

J. Raymond Miyares
Thomas J. Harrington
Christopher H. Heep
Donna M. Brewer
Jennie M. Merrill

Rebekah Lacey
Ivria Glass Fried
Eric Reustle
Blake M. Mensing

February 17, 2017

VIA FIRST CLASS MAIL AND E-MAIL

M.Kathryn Sedor, Presiding Officer
Energy Facilities Siting Board
One South Station,
Boston, MA 02110

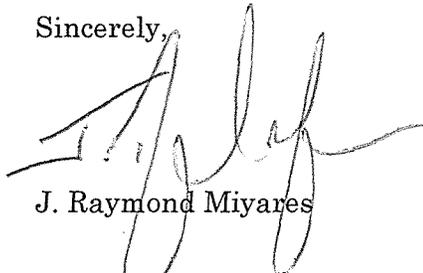
Re: NSTAR Electric Company d/b/a/Eversource Energy,
EFSB 16-02/D.P.U. 16-77

Dear Ms. Sedor:

On behalf of the Town of Needham, enclosed for filing is the First Set of Document and Information Requests to NSTAR Electric Company.

Enclosed also is a certificate of service. Thank you for your attention to this matter. If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,



J. Raymond Miyares

cc: Service List

COMMONWEALTH OF MASSACHUSETTS
ENERGY FACILITIES SITING BOARD

Petition of NSTAR Electric Company d/b/a/
Eversource Energy for Approval to Construct
and Maintain a New 115-kV Combination
Overhead/Underground Transmission Line in
West Roxbury, Dedham and Needham
Pursuant to G.L. c. 164 § 69J

EFSB 16-02/D.P.U. 16-77

THE TOWN OF NEEDHAM'S
FIRST SET OF DOCUMENT AND INFORMATION REQUESTS
TO NSTAR ELECTRIC COMPANY

Instructions

1. These Document and Information Requests call for all information, including information contained in documents, that relates to the subject matter of the requests and that is known or available to NSTAR Electric Company, d/b/a Eversource Energy ("Eversource") and its affiliates or to any individual or entity sponsoring testimony or retained by them to provide information, advice, testimony or other services in connection with this proceeding.
2. Where a Request has a number of separate subdivisions or related parts or portions, a complete response is required to each such subdivision, part, or portion. Any objection to a Request should clearly indicate the subdivision, part, or portion of the Request to which it is directed.
3. If information requested is not available in the exact form requested, please provide such information or documents as are available that best respond to the Request.
4. These requests are continuing in nature and require supplemental responses when further or different information with respect to the same is obtained.
5. Each response should be furnished on a separate page headed by the individual Request being answered. Each page of individual responses of more than one page should be consecutively numbered.
6. Each Request to "Please provide all documents..." or similar phrase includes a request to "identify" all such documents. "Identify" means to state the nature of the document, the date on which it was prepared, the subject matter and the titles and the names and positions of each person who participated in the preparation of the document, the addressee and the custodian of the documents.

To the extent that a document is self-identifying, it need not be separately identified.

7. For each produced or identified document that is computer generated, please state separately (a) what types of data or files are included in the input and the source thereof, (b) the form of the data that constitutes machine input, (c) a description of the recording system employed (including descriptions, flow charts, etc.), and (d) the identity of the person who was in charge of the collection of input materials, the processing of input materials, the data bases utilized, and the programming to obtain the output.
8. If a Request can be answered in whole or part by reference to the response to another Request served in this proceeding, it is sufficient to so indicate by specifying the other Request by participant and number, by specifying the parts of the other response which are responsive, and by specifying whether the response to the other Request is a full or partial response to the instant Request. If it constitutes a partial response, the balance of the instant Request must be answered.
9. If Eversource cannot answer a Request in full, after exercising due diligence to secure the information necessary to do so, please state the answer to the extent possible, state why Eversource cannot answer the Request in full, and state what information or knowledge is in Eversource's possession concerning the unanswered portions.
10. If, in answering, you believe that any Request or definition or instruction applicable thereto is ambiguous, please set forth the language you believe to be ambiguous and the interpretation you are using in responding to the Request.
11. If a document requested is no longer in existence, please identify the document, and describe in detail the reasons the document is unavailable.
12. Please provide copies of all requested documents. A response that does not provide the Town of Weymouth with the responsive documents, and requests the Town to inspect documents at any location is not responsive.
13. If you contend that any document responsive to any of these requests is privileged or otherwise not subject to discovery, or if any document responsive to this request is withheld for any other reason, please indicate: (a) the name and address of each signatory to the document and the capacity in which each signed; (b) the date of the document; (c) the name of each addressor or author of the document and the capacity in which each was acting at the time he addressed or created the document; (d) the name of each addressee of the document (including all persons to whom copies were sent) and the capacity in which each was addressed; (e) the nature of the document (*e.g.*, note, memorandum, letter, etc.) and subject matter of the document; and (f) the specific grounds or reasons for withholding the document.

