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

PRE-FILED DIRECT TESTIMONY OF CHERILYN E. WIDELL

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

2

3

4

6

7

8 9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

Qualifications and Purpose of Testimony

Q. Please state your name and business address.

A. My name is Cherilyn E. Widell. My consulting business is Widell Preservation Services LLC. It is located at 105 North Water Street, Chestertown, Maryland 21620. 5

Q. Please describe your background and qualifications?

A. I have a Bachelor's degree in History from Hood College in Frederick, Maryland. I have worked in the field of historic preservation throughout the United States and internationally for 40 years. I am a former state historic preservation officer ("SHPO") and federal preservation officer. My background and training meets the Secretary of the Interior's professional qualification standards, 36 C.F.R. Part 61, for both historian and architectural historian. I was named a Senior Fulbright Scholar to Japan in historic preservation and have been nominated to the Board of the United States Committee of the International Council on Monuments and Sites ("ICOMOS").

I began my career documenting hundreds of historic buildings and landscapes through field surveys in Maryland. I was appointed by the Governor of California to serve as State Historic Preservation Officer with oversight for all aspects of historic resource protection throughout California. In this capacity, I was responsible under Section 106 of the National Historic Preservation Act for consulting with all federal agencies with undertakings which may have an effect on historic properties in the state. Specifically, federal agencies consulted with me on the identification of historic properties in Areas of Potential Effect, determinations of eligibility for the National Register of Historic Places (the "National Register"), assessment of effects and resolution of adverse effects through avoidance, minimization and mitigation and preparation of agreement documents as needed. Among those federal actions were the repair and seismic retrofit of the Los Angeles Memorial Coliseum and Los Angeles City Hall following the Northridge Earthquake, the closure of 29 military installations caused by the Base Realignment and Closure Act ("BRAC") and numerous Department of Energy ("DOE") and FERC projects. I was also responsible for compliance of all state undertakings under the California Environmental Quality Act ("CEQA") which might have an adverse impact on historic resources.

		-	
1	I also served as the federal preservation officer for the Presidio Trust, the federal		
2	agency responsible for the conversion of the Presidio of San Francisco from an Army		
3	post to a National Park. In this capacity, I was responsible for agency compliance with		
4	NEPA and NHPA for over 450 historic buildings and the archeological resources		
5	located in a National Historic Landmark district.		
6	A copy of my résumé is attached to this pre-filed testimony as Attachment A. It		
7	contains further information regarding my education, training, background and		
8	qualifications.		
9	Q.	What is the purpose of your testimony?	
10	A.	The purpose of my testimony is to discuss my assessment of the potential	
11	effects that the Seacoast Reliability Project ("SRP" or the "Project") may have on		
12	above ground historic properties. Based on this assessment, I offer the opinion that the		
13	Project will not have an unreasonable adverse effect on historic resources.		
14	Q:	Have you testified before the New Hampshire Site Evaluation	
15	Committee p	previously?	
16	A.	No, I have not. I have, however, submitted pre-filed testimony to the Site	
17	Evaluation Committee in support of the Northern Pass Transmission Project		
18	Application	n.	
19	Q.	How are you familiar with the Project?	
20	A.	I received information on the Project's components and location of the	
21	transmission lines and facilities. I have spent considerable time reviewing that		
22	information and online tools in specific locations. I have also viewed much of the route		
23	and visited m	any individual historical resources in person.	
24	Q.	What documents have you reviewed relating to the assessment of the	
25	Project's po	tential effects on historic properties?	
26	A.	I have reviewed the February, 2015 Seacoast Reliability Project	
27	Preliminary I	Report: Historic Resources prepared by Archaeological and Historical	
28	Services, Inc. (AHS). See Appendix 11. I have also reviewed the Seacoast Reliability		
29	Project New	Hampshire Division of Historical Resources Project Area Form completed	
30	by Preservation Company in February, and amended in April 2016. I have also reviewed		

the National Register nomination form for the Newington Center Historic District and

- numerous other New Hampshire Division of Historic Resources ("DHR") forms for
- 2 Durham, Newington and Portsmouth that provide additional contextual and survey
- 3 information for the area. I have also reviewed historic -resources eligibility and
- 4 assessment documentation to help in the preparation of the individual and large area
- 5 inventory forms for purposes of the Section 106 review being done by DHR and the lead
- 6 federal agency, the US Army Corps of Engineers ("USACE").

Historic Resources

- Q. Please describe the Project Area Form.
- 9 A. The Applicant has prepared a Project Area Form ("PAF") for the study
- area known as the Area of Potential Effect ("APE"). For SRP, the APE includes the
- electric utility corridor itself and one-half mile on each side of the corridor. The PAF was
- completed by Preservation Company in February 2016 and amended in April 2016 for
- DHR's review as part of the National Historic Preservation Act ("NHPA") Section 106
- review process. The PAF describes the historic, geographic and architectural contexts
- used to evaluate historic resources potentially affected by the Project. The PAF also
- 16 recommends resources for further evaluation of eligibility for listing on the National
- 17 Register.

