven petitions to intervene and/or for limited participant status were filed. On January 16, 2009, a joint petition to intervene and/or to participate was filed on behalf of six individuals or entities: (1) Kenneth Carpi and Thomas Carpi, Members, Car Realty, LLC ("Car Realty"); (2) Kenneth Carpi, individually; (3) J. Ronald Costa, Member, 751 Lynnway Realty, LLC ("751 Lynnway"); (4) J. Ronald Costa, Member, 759 Lynnway Realty, LLC ("759 Lynnway"); (5) Margaret Ansara, Trustee, Fazio Realty Trust ("Fazio Realty"); and (6) Donald Algeni, Trustee, Algeni Realty Trust. Additionally, on January 20, 2009, the City of Lynn ("City") filed a petition to intervene. On January 28, 2009, National Grid filed a response to the joint petition and the City petition. On March 10, 2009, the Department granted intervenor status to the City and to two of the joint petitioners: Car Realty, and Algeni Realty. The Department granted limited participant status to 751 Lynnway Realty/759 Lynnway, and to Fazio Realty. Car Realty filed the prefiled testimony of Kenneth Carpi on April 24, 2009.

On June 15, 2009, the Department conducted an evidentiary hearing. In total, approximately 100 exhibits were moved into evidence in the proceeding, including prefiled direct testimony, responses to information requests, and responses to record requests. The Company, the City, Car Realty and Fazio Realty filed initial briefs on July 15, 2009. The Company and the City filed reply briefs on July 22, 2009.

## II. STANDARD OF REVIEW

G.L. 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.<sup>1</sup>

The Department, in making a determination under G.L. c. 164, § 72, is to consider all aspects of the public interest. <u>Boston Edison Company v. Town of Sudbury</u>, 356 Mass. 406, 419 (1969). Section 72, for example, permits the Department to prescribe reasonable conditions for the protection of the public safety. <u>Id.</u> at 419-420. All factors affecting any phase of the public interest and public convenience must be weighed fairly by the Department in a determination under G.L. c. 164, § 72. <u>Town of Sudbury v. Department of Public</u> Utilities, 343 Mass. 428, 430 (1962).

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 (see <u>Massachusetts Electric</u> <u>Company</u>, D.P.U. 93-29/30, at 10-14, 22-23 (1995); <u>New England Power Company</u>, D.P.U. 92-278/279/280, at 19-22 (1994) ("<u>NEPCo</u>, D.P.U. 92-278/279/280"); <u>Tennessee Gas</u> <u>Pipeline Company</u>, D.P.U. 85-207, at 6-9 (1986) ("<u>Tennessee</u>")); (2) the environmental impacts or any other impacts of the present or proposed use (<u>see NEPCo</u>, D.P.U. 92-278/279/280, at 20-23; <u>New England Power Company</u>, D.P.U. 92-270, at 17-20 (1994) ("<u>NEPCo</u>, D.P.U. 92-270"); <u>Tennessee</u>, at 20-25); and (3) the present or proposed use and any alternatives identified (see NEPCo, D.P.U. 92-278/279/280, at 19; NEPCo, D.P.U. 92-

<sup>&</sup>lt;sup>1</sup> 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 the Department requires. The Department finds that the Company complied with these requirements.

270, at 17; <u>Tennessee</u>, at 18-20). 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.<sup>2</sup>

National Grid is an electric company as defined by G.L. c. 164, § 1. <u>New England</u> <u>Power Company d/b/a National Grid</u>, D.T.E. 04-4, at 8 (2004). Accordingly, the Company is authorized to petition the Department for a determination under G.L. c. 164, § 72 that its proposed transmission line is necessary for the purpose alleged, will serve the public convenience, and is consistent with the public interest.

## III. DESCRIPTION, ANALYSIS AND FINDINGS

## A. Need for or Public Benefit of Use

## 1. Background

National Grid presently owns, operates, and maintains portions of two 115 kV lines on parallel single-circuit wood poles within an existing 200-foot wide right-of-way ("ROW") in Lynn between the General Edwards Bridge and Massachusetts Electric Company's Lynn #21 Substation located off Marine Boulevard ("existing lines") (Exh. NG-RAS at 3). The existing Q-169 and A-179 Lines are overhead in this location and are supported by 21 single and

<sup>&</sup>lt;sup>2</sup> 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. § 11.112(5), these findings are required if the Secretary of Environmental Affairs has required an Environmental Impact Report ("EIR") for the project. In the instant case, the Secretary of Environmental Affairs determined that no EIR is required (see Environmental Monitor, Vol. 66, Issue 2, May 24, 2006). Accordingly, Section 61 findings are not necessary in this case.

double-pole wooden structures between 45 feet and 70 feet tall, as well as one 65-foot tall double-circuit steel tower and two 55-foot tall single-circuit steel towers. The existing lines including supporting structures are located approximately 100 feet from and along Lynn's South Harbor bulkhead (id.).

The proposed project is the result of a partnership between National Grid and the City of Lynn which serves a dual purpose of need and benefit: (1) it advances the City's plans to relocate the Q-169 and A-179 Lines away from the waterfront, further landward, to allow for public access and development of the waterfront in accordance the City's 2007 Waterfront Master Plan ("Waterfront Master Plan" or "Master Plan")<sup>3</sup>; and (2) it satisfies the Company's need to upgrade the Q-169 Line to maintain reliable service and to accommodate anticipated area load growth (Exhs. NG-RAS at 13; NG-RAS-6A; NG-RAS-6B; NG-Brief at 8, 9).

