THE STATE OF NEW HAMPSHIRE BEFORE THE SITE EVALUATION COMMITTEE DOCKET NO. 2015-04

SUPPLEMENTAL PRE-FILED DIRECT TESTIMONY OF KENNETH BOWES AND DAVID PLANTE

APPLICATION OF PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY FOR A CERTIFICATE OF SITE AND FACILITY FOR CONSTRUCTION OF A NEW 115 kV TRANSMISSION LINE

THE SEACOAST RELIABILITY PROJECT

July 27, 2018

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1		Initial Background
2	Q.	Please state your name, title, and business address.
3	A.	My name is Kenneth Bowes. I am a Vice President of Transmission Performance
4	at Eversourc	e Energy ("Eversource"), currently assigned to the Seacoast Reliability Project (the
5	"Project") be	eing developed by Public Service Company of New Hampshire d/b/a Eversource
6	Energy. My	business address is 107 Selden Street, Berlin, Connecticut, 06037. My curriculum
7	vitae was pro	ovided as Attachment A of my pre-filed testimony dated March 29, 2017.
8	My n	ame is David Plante. I am the Manager of the Project Management Department for
9	Public Servi	ce Company of New Hampshire d/b/a Eversource Energy. My business address is 13
10	Legends Dri	ve, Hooksett, NH. My curriculum vitae was provided as Attachment A of my pre-
11	filed testimo	ny dated April 12, 2016.
12	Q.	What is the purpose of your supplemental pre-filed testimony?
13	A.	The purpose of our supplemental pre-filed testimony is to provide and describe
14	updates and	changes to the design of the Project and construction related issues. In addition,
15	since we file	d our initial testimony, the Site Evaluation Committee (SEC) rendered a decision in
16	another dock	tet that necessitated updates and revisions to my testimony.
17	Q.	Aside from your recent submittal of Supplemental Information regarding
18	Horizontal 1	Direction Drilling, has anything changed with regards to your background or
19	Eversource	s capabilities to manage, construct, or operate the Project since the original
20	Application	for the Project was filed on April 12, 2016 and the Amendment to the
21	Application	was filed on March 29, 2017?
22	A.	Yes. Eversource recently completed construction on a 9.8 mile segment of the
23	Merrimack V	Valley Reliability Project, SEC Docket No. 2015-05 ("MVRP")—a new 345 kV
24	transmission	line that was constructed in conjunction with National Grid from the Scobie Pond
25	Substation in	Londonderry, NH to the Tewksbury 22A Substation in Tewksbury, MA. Mr.
26	Plante was a	lso the Project Manager for the Eversource portion of MVRP. The completion of
27	that project f	Further demonstrates that Eversource has the financial, technical and managerial
28	capability to	construct and operate high-voltage transmission lines.

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changes is included in Attachment A.

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1		Project Design and Construction-Related Issues
2	Q.	Describe the current state of the construction design plans.
3	A.	The Engineering Drawings are approximately 90 percent complete. See
4	Engineering	Drawings, July 27, 2018. Issued for Construction Plans ("IFC") will be completed
5	after final pe	ermit conditions to ensure they are incorporated.
6	Q.	Have there been additional design modifications since the Amendment to the
7	Application	was filed?
8	A.	Yes. The underground to overhead riser structures at Frink Farm, Flynn Pit and
9	Hannah Lan	e were changed from three pole structures to single pole structures at the specific
10	request from	the Town of Newington and concurred by the Frinks as well as other Newington
11	residents.	
12	In ad	dition, Structure 151 before Portsmouth Substation was shifted approximately 50
13	feet south to	accommodate final land rights that resulted from the sale of Eversource's Schiller
14	Station in Po	ortsmouth. Minor structure changes were made near the crossing of Mill Road in
15	Durham, NE	I as a result of unrelated roadside distribution work that had been completed after the
16	initial SRP d	lesign. Finally, small structure shifts, of approximately 15 feet or less were made at
17	structures 11	and 22 based on a constructability review performed by Eversource and its
18	overhead lin	e contractor. Please see Revised Engineering Drawings dated July 27, 2018.
19	Q.	Please describe the outreach that Eversource has undertaken since the
20	Application	was filed.
21	A.	Since the Application was filed, the Applicant has continued extensive outreach in
22	the commun	ities where the Seacoast Reliability Project is proposed to be located. The Project's
23	outreach effo	orts have been designed to inform stakeholders, respond to questions or concerns,
24	and elicit fee	edback. A detailed summary of all outreach efforts undertaken on this Project since
25	2013 is prov	ided in the Project Outreach Supplement, Attachment A. As a result of those

outreach efforts, the Project has continued to make Project design modification to address

comments and concerns from host communities and its residents. A summary of the design

Q	Certain parties have raised concerns regarding the potential for impacts to
their pro	perties, particularly during construction. Are you familiar with the Applicant's
mitigatio	n strategy that will be employed prior to and during construction?