7

8

- Q. Please describe the assessment of historic resources completed for the
- 19 **Project.**

18

- A. The first assessment completed by the Project is the Seacoast Reliability
- 21 Project Preliminary Report: Historic Resources dated February 13, 2015, prepared by
- 22 AHS. This report identified historic resources in preparation for filing a Request for
- 23 Project Review (RPR) with DHR on behalf of the Applicant. It focused on the area
- immediately around the Project site. As part of this review, AHS conducted a site file
- 25 check at DHR in November 2013 to gather information on already-identified historic
- resources. AHS also undertook a field review of the route in December 2013 that
- 27 identified additional potential historic resources, examined all points where the
- transmission-line route will cross public roads, and reviewed two points on private
- 29 property where the line will travel underwater and cross Little Bay.
- Subsequently, Preservation Company undertook a survey to identify all of the
- identified historic sites in the one-mile APE. This assessment started with a

- comprehensive review of DHR files for the towns within the APE for above ground
- 2 historic resources. It included a review of documented historic resources from the
- 3 National Register and New Hampshire State Register of Historic Places listed properties,
- 4 DHR individual, project area and town-wide area forms, planning surveys and town
- 5 master plans. Other important sources consulted were town tax assessments and tax
- 6 maps, online digital aerial mapping and University of New Hampshire ("UNH") maps
- and materials. Field survey of the Project transmission route was completed between May
- 8 2015, and February 2016.

- In the field, viewshed mapping along with actual sight analysis was used to
- preliminarily assess the properties' historic settings and their visual relation to the
- Project. Further refinement of this assessment was done using aerial mapping (Google
- Maps, Bing Maps), Google Street View (where available) and Google Ground-level
- 13 View (which models the topography of a given area). These served as "checks" on the
- actual site analysis and viewshed mapping. The combination of these methods allowed
- 15 Preservation Company to better identify those properties that warranted further analysis.
- For some properties where visibility was considered to be likely, LandWorks, the visual
- 17 assessment consultant, created visual simulations of the affected view. This information
- provided a more complete understanding of historic resources within the APE.

Q. Please describe how SRP has coordinated with DHR.

- A. PSNH filed a Request for Project Review ("RPR") with the DHR for the
- 21 Project on March 4, 2015. DHR responded with comments on the RPR and concurred
- with the findings presented in the Phase I-A archeological report on March 19, 2015.
- Those comments included a specific requested consultation on the National Register
- listed Newington Center Historic District.
- 25 From the documentation that included in Appendix 33 of this Application, I know
- that Project representatives met with DHR on April 10, 2015 and discussed in part the
- 27 historic resources review process. DHR indicated that it concurred in the establishment
- of a one mile Area of Potential Effects ("APE") for indirect visual effects. That meeting
- was followed by e-mail exchanges between Laura Games of PSNH and Edna Feighner
- at DHR that addressed the planned SRP application. SRP and DHR again exchanged e-

mails on May 14, 2015 in response to the May 4, 2015 letter from the USACE to DHR
on the permit area for archeological survey.

SRP next communicated with DHR by phone on October 20, 2015. That call dealt mostly with the status of work on cultural resources review, including Phase 1-B archeological survey and the need for a PAF prior to filing the SEC application. The Project's efforts to address concerns regarding the Newington Center Historic District were also discussed.

Two meetings between DHR and SRP were held in January 2016. The first included a brief discussion on the impending SRP application to the SEC on January 12 and the second on January 20 to discuss cultural resource survey work and SEC application requirements. A follow up meeting was held with DHR on February 23, 2016 to discuss the PAF, inventory forms to follow, SEC application requirements and the schedule for NHDHR review. See Appendix 33 for copies of communications with DHR.

Q. Is the Project's potential effect on historical resources also being reviewed under Section 106 of the National Historic Preservation Act?

A. Yes.

Q. Please describe that process.

A. The Section 106 Process requires federal agencies to take into account the effects of their undertakings on historic properties. It is a consultative process that requires a federal agency to identify historic properties potentially affected by the undertaking, assess its effects and seek ways to avoid, minimize or mitigate adverse effects on historic properties. As is typical in the Section 106 process, SRP will be required to provide mitigation for any unavoidable effects. The required mitigation elements will likely be memorialized in an agreement that will continue beyond the SEC timeframe. These mitigation elements will be determined through consultation among USACE, DHR, PSNH and the consulting parties. The Section 106 process is triggered in this case by the application for a Clean Water Act Section 404 permit that has been filed by PSNH with the USACE.

