

STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE: July 29, 2020

AT (OFFICE): NHPUC

FROM: Randy Knepper *RSK*
Director – Safety Division

SUBJECT: Docket No. DE 19-178 Vermont Transco LLC
Petition for a License to Operate and Maintain Electric Lines across the
Sugar River in the City of Claremont, New Hampshire
Staff Recommendation

TO: Debra Howland, Executive Director
Thomas Frantz, Director, Electric Division
Rich Chagnon, Assistant Director, Electric Division
Mary Schwarzer, Staff Attorney, Legal Division

The Safety Division's review of the above petition consisted of the following elements:

- Petition contents and history;
- Applicable State Statute;
- Review of the existing crossing(s) already licensed by the PUC;
- Review of land ownership of existing pole structures;
- Review of NESC code requirements as described in Puc 300;
- Review of public need and public impact, including applicability of other State regulations; and
- Conclusions and Recommendations.

1. Petition contents and history

Commission Order 26,293 required VT Transco file a petition for license to operate and maintain the K149 Transmission Line over and across the public waters of the Sugar River in Claremont, New Hampshire. On October 21, 2019, Vermont Transco LLC, (VT Transco), filed a petition pursuant to RSA 371:17 for a license to operate and maintain a an existing 115 kV, three phase electric transmission line identified as K149. The crossing is an existing crossing that has been in operation since 1958. The existing set of structures support the existing electric overhead transmission line designated as K149 circuit and also serve as an attachment point for the fiber optic cable licensed in Order 26, 293 over and across the public waters of the Sugar River.

Sugar River Crossing (Claremont)

The existing crossing is located east of Jarvis Hill Road and west of Main Street (NH Route 12 and NH Route 103) and spans approximately 733 feet between two existing structures. The structure on the western side of the river, #19, is constructed with a single crossed braced, 70 foot tall CCA pole. The structure on the eastern side of the river, number #120, is constructed with a double cross braced 80 foot tall CCA pole. VT Transco provided a location map, a project plan schematic, construction details of the structures, and River Crossing table as Exhibits 1 through 5 in its attachment to the petition¹.

VT Transco used Ordinary High Water Marks elevation of 305.5 feet for the Sugar River and calculated clearances of 42.2 feet. VT Transco also states the water clearance of 27.8 feet are taken from the projected 100 year flood levels of elevation 319.9 feet. This is more conservative than the 10 year flood levels allowed by the NESC (note 18 to Table 232-1). VT Transco uses flood water elevations for the Sugar River in Sullivan County. Staff confirmed those values with those that are identified on FEMA flood map #50027C0644E. The 100-year flood elevation for the river in this location is approximately 319.9 feet, and is based on the North American Vertical Datum of 1929 (NAVD29). The Safety Division verified the 319.9 foot flood level from the FEMA flood map.

The NESC clearance requirements are 14 feet for non-sailboating areas and 17 feet for sail boating so the vertical clearances far exceed the NESC requirements.

2. New Hampshire statute referenced in petition

371:17 Licenses for New Poles. – Whenever it is necessary, in order to meet the reasonable requirements of service to the public, that any public utility should construct a pipeline, cable, or conduit, or a line of poles or towers and wires and fixtures thereon, over, under or across any of the public waters of this state, or over, under or across any of the land owned by this state, it shall petition the commission for a license to construct and maintain the same. For the purposes of this section, "public waters" are defined to be all ponds of more than 10 acres, tidewater bodies, and such streams or portions thereof as the commission may prescribe. Every corporation and individual desiring to cross any public water or land for any purpose herein defined shall petition the commission for a license in the same manner prescribed for a public utility.

Source. 1921, 82:1. PL 244:8. RL 294:16. 1951, 203:48 par. 17. 1953, 52:1, eff. March 30, 1953. 2013, 82:1, eff. June 19, 2013.

¹ See footnote 1, above.