A. Yes. As described in the Supplemental Pre-filed Testimony of William Quinlan, Eversource employs a robust mitigation strategy to identify areas and sources of potential concern along the entirety of the Project route. We have been significantly involved with Eversource's mitigation strategy for over 20 years.

As part of Eversource's community outreach efforts, residents, business owners and other stakeholders are encouraged to contact the Project Team with any questions, comments or concerns through Eversource's Project Outreach Team or to contact the Eversource Project Hotline at 888-926-5334 or email to NHProjectsInfo@eversource.com. A representative of the Project Outreach Team or the responsible contractor will promptly respond and work to resolve the concern in an appropriate manner. Potential solutions may include additional vegetative screening, repairs, replacements, and/or other mitigation efforts.

- Q. Are you familiar with NH DES's Final Recommendation that suggested the Applicant undergo a trial jet plow run?
- **A.** Yes.
 - Q. What is the Applicant's position on NH DES's Final Recommendation?
 - **A.** The Applicant is in general agreement with NH DES's recommendation for a trial jet plow run; however, we disagree with the proposed timing of the trial jet plow run. Typically, trial jet plow runs are conducted immediately before (i.e., 7 to 14 days) the actual installation and are done with the exact equipment and construction personnel that will conduct the installation.

Therefore, the Applicant will commit to conduct a 1,000 foot trial jet plow run approximately 21 days prior to commencing the cable installation. The Applicant will further commit to providing the results of the trial run to NHDES 14 days prior to commencing cable installation, with the understanding that NHDES would issue a final approval 7 days after receipt of the jet plow trial run sampling data and results. The Applicant's commitment is in-line with those recommendations made by ESS Group, Inc. *See Supplemental Testimony of Payson R. Whitney, III* at 10-12.

Q.	Has the Project identified all l	ydown and marshalling yards to-date?
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A. The majority of laydown and marshalling yards have been identified. Additional yards may be proposed to support construction.

Eversource submitted a letter to the SEC dated October 26, 2017 regarding its intention to use a site for laydown in Lee, NH. *See* Letter to SEC regarding Applicant's Intention to Use a Former Gravel Pit in the Town of Lee as a Marshalling Yard, dated October 26, 2017. As identified on Attachment A of that letter, it is a former gravel pit located off Route 125 Calef Highway in Lee (the "Site"). Eversource has executed a lease for the 3.5-acre area within the former gravel pit. Eversource may also extend an existing lease for an additional 3.0-acre area at the same Site a later date.

Eversource is also currently working with the University of New Hampshire (UNH) on the coordination of laydown space primarily for the underground portion of work on campus. The laydown space at UNH will be used to store material and equipment, construction trailers and temporary soil stock piles. These areas may also be used as temporary staging areas for wetland matting and equipment for the overhead construction just before or after bringing them into the right of way areas. Two locations have currently been identified as potential laydown areas. One is in Parking Lot A, north of Main Street. The second is a gravel parking lot near the intersection of Waterworks Road and South Drive. All locations will be coordinated directly through and with approval of UNH and will not disturb the campus operations. These laydown areas will also only be used during the summer months after graduation or during other academic breaks, with UNH permission. All locations will be previously disturbed paved or graveled areas with no wetland or archeological impacts. It is expected that an agreement regarding the use of additional laydown space will be reached in a Memorandum of Understanding (MOU) with UNH.

Additional laydown areas may be required. Eversource requests that any additional laydown areas be handled in accordance with the MOU's executed with host communities or via delegation to NH DES for approval. *See e.g.*, Town of Newington MOU § I.V., C; SEC Application, Docket 2015-04, at 22–23 (April 12, 2016).