## 2. <u>City of Lynn</u>

The geographical focus of the Waterfront Master Plan is a 305-acre district located along the South Harbor waterfront in Lynn (Exh. NG-JMC-1, at 1). The district is made up of contiguous parcels of land that are currently not developed to their fullest potential as a waterfront location, but serve the needs of some industrial facilities, including a scrap iron yard, light industrial uses, automobile oriented businesses, and big-box retail (<u>id.</u>). The waterfront district also includes a regional sanitary sewer treatment plant and a capped municipal land fill that is no longer in operation (<u>id.</u>). Historically this land was used for a

<sup>&</sup>lt;sup>3</sup> The Master Plan, dated September 2007, was prepared by Saski Associates, Inc. (Exh. NG-JMC-1).

large variety of industrial uses ranging from active maritime commerce to power generation (id.). However, in the last fifty years, a substantial number of industrial uses have relocated elsewhere (id.).<sup>4</sup>

The City attributes the lack of development and public access along the waterfront for the past fifty years to the existing transmission lines in their current location (Exh. COL-Brief, at 7). Thus, when it came time to reconductor the Q-169 Line, the City of Lynn and the City of Lynn Economic Development Industrial Corporation ("EDIC") requested that National Grid instead relocate a portion of the Line (the existing lines) further inland (Exh. NG-RAS at 5, 6). As a result, the Lynn Harbor Line Relocation Study was initiated by Vanderweil Engineers in July 2007 and was updated in April 2008 and September 2008 (Exh. NG-RAS-2). Both the Company and the City have stated that the relocation of the lines and release of the existing ROW are critical components to redevelopment and enhancement of public access to the waterfront, as recommended in the Master Plan (Exhs. NG-RAS at 4, 5; COL-L-2).<sup>5</sup>

<sup>&</sup>lt;sup>4</sup> The Lynn South Harbor waterfront is located within ten miles of downtown Boston (<u>id</u>.). In December of 2008, the Commonwealth of Massachusetts recognized the importance of this project by committing \$2.5 million in grant monies towards relocating the power lines. At that time, Governor Deval Patrick noted that this area is the only place in the Commonwealth where there exists a mile of undeveloped ocean front land (Tr. 64; COL-Brief at 19).

<sup>&</sup>lt;sup>5</sup> The Master Plan was adopted by the Lynn City Council in September 2007 (Exh. NG-RAS at 5). Furthermore, in April of 2008, the Lynn City Council voted unanimously to approve a zoning ordinance amendment to regulate the development of the South Harbor consistent with the goals, objectives and vision of the Master Plan (<u>id.</u>).

The goal of the Master Plan is to facilitate the redevelopment of the waterfront with higher and better uses by promoting mixed use development over a twenty-year build-out period (Exh. NG-JMC-1, at 1, 35). The City anticipates that the mixed-use development proposed in the Master Plan, including residential, office, hotel, retail and light industrial uses should positively influence the area and act as a catalyst for future economic revitalization within the community (id. at 1). Such development would increase tax revenues, create construction and permanent jobs, enhance public access to the waterfront, advance the City's environmental sustainability goals, and create mixed income housing (NG-Brief at 8). Specifically, the Master Plan projects 5.8 million square feet of mixed use development to be constructed (Exh. JMC-1, at 35). The Master Plan estimates that ultimately the mixed use development would create approximately 9,620 construction jobs; 2,740 office, hotel and light industrial jobs; as well as 2,180 retail jobs over the next twenty years (Exh. JMC-1, at 35, 38; Tr. at 113, 114). The City expects that the development projected in the Waterfront Master Plan would generate approximately \$18.7 million in taxable revenues (using 2007 dollar values) (id.). The Company estimates this to be over 400 percent of the current level of tax revenues for the waterfront area (Exh. RR-DPU-NG-9; NG-Brief, at 8).

## 3. <u>The Company</u>

The Company stated that the proposed relocation project would improve reliability in the Lynn and Revere service territory because the additional capacity of the relocated lines would allow the Company to meet existing and anticipated load growth (Exh. NG-RAS, at 15, 16). The proposed project would provide reliability in a similar manner as would have occurred had the Company completed its earlier proposal to upgrade the Q-169 Line in place between the General Edwards Bridge and the line's terminus at Lynn #21 Substation (Exh. NG-RAS-1-CORR).

National Grid stated that independent of the City's request to relocate the existing lines, National Grid sought and obtained in 2005 the concurrence of New England Independent System Operator ("ISO New England") to upgrade the 115 kV Line Q-169, including substation improvements and reconductoring the portion of the Line extending from the Golden Hills Substation in Saugus to the Lynn #21 Substation, in order to provide for additional capacity to reliably serve anticipated load growth (Exhs. NG-RAS at 13; NG-RAS-6-A).<sup>6</sup> The Company stated that it began the Q-169 upgrade project in October 2007 and completed reconductoring of the Q-169 line from Golden Hills Substation up to the vicinity of the General Edwards Bridge in May 2008, and also upgraded the 79-69 breaker and installed a motoroperated disconnect switch at the Lynn #21 Substation by December 2006 (Exh. NG-RAS at 14). The Company asserted that while the breaker upgrade enhanced reliability, by April 2011 either the proposed project or the remaining portion of reconductoring of the Q-169 Line in place must be completed in order to meet customer requirements in the Lynn and Revere service territory (Exh. NG-RAS at 14, 15).

As a result of the City's request that National Grid relocate the existing lines away from the South Harbor waterfront, National Grid has not reconductored the remaining portion of the Q-169 Line between the General Edward's Bridge and the Lynn #21 Substation, but instead

<sup>&</sup>lt;sup>6</sup> Pursuant to Section 1.3.9 of the ISO New England Transmission, Markets and Services Tariff, ISO New England reviews projects to construct, retire, or change transmission facilities 69 kV or above.

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has deferred that work in anticipation of relocating the existing lines in connection with the proposed project (Exh. NG-RAS at 14). On January 8, 2008, the Company submitted a Proposed Plan Application (Exh. NEP-07-T45) for the proposed relocation project to ISO-New England (Exh. NG-RAS-7-A). The Company stated that on February 28, 2008, ISO-New England accepted the plan, determining that the proposed project would not have a significant adverse effect on the stability, reliability, or operating characteristics of National Grid's transmission facilities, the transmission facilities of another transmission owner, or the system of a market participant (Exh NG-RAS-7-B). The Company indicated that if the proposed project is constructed and operational by April 2011, the remainder of the Q-169 reconductoring project would be unnecessary because the proposed project will achieve the same result (Exh. NG-RAS at 14).<sup>7</sup>

Regarding the proposed double-circuit design, the Company proposed extra insulation on one of the two lines to reduce the probability of double-circuit outages caused by lightning ( $\underline{id.}$  at 16). The Company also proposed two shield wires to be used on each structure to provide additional lightning protection ( $\underline{id.}$ ). Moreover, the Company noted that because the structures that would support the relocated lines would be new, the lines would be less susceptible to severe weather events than if they remained on the existing wooden poles ( $\underline{id.}$  at 15).

<sup>&</sup>lt;sup>7</sup> The Company stated that the proposed relocated lines would be constructed with a 795 ACSS conductor, which would satisfy the need for a 2000A rating that otherwise would have been achieved through reconductoring of the Q-169 Line in place (Exh. NG-RAS-1-Corr).

