THE STATE OF NEW HAMPSHIRE BEFORE THE DEPARTMENT OF ENERGY

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE d/b/a EVERSOURCE ENERGY

DOCKET No. CR 2022-

PETITION OF PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY FOR A LICENSE TO CONSTRUCT AND MAINTAIN ELECTRIC LINES OVER AND ACROSS PUBLIC WATER IN GOFFSTOWN, NEW HAMPSHIRE

Pursuant to RSA 371:17, Public Service Company of New Hampshire d/b/a Eversource Energy ("Eversource"), a public utility engaged in the transmission, distribution and sale of electricity in the State of New Hampshire, hereby petitions the Department of Energy ("Department"), for a license to construct and maintain electric lines over and across public water in Goffstown, New Hampshire. In support of this petition Eversource states as follows:

- 1. In order to meet the requirements for reasonable service to the public, Eversource has previously constructed and currently operates and maintains an overhead 115 kV electrical transmission line, designated as the Eversource Q171 Line, originally constructed in 1966, over and across public waters in Goffstown, New Hampshire. The public water crossing that is included in this petition was previously licensed in 1975 under DE 75-106 (Order No. 11,856 copy of petition and Order included with this petition) for the relocation of the line across public waters.
- 2. As part of its ongoing asset condition inspection program, Eversource determined that the existing wood Structures 139 and 140 at the public water crossing need to be replaced to continue to function safely and reliably. Structure 139 will be replaced with weathering steel equivalent that will be located within 10' of the original structure location. Shortly after the Structure 139 replacement is completed and in conjunction with a maintenance project planned for the Greggs substation located near Str. 140, which is anticipated to commence in 2023, the existing wood three pole Structure 140 will be replaced with a single pole engineered weathered steel structure

whose design is depicted on the Exhibit 2 Structure Detail, which will be located within 10' of the original structure location. Also, as part of the Greggs substation improvements the Q171's existing three 795 ACSR 36/1 conductors will be replaced with 1272 ACSS 54/19 conductor, and the existing two pole top shield wires will be replaced with two pole top OPGW's. The proposed wire specifications are identified on the Exhibit 3 Cable Schedule.

3. The location of the public water crossing which is the subject of this petition, is depicted on the Overview Map attached hereto as Exhibit 1 and a more detailed location description is as follows:

Exhibit 2 – The Q171 Line crosses Glen Lake commencing at Structure 139 immediately south from where the Q171 Line crosses Elm Street in Goffstown, which is approximately 400 feet east from the entrance to the Glen Lake School and approximately 325 feet west from the Glen Lake Public Boat Ramp on Elm Street. The waterbody crossing extends south approximately 1,187 feet to Structure 140, where the line turns 90 degree east into the Greggs Substation, which is located off Mast Road in Goffstown between the Goffstown Rail Trail Parking Lot and the Greggs Falls Dam/Hydroelectric station.

- 4. Wire specifications and loading condition to establish maximum sag for the crossing span that is the subject of this petition are as indicated on Profile View and Cable Schedule of Exhibit 2 and 3. The 100 year flood elevation for Glen Lake was derived from FEMA's National Flood Hazard Layer Firmette, accessed on May 17, 2022.
- 5. The location of structures and max sag conditions creates the following crossing span:

(a) Public water Crossing: Goffstown - Glen Lake (Exhibit 2 and 3)

i.Structures: 139 to 140

ii.Structure Span (ft): 1,187.4

iii.Public water Span (ft): 964.2

- 6. All conductors and wires have been drawn on Exhibit 2 to show the minimum clearance at maximum sag conditions in reference to the public water crossing.
- 7. Eversource will maintain and operate the clearances of the crossings at a height no less than what is required by the 2012 National Electrical Safety Code (NESC, Table 232-1) which is 30.1' for 115 kV conductor over water areas suitable for sail boating including lakes, ponds,

reservoirs, tidal waters, rivers, streams, and canals with an unobstructed surface area of over 20 to

200 acres. The actual minimum height over the public water is depicted on the attached Exhibit 2

and exceeds the respective minimum requirements.

8. A New Hampshire Department of Environmental Services (NHDES) wetland statutory

permit by notification (SPN) and shoreland permit by notification (PBN) will be required to

account for temporary wetland and shoreland buffer impacts associated with the replacement of

Structures 139 and 140. The SPN and PBN will be obtained prior to commencement of

construction.

9. The structure replacement work will be accomplished within existing Eversource

easements thereby mitigating impacts and concerns of property owners affected by the project

scope. When wires are being transferred, Eversource will ensure the public water is clear of any

persons before work commences. Additionally, a guard structure will be utilized when wires are

being transferred from the old structure to the new to further protect the general public.

10. Eversource submits that the license petitioned for herein may be exercised without

substantially affecting the use and enjoyment of the public water because safe clearances will be

maintained at all times and appropriate precautions to ensure the safety of recreational users will

be undertaken while the maintenance work is performed.

WHEREFORE, Eversource respectfully requests that the Department:

1. Find that the license petitioned for herein may be exercised without substantially affecting

the public rights in the public water crossing which is the subject of this petition;

2. Grant Eversource a license to construct and maintain electric lines over and across public

water described in this petition;

Dated at Manchester, New Hampshire this 28th day of July, 2022.

Respectfully submitted,

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

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D/B/A EVERSOURCE ENERGY By Its Attorney

Erik R. Newman, Senior Counsel, Legal

780 North Commercial Street

Manchester, NH 03101

(603) 634-2459