Q. Describe emergency access at UNH.

A. Emergency vehicles will be able to access all UNH facilities as necessary for the entire duration of the Project. Eversource has worked with UNH to identify access and work

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- locations. In general, roads will have at least one lane open with traffic control and/or police
- detail. Where one lane cannot be maintained or for a more efficient construction to minimize
- 3 overall disruption, some roads may be completely closed for limited periods. Where road
- 4 closures occur, temporary access roads will be constructed or detours will be established to allow
- 5 access to all locations. Eversource will work closely with UNH during construction so that any
- 6 changes are communicated to emergency officials. In addition to maintaining emergency access
- at UNH, the Project will ensure the emergency access will be maintained for all roads during
- 8 construction, including those outside of UNH.
 - Q. Concerns have been raised about dealing with PFOA and PFOS during construction. Please describe worker protection measures for dealing with PFOA and PFOS if encountered.
- 12 A. Given the potential to encounter groundwater impacted by PFOA and PFOS in the
- 13 Newington Area, a soil and groundwater management plan has been developed for the Project.
- 14 See Supplemental Pre-Filed Testimony of Sarah Allen, Ann Pembroke, and Kurt Nelson,
- 15 Attachment A. The management plan, which will be reviewed and approved by NHDES prior to
- 16 construction, requires contractors to develop a site-specific health and safety plan and requires
- that any workers directly handling contaminated or potentially contaminated soil or water have
- 18 OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) 40-hour training
- in accordance with standard 1910.120(e). A site-specific health and safety plan will dictate the
- 20 proper personal protective equipment to be utilized by workers such as long sleeve shirts, safety
- 21 glasses, safety shoes and chemical resistant gloves.
 - Q. Please describe Eversource's efforts to avoid impacts to stonewalls.
- 23 A. Eversource has taken all reasonable efforts to avoid and minimize impacts to
- 24 stonewalls, both those that are historic stonewalls and those that are boundary stonewalls.
- 25 However, in some cases, impacts are unavoidable. For historic stonewalls, Eversource will
- 26 avoid impacts in all but a few cases. Eversource expects to enter into a MOU with New
- 27 Hampshire Division of Historical Resources (DHR) and UNH to address impacts to those
- 28 specific historic walls. For boundary walls, Eversource has received permission from underlying
- 29 landowners to temporarily impact those walls. Post-construction, Eversource will replace those
- 30 stonewalls to pre-construction conditions.

Utility Accommodation Manual ("UAM") and State and Locally Maintained Roads

- Q. Have you reviewed the new Utility Accommodation Manual issued by DOT in 2017? If so, how does the new version of the UAM affect the Project?
- 4 A. Yes, Eversource has reviewed the new 2017 UAM to ensure Project compliance.
- 5 The 2017 version was recently adopted to replace the 2010 version of the UAM and includes
- 6 several changes with regards to overhead and underground electric facilities. Based on this
- 7 review, some minor issues regarding Project design were identified and minor changes are
- 8 required. A summary of the UAM changes that impact the Project, as well as the proposed
- 9 mitigation, is listed below.
 - 1. Section XII.B and Section XII.C, as revised, adjusts clearance and structure offset requirements from the travel way, right-of-way line, guardrails and other structures. As shown on the crossing plans previously provided as part of the Amendment, all clearances have been met; therefore, the Project as designed is in compliance.
 - 2. Section XIII.B.5 states, "In those special cases where utility supports, manholes, or other appurtenances are located in medians, interchange areas, or otherwise inaccessible portions of freeway rights-of-way, access to them from through roadways or ramps of the freeway may be permitted when other alternatives do not exist. Such access shall be by permit setting forth the conditions for policing and other controls to protect highway users. Entry to the median area should be restricted where possible to nearby grade separation structures, stream channel crossings, or other suitable locations not involving direct access from through roadways or ramps of the freeway." There are four locations off NH Route 16 where Eversource proposes access roads off an exit ramp for Gosling Road in Portsmouth. The access road is proposed to avoid wetland impacts. These locations have been submitted to the NHDOT for review. Eversource with work with NHDOT to secure the appropriate permissions for these access routes and will comply with any conditions of those permits.
 - 3. Section XII.A.4 added the requirement that "The minimum horizontal clearance of new aerial utility lines adjacent and parallel to highway structures shall be 10' unless the National Electrical Safety Code or governing laws require greater clearances, in which case, the greater shall apply. Where existing highway structures are widened due to construction, existing aerial utility lines shall be adjusted to meet the minimum