National Grid estimated that it would cost approximately \$800,000 for the Q-169 reconductoring project, if done in place, from the General Edwards Bridge to the Lynn #21 Substation (Exh. NG-RAS at 17). National Grid indicated it agreed to provide the City of Lynn with an \$800,000 credit towards the project cost if the proposed project is completed by April 2011, corresponding to the amount that National Grid estimated it would have spent for in-place reconductoring (id. at 15).

The City, through its EDIC, has funded project engineering and permitting activities to date and would be responsible for funding the remaining costs associated with the relocation project, including engineering, permitting and construction costs (id. at 17). The Company indicated that construction costs of the proposed project is estimated at approximately \$5.75 million in 2009 dollars (id.). In addition to the \$800,000 credit from National Grid, the City stated that it would finance the relocation project with funds from a \$4 million bond, unanimously approved by the City Council and a \$2.5 million Growth District grant issued by the Executive Office of Housing and Economic Development in December of 2008 (Exh. COL-L-3(a); Tr. at 116). Additionally, Joseph O'Donnell and Patrick McGrath, who both own land along the waterfront which the existing ROW crosses, may contribute \$1 million and \$500,000 respectively to the relocation project (Exhs. COL-C-1; COL-L-3(a) at 50-56). However, the City indicated that negotiations are on-going and have not been finalized (Tr. at 116). The City of Lynn also has applied for federal stimulus funds to be utilized for the relocation project; however, this request is still pending (id.). The City indicated that private

used in lieu of bond money (id.).

land owners' contributions and federal stimulus funds, if and to the extent obtained, would be

#### 4. Analysis and Findings

The record shows that the relocation of the existing transmissions lines from the South Harbor waterfront further landward would allow the City of Lynn to facilitate the redevelopment of its waterfront by promoting mixed-use development opportunities and providing enhanced public access to the waterfront, while re-establishing transmission facilities in a new corridor to allow for the continuation of reliable electric service (Exhs. NG-JMC-1, at 1, 35; NG-RAS at 4, 15, 17; COL-L-2). The Company has also established that there is need, beginning in the summer of 2011, for expanded transmission supply to meet customer requirements in the Lynn area (Exh. NG-RAS at 14, 15). The proposed project implemented in lieu of previously planned in-place reconductoring of a portion of the Q-169 Line would provide expanded transmission capacity to meet that need (Exh. NG-RAS at 15).

Accordingly, the Department finds that there is a need for and public benefits that would result from the construction and operation of the proposed project.

## B. Proposed Project and Alternatives

The Company and City reviewed several routes, including the proposed route, for the relocation project. In selecting the proposed route, the City considered the extent to which a proposed route would be practicable, affordable, maintain reliable energy transmission, and allow for public access to, and maximize development of, the waterfront (Exh. JBH-1-A at 1).

## 1. Description

The Company identified several overhead as well as full and partial underground routes (Exh. NG-RAS at 8 and 9) which are summarized in Table 1. The Company stated that all the alternative routes are comparable with respect to reliability (Tr. at 53).

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Table 1. Alternatives							
Route	Description	Length (miles)	Cost (millions)	Reason Rejected			
Original route	Driginal route Two overhead single circuit lines along Lynnway and private ways		Not developed	Would not allow for full development of the waterfront			
Alternative 1 Two overhead single circuit lines along Lynnway, Hanson Street and private ways		1.1	Not developed	Would not allow for full development of the waterfront			
Alternative 2	Single pole, double-circuit overhead line along Lynnway, Harding Street and private ways	1.1	\$3.2 (2005)	Visual concerns along Lynnway			
Alternative 3/Preferred Route	Single pole, double-circuit overhead line along GE property, Harding Street and private ways	1.1	\$5.75 (2009)	None (this route was selected for development)			
Alternative 4	Single pole, double circuit overhead line along GE property, underground along MBTA Railroad ROW and Commercial Street	1.4	Not developed	Technical infeasibility, high cost			
Alternative 4A	Single pole, double-circuit overhead lines along the MBTA Railroad ROW, underground for portion of MBTA railroad ROW and Commercial Street to end	1.5	Not developed	Technical infeasibility, high cost			
Alternative 5	Double-circuit submarine cable along shoreline	1.3	Not developed	Assumed high cost			
Alternative 6	Single pole, double-circuit overhead lines along MBTA Railroad ROW and underground along Commercial Street to end	1.7	Not developed	Requisite line clearance could not be achieved			
Additional Alternative	Double-circuit underground lines along Lynnway		\$15.8 (2005)	High cost			

(Exh. NG-RAS at 11-14).

The City and Company identified two routes, referred to as the Original Route and Alternative Route 1, that would relocate the lines off of the waterfront and use a configuration consisting of two overhead single-circuit lines (Exh. NG-RAS at 6). Both routes would run north along the Lynnway; then turn east using different paths toward the harbor: the Original Route would transverse a private way to a point along the Existing ROW, and Alternative 1 would follow Hanson Street; then both routes would turn north and cross the Garelick Farms property and then proceed across the Lynn Water and Sewer site before rejoining the existing ROW and proceeding to the Lynn Substation (<u>id.</u> at 7). The Company stated that the Original Route and Alternative Route 1 were not selected by the City because the lines remained close to the waterfront area and would not allow for the full development of the area (id.).

The Company and City identified two other routes that would relocate the lines landward and use overhead, single-pole, double-circuit construction, Alternative Route 2 and Alternative Route 3. Alternative Route 2 would run north along the Lynnway, then turn east toward the harbor down Harding Street, then turn north and run across the Garelick Farms property, and proceed across the Lynn Water and Sewer site before rejoining the existing ROW and proceeding to the Lynn Substation (Exh. NG-RAS at 7). The Company indicated that Alternative Route 2 was not selected by the City because of visual concerns along the Lynnway (<u>id.</u> at 8). Alternative Route 3, ultimately chosen as the preferred route, would start at a point west of the Lynnway at the northern edge of the existing ROW near the General Edwards Bridge, continue along General Electric property, turn east and cross the Lynnway, then continue along Harding Street, turn northeast across the Garelick Farms land, cross the Lynn Water and Sewer property before rejoining the existing ROW and proceeding to the substation (<u>id.</u> at 11). The Company stated that this route would cost approximately \$5.75 million to construct (Exh. DPU-C-2).

