STATE OF NEW HAMPSHIRE BEFORE THE PUBLIC UTILITIES COMMISSION

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New England Power Company d/b/a National Grid

Verified Petition for License to Cross the Connecticut River

New England Power Company d/b/a National Grid ("NEP") hereby petitions the Public Utilities Commission pursuant to RSA 371:17 for a license to construct and maintain a 34.5 kV electric transmission line and associated facilities above and across the Connecticut River in Monroe, New Hampshire. In support of its petition, NEP states as follows:

- 1. As part of its transmission system in Northern New Hampshire and Vermont, NEP owns and operates a 34.5 kV electric transmission line that runs approximately 8.3 miles along the northeastern edge of Vermont and northwestern New Hampshire, beginning at the Moore Hydroelectric Station in Littleton, New Hampshire and terminating at the 34.5 kV substation at the Comerford Hydroelectric Station in Monroe, New Hampshire. (This 8.3 mile segment of NEP's transmission system is part of what is referred to as the "3315 circuit," the majority of which is located on the Vermont side of the Connecticut River.) The 3315 circuit has taps to Green Mountain Power Corporation's Waterford, Vermont substation and Littleton Light & Power Company's substation in Littleton, New Hampshire. Attachment 1 to this Petition shows the general route of the 3315 circuit superimposed over a map of the relevant area.
- 2. As currently constructed, the 3315 circuit crosses the width of the Connecticut River at two locations: (1) between Barnet, Vermont and Monroe, New Hampshire, approximately 3,000 feet northwest of the existing Comerford Substation/HVDC yard in Monroe

and (2) between Waterford, Vermont and Littleton, New Hampshire, approximately 7,500 feet west of Interstate 93. The 3315 circuit also crosses over a short section of an inlet (known as Bill Little Brook) on the New Hampshire side of the river, approximately 1,200 feet east of the New Hampshire side of the existing Waterford/Littleton crossing.

- 3. The 3315 circuit needs to be refurbished in order to extend the life of the circuit and remedy the effects of normal deterioration that has occurred during the approximately 90 years since the line was first put in service. There are also substantial benefits to relocating significant portions of the circuit as part of that process, the most significant of which are that the proposed relocation will be in less remote areas, making the line easier to access for routine maintenance and in the event of an emergency, and the proposed relocation will reduce operation and maintenance expense and reduce vegetation management issues associated with the circuit.
- 4. The proposed route for the relocated circuit includes an approximately 910 foot crossing of the Connecticut River (including the distance over the river banks to the structure on each side) from a location approximately 2,500 feet south of the Waterford, Vermont substation to a point on the New Hampshire side of the river approximately 15,500 feet east of the Comerford substation in Monroe, New Hampshire and 15,250 feet west of the Moore Dam substation in Littleton. This portion of the 3315 circuit is shown in green on Attachment 1.
- 5. This proposed river crossing will be entirely aerial in nature and will consist of three conductor cables that will have a minimum clearance of 35 feet above the high water level of the river, a fiber optic cable below the conductors that will have a minimum clearance of 31 feet 6 inches above the high water level, and two shield wires above the conductors that will have a minimum clearance of 37 feet above the high water level. The structures holding these lines will be a 70 foot weathered steel H-frame dead-end structure located on land on the

Vermont (north) side of the river 148 feet from the river bank and a 50 foot weathered steel H-frame dead-end structure located on land on the New Hampshire (south) side of the river approximately 50 feet from the river bank. A cross section depicting this crossing is included as Attachment 2 to this Petition.