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requirement. Aerial utility lines shall not cross highway structures or cross the roadway within 50' of a highway structure. Where existing highway structures are rehabilitated or reconstructed, existing crossing aerial utility lines shall be adjusted to meet this requirement. Horizontal clearance requirements for bridges/culverts under fill will be reviewed on a case by case basis." The UAM also adds a requirement for all lines that parallel a bridge structure be at least 10 ft. horizontally away. For a crossing line, the new UAM requires the line to stay 50 feet from a bridge structure. Eversource had previously discussed this requirement prior to the issuance of the 2017 version of the UAM with the anticipation that this rule would be added and designed the Project to address this requirement. For the bridge clearance requirements, there are two locations on NH Route 4 in Durham and Madbury Road in Madbury where the line is adjacent to existing bridge crossings of the PanAm Railroad tracks and do not meet the 50 feet requirement. Eversource adjusted the design as part of the Amendment, to move the line to the extent possible to comply with this rule and provide a minimum of 24 feet from the centerline to the closest bridge location. Eversource does not have the real estate rights to move the line further away from the bridge structure. Eversource met with representatives from NHDOT to discuss this design and Eversource has submitted a written Exception Request per the UAM to NHDOT. See Attachment B. Based on discussions with NHDOT, we do not foresee issues with the approval of this Exception Request.

Q. Has Eversource identified all access roads it intends on using? If so, what roads have you identified?

A. Eversource has reviewed the potential roads that may be used in the towns where the Project is located. Access locations to the Project Corridor are shown on the Environmental Maps. *See* Revised Environmental Maps, dated July 25, 2018. The list of roads does not include roads outside the Project area that may be used for travel of equipment, material or personnel to the Project area. If additional roadways are identified as required for construction, Eversource will work directly with the Town or NHDOT to ensure compliance with all requirements.

The following is a list of public roads that Eversource has identified that will be needed to construct the Project:

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•	Town of Madbury: Madbury Road (some portions are maintained by NHDOT), Beech
	Hill Road, and Miles Lane. See Revised Environmental Maps 1 and 2, dated July 25,
	2018.

- 4 Town of Durham: NH Route 4 (NHDOT), NH Route 108 (NHDOT), NH Route 155A 5 (NHDOT), Beech Hill Road, Durham Point Road, Longmarsh Road (both ends off 6 Durham Point Road and NH Route 108), Timberbrook Lane, Cutts Road, fFrost Drive, 7 Hemlock Way, Packers Falls Road, Sandy Brook Drive, Bennett Road, Mill Road, Main 8 Street (NHDOT Owned, town maintained), Pettee Brook Lane, Foss Farm Road, South 9 Drive (UNH), Waterworks Road (UNH), Colovos Road (UNH), North Drive (UNH), 10 Gables Way (UNH), and Madbury Road (portions are maintained by NHDOT). See 11 Revised Environmental Maps 2 through 22, dated July 25, 2018.
 - Town of Newington: Little Bay Road, Fox Point Road, Nimble Hill Road, Old Post
 Road, McIntyre Road, Gundalow Landing, Shattuck Way, Woodbury Ave (portions are
 maintained by NHDOT), NH Route16/NH Route 4 (NHDOT), Arboretum Drive, Pease
 Blvd, Gosling Road (portion of road is in Portsmouth). See Revised Environmental Maps
 22 through 31, dated July 25, 2018.
 - <u>City of Portsmouth</u>: Gosling Road (portion of road is in Newington); NH Route16/NH Route 4 (NHDOT); Woodbury Ave. *See* Revised Environmental Map 31, dated July 25, 2018.
 - Q. The Application requests that the SEC issue approvals for locally maintained road crossings and underground installations. Please describe the aerial road crossing and underground installations needed for this Project.
 - A. As part of the Project, Eversource requires 11 aerial crossings of municipally maintained highways in the communities of Durham, Newington and Portsmouth. In addition to the aerial road crossings, Eversource seeks to install the Project underground within the right-of-way of municipally maintained highways in the towns of Durham and Newington. Please see Appendix 18 and Appendix 18a of the Application for more detail.
 - Q. Has the Applicant discussed the local road crossings and underground installations needed with the host communities?
- 30 A. Yes. Eversource has worked proactively with host communities since the inception of the Project. As part of this proactive outreach, the Eversource provided design