14. Each request for information includes a request for all documentation that supports the response provided.
15. Please submit responses within 14 days of receiving the request.

Definitions

1. As used herein, "communication" shall mean any and all means of display or transmission of data, ideas, or other information (whether oral, written, electronic or other means are used), as well as any note, memorandum or other record thereof.
2. As used herein, "document" shall mean any written, recorded, or graphic material of any kind, whether prepared by you or by any other person, that is in your possession, custody, or control. The term shall include agreements; contracts; letters; telegrams; inter-office communications; memoranda; reports; records; instructions; specifications; notes; notebooks; scrapbooks; diaries; plans; drawings; sketches; blueprints; diagrams; photographs; photocopies; charts; graphs; descriptions; drafts, whether or not they resulted in a final document; minutes of meetings, conferences, and telephone or other conversations or communications; invoices; purchase orders; bills of lading; recordings; published or unpublished speeches or articles; publications; transcripts of telephone conversations; phone mail; electronic-mail; ledgers; financial statements; microfilm; microfiche; maps; tape or disc recordings; and computer print-outs. The term "document" shall also include electronically stored data from which information can be obtained either directly or by translation through detection devices or readers; any such document is to be produced in a reasonably legible and usable form. A draft or non-identical copy is a separate document within the meaning of this term.
3. As used herein, the term "Company" shall mean Eversource and its affiliates. Unless the request specifically provides otherwise, the term "Company" includes all witnesses, representatives, employees, and legal counsel.

COMMONWEALTH OF MASSACHUSETTS
ENERGY FACILITIES SITING BOARD

Petition of NSTAR Electric Company d/b/a/
Eversource Energy for Approval to Construct
and Maintain a New 115-kV Combination
Overhead/Underground Transmission Line in
West Roxbury, Dedham and Needham
Pursuant to G.L. c. 164 § 69J

EFSB 16-02/D.P.U. 16-77

THE TOWN OF NEEDHAM'S
FIRST SET OF DOCUMENT AND INFORMATION REQUESTS
TO NSTAR ELECTRIC COMPANY

TON-1-001: Please refer to the *Electric and Magnetic Field (EMF) Modeling Analysis for the West Roxbury to Needham Reliability Project* (hereinafter, the "EMF Report"), Appendix 5-8 to the Analysis to Support Petitions before the Energy Facilities Siting Board. Appendix C the of EMF Report presents a diagram showing placement for the duct bank, and indicates that the bank would begin at approximately 30 inches below the pavement, and extend 32 inches below that, with the transmission lines spaced out over that 32 inches in an inverse diamond configuration.

- (a) Did the Company review and utilize the as-built plans of sewer lines along the Company's preferred route and noticed alternative route, on file with the Town, in preparing Appendix C?
- (b) Did the Company review and utilize the plans of gas lines along the Company's preferred route and noticed alternative route, prepared by its affiliate, NStar Gas Company, in preparing Appendix C?
- (c) Did the Company consult with the Needham Town Engineer before preparing Appendix C?
- (d) Please explain how the placement of the duct bank as shown in Appendix C will be reconciled with the location of existing utilities along the Company's preferred transmission route and its noticed alternative route.
- (e) Specifically, in light of the location of existing utilities along the Company's preferred transmission route and its noticed alternative route, what is the realistic depth placement for the duct bank?

- (f) Please provide a copy of the results of EMF modeling analysis using the depth placement for the duct bank specified in your response to TON-1-001(e).

TON-1-002: When will the Company provide the topographic field survey plan and profile and proposed design to the Town for review?

TON-1-003: For each of the 12 narrowest points along both the Company's preferred transmission route and its noticed alternative route, please provide the distance between the proposed location of the conduit and;

- (a) The nearest property line;
- (b) The nearest building foundation; and
- (c) The nearest residential building foundation.

In your response, please identify the points along each route that were utilized for such measurements; property information, including Assessors' Map and Lot designations, for each property line utilized for such measurements; and the address and current use of the buildings utilized for such measurements.

TON-1-004: Please refer to your response to EFSB-LU-14. Please provide the distance between the actual proposed location of the conduit within the proposed route ROW and the 900 Greendale Avenue units referenced in your response.

TON-1-005: What is the Company's understanding of the relative effectiveness of HPFF piping, as compared to XLPE piping, in reducing mG exposure levels from EMF associated with electricity transmission lines? Please identify and provide copies of all documentation that the Company has relied on or otherwise considered in reaching this understanding.

TON-1-006: Please describe the factual basis for the Company's choice to utilize XLPE cables in for its proposed transmission line. Please identify and provide copies of all documentation that the Company relied on or otherwise considered in making this choice.

- (a) What is the cost differential between HPFF cable and XLPE cable installation along the Company's preferred transmission route and its noticed alternative route?
- (b) What is the effectiveness differential in EMF reduction between HPFF cable and XLPE cable installation along the Company's preferred transmission route and its noticed alternative route?
- (c) Please provide the Company's cost-benefit or other analysis in support of its decision to utilize XLPE cable.

