#### Seacoast Reliability Project

#### Pre-filed Direct Testimony of Helen H. Frink

#### Qualifications and Purpose of Testimony

#### Q. Please state your name and address.

A. My name is Helen Hiller Frink. My address is 24 Clark Road, South Acworth, NH 03607

#### Q. Briefly summarize your relevant background and experience.

**A**. I hold a BA degree from the University of New Hampshire, and a Master's degree, and a Ph. D. magna cum laude from the University of Chicago. In 2009 I retired from Keene State College as Professor Emerita of Modern Languages. I now work pro bono in conservation and historic preservation. I am the author of town histories of Acworth and of Alstead, NH, and a trustee of the New Hampshire State Historical Society.

As an intervenor and consulting party in SEC Docket 2015-04, I represent the Darius Frink Farm at 272 Nimble Hill Road in Newington. I am co-owner with my brother, John Darius Frink, and sister, Sara (Sally) Frink Ryder.

#### Q. What is the purpose of your testimony?

A. First I will address the impact of the proposed Seacoast Reliability Project on two of Newington's historic residential properties. Second, I will address environmental impacts on the agricultural viability of the Darius Frink Farm.

#### Q. Briefly summarize the historic properties of concern.

A. The Darius Frink Farm was placed on the National Register of Historic Properties in 1987, as part of the Newington Center Historic District. In October, 2015 the adjacent Pickering Farm was also found eligible for both the New Hampshire State Register of Historic Places, and the National Register.

#### Q. How will the Seacoast Reliability Project impact these historic properties?

**A**. The Seacoast Reliability Project transmission line will run overhead through the Pickering Farm. According to the "Historic Property/Properties Affected Table Results Of Effect Evaluation": "The proposed project will introduce a visual element that diminishes the setting of the open field that is a character defining feature of the property. The project will be visible from the buildings and land of the Alfred Pickering Farm and from the road in front." Therefore the NH Division of Historical Resources has already identified this as an adverse effect.

No similar evaluation of the transmission line's adverse effect on the Darius Frink Farm has been documented, because the line itself will be buried, as necessitated by the property's National Register status. However, a 75-foot high monopole transition structure will be placed on the Frink Farm where the overhead line through the Pickering property transitions to underground through the Frink property. Appendix 2a of the Amended Application, Map 21 shows the "Historic Sites" demarcation *east* of the transition structure. That is false. The entire Darius Frink Farm, encompassing the location of the transition structure, is included on the National Register.

## Q. Will the Seacoast Reliability Project locate any other visible overhead structures within the Newington Center Historic District?

**A.** No.

#### Q. What will be the visual impact of the transition structure located on the Darius Frink Farm?

**A**. Appendix 32A(a) Exhibit 20A sheet 3 gives a visual simulation from Nimble Hill Road illustrating the transition structure, whose height will reach 75 feet. The monopole itself is pictured below. It will stand as an incompatible visual element diminishing the setting of the open field that is a character defining feature of this historic property.



The structure will be visible from Nimble Hill Road, a town-designated scenic road, where passersby have, until now, enjoyed the unobstructed view across the Frink Farm's cleared hayfields. Eversource did not provide a visual simulation from Little Bay Road, which is also a designated scenic road. The

transition structure could also be seen from the interior of the 1840 brick farmhouse. Eversource's own assessment of the value of the view to the Newington Center Historic District states: "Scenic views are a component of the district, including views along Nimble Hill Road and across the Frink field." In the language of Section 106 of the National Historic Preservation Act, the transition structure will "diminish the integrity" of the Frink Farm by the "introduction of [an] "incompatible visual . . . element."

#### Q. Will the transition structure be visually absorbed into surrounding woods?

**A.** No. The Landworks Visual Assessment in Eversource's amendment, Appendix 32a page 3 asserts that the transition structure "would not be overly obtrusive because it would be "accommodated by existing woodlands." This assertion is false because the overhead transmission line on the Pickering property will eliminate the existing woodlands along the right of way. Further east, toward Nimble Hill Road, an area will be kept clear of vegetation within a radius of 100 feet extending beyond the base of the transition structure and shroud, the polygonal encasement that travels up the side of the pole to protect the wires as they run from underground on the Frink Farm, up the pole, to the overhead line on the Pickering farm.

