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

PRE-FILED DIRECT TESTIMONY OF LYNN FARRINGTON

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

April 12, 2016

1		Qualifications and Purpose of Testimony				
2	Q.	Please state your name, title, and business address.				
3	A.	My name is Lynn Farrington and I am a licensed professional engineer				
4	(NH License #14125, specializing in 'Civil-Highway,') working in the transportation					
5	field. I am also a licensed professional traffic operations engineer (Certificate #3416					
6	awarded by the Transportation Professionals Certification Board). I am currently					
7	employed by	Louis Berger at 482 Congress Street, Suite 401, Portland, Maine 04101.				
8	Q. Briefly summarize your educational background and work					
9	experience.					
10	A.	I graduated with a B.S. in Civil Engineering from the University of Maine				
11	in 2006. I have worked in the transportation field as an engineering consultant for the pa					
12	nine years.					
13	Q.	Have you previously testified before the Site Evaluation Committee?				
14	A.	No, I have not. However, I have submitted pre-filed testimony in support				
15	of the North	ern Pass Transmission Project.				
16	Q.	What is your role in the Project?				
17	A.	I am advising the Seacoast Reliability Project ("SRP" or the "Project")				
18	construction planning team in relation to mobility, safety and maintenance/protection of					
19	traffic on roadways temporarily affected by installation of the transmission line.					
20	Q.	What is the purpose of your testimony?				
21	A.	The purpose of my testimony is to demonstrate to the Committee that				
22	temporary traffic impacts due to installation of the transmission line are being consider					
23	and appropriately mitigated by the Applicant and offer the opinion that the Project will					
24	not have an unreasonable adverse impact on public safety during construction.					
25	Q.	Please describe other similar projects you have worked on.				
26	A.	I completed a traffic control plan and traffic management plan for a bridge				
27	replacement on Veterans Memorial Parkway in East Providence, RI. In order for the					
28	bridge to be built quickly (within 2 months' time) the Rhode Island Department of					
29	Transportation approved a construction method that required closing the Parkway for the					
30	duration of the project, which resulted in the need for a detour route. Since this location is					
31	urban I utilized the roadway network to create both a primary and an alternative detour					

route. By having two signed routes for drivers the volume of vehicles on any one route was lessened. Traffic signal timing and phasing along both detour routes was adjusted to better serve the change in traffic patterns.

As part of the bridge construction the local road passing under the bridge, Warren Avenue, also needed to be closed for short periods of time. This process required a total of three detour routes: one for the eastbound direction, one for the westbound direction and a pedestrian route. In these instances police details were assigned to intersections to keep traffic flowing.

A second, smaller scale traffic control plan that I recently completed was for the construction of a downtown roadway in Newport, RI. This full depth and overlay roadway repair was completed by shifting both lanes of traffic to north while constructing to the south, and vice versa. This configuration pattern made up Phases 1 and 2 of the traffic control plans. The client had also requested brick crosswalks with granite curbing border throughout the downtown area. The construction of this requires a four day period with no traffic driving over the brick for the mortar to dry. This was accomplished by detouring traffic in the westbound direction, shifting traffic in the eastbound direction and constructing the crosswalks in two stages.

Q. Please summarize the process you used to analyze traffic impacts during construction.

A. The first step to analyze traffic impacts during construction was to understand the construction methods and procedures required to install the transmission line within the public roadway right-of-way (ROW) limits. Construction space and duration requirements must be determined before the possible effects on traffic can be evaluated.

The next step was to understand how traffic currently operates within the specific highway or roadway corridor. This was accomplished by reviewing the available hourly traffic volumes throughout the corridors within the Seacoast area.

Once the construction methods, duration and existing condition volumes were determined the appropriate traffic control plan method was chosen. This was accomplished by comparing the current volumes to construction scenario capacities in the Highway Capacity Manual and choosing an appropriate layout.