The City and Company identified three routes that would relocate the existing lines utilizing both overhead and underground means: Alternatives 4, 4A, and 6. (Exh. NG-RAS at 8). Alternative Route 4 would run north on overhead structures through General Electric Company's property then transition underground at the MBTA Railroad ROW, where it would continue along the MBTA Railroad ROW turn east toward the harbor on Commercial Street, and finally rejoin the existing ROW and proceed to the Lynn Substation (id.). Alternative Route 4A would be the same as Alternative 4 but continue overhead along the Railroad ROW for a distance before transitioning underground (id.). According to the Company, Alternative Routes 4 and 4A were not selected by the City because of cost considerations as well as location issues for the overhead-underground transition structure (id.). Alternative 6 would run overhead on double-circuit poles along the Railroad ROW, turn east and transition to underground construction, continue toward the harbor on Commercial Street, and finally rejoin the existing ROW and proceed to the Lynn Substation (id. at 9). According to the Company, this alternative was not selected by the City and the Company because the requisite clearances for the overhead lines could not be achieved. Since the Company deemed these three route alternatives impractical, it did not develop cost estimates for them (Exhs. DPU-C-2, at 2; NG-RAS at 11-14).

The City and the Company identified two fully underground routes. Alternative Route 5 would relocate the existing lines by installing double circuit submarine cable along the shoreline (Exh. NG-RAS at 9). Another underground alternative (the "additional alternative" identified in Table 1) would run underground along the Lynnway (<u>id.</u>). The Company estimated the cost of this alternative to be approximately \$15,800,000 (Exh. DPU-C-2, at 2). The Company indicated that neither of the fully underground alternatives was selected by the City because of cost considerations (Exh. NG-RAS at 9).

## 2. Analysis and Findings

The record shows that the Company and the City considered at least nine routes for the relocated transmission lines (Exh. NG-RAS at 11-14). The record shows that the Company's goals in relocating the lines would be to allow for a more beneficial use of the land on which the existing lines currently lie while maintaining the reliability of the system and conducting required upgrades (Exh. JBH-1-A at 1). The record shows that each of the alternatives considered would offer approximately the same level of reliability (Tr. at 53). The record further shows that, compared to the preferred route, some alternatives would leave less waterfront property available for redevelopment, or be less favorable with respect to visual impacts as a result of higher visibility (Exh. NG-RAS at 11-14). Some alternatives were not practical due to technical considerations or cost (id.). The record shows that the Company, along with the City, chose the preferred alternative because it would facilitate public access to the waterfront, would allow for a substantial amount of redevelopment to occur, would be

technically feasible, would limit visibility avoiding undue visual impact, and would be economically feasible for the City to implement (id.).

The Department finds that the Company reasonably established that the proposed project on the preferred route would be preferable to identified alternatives.

## C. Impacts of the Proposed Project

In accordance with its responsibility to undertake a broad and balanced consideration of the general public interest and welfare, the Department examined the impacts associated with the proposed project to identify any significant impacts that may occur during construction and operation of the proposed project.

#### 1. Land Use

#### a. Development Effects

The City stated that according to the Waterfront Master Plan, a total of approximately 5.8 million square feet of mixed-use development could be developed within the Lynn Waterfront District consisting of residential, retail, light industrial, office and hotel uses over a twenty-year build-out period (Exh. JMC-1, at 35). The Waterfront Master Plan estimated that ultimately the mixed-use development would create approximately 9,620 construction jobs; 2,740 office, hotel and light industrial jobs; as well as 2,180 retail jobs (Exh. JMC-1, at 38; Tr. at 113, 114). According to the City of Lynn, the Tax Assessor is currently collecting \$4.2 million in taxes for existing residential, commercial and industrial property in the waterfront area (Exh. RR-DPU-NG-9). In contrast, the City expects that the development projected in the Waterfront Master Plan would generate approximately \$18.7 million in taxable revenues (using 2007 dollar values)

(<u>id.</u>). The Company estimates this to be an increase of over 400 percent of the current level of tax revenues for the waterfront area (NG-Brief at 8).

The proposed relocation project would facilitate the implementation of (1) the Waterfront Master Plan, adopted by the Lynn City Council in September of 2007, and (2) the Zoning Ordinance Amendment adopted in April of 2008 by the Lynn City Council to regulate the development of the Lynn waterfront to be consistent with the goals, objectives and vision of the Master Plan (Exh. JMC at 5). It is the City's position that the Waterfront Master Plan together with the Zoning Ordinance Amendment will have a major positive impact not only in Lynn but across the North Shore (id.; NG Brief at 11). There are provisions in the Amended Zoning Ordinance for a Waterfront Zone Site Plan Review Committee to specifically oversee that the redevelopment plans for the Lynn Waterfront are consistent with the Waterfront Master Plan (Exh. COL-P-1(a) at 71). The City noted that the Waterfront Master Plan discusses the opportunity to incorporate sustainable development and green technologies into future waterfront development and indicated that the Waterfront Zone Site Plan Review Committee would encourage developers to use sustainable designs and low impact development in their proposals (Exh. JMC-1, at 43; Tr. at 100).

The City stated that several existing public facilities located along the waterfront have the potential to be enhanced as public assets by incorporating more public access in future waterfront development plans (Exh. NG-JMC-1, at 13). Lynn Heritage State Park and Seaport Marina are enjoyed by residents but remain isolated along the waterfront (<u>id.</u>). Other existing amenities that may be improved as a result of the proposed project by making the waterfront more accessible include the public launching ramp at Blossom Street Extension, the EDIC pier at Marine

Boulevard, and the Massachusetts Department for Conservation and Recreation's public fishing pier located at the southern end of the site (<u>id.</u> at 14). To enhance existing public amenities along the waterfront and to provide connectivity between the public spaces, the Waterfront Master Plan incorporates a significant amount of open space that allows for a variety of active and passive recreational opportunities in public parks along the harbor (<u>id.</u> at 25). The City also envisions a pedestrian boardwalk along the water's edge to transverse the entire mile of oceanfront and provide connectivity between existing and future waterfront amenities from the General Edwards Bridge to the Nahant Rotary, which would be incorporated into future development plans pursuant to G.L. c. 91 (Tr. 65-66).