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- drawings to all host communities for their review and comment, particularly as the design
- 2 drawings relate to local road crossings. Specifically, Eversource provided host communities
- 3 with copies of Appendix 18 and Appendix 18a of the Application, which contain the specific
- 4 design details for local road crossings and installations in local roads. The proposed overhead
- 5 design meets the requirements of the National Electric Safety Code and meets all local and State
- 6 clearance requirements. In addition, Eversource will prepare and follow traffic control plans
- 7 consistent with the Manual on Uniform Traffic Control Devices (MUTCD).
 - To our knowledge, the Town of Newington has not raised any concerns about aerial clearance requirements. In addition, Eversource has entered into a MOU with the Town of
- 10 Newington to address specific road restoration standards that are suitable to the Town for the
- 11 underground installations in locally maintained roads.
- Eversource is currently negotiating a MOU with the Town of Durham and expects to
- have the issue of locally-maintained road crossings and underground installations addressed.
- There are no aerial road crossings or underground installations in the Town of Madbury.
- 15 The City of Portsmouth has not raised any clearance concerns about the design of the Project as
- it relates to the crossing of locally-maintained roads.
 - Q. Does the Applicant request that the SEC approve aerial road crossing and underground installations for municipally maintained roads?
- 19 A. Yes. It is my understanding the SEC approved similar aerial road crossings for
- 20 the Merrimack Valley Reliability Project, docket 2015-05. Based on that prior docket,
- 21 Eversource respectfully requests that the same review and approval process occur here.
- Q. Please provide an overview of the Applicant's position on decommissioning
- as it relates to the SEC's December 29, 2016 Order on Applicant's Motion for Partial
- Waiver of the Requirements of N.H. Code Admin. Rules Site 301.08(d)(2).
- 25 A. With its Application for a Certificate of Site and Facility, Eversource submitted a
- 26 Motion to Partially Waive Site 301.08(d)(2) (at the time this rule was codified as Site
- 27 301.08(c)(2)) regarding decommissioning, in part, because it is extremely rare for transmission
- 28 line owners to decommission and completely remove a 115 kV transmission line and related
- 29 facilities. As described in the Motion, once a transmission line is constructed for reliability
- purposes, it becomes an integral part of the electric transmission system in the New England
- region that the Independent System Operator-New England (ISO-NE) includes as an element of

- its studies. While it is not uncommon for existing high voltage transmission lines to be reconductored and refurbished, it is only under exceptional circumstances that they are removed
 completely. On December 29, 2016, the SEC granted our request to partially waive Site
 301.08(d)(2), but stated that the Applicant should be prepared to address decommissioning
 during the adjudicative process.
 - Q. What condition does the Applicant put forth for inclusion in a Certificate of Site and Facility regarding decommissioning to ensure the orderly development of region?
 - **A.** As part of Eversource's Application in this docket, Eversource suggests that the SEC impose the same condition for decommissioning that was included in the Certificate of Site and Facility for the Merrimack Valley Reliability Project, docket 2015-05.
 - In MVRP—a similarly situated reliability project—the SEC also granted a waiver of the requirements of Site 301.08(d)(2). In the Certificate of Site and Facility granted in that case, the SEC ordered the joint applicants to: (i) submit a report to the Committee every 10 years indicating any change in the need for the Project to ensure the continued reliability of the regional bulk transmission system; (ii) promptly notify the Committee of any retirement obligation that arises; and (iii) submit to the Committee a decommissioning plan in accordance with then-applicable rules, upon any imposition of a decommissioning obligation, or prior to the retirement of any part of the Project.

Eversource requests that the same condition be included in any Certificate issued in this docket.

22 Conclusion

- Q. Does anything in your supplemental pre-filed testimony alter your opinion on Eversource's technical and managerial capability to construct, operate, and maintain the Project?
- **A.** No. Based on Eversource's significant experience in constructing, operating, and maintaining electric transmission lines across the Northeast region, it is our opinion that the Applicant has the necessary technical and managerial capability to construct, operate, and maintain this Project.
- Q. Does this conclude your supplemental pre-filed testimony?
- **A.** Yes, it does.