Q. What are the next steps in the Section 106 process?

A. The first step is to complete the identification of historic resources likely			
to be affected by the Project. For this, DHR will review and comment on the PAF, and			
then PSNH will complete individual or district inventory forms. USACE, as the lead			
federal agency, in consultation with DHR and any consulting parties, will apply the			
criteria for determining National Register eligibility of properties within the APE.			
USACE will then determine the potential effects of the Project on these identified			
historic properties, again in consultation with DHR and consulting parties. The final			
step of the Section 106 process is to explore additional alternatives to avoid and			
minimize adverse effects on historic properties and to establish appropriate mitigation			
for adverse effects, also in consultation with DHR and consulting parties.			

Q. Please explain the results of the historical resources assessment.

A. Preservation Company identified a total of 162 historic resources, including both individual resources and groupings of resources, within the APE. Of these, four historic districts and seven individual properties, as well as one former historic district, are either listed on the National Register or already determined eligible for it on an individual basis.

I have concluded that the Project is likely to have an indirect (visual) adverse effect on the following three resources:

- The Project could affect the Newington Center Historic District listed on the National Register in 1987 (district expanded 1991). Here three new taller structures will replace the existing five single wooden poles of the distribution line installed in 1952 in an open field behind the Frink Farm. (As discussed below, an existing distribution line will be relocated to public roadways to allow the new transmission line to be installed on H-frame structures that are shorter than single monopole structures. Undergrounding of the line in this area was also proposed by the Project, but the required land rights could not be obtained.)
- At the Pickering-Rowe House, 50 Old Post Road, Newington, one structure located in the Frink Farm field in the Newington Center Historic District may be a focal point affecting the view from the house.
- At the Pickering Farm on 339 Little Bay Road, Newington, a weathering steel H-frame structure has been moved as close as possible to existing vegetation to

reduce visibility. It will not be substantially visible in the primary view from Little Bay Road, but it will still be seen in some views of the house and barn.

In addition, the Project will have a direct effect on the Cable Terminal House¹ in Durham. It will need to be moved for construction of the submarine cable. PSNH will use best practical measures to move and stabilize the terminal house during the construction of the Project and relocate it on its current site or on a nearby site. Selecting the best practicable measures to minimize impact to the building and determining whether the impact can be minimized sufficiently to avoid an adverse effect will be done in the Section 106 review process.

Q. What steps has SRP taken to avoid and minimize impact?

- A. The Applicant has taken substantial meaningful measures to avoid and minimize potential adverse effects of the Project on historic resources. The design engineers have reviewed and revised the design of the transmission line to avoid adverse effects on historic resources. Key examples are as follows:
- The Applicant has modified the design to place the Project underground in the Main Street area of Durham, reducing visibility of the Project from the 1936 Main Street Bridge/Railroad Overpass, the 1911-12 Library Way Railroad Underpass and the B&M Depot/ UNH Dairy Bar and from historic resources in the UNH area. Further, the Project has contracted to procure additional easements that will lower structure heights to or below tree height and reduce the number of new structures in the B&M Railroad Western Division Historic District in the area of the UNH campus.
- Construction constraints require that the Cable Terminal House in Durham be removed during the Project's construction. Selecting the best practicable measures to minimize impact to the building and determining whether the impact can be minimized sufficiently to avoid an adverse effect will be done in the Section 106 review process.
- The Project has been modified to reduce visibility at the Pickering Farm, 339 Little Bay Road in Newington, by using weathering steel H-frame structures. This design modification reduced visual contrast with the background vegetation, provided

¹ This is part of what is identified in the PAF as the Little Bay Underwater Cable Terminal Houses District, which is recommended to be evaluated for eligibility as a historic district.

15

17

18

19

20

21

22

23

24

28

29

30

31

- longer span widths to reduce the number of visible structures, and placed those structures
- 2 behind or as close as possible to existing vegetation.
- PSNH proposed placing the line underground and removing the
- 4 distribution line on the Frink Farm, a historic property at 272 Nimble Hill Road in the
- 5 Newington Center Historic District. After meeting with Newington Town officials, and
- 6 the landowners on numerous occasions, the necessary rights for undergrounding the line
- 7 could not be obtained. Consequently, an alternative overhead design with H-frame
- 8 structures was designed that allowed for the combination of the longest possible spans,
- 9 fewest number of structures, and shortest possible corresponding structure heights. The
- 10 new design reduces the number of structures in the Frink Farm field from five to three.
- The structures will be placed in wooded areas, an area not under cultivation in the field,
- and where one structure currently exists. The existing distribution line in the right-of-way
- will be removed and replaced by upgraded lines on public roadways.
 - The Project has also been modified to reduce or eliminate visibility in the Newmarket-Bennett Roads Historic District in Durham through the use of reduced
- structure heights, use of weathering steel H-frames, and moving structure locations.