Another component of the City's plan to facilitate redevelopment of the waterfront (once the transmission lines are relocated) is to remediate a former municipal landfill located on Harding Street in the Waterfront District. National Grid holds the title to this landfill, which encompasses approximately 30 acres and has an associated bulkhead in poor condition which extends 640 linear feet (Exh. NG-RAS 2, at 6-2; Tr. at 107, 108, 142). The City has expressed that it would like to see the former landfill repositioned so that mixed use development could occur (Tr. at 108). The City of Lynn and EDIC envision a public/private collaboration with respect to environmental remediation (Tr. at 107-111). The City will begin the process by performing site assessment and environmental remediation planning and has secured funding for those activities from numerous federal, state and local sources (Exh. COL-L-3). The Company stated that the relocated lines would lie within a new transmission ROW to be acquired by the City of Lynn on behalf of the Company for the proposed project (Exh. NG-1, at 2, 3). National Grid indicated that once the proposed transmission lines were constructed and operational within the new ROW, the existing ROW would be released (Exh. NG-RAS at 5).<sup>8</sup> The Company indicated that the land area occupied by the existing ROW is 18.4 acres, while the land area of the proposed ROW would be approximately 7.6 acres (Exh. DPU-NB-8). Thus, the net gain of unencumbered land resulting from the proposed project would be approximately 10.8 acres (<u>id.</u>).

The City indicated that the proposed route crosses several City of Lynn public ways in order to minimize the number of land rights and easements to be acquired over existing commercial properties (Exh. COL-A-1). In addition to City public ways, the transmission relocation project would require several easements on private property for new ROW, aerial crossings and structures (Exh. CR-COL-9). The proposed relocation project would require the acquisition of easements from a total of nine property owners. <u>See</u> Table 2, below.

<sup>&</sup>lt;sup>8</sup> The Company testified that it has not determined to whom the easements would be released, but stated that typically easements are released to the owner of the encumbered underlying parcel or the entity who granted the easement to the Company (Exh. DPU-NB-9; Tr. 118, 119).

Table 2. Required Easements for the Proposed ROW							
Property Owner	Address	Map/Block/Lot	Easement Area (sf)	Status of Negotiations	Aerial Easement/Structure(s)		
General Electric	Riverworks	035-757-003	125,901 ±	Grant of Location Agreement Reached	Both/6		
Electric Mutual Liability Ins. Co.	715 Lynnway	035-796-019	27,095±	Taking	Aerial Easement		
Donald P. Algeni	847 Lynnway	017-796-007	2,539±	Negotiations Ongoing/ Possible Taking	Aerial Easement		
Car Realty LLC	720 Lynnway	034-758-006	1,899±	Taking	Aerial Easement		
South Harbor Realty Trust	Harding Street	034-752-028	5,362± 26,846± 27±	Taking	Aerial Easement		
West Lynn Creamery Realty Corp.	Circle Avenue	034-752-027	40,764±	Taking	Both/1		
Lynn Economic Development and Industrial Corp.	Marine Boulevard	050-752-026	36,775±	Grant of Location Agreement Reached	Y/1		
City of Lynn	Harding Street	Public Way	48,647±	Grant	Y/3		
Massachusetts Department of Conservation Recreation	Lynnway	Public Way	11,187±	Anticipated Agreement	Aerial Easement		
City of Lynn	Gas Wharf Road	Public Way	4,381±	Grant of Location Agreement Reached	Aerial Easement		
Exh. COL-L-1)							

The most significant easement required for the relocated ROW would be 125,901 square feet ("sf") of easement on the General Electric property which would contain 6 structures within

a sixty-foot wide ROW (Exh. CR-COL-9; Tr. at 48). The City has successfully negotiated a Grant of Location Agreement with General Electric (<u>id.</u>).

The project would require one aerial easement, with approximately 2,539 sf of ROW transversing the rear of property owned by the intervenor Algeni Realty at 847 Lynnway, currently operated as an automobile sales business. The City stated that it is in negotiations with Algeni Realty, and anticipates that it will not have to use its eminent domain powers to obtain the easement (Tr. at 105-106). The City opined that the aerial crossing on the back corner of Mr. Algeni's property would not constrain his ability to redevelop his property to its full potential in the future because the crossing would be within the required setbacks (<u>id.</u>).

The project would require an easement of 1,899 sf for a permanent ROW over property owned by the intervenor Car Realty at 720 Lynnway, currently operated as a KFC franchise at the intersection of the Lynnway and Harding Street (Exh. NG-1, at 6-2). Car Realty opposes the project; Car Realty asserted that the relocated lines should be placed underground, as the proposed overhead lines would be unsightly and would negatively impact the development potential of the waterfront area, including Car Realty property (Exh. CAR-KC at 6). Car Realty noted that the Waterfront Master Plan calls for underground utilities (<u>id.</u>). While the Master Plan recommends that all utility service lines be buried in conduits underground for aesthetic purposes, the City stated that the significant cost differential (12 million dollars) between overhead and underground lines would be infeasible due to the City's financial constraints and was the primary factor in precluding placement of the relocated lines underground (Exh. JMC-1, at 43; Exh. COL-A-2; Tr. at 57).<sup>9</sup>

The Company stated that the Car Realty easement would consist solely of a small portion of the property that falls within the required National Grid ROW (Tr. at 103, 104). The Company indicated that in order to minimize the impact to the Car Realty property, a proposed transmission structure (Pole 8) which the Company initially proposed to locate on the Car Realty property was subsequently moved onto the ROW for Harding Street, thereby reducing the easement on the Car Realty property from 27,800 sf to 1,899 sf (RR-DPU-NG-8; Tr. at 101, 102). Additionally, the Company and City originally proposed a temporary construction staging area on property owned by Car Realty; however, the temporary staging area has been relocated to property owned by the City to minimize disruption to the businesses located on land owned by Car Realty (Tr. at 104). According to the Company, as a result of moving the pole further from the Car Realty property towards land owned by the City, the relocated transmission lines would not limit Car Realty from realizing the full development potential of the property in the future (Exh. CR-COL-9; Tr. at 105).

Neither of the properties owned by the limited participants, Lynnway Trust and Fazio Trust, are identified by National Grid as requiring easements (Exhs. NG-RAS-2, at 6; NG-1, at 1). However, Ms. Ansara, of Fazio Realty, expressed concerns during the course of this

<sup>&</sup>lt;sup>9</sup> The City also noted that placement of the transmission lines underground (1) would cause significant traffic disruption both during the relocation process and during any subsequent repair work, and (2) potentially would conflict with existing underground utilities such as water, sewer and gas lines. The City noted that it likely will require future distribution lines in the Waterfront District to be placed underground (<u>id.</u>).

proceeding regarding how the construction and placement of Pole 8 on Harding Street as well as the accompanying reconfiguration of Harding Street would impact her businesses, which consist of a liquor store, car wash and gas station located at 700-705 Lynnway (Fazio Initial Brief).