3. Review of existing license(s) and permissions previously granted by the PUC for this location of the Connecticut River and Sugar River

This public water crossing license application is part of the existing K149 circuit for VT Transco. The electric crossing is considered an integral part of the bulk electric system and was inadvertently never previously licensed

The Sugar River is listed in the *Official List of Public Waters (OLPW) under Part 2 List of Freshwater Public Rivers and Streams*". The entire list of public waters can be accessed through the following web link:

<http://des.nh.gov/organization/commissioner/pip/publications/wd/documents/olpw.pdf>

VT Transco asserts in the petition that the crossing is exercised without substantially affecting the rights of the public in the public waters of the Sugar River. Minimum safe line clearances above the river surface and affected shorelines has been maintained at all times. The use and enjoyment of the river by the public is not diminished in any material respect as a result of the overhead line crossing.

4. Review of land ownership of existing pole structures

In its petition, VT Transco specifies the existing structures of the nearby crossing span the Sugar River. Existing poles #19 and #20 are already located on each side of the river within VT Transco attained easements. Easement documentation was provided in Exhibit 2 that was reviewed by the Safety Division and found to confirm VT Transco's assertions

5. Review of NESC code requirements as described in Puc 300

N.H. Code of Administrative Rules Puc 306 requires:

- (a) each utility shall construct, install, operate and maintain its plant, structures and equipment and lines, as follows:
 - (1) In accordance with good utility practice;
 - (2) After weighing all factors, including potential delay, cost and safety issues, in such a manner to best accommodate the public; and
 - (3) To prevent interference with other underground and above ground facilities, including facilities furnishing communications, gas, water, sewer or steam service.
- (b) For purposes of this section, "good utility practice" means in accordance with the standards established by:

(1) The National Electrical Safety Code C2-2012....

VT Transco states that the existing crossing has been designed and has been and will be maintained and operated in accordance with 2017 National Electrical Safety Code C2-2017.

Safety Division Staff reviewed the specifications related to the existing design and construction of this crossing project as provided in the petition, the attachments, and all supplemental support documents, and found them to be in conformance with the applicable sections of NESC code C2-2012 and Puc 300.

6. Review of public need and public impact

In order to meet the reasonable requirements of electric service to the public, the K149 circuit is an integral part of VT Transco's electric transmission system in the area and for managing energy resources. VT Transco's existing support structures are concurrently being replaced as a result of normal maintenance of aging infrastructure.

VT Transco asserts in the petition that the proposed license for this crossing may be exercised without substantially affecting the rights of the public in the public waters of the Sugar River. Minimum safe line clearances above the river surface and affected shorelines will be maintained at all times. The use and enjoyment of the river by the public will not be diminished in any material respect as a result of the overhead line crossing.

Safety Division Staff concludes the impact to the public will be *de minimis* and not measurable. The existing crossing has been operating for over 60 years without problems and has not to date affected the rights of the public in the public waters of the Sugar River because minimum safe line clearances above the water surface has been and will be maintained at all times. Future public use and rights of the river do not appear to have any additional safety considerations associated with the electric crossing. Shorelines are not affected by this crossing.

Staff Recommendation:

Based on the results of its review of the petition, its attachments, and all other supporting documents filed to this docket, the Safety Division Staff recommends that the Commission:

- 1) Find that the license VT Transco requests in this docket may be exercised without substantially affecting the public rights in the public waters which are the subject of the petition;
- 2) Grant VT Transco a license to operate and maintain an electric transmission line, across the public waters of the Sugar River in Claremont, New Hampshire, as specified in the petition; and
- 3) Issue an Order Nisi and orders for its publication.