1	Possible traffic control measures that are commonly evaluated for construction						
2	scenarios include, but are not limited to:						
3	1.	Short term single lane closures on a two lane roadway utilizing a flagger					
4	2.	2. Long term single lane closures on a two lane roadway utilizing a					
5	temporary signal						
6	3.	Single or multiple lane closures on a multiple lane or divided highway					
7	4.	Detour routes					
8	5.	Lane closures and/or turning movement restrictions at signalized					
9	intersections						
10	Generally the simplest appropriate method is chosen because it is most likely to						
11	be what is expected by drivers. Complex or unusual traffic control plans do not meet the						
12	expectations of users.						
13	Q.	Please describe the process you used to develop an approach to					
14	managing and mitigating traffic impacts during construction.						
15	A.	For this Project, a number of alternate routes are generally available to					
16	reach any give	en location. Due to this intricate road system in the Project area, a map was					
17	created to allo	w the design team to choose appropriate roadways for transport, time of					
18	day for transport and suitable routes for over-height and/or overweight deliveries. By						
19	creating a well thought through plan for deliveries and construction vehicles traveling to						
20	and from the loading zones traffic impacts can largely be avoided.						
21	Q.	How will you ensure that the traffic management components of the					
22	Certificate ar	re being complied with at all times?					
23	A.	Approved traffic control plans are a condition of NHDOT's permits. The					
24	Traffic Contro	ol Plans created for the Project will be included as part of the contract					
25	documents. These plans or an approved alternative plan meeting the requirements of the						
26	Manual of Uniform Traffic Control Devices and approved by a certified traffic operations						
27	engineer must	be followed by the contractor during installation.					

1	Q.	Please describe the NH Department of Transportation ("NHDOT")					
2	permits and other approvals that the Applicants are seeking that relate to						
3	construction.						
4	A.	The permits and approvals expected to be necessary for the completion of					
5	this Project are:						
6	1.	A Use and Occupancy Agreement executed by NHDOT. This permit					
7	allows the Contractor to install utilities within Limited Access State owned Right of Way						
8	(LAROW), including Turnpike property. Once completed the permit serves as permission						
9	for the approved elements to occupy an agreed upon area within the State LAROW.						
10	2.	An Excavation (Trench) Permit executed by NHDOT. This permit allows					
11	the Contractor to excavate earth and/or roadway within the State ROW to install project						
12	components. A key element of this permit is that any disturbed areas must be restored to						
13	their original standards of design.						
14	3.	A Turnpike Encroachment Permit Application executed by NHDOT,					
15	Bureau of Turnpikes. This permit controls and manages excavations within the LAROW.						
16	It will allow	the contractor to access the transmission line ROW across turnpike owned					
17	property.						
18	4.	An Application for Driveway Permit executed by NDOT. If needed this					
19	permit will b	e requested by the contractor to install a driveway from a NH State					
20	maintained h	ighway to access the transmission line ROW.					
21	5.	Permission for Aerial Crossing, granted by NHDOT. This permission is					
22	obtained by petitioning the Department as outlined in the Utility Accommodations						
23	Manual. Permission is granted after construction once the Department has completed a						
24	field inspection to ensure that all poles and associated elements comply with all standards						
25	stated in the	Manual.					
26	Q.	How will the Applicants ensure compliance with all of the					
27	requiremen	ts of NHDOT permits and agreements when constructing the Project?					
28	A.	Each NHDOT permit and agreement issued has a series of conditions					
29	assigned that must be met by the Applicant. Upon issuance of the NHDOT permits and						
30	agreements and the SEC Certificate of Site and Facility the Project will move forward						
31	with selection of one or more Contractors to complete the work specified in the contract						

1	documents ((which include	le design pl	lans and si	pecifications)	. All	conditions	of t	hε

- 2 NHDOT permits and agreements and the SEC Certificate of Site and Facility will be
- 3 included in the contract documents to be executed by the selected Contractor(s).
 - Q. In your opinion, will the Project have a negative effect on public safety with regard to public highways and local streets?
- A. As described above, it is anticipated that the traffic management components of the Project will provide appropriate mitigation of the temporary impacts to traffic to ensure that there will be no unreasonable adverse effects on public safety along the public highways and local streets.
 - Q. Does this conclude your testimony?
- 11 A. Yes.

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