

# STATE OF NEW HAMPSHIRE

## Inter-Department Communication

**DATE:** April 30, 2013

**AT (OFFICE):** NHPUC



**FROM:** Tom Frantz – Director, Electric Division

**SUBJECT:** DE 13-045; Petition by New Hampshire Electric Cooperative for License to Construct and Maintain an Electric Cable and Conduit under Lake Winnepesaukee to Dollar Island in Accordance with RSA 371:17

**TO:** Chair Ignatius and Commissioners Harrington and Scott

On February 4, 2013, the New Hampshire Electric Cooperative (NHEC) filed a petition with the Commission under RSA 371:17 for a license to construct and maintain an electric cable and conduit under Lake Winnepesaukee in the Town of Meredith, NH. As part of its petition, NHEC included the pre-filed testimony of Dean Benton, Plant Supervisor with NHEC. NHEC states in its petition that the project is intended to provide electric service to a residence located on Dollar Island in Lake Winnepesaukee. There are no electric lines currently serving the island. NHEC states that without construction of this line, the residence on Dollar Island will not be able to receive electric service from NHEC and the line is intended to meet its obligation to provide service to the public.

Staff employed Accion Group Inc. (Accion) to review NHEC's petition. Accion filed an electronic memo of its review of NHEC's petition with Staff on April 10, 2013. Accion stated that "[T]he facilities, as proposed, should be in conformance with the National Electrical Safety Code C2-2012, however, NHEC does not make such a definitive statement." Accion further goes on to recommend that the Commission approve the NHEC petition for license to construct, operate and maintain the electric line under Lake Winnepesaukee in the Town of Meredith; however, Accion states that Commission's approval should be conditional and lists four conditions.

Based on the recommendation of Accion and Staff's review of the filing, Staff recommends that the Commission grant NHEC's petition with the conditions stated in Accion's report. I have attached Accion's report to this memo.

Please contact me if you have any questions or would like to discuss this matter.



**REPORT ON ADEQUACY OF**

**NEW HAMPSHIRE ELECTRIC COOPERATIVE'S PETITION FOR LICENCE  
FOR ELECTRICAL FACILITIES UNDER AND ACROSS PUBLIC WATERS OF  
LAKE WINNIPESAUKEE IN THE TOWN OF MEREDITH, NEW HAMPSHIRE**

**DOCKET DE 13-045**

**April 10, 2013**

Submitted by:

**ACCION GROUP, INC.**  
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Accion's review of the subject petition consisted of the following elements:

- Petition contents and history
- Review of public need and public impact, including applicability of other state regulations
- Conclusions
- Recommendations

## **1. Petition Contents and History**

On February 4, 2013, the New Hampshire Electric Cooperative ("NHEC") filed a petition to construct, operate, and maintain an electric cable and conduit under and across the public waters of Lake Winnepesaukee in Meredith, New Hampshire (Petition). The new facilities will consist of a 15.0 kV submarine 1/0 aluminum cable operated at 7.2 kV constructed from Bear Island in Meredith, New Hampshire to an underground concrete vault on Dollar Island in Meredith, New Hampshire. These facilities will then feed the single residence on Dollar Island, which is currently without electrical service.

More specifically, the project begins on the property of Greater Lawrence YMCA, Inc. (also referred to as the Merrimack Valley YMCA) on Bear Island in Meredith, New Hampshire, at NHEC Pole #11525/61.1 and:

Traverses underground and in conduit for a distance of approximately 70 feet to the shore of Lake Winnepesaukee, traverses approximately 2570 feet on the lake bed and then underground and in conduit to a new concrete electrical vault (NHEC #11525/61.2), that will be constructed on the property of Dollar Island LLC (Russell A. Sabanek and Judy Sprague Sabanek), in Meredith, New Hampshire. Secondary electrical service will be provided at 120/240 volts to the single residence from the new vault.

All underground sections will be buried to a depth of 3 feet – 0 inches, will extend from the shore line on the lake bed in Schedule #80 PVC conduit for a minimum length of 40 feet or until a water depth of 6 feet – 0 inches from the water line (defined as mean low water table) can be achieved per NHEC Construction Standard IUSUB (Petition Exhibit G) whichever is longer. In addition, a minimum of two concrete cable covers will be installed at both shorelines as described in NHEC Construction Standard U7-6B (Petition Exhibit H).

NHEC describes conduit entering a typical body of water in detail in its Construction Standard URD 1W-1 (Petition Exhibit I).

The NHEC states that overhead facilities were considered for the project, but that overhead facilities are not feasible due to the distance involved (2570 feet).

NHEC also states that all facilities will be constructed and maintained to meet the National Electrical Safety Code.

Additionally, the NHEC states that it and its contractors have the expertise to design, construct, operate, and maintain the proposed facilities as the NHEC currently maintains over 50 similar installations in its service territory.

## **2. Review of Public Need and Public Impact**

NHEC states that there are no existing facilities that can provide the requested electrical service. NHEC further states that an underwater crossing is the only feasible alternative to provide the requested electrical service, due to the distance between the facility terminals.

A license is required to place electrical facilities under and across Lake Winnepesaukee as that body of water is public waters as defined in RSA 371:17, and is also listed on the Department of Environmental Service Water Division's Official List of Public Waters as revised March 1, 2011.

NHEC requires easements to facilitate the new construction on Bear Island and Dollar Island in Meredith, New Hampshire, and has provided same as Petition Exhibits D and E, respectively.

NHEC requires Wetland and Non-Site Specific Permits from the Department of Environmental Services for the new construction, and has provided approved Wetlands and Non-Site Specific Permits with conditions on Bear Island (Permit #2012-02481) and Dollar Island (Permit # 2012-01846) in Meredith, New Hampshire, and has provided same as Petition Exhibits A and B, respectively.

## **3. Conclusions**

The proposed facilities are required to meet the reasonable requirements to provide reliable electrical service to the public on Dollar Island.

The facilities, as proposed, should be in conformance with the National Electrical Safety Code C2-2012; however the NHEC does not make such a definitive statement.

## **4. Recommendations**

Accion recommends the Commission approve the NHEC petition for a license to construct, operate, and maintain electric lines under and across Lake Winnepesaukee in the Town of Meredith, New Hampshire as requested in the Petition, with the following conditions:

- a) The Commission should require that the proposed construction be done in conformance with applicable sections of the National Electrical Safety Code C2-2012;
- b) The Commission should require that the NHEC operate and maintain the proposed facilities to the National Electrical Code C2-2012;
- c) The Commission should require that any future alterations to the proposed facilities meet the then-existing provisions of the National Electrical safety Code, and that requests for such alterations be submitted to the Commission for its consideration at least 60 days prior to the commencement of construction; and
- d) There is required conformance to the conditions imposed in the Department of Environmental Service's Wetland and Non-Site Specific Permits contained in Petition Exhibits A and B.