#### Q. Why is the transition structure necessary at this location?

**A.** If the line were underground through the designated historic Alfred Pickering farm, the monopole would not be necessary. Eversource asserts that it must be located on the Frink Farm because it needs to be placed where the utility has acquired underground rights.

In his pre-filed testimony on behalf of the Town of Newington, Denis Hebert recommends that the transmission line be buried along its entire route through Newington's residential and historic districts to conform to the Town's zoning regulations. If the line were buried, the transmission structure would not be needed.

#### Q. Will the transition structure impair the conservation values of the Frink property?

**A**. Yes. The 75 foot monopole's foundation will protrude one and one-half feet above the surface of the ground and will extend 12 feet below the surface. The monopole will be approximately 8 feet in diameter, not including the shroud. The structure and its foundation will create an impervious surface, diminishing the existing shrub-scrub wildlife habitat that also contributes to the conservation values of the property.

### Q. How will burial of the transmission line impact the agricultural value of the Darius Frink Farm and its protection under the conservation easement?

**A**. In 2005 the Frink family placed a conservation easement on the Farm, funded by the federal Farm and Ranchland Protection Program (now Agricultural Land Easement), and the Town of Newington. The conservation easement is held by the Rockingham County Conservation District (RCCD). Section L of the conservation deed reads:

The Grantor shall honor the Right-of-Way of the utility easement owned, operated, and maintained by Public Service Company of New Hampshire, as described in the title insurance policy, for the purposes of quality review checks and maintenance operations. *Any granting of further use restrictions that might diminish or impair the agricultural viability or productivity of the property, or otherwise diminish or impair the conservation values of the property are prohibited.* Any such activity proposed by the utility company requires prior notification to the Grantee and the United States Department of Agriculture, Natural Resources Conservation Service. (Rockingham County Registry of Deeds Bk. 4517, pg. 2436.)

This provision of the conservation deed forced Eversource to obtain approval for construction from RCCD and the Natural Resources Conservation Service. Therefore, east of the transition structure, the

transmission line will be buried in an 8 foot deep farmland trench, of which the top 4 feet will be "native backfill."

## Q. How might underground construction of the Seacoast Reliability Project in the proposed farmland trench "diminish or impair the agricultural viability or productivity of the property, or otherwise diminish or impair the conservation values of the property?"

**A**. The encasement of the transmission cables and the thermal backfill covering them may create a dam impeding the flow of the existing tributary of Knight's Brook flowing through the wetlands. The solid structure could act as a dam below the surface as well, causing backup flooding into the farm fields.

A more serious concern is that the Seacoast Reliability Project underground line will intersect wetlands and a brook contaminated with dangerously high levels of PFOA and PFOS moving down plume from the former Pease Air Force base. Eversource's GEI consultants produced a report of soil & groundwater tests on the Frink Farm conducted on September 1, 2016. Page 4 of that report states:

# PFOA and PFOS were detected in sample SW1 [surface water] from Knight's Brook at 0.842 $\mu$ g/L and 2.91 $\mu$ g/L, (micrograms per liter) respectively. The total PFOA/PFOS concentration was 3.752 $\mu$ g/L. *Both the individual and total concentrations exceed the NH AGQS [Ambient Groundwater Quality Standards] of 0.07* $\mu$ g/L.

The EPA Provisional Health Advisory Standards are more stringent than those for ambient groundwater quality: 0.2 micrograms/liter of PFOS; and 0.4 micrograms/liter for PFOA. According to Eversource GEI consultants, the concentration of PFOA in the surface water of Knight's brook is *twice* the Health Advisory Standard; for PFOS, the concentration is *14.5 times* the Health Advisory Standard.

It is important to note that Eversource has tested only the surface water in the brook and at the 3 locations where poles for the overhead transmission line were originally planned, not at the location of the transition structure, nor through the wetlands surrounding the brook.