## c. Analysis and Findings

With respect to land use impacts, the record shows that the proposed project would result in a 59 percent reduction in the amount of land encumbered by transmission line ROW (Exh. DPU-NB-8). The current 200-foot wide ROW, along the waterfront, would be replaced by a ROW varying in width from 60 feet to 80 feet and would be located away from the waterfront, thus allowing waterfront property to be redeveloped and made accessible to the public (Exhs. NG-RAS at 3, 5; NG-JMC-1, at 3). Regarding the land use impacts of the relocated line, the City and Company have attempted to select a route that utilizes a significant amount of land owned by the City to minimize impacts to businesses along the relocated ROW (Exh. NG-DPU-L-1). The Company has made specific changes to the project in order to minimize impacts on property owned by the intervenor Car Realty (RR-DPU-NG-8; Tr. at 101-104).

The City of Lynn has demonstrated its full commitment to the redevelopment of the South Harbor waterfront, by adopting the Waterfront Master Plan, amending its Zoning Ordinance, and establishing a Waterfront Zone Site Plan Review Committee to oversee the local permitting process (Exhs. NG-JMC-1, at 5; COL-P-1 (9)). The City asserted its intention to encourage low impact development, green technologies, and sustainable design in the implementation of the Waterfront Master Plan (Tr. 99-101). Additionally, the City of Lynn has been successful in securing grant monies and raising the necessary capital for the proposed transmission line relocation project, infrastructure improvements and environmental remediation that will send a clear signal to developers of the City's commitment to facilitate long term waterfront redevelopment as well as public access and recreational opportunities (Exhs. COL-3(a); COL-C-1).

Consequently, the Department finds that the Company has established that it would take all reasonable measures to avoid, minimize, or mitigate the land use impacts of the proposed project.

## 2. Visual

## a. <u>Description</u>

The existing overhead lines are supported by twenty-one single and double wooden poles and three steel structures varying between 45 feet and 70 feet within a 200-foot ROW, approximately 100 feet from Lynn's South Harbor bulkhead (Exh. NG-RAS at 3). The Company is proposing sixteen steel structures ranging in height between 95 and 110 feet on a ROW that would vary in width from 60 feet to 80 feet (<u>id.</u> at 12). The proposed ROW begins near the General Edwards Bridge adjacent to the GE property and proceeds northerly along GE property to the GE gatehouse, then turns east and crosses the Lynnway (<u>id.</u> at 11). The relocated ROW then proceeds along Harding Street and turns northeasterly across Garelick Farms land (id.). The ROW then proceeds across the Lynn Water and Sewer land to the westerly edge of the existing ROW in the vicinity of the turning point on the existing lines on property owned by Massachusetts Electric Company (id.).

The Company showed that no residential properties are located near the relocated lines (Exh. DPU-V-1). While the existing transmission lines are visible to the residents in the Point of Pines neighborhood, which is across the General Edwards Bridge in Revere, the Company opined that the relocated lines would be less visually prominent to the Point of Pines residents than the existing lines (id). Additionally, the Company indicated that the relocated lines would be supported by one line of single pole structures on a reduced width ROW rather than supported by two parallel lines of wider H-Frame structures on a wider ROW (Exh. NG-RAS at 18). As the Company noted, the proposed ROW passes, in part, through newly zoned waterfront districts permitting residential components within the mixed use development as of right; therefore, possible future residents may have a view of the transmission lines and structures (Tr. at 80). The Company stated that the proposed transmission lines would be visible from many businesses along the Lynnway that abut or are near the proposed ROW including auto dealerships, auto repair shops, restaurants, retail outlets, and others (Exh. DPU-V-2).

The Company stated that limited clearing will be required at the new turning point for the new line located west of the General Edwards Bridge and also in the vicinity of the waste water treatment plant (Exh. DPU-V-4). Limited trimming may also be required in the vicinity of Harding Street to maintain proper clearances for the lines (<u>id.</u>). The Company stated that it would clear approximately 20 trees along the proposed route (id.). The Company concluded that given the industrial and commercial development along the proposed route, the minimal tree removal and pruning activities should have little visual impact (id.). The Company stated that during the next growing season after the completion of tree removal and pruning activities, native vegetation would begin to grow within the ROW (id.). The Company did not propose any tree replacement (id.).

## b. Analysis and Findings

With respect to visual impacts, the record shows that residents who have a view of the existing lines would have a less prominent view upon relocation of the lines (Exhs. DPU-V-1; NG-RAS at 18). However, the record also shows that the relocated lines may be more prominent than the existing lines as seen from several businesses along the Lynnway and may be visible from potential future residences included as part of the Waterfront District development (Exh. DPU-V-2; Tr. at 80). The record shows that the relocated lines would be supported by one line of single pole structures rather than supported by two parallel lines of wider H-frame structures (Exh. NG-RAS at 18). The record shows that visual impacts due to tree removal would be limited as the new ROW is in a densely developed commercial and industrial area (Exh. DPU-V-4).

The Department finds that potential visual impacts from the proposed project's construction and operation are minimal, and that the Company has established that it will take all reasonable measures to avoid, minimize, or mitigate these impacts.

## 3. Wetlands, Endangered Species and Historic Resources

#### a. Description

The Company stated that the proposed project requires filing a Notice of Intent with the Lynn Conservation Commission, as the installation of new transmission structures would partially take place within land subject to coastal storm flowage, the 200-foot riverfront area, and the 100-foot buffer zone to coastal bank (Exh. NG-JBH at 8). Specifically, the footings for Poles 1001 A&B and 1002 would result in 1,200 sf of permanent impacts within the riverfront area and 1,600 sf of permanent impacts within land subject to coastal storm flowage (Exh. NG-JBH-1, at 8). No work is being proposed in the nearby Rumney Marsh Area of Critical Environmental Concern (id.).

Once the relocated transmission lines are fully operational, the Company stated that it would remove existing transmission lines, towers and foundations. Swamp mats would be used to mitigate construction access over an isolated wetland during removal of two of these towers (id.). The swamp mats would result in the temporary alteration of an approximately 3,200 square-foot area, which is a concurrently isolated wetland and land subject to coastal storm flowage (id.). This area is also within the riverfront area (Exh. NG-JBH at 8). However, the Company stated that the wetlands and riverfront regulations are not applicable for this project because the proposed work is on licensed formerly filled tidelands, but requires notification under the Lynn General Wetland Protection By-Law (Exh. NG-JBH at 11).