- 6. Installation of the cables across the river will require no dredging or use of heavy equipment in the river, and at no time will the flow of the river be diverted or altered for the project. The actual installation of the cables across the river is anticipated to require 4 to 6 hours, during which time use of the river in the immediate area of the project will need to be restricted.
- 7. In addition to the crossing described above, the project will also involve the installation of cables over a short section of Bill Little Brook, the inlet described above, for a distance of approximately 666 feet (including the distance over land to the structure on each side of the inlet). In this section of the 3315 circuit, the cables will be installed along the same route and adjacent to existing transmission lines owned variously by NEP and other parties, and will be attached to the transmission structures already in place for existing purposes. This section of the project is shown as part of the yellow line on Attachment 1, just to the east of the crossing from the Waterford substation shown in green.
- 8. The proposed crossing of the inlet will be entirely aerial in nature and will consist of three conductor cables with a minimum clearance of 35 feet above the high water level of the river and a fiber optic cable below the conductors that will have a minimum clearance of 31 feet 6 inches above the high water level. The structures holding these lines will be 65 and 75 foot wood head-end structures. One will be located approximately 40 feet from the nearest Connecticut River bank, and the other will be located approximately 25 feet from the nearest Connecticut River bank. The crossing will not require removal of any of existing lines over the

inlet or the addition of any new supporting structures. A cross section depicting the crossing is included as Attachment 3 to this Petition.

- 9. The 3315 circuit refurbishment project has been designed in accordance with the 2012 National Electrical Safety Code C2-202 to ensure sufficient structure strength and the required minimum clearances above the Connecticut River. The project was designed assuming the most sag that could occur over the river.
- 10. Once the refurbished 3315 circuit is in service, any portions of the existing circuit that are no longer needed will be removed, including the facilities related to the existing crossing of the Connecticut River. During the time when the existing lines are being removed, which is anticipated to last approximately four hours, use of the river in the immediate area of the existing crossing will need to be restricted while the existing cables are lowered and reeled in to shore.
- 11. Except for the very short period during which the cables described above will be installed or removed, the rights granted by the license sought in this petition can be exercised by NEP without affecting the rights of the public to use the waters of the Connecticut River or the property of the State, and the use and enjoyment by the public of the river and the property of the State will not be diminished. All of the property rights necessary to construct and maintain the transmission line above the Connecticut River and the State's property have been obtained, and therefore no taking of private property or other acquisition of property rights is required for this purpose.
- 12. The transmission line proposed to be constructed by NEP will cross various other intermittent or smaller streams, but a license is not being sought for such crossings because the streams are not navigable. Cf. Public Utilities and Others, 35 NHPUC 94 (1953).

13. Representatives of NEP have appeared before the selectboards of the Towns of Littleton (on December 8, 2014) and Monroe (on December 16, 2014) to provide an overview of this proposed project and to respond to any questions. In addition, a copy of this Petition is being served on representatives of the towns and the abutters of the proposed crossings.

WHEREFORE, NEP respectfully requests that the Commission:

A. Grant NEP a license to cross the Connecticut River in the locations and for the purposes described above; and

B. Grant such other and further relief as the Commission may determine to be just and reasonable and consistent with the public interest.

Respectfully submitted,

NEW ENGLAND POWER COMPANY d/b/a NATIONAL GRID

By its Attorneys,

McLANE, GRAF, RAULERSON & MIDDLETON, PROFESSIONAL ASSOCIATION

February 11, 2015

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I, David Arthur, Lead Project Manager, for New England Power Company d/b/a National Grid, being first duly sworn, hereby depose and say that I have read the foregoing Verified Petition and all related exhibits, and the facts alleged therein are true to the best of my knowledge and belief.

Dated: February 10, 2015

COMMONWEALTH OF MASSACHUSETTS COUNTY OF Middles &

Sworn to and subscribed before me this day of February, 2015.

Dated: February 10, 2015

Justice of Person My My commissions

David Arthur

Certificate of Service

I, Steven V. Camerino, hereby certify that a copy of the foregoing Verified Petition and all related exhibits have been forwarded this day of February, 2015 to Joseph A. Foster, Esq., Attorney General, Susan Chamberlain, Esq., Consumer Advocate, Frederick Moody, Littleton Town Manager, Marilyn Bedell, Monroe Town Clerk, and the New Hampshire property owners of the parcels abutting the crossings described above, Carl G. Hilgenberg, Bruce and David Dovholuk, John H. and Martha Meyer, and Carl E. and Elaine R. Neveu.

Steven V Camerino