

STATE OF NEW HAMPSHIRE**Inter-Department Communication****DATE:** October 8, 2019**AT (OFFICE):** NHPUC**FROM:**Randy Knepper
Director, Safety Division**SUBJECT:**Docket No. DE 16-441 Public Service Company of New Hampshire
d/b/a Eversource Energy, Second Revision for Alteration to Granted
License for Public Waters Crossings of Little Bay between the Towns
of Durham and Newington**Second Revised Staff Recommendation to Original
Recommendation filed on February 1, 2017 and First Revised
Recommendation filed on January 29, 2018****TO:**Debra A. Howland, Executive Director
Thomas C. Frantz, Director, Electric Division
Richard Chagnon, Assistant Director, Electric Division
David K. Wiesner, Director of Legal Division**cc:**

Paul Kasper, Assistant Director, Safety Division

On September 30, 2019, Public Service Company of New Hampshire, d/b/a Eversource Energy (Eversource) notified the Commission of a planned second alteration to its proposed construction of the Little Bay public water crossing previously approved by the Commission in this docket in Order *Nisi* Granting License (Order No. 25,998 dated March 10, 2017) (the Order). By Secretarial Letter dated February 7, 2018, the Commission approved the first alteration regarding depths of the submarine cable installation for a portion of the proposed crossing, without requiring an amendment of the licensing order.

The second alteration proposed by Eversource consists of a route alignment characterized by Eversource as "slight," involving a change of approximately 100 feet in a southerly direction for a segment of the crossing representing approximately one-third of the 4,622 foot length of the submarine cable crossing. In addition, the overall crossing length will increase by approximately 20 feet, because there will be a minor change in direction from an originally proposed straight alignment within the bay. The crossing continues to be made up of three 115 kV submarine electric transmission cables (one per phase) and two fiber optic cables used for communications for control of the circuit. The modified cable route will remain within the underwater cable corridor charted by the National Oceanic and Atmospheric Administration. The circuit is the proposed F107 extension, which forms a part of the Seacoast Reliability Project that is integral to the New England regional electric transmission system.

According to Eversource, as a result of certain permit and other work restrictions applicable to project construction, construction of the Little Bay cable crossing must be completed before winter, and any significant delay in the construction schedule could result in deferral of the reliability upgrade project until Fall 2020. Eversource currently plans to begin construction on October 10, 2019.

Staff has reviewed Attachment A to Eversource's notification filing (Drawing No. 10740905 Rev. No. 11 dated 9/19 entitled "F107 Line Crossing Little Bay"). That drawing depicts the three submarine cables in their new locations as well as their original proposed locations. Each cable is approximately 30 feet offset from each phase and will be buried between 42 inches deep and 60 inches deep depending on the distance from the two shorelines. The portion that will be hand-buried by divers remains as approximately 300 feet east of the Durham shoreline and approximately 600 feet west of the Newington shoreline. Staff estimates that approximately 1,050 feet of submarine cable will vary between 0 feet to a maximum of 96 feet from the original projected route. This applies to all three phases. The second proposed alteration is necessary as a result of "sand waves" with heights that vary between 8 to 10 feet recorded in Little Bay in the original proposed cable route. Alteration of the route will allow for a less disruptive cable installation process and ultimately less overburden on the cables.

The scope of the Safety Division review was limited to analysis of the functional use and safety of the proposed crossings. The scope of the review excluded environmental and aesthetic impacts, as those subject areas are reviewed by New Hampshire Department of Environmental Services (DES) and the New Hampshire Site Evaluation Committee (SEC).

There has been significant public interest and supplementary information that has been published since the Safety Division's original recommendation was written in 2017 regarding the Little Bay cable crossing for the Seacoast Reliability Project. This includes an order issued with a certificate for site and facility to construct with conditions imposed by the SEC on January 28, 2019. In SEC Docket No. 2015-04, an extensive record was accumulated, deliberated, and ultimately resulted in a certificate granted for the overall Seacoast Reliability Project. That evidentiary record included the Little Bay submarine cable crossing and continues as of this writing with submittals regarding post-certificate conditions and further required filings.