The Company stated that there are no areas of mapped Estimated or Priority Habitat of State-listed Rare or Endangered Species under the Massachusetts Endangered Species Act within the existing ROW or relocated ROW (Exh. NG-JBH at 13).

The Company stated that there are no recorded historical or archeological resources within the project site, nor any properties listed in the State Register of Historic Places. Consultation with the City of Lynn revealed no historical properties on or adjacent to the project site (Exh. NG-JBH-1, at 5).

#### b. Analysis and Findings

With respect to wetlands, the record shows that installation work on the new ROW would take place within land subject to coastal storm flowage, the 200-foot riverfront area, the 100-foot buffer zone to the coastal bank and isolated wetlands (Exh. NG-JBH-1, at 5). The record also shows that for the installation work the Company will file a Notice of Intent with the Lynn Conservation Commission, and will perform removal work on the existing ROW in accordance with the Lynn General Wetland Protection By-Law (Exh. NG-JBH-1). The record demonstrates that there are no mapped areas of Estimated or Priority Habitat of State-listed Rare or Endangered Species within the existing ROW or the relocated ROW (Exh. NG-JBH at 13). The record demonstrates that construction and operation of the proposed project would have no impacts on historic resources (id.).

The Department finds that the Company has established that it will take all reasonable measures to avoid, minimize, or mitigate the proposed project's potential impacts on wetlands, rare species and historic resources.

## 4. Traffic

#### a. Description

The Company stated that the majority of the construction work would be done outside of public ways, and that traffic impacts during construction would be minimal (Exh. DPU-TS-1). The Company provided a draft traffic management plan for the portion of the work which would impact the Lynnway, which was prepared in conjunction with the state agency responsible for that roadway, the Massachusetts Department of Conservation and Recreation ("MA DCR") (Exh. DPU-TS-1). The Company stated that work associated with construction of the new lines would require two crews of six to eight workers and foundation installation would require 11 crews of eight workers (<u>id.</u> at 2). The Company stated that the lay-down area for the entire project would be at the existing Lynn #21 substation at the eastern end of the proposed ROW (<u>id.</u> at 3). The Company stated that because this lay-down area would be located on the Company's property, no traffic control or other measures would be necessary (id. at 4).

In addition to temporary traffic impacts during construction, the Company stated that as a result of the proposed relocation project, Harding Street, which runs perpendicular to the Lynnway, will be reconfigured to accommodate one of the transmission structures, identified as Pole 8. The Company notes that the City has undertaken a traffic study of Harding Street, requested by the Company, to determine the impact of the pole on the flow of traffic (Tr. at 67). The City indicated that Harding Street is approximately 40 feet wide and uncurbed, but will be altered when realigned (Exh. COL-TS-1(a)). The City provided draft plans indicating realignment of Harding Street could alter access to parking lots from Harding Street of several businesses, particularly the KFC restaurant on Car Realty property and the gas station/liquor store on Fazio Trust Property (id.). Currently, the KFC has a 24 foot wide, two-way driveway which is delineated by landscaping and the gas station has a driveway approximately 120 feet wide, with no defined lanes and no landscaping or curbing (Exh. COS-TS-1(a)).

According to the draft plans, the realignment would narrow Harding Street by making two 12-foot travel lanes with two 2.5-foot shoulders, for a total width of 29 feet (Exh. COL-TS-1(a), (b)). Additionally, the City would install standard curbing along Harding Street, leaving the restaurant's 24-foot entrance intact, but replacing the gas station's 120-foot wide driveway with two 30-foot, one-way driveway openings (Exh. COS-TS-4). The City stated that its reasoning for altering the entrance to the gas station is to improve safety and to clearly define ingress and egress points (id.). Further safety enhancements would be made to Harding Street as well, including scored pavement between the travel lanes allowing a left-hand turn onto Harding Street from the Lynnway, and turns onto the Lynnway from Harding Street. The safety enhancements also would include a median further down Harding Street (Exh. COS-TS-1(a)). The City stated that the realignment of Harding Street would take approximately two to four weeks and would be completed prior to relocation of the transmission lines (Exh. COL-TS-10). The City stated that it views the preliminary realignment plans as a basis of discussion between the City and abutters, including the property owners who will be directly impacted by the realignment (Exh. COL-TS-9). The City stated that it intends to consult with these owners prior to finalizing plans for the realignment (id.).

## b. Analysis and Findings

With respect to traffic the record shows that, in addition to consulting with the MA DCR, the Company has provided traffic management plans for portions of the proposed project which would affect the Lynnway (DPU-TS-1). The record also shows that the City will realign Harding Street due to the location of one new pole in the Harding Street ROW (Tr. at 67). The record shows that the Company and the City have undertaken a traffic study and provided preliminary road-design plans detailing the realignment (<u>id.</u>). The record shows that the realignment as currently proposed will impact the driveway access to several businesses with access from Harding Street (Exh. COL-TS-4). The record also shows that the Company and the City will consult affected property owners before finalizing the draft plans for Harding Street (Exh. COL-TS-9).

The Department finds that potential impacts to traffic from the proposed project's construction and operation are minimal, as the Company has established that it will take all reasonable measures to avoid, minimize, or mitigate these impacts, including consultations with municipal officials and affected property owners.

5.

#### a. Description

The Company submitted to the Department a copy of a Company-commissioned study that assessed the electric and magnetic field ("EMF") impacts associated with the existing and proposed configurations of Lines A-179 and Q-169 (Exh. NG-PAV-3). The present day configuration of the lines is on two separate towers in a 200-foot wide ROW. The Company stated that, presently, estimated maximum magnetic field levels along the current ROW from the existing transmission lines are 7.0 milligauss ("mG") at the northwest edge of the ROW and 5.0 mG at the southeast edge (id. at 16). The Company separately modeled two sections of the proposed lines, one with a ROW width of 60 feet and a minimum conductor-to-ground clearance of 40 feet; and the other with a ROW width of 80 feet, and a clearance of 30 feet (Exh. RR-DPU-NG-5). The Company concluded that the proposed double-circuit transmission line in its new ROW will produce magnetic fields at or below 31 mG and electric fields at or below 0.22 kV/m at all ROW edges (Exh. NG-PAV-3, at 1). The Company stated that similar magnetic field levels of 31 mG would occur at the northern edge and 19 mG at the southern edge for both ROW widths, given that with the narrower ROW the circuits would be at a greater height above the ground (id. at 16). The Company pointed out that the predicted EMF levels are below the generally accepted guidelines for allowable public exposure to EMF (id. at 17).<sup>10</sup>

<sup>&</sup>lt;sup>10</sup> The Company stated that health-based exposure guidelines for public exposure to magnetic and electric fields are 833 mG and 4.2 kV/m, respectively (Exh. PAV-3, at 17).