Reference Attachment on following page

Attachment A1

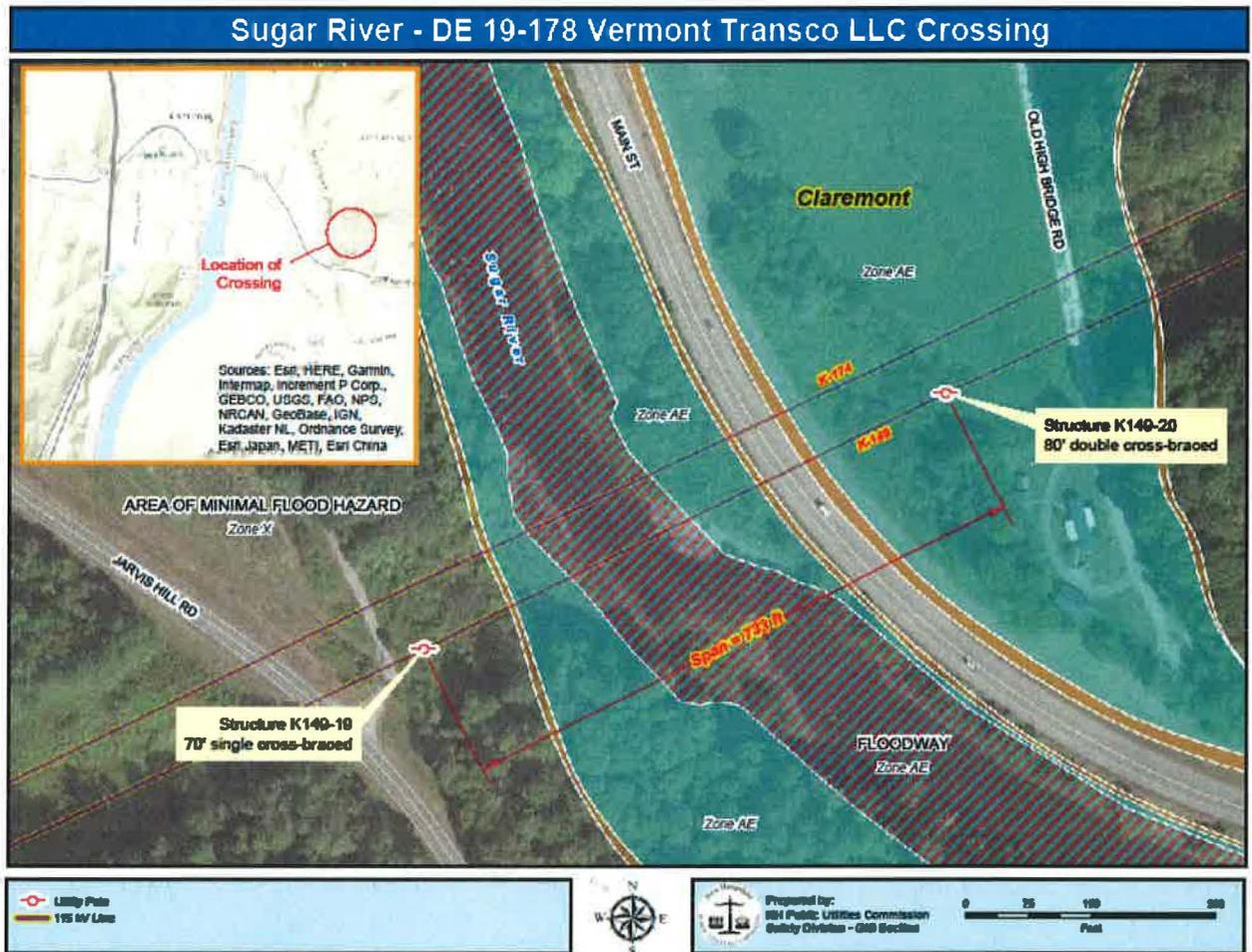


Figure 1: The location of the of the electric transmission line designated as the K149Circuit, a span of approximately 733 feet, across the Sugar River in Claremont, NH is overbuilt ADSS communication cable is on the same structures. The communication cable was issued a license previously in Commission Order 26,293 in DE 19 -109. The structure on the northeast side of the river is a wooden double cross braced structure, designated #20 and will be constructed with a double 80 foot tall, CCA pole. The structure on the southwest side of the river, designated # 19 shall be a structure, constructed with a single 70 foot tall, CCA pole. The span of the river is approximately 129 Ft. at the northeast and southwest banks.

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