Q. What plans does the Project have to mitigate any potential unavoidable effects of the Project on historic properties?

- A. As is typical in the Section 106 process, SRP will be required to provide mitigation for any unavoidable effects. It is expected that the required mitigation elements will be memorialized in an agreement with the USACE and DHR, an agreement that will continue beyond the SEC timeframe. These mitigation elements will be determined through consultation among USACE, DHR, SRP, and the consulting parties. For this reason, it is premature to identify specific mitigation measures for
- unavoidable potential adverse effects but they likely will take the form of preservation
- and education measures. The efforts to preserve the Cable Switch House in Durham also
- 27 provide substantial mitigation for unavoidable impact during construction.
 - Q. In your opinion will the Project have an unreasonable adverse effect on historic sites? Please explain.
 - A. No. With the assistance of Preservation Company and LandWorks, I reviewed potentially affected historic properties, districts and cultural landscapes by

- conducting site visits and by reviewing viewshed mapping, 3-D modeling tools, and photosimulations. This effort helped me understand the relationship and potential
- general effects of the Project on eligible or potentially eligible historic resources. Based on the
- 4 research and analysis done by the Applicant's consultants and my professional
- 5 experience, coupled with the measures taken by the Applicant to avoid, minimize and
- 6 mitigate, it is my opinion that the Project will not have an unreasonable adverse effect
- 7 on historic resources.

9

10

11

12

13

14

15

16

17

18

19

23

I base this conclusion on the following:

- The Project will be located within an existing electric utility corridor in a largely suburban setting. Also, for much of the length of the Project, there will only be the incremental effect of replacing the existing poles with taller structures to accommodate the Project.
- The Project will be built underground between A Lot on the UNH campus to south of the intersection of Colovos Road and Waterworks Drive, eliminating and reducing visibility concerns in the UNH area and the B&M Western Division Railroad Corridor.
- In the Newmarket-Bennett Roads Historic District in Durham, redesigning structure placement enabled fewer structures spread farther apart so that the visibility of the Project will be minimized in relation to views from historic resources.
- There are no long views of the Project within the APE due to the area's topography, tree cover and density. Views are limited to an area close to the transmission line corridor.
 - There are no National Historic Landmarks located in the APE.
- The indirect visual effects on historic properties will not prevent them
 from being determined eligible for listing on the National Register or, if already listed,
 will not cause them to be removed from the National Register because of a loss of
 integrity.
- While I believe that three properties may be indirectly adversely affected by the Project, the adverse effects to those sites are not substantial. These adverse effects are not of an unusual or disproportionate degree.

2

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

- The Cable Terminal House in Durham is the only resource directly affected by the Project, which will be moved to construct the submarine cable. PSNH will 3 use best practical measures to avoid an adverse effect in relocating and stabilizing the cable house to a location to be determined in the Section 106 review process.
 - PSNH has taken substantial steps to design the Project to avoid and minimize the Project's effect.
 - Also, in consultation with the Town of Newington, the Applicant proposed to place the Project underground in the vicinity of the Newington Center Historic District. Although all the necessary rights for undergrounding the line could not be obtained, PSNH remains willing to consider that alternative. Even if this underground alternative were not possible, the Project will not have an unreasonable adverse effect on historic resources.
 - As a matter of practice, the identification, evaluation and mitigation of historic resources under the federal Section 106 process is an iterative process that will continue beyond the time frames set forth in RSA Chapter 162-H, and any remaining requirements will be memorialized in an agreement between the USACE, DHR, and PSNH and consulting parties. This comprehensive identification and evaluation process provides assurance that any adverse effect on historic sites will be addressed, and that DHR will have a continuing role in the Project until its completion. I expect that USACE in consultation with DHR will determine at the end of the Section 106 process, as I have, that there will be some adverse effects from the Project. The Section 106 process will require that any adverse effects be mitigated.
 - It is my understanding that it is customary in SEC proceedings and may be appropriate here for the SEC to require the applicant (1) to continue to consult with DHR with respect to effects on historical resources, (2) to comply with any agreements and memoranda of understanding with DHR, and (3) to report to the SEC and DHR any new information or evidence about aboveground historical resources in the APE. Based on prior precedent, it is also reasonable to expect that the SEC will delegate to DHR monitoring and compliance authority with respect to historic resources. These expected conditions provide an additional level of assurance that PSNH will fully execute any and

- all requirements imposed on it with respect to the identification, avoidance and
- 2 minimization, and mitigation of impacts on historical resources.
- **Q.** Does this conclude your pre-filed testimony?
- 4 A. Yes.