TON-1-007: Please refer to Section 4 of the EMF Report, which indicates that Gradient used the FIELDS modeling application for its modeling analysis.

- (a) Did Gradient ever consider, or did the Company ever request, comparing the modeling scenarios presented in the EMF Report against a separate analysis using the MATLAB modeling application or another modeling package? If not, why not?
- (b) If such a comparative analysis was conducted, please provide the results thereof and the Company's understanding of the significance of any differences noted between the alternative modeling and the results presented in the EMF Report.
- (c) If Gradient considered, or the Company requested, such a comparative analysis, but no such analysis was, in fact, conducted, please provide the rationale for not conducting the analysis. Please identify and provide copies of all documentation that the Company relied on or otherwise considered in making this decision.

TON-1-008: Did Gradient conduct a modeling analysis that compares EMF levels from its preferred transmission route and its noticed alternative route?

- (a) If not, why not?
- (b) If such a comparative analysis was conducted, please provide the results thereof and the Company's understanding of the significance of any differences noted between the preferred transmission route and its noticed alternative route.

TON-1-009: Did the Company or any of its consultants perform modeling of projected EMF levels along the narrowest portions of the preferred transmission route and its noticed alternative route?

- (a) If not, why not?
- (b) If such modeling was conducted, please provide the results thereof and the Company's understanding of the significance of any differences noted between EMF levels at the nearest property lines, building foundations and residential building foundations identified in your response to TON 1-002 and those presented in the EMF Report.

TON-1-010: Did the Company or any of its consultants perform modeling of projected EMF levels at the 900 Greendale Avenue residences?

- (a) If not, why not?

- (b) If such modeling was conducted, please provide the results thereof and the Company's understanding of the significance of any differences noted between EMF levels at the 900 Greendale Avenue residences and those presented in the EMF Report.

TON-1-011: Did the Company or any of its consultants perform modeling of projected EMF levels at the residences on Grosvenor Street along the preferred transmission line route?

- (a) If not, why not?
- (b) If such modeling was conducted, please provide the results thereof and the Company's understanding of the significance of any differences noted between EMF levels at the residences on Grosvenor Street and those presented in the EMF Report.

TON-1-012: Please refer to Section 3.4.2 of the EMF Report, which indicates that the level of EMF is significantly higher above manholes than it is on standard line segments.

- (a) What are the logistical considerations that apply to placement decisions for manholes?
- (b) Has the Company sited its proposed manhole locations such that the manholes are on segments of the installation route where the setbacks between the middle of the street and adjacent residences is greater than average along the proposed transmission route? If not, why not?

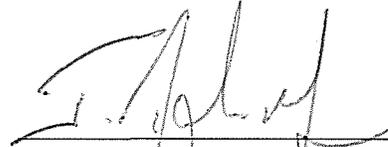
TON-1-013: Has the Company ever sponsored a pre-construction EMF monitoring study along a proposed underground transmission route comparable to the Company's preferred alternative or noticed alternative route?

- (a) If not, why not?
- (b) Please provide the reports of any such studies conducted within the past five years or the three most recent studies (whichever is the greater number).

TON-1-014: Has the Company ever sponsored a post-construction EMF monitoring study along an underground transmission route comparable to the Company's preferred alternative or noticed alternative route?

- (a) If not, why not?

(b) Please provide the reports of any such studies conducted within the past five years or the three most recent studies (whichever is the greater number).



J. Raymond Miyares, BBO #350120
Eric Reustle, BBO #681933
Miyares and Harrington LLP
40 Grove Street • Suite 190
Wellesley, MA 02482
t: (617) 489-1600
f: (617) 489-1630

Dated: February 17, 2017

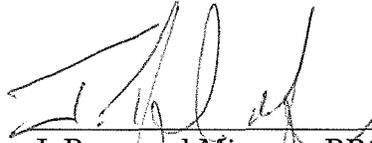
COMMONWEALTH OF MASSACHUSETTS
ENERGY FACILITIES SITING BOARD

Petition of NSTAR Electric Company d/b/a/
Eversource Energy for Approval to Construct
and Maintain a New 115-kV Combination
Overhead/Underground Transmission Line in
West Roxbury, Dedham and Needham
Pursuant to G.L. c. 164 § 69J

EFSB 16-02/D.P.U. 16-77

CERTIFICATE OF SERVICE

I certify that I have this day served the foregoing upon the Energy Facilities Siting Board and the Service List in the above-docketed proceeding in accordance with the requirements of 980 CMR 1.03 (Siting Board's Rules of Practice and Procedure).



J. Raymond Miyares, BBO #350120
Eric Reustle, BBO #673908
Miyares and Harrington LLP
40 Grove Street • Suite 190
Wellesley, MA 02482
t: (617) 489-1600
f: (617) 489-1630

Dated: February 17, 2017