## b. Analysis and Findings

With respect to EMF, the record demonstrates that construction of the proposed project in the relocated ROW would result in an increase in maximum edge-of-ROW magnetic fields from approximately 7 mG to approximately 31 mG (Exh. NG-PAV-3, at 16). However, the record shows that the magnetic field levels produced by the relocated transmission lines would be below levels generally found acceptable to the general public (id. at 17).

The Department finds that potential EMF impacts from the proposed project's construction and operation are minimal, and that the Company has established that it will take all reasonable measures to avoid, minimize, or mitigate these impacts.

6. <u>Noise</u>

#### a. <u>Description</u>

With respect to construction noise impacts, the Company stated that construction hours would be from 7 a.m. to 5 p.m., Monday through Friday, and are in accord with the City's noise ordinance, which allows construction from 7 a.m. to 6 p.m., Monday through Friday (Exh. DPU-N-1). The Company stated that some construction activities may require extended hours or weekend work, in which case the Company would need to seek permission from the City's building inspector in advance (Exh. DPU-N-2). The Company stated that major sources of construction noise would be large trucks, cranes and other large construction equipment (Exh. DPU-N-1). The Company also stated that another source of noise would be pile-driving operations for foundation installation at two poles (<u>id.</u>). The two poles which would require pile-driving are structures 7 and 10 located at the northern corner of the GE property on the west side of the Lynnway and at the City's impound lot on the east side of the Lynnway, respectively (Tr. at 78). The Company stated that pile driving operations would last approximately one week per structure (Exh. DPU-N-1). The Company stated that, once constructed, the relocated lines would not be a source of noise (id.).

## b. Analysis and Findings

With respect to noise impacts, the record shows that construction noise would take place during normal working weekday hours of 7 a.m. to 6 p.m., which are in accordance with the City's noise ordinance (Exh. DPU-N-1). The record shows that, should the Company need to conduct work outside of normal weekday hours, the Company would need to seek permission from the City's building inspector (<u>id.</u>). The record shows that pile-driving operations at two pole locations will have noise impacts on surrounding properties (<u>id.</u>). The record also demonstrates that the operation of the relocated transmission lines would have no noise impacts (id.).

The Department requires the Company to communicate with neighboring property owners and tenants prior to pile-driving operations, alerting them to the expected hours and duration of noisy operation. The Department finds that potential noise impacts from the proposed project's construction would include some impact from pile driving and otherwise would be minimal, and that the Company has established that it will take all reasonable measures to avoid, minimize, or mitigate these impacts.

#### 7. Hazardous Waste

#### a. Description

The Company has determined that the relocated ROW will abut approximately twenty separate parcels of land, three of which are known contaminated sites (Exhs. NG-JBH, at 11; DPU-TS-6; NG-Brief at 18, 19). There is the potential that the soils at the proposed pole locations near these sites could be disturbed during construction (id.). The Company has proposed to mitigate the possibility that soil contamination may be encountered during the construction by pursuing a Utility Related Abatement Measure under the Massachusetts Contingency Plan (id.). The Company stated that during construction tsoil at the proposed transmission pole locations can be shipped directly from the field to minimize erosion and/or sedimentation issues (Exh. NG-JBH, at 12). The Company does not expect any effects on the ground water quality in the project area (id.). The Company stated that it will submit required documentation to the Massachusetts Department of Environmental Protection ("MassDEP") pertaining to soil management and dewatering as well as health and safety (id.).

## b. Analysis and Findings

With respect to safety impacts, the record shows that there are several sites along the relocated ROW which are contaminated and that the Company will take abatement measures and submit documentation as required by MassDEP regarding soil management and dewatering (Exh. NG-JBH at 12).

The Department finds that the Company has established that it will take all reasonable measures to avoid, minimize or mitigate contaminated soils and/or groundwater.

Based on its review above, the Department concludes that the Company will take reasonable measures to avoid, minimize or mitigate impacts of the proposed project. The Department further finds that the impacts of the proposed project would be generally minimal but would include some noise impacts from pile driving during construction.

#### D. Conclusion

The Department finds both a need for, and public benefits of, the construction and operation of the relocated 115 kV transmission line. The Department also finds that National Grid's decision to pursue the proposed project route rather than an identified alternative route is reasonable. The Department concludes that the Company will take reasonable measures to avoid, minimize or mitigate impacts of the proposed project, and further finds that the impacts of the proposed project would be generally minimal but would include some noise impacts from pile driving during construction.

Based on the foregoing, the Department finds that the public interest in the construction of the proposed project outweighs the adverse local impacts of the project. Consequently, pursuant to G.L. c. 164, § 72, the Department finds that the proposed 115 kV transmission project is necessary for the purpose alleged, will serve the public convenience, and is consistent with the public interest.

## IV. ORDER

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

<u>ORDERED</u>: That the proposed 115 kV transmission relocation project in the City of Lynn, as described in the petition and exhibits of New England Power Company d/b/a National Grid, is necessary for the purpose alleged, and will serve the public convenience and is consistent with the public interest pursuant to G.L. c. 164, § 72 and the petition is allowed; and it is

<u>FURTHER ORDERED</u>: That New England Power Company d/b/a National Grid work cooperatively with municipal and state officials and affected property owners in the City of Lynn to minimize any traffic, noise, visual or other local impacts associated with the construction or operation of proposed transmission project; and it is

<u>FURTHER ORDERED</u>: That New England Power Company d/b/a National Grid communicate with abutting property owners and tenants prior to pile-driving operations and construction activities alerting them to the hours and duration of such activities; and it is <u>FURTHER ORDERED</u>: That New England Power Company d/b/a National Grid shall obtain all other governmental approvals necessary for this proposed transmission relocation project.

By Order of the Department:

Paul J. Hibbard, Chairman

Tim Woolf, Commissioner

Jolette A. Westbrook, 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.