The Frink family is concerned that trench construction and dewatering will spread PFOA and PFOS into soil, cattle pasture, and hayfields not presently contaminated with these toxins. On June 30, 2017 Eversource submitted a Soil and Groundwater Management Plan whose Appendix A summarizes procedures for constructing the farmland trench. Our Option Agreement with Eversource specifies that RCCD must be involved in approval and execution of soil management plans. Yet Eversource's response to Frink data requests describes a series of meetings with NHDES, Eversource staff, and Pease, bypassing any contact with or involvement of farm operator John Frink or RCCD's Executive Director, Dr. Leonard Lord.

#### Q. Did Dr. Lord review the Soil and Groundwater Management Plan?

**A.** Yes. The Frink family requested that he review the Plan to determine whether it complies with the terms of our conservation easement. Leonard Lord is a certified soil scientist and a certified soil scientist.

#### Q. What were Dr. Lord's concerns regarding soil contamination?

**A.** With respect to the GEI consultants' finding that "Perfluorinated compounds (PFCs) were not present in the soil tested," Mr. Lord's concern is that:

Soils for testing were only taken from the three borings (B101-103) at approximately Stations 500+30, 504+25, and 510+90. Apparently no soils were tested for PFCs along Knights Brook (Stations 498+00 to 500+00), the area that appears most likely to be contaminated based on testing of the surface water.

He observes that hand auger borings were done in April, 2017 along Knights Brook, "but it does not appear that soil samples were collected and tested for PFCs. Why not?"

**Q.** The Soil and Groundwater Management Plan's section 4, Soil Pre-Characterization and Classification states: "Based on the results of GEI's soil pre-characterization, soil in the Project Area is suitable for onsite reuse within the Property boundary . . . . Approximately 690 cubic yards of excess soil will be available for onsite reuse in other areas of the Property." Does Dr. Lord concur with the reuse of this soil on the Frink property?

A. He does not. He states:

Stockpiling of excess soil from the project on the property seems to be encouraged, though is nowhere mandated. *First, placement of the excess soil is unlikely to be allowed within the conservation easement under Section 2.G.* Second, I would be very concerned about stockpiling excess fill somewhere outside of the conservation easement unless you all have an clear need for it. The excess fill will presumably be almost all from the substratum (i.e., from the bottom of the trench) since the topsoil and subsoil will be segregated and reused because it is valuable for farming as well as restoration of wetland. The substratum is typically clayey so is unlikely to have much use. *I am also concerned that this soil may be contaminated, particularly the soil collected between Stations 498+00 and 500+00 along Knights Brook.* 

Q. Did Dr. Lord comment further on the disposal of excavated soil?

A. Yes. He states:

Note the requirements for transporting the excess soil offsite include proper licensing, proper cover while transporting, material tracking and disposal documentation, and possible additional environmental testing. These costs would be avoided by on-site stockpiling, which is probably why it seems to be encouraged by the consultant.

Any excess soil should be the responsibility of Eversource to dispose of properly off-site. The Soil & Groundwater Management Plan outlines the steps they should take, including requirements for trucking, documentation, and possible additional testing if (likely) required by the receiving entity.

Q. Does this conclude the testimony provided by Mr. Lord?

A. Yes, it does.

**Q.** Do the property owners have further concerns not addressed in the Soil & Groundwater Management Plan?

**A.** Yes. Trucking contaminated soil and dewatering effluent off-site will compact the soil along the trucking route, presumably with the utility right of way. To preserve the agricultural viability of the soil as mandated in the 2005 conservation easement, Eversource will need to remediate compacted conditions.

Q. What further concerns remain relative to the PFOA and PFOS contaminants in soil and groundwater?

**A.** Eversource did not provide data for PFOA and PFOS toxins on the Pickering Farm, where locating pole #F107-108 for the overhead line will also necessitate excavating in likely contaminated soils and wetlands. Concentrations of PFOA and PFOS on the Pickering property are available from the US Air Force engineering studies done for the Pease superfund site.

Eversource's Soil and Groundwater Management Plan and the additional measures detailed by Dr. Leonard Lord are evidence that construction of the underground line through the Frink Farm is neither safe, nor simple, nor cost effective.

Moreover, construction of the Seacoast Reliability Project may endanger the health and safety of construction workers, and pollute the newly conserved acreage in Newington that Eversource is proud of helping to protect.

#### Q. Does this conclude your pre-filed testimony?

A. Yes, it does.