In addition to the September 30, 2019 proposed alteration submitted to the Commission, Safety Division Staff reviewed the following reports:

- *Horizontal Directional Drilling and Jet Plow: A Comparison of Cable Burial Installation Options for a 115-kV Electric Transmission Line in Little Bay.*
The report was prepared by EverSource on July 1, 2018 and submitted to the SEC on July 2, 2018. The report discusses and describes the jet plow construction technique for the cable installation in Little Bay.
- *Eversource Energy Seacoast Reliability Project Jet Plow Trial Summary Report.*

The report was prepared by Normandeau Associates, Inc. for EverSource on September 18, 2019. The report discusses the results of the jet plow trial that was required by the DES and the SEC for the cable installation in Little Bay.

- *Eversource Energy Wetlands Permit Amendment Request Minor Construction- Related Change Submarine Cable Realignment.*

The report was prepared by EverSource on October 2, 2019 and submitted to the DES. The report describes the submarine cable realignment and technical justification for the change and contains more detailed drawings of the cable realignment.

- *Testimony of Whitney during SEC Docket No. 2015-04.*
The testimony was prepared by Mr. Whitney on behalf of the Counsel for the Public (Attorney General's Office) in the SEC docket on July 2, 2018. The report discusses the importance of jet plow trials and timing of such trials prior to cable installation.
- *Testimony of Bowes, Plante, Stater, and Dodeman during SEC Docket No. 2015-04.*
The testimony was prepared by those listed on behalf of Eversource on July 2, 2018. The testimony discusses the impacts of horizontal drilling alternatives for the Little Bay submarine cable installation.
- *Testimony of Allen and Nelson during SEC Docket No. 2015-04.*
The testimony was prepared by Normandeau Associates, Inc. by those listed on behalf of Eversource on July 2, 2018. The testimony discusses the negative impacts of horizontal drilling alternatives for the Little Bay submarine cable installation.

The Order granting the crossing licenses requires that "Eversource shall submit to the Commission any future proposed alteration(s) to the crossing licenses granted herein at least 60 days prior to undertaking any such alteration(s)."

The Safety Division notes that Eversource did not file notification of the proposed cable realignment change within 60 days as specified in the Order. Staff further notes, however, that the Order involved five crossings for the Seacoast Reliability Project and that the general ordering clause was not specific to the Little Bay crossing itself. The Safety Division when writing its original recommendation which was the basis for similar language used within the Order did not contemplate the numerous scheduling, timing, and other conditions imposed by an SEC order that had not been issued at the time, nor the numerous DES conditions imposed as part of the environmental permit that had not been issued at the time. Those conditions required trial jet plow runs, notifications, surveys, reports, and completion times for the Little Bay submarine cable crossing.

Staff believes the public interest is best served by approving the proposed cable route realignment upon less than 60 days' prior notice, in view of the permit and work conditions cited by Eversource, which involve potentially conflicting conditions imposed by multiple state and federal agencies adopted in a disparate manner. That earlier approval is warranted under the specific circumstances of this case and for the Little Bay crossing only.

Accordingly, Staff has determined that the proposed cable route realignment would have only a minor impact on its prior conclusions with respect to the Little Bay crossing, and Staff therefore confirms that its recommendation for approval of that crossing, as stated in its original recommendation filed on February 1, 2017 and its addendum filed on January 29, 2018, remains fully effective. In addition, Staff has reviewed the Order and

has concluded that it does not need to be amended to specifically address the proposed minor cable route realignment.

The Safety Division recommends that any final as-built records of the completed cable installation be geocoded, and a copy of the completed installation record be provided to the Commission. That requirement is a condition of the SEC order and certificate and the Safety Division believes the Commission should be furnished a copy for its files as well.

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