

STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE: April 19, 2012
AT (OFFICE): NHPUC

FROM: Leszek Stachow, Analyst 

SUBJECT: DT 13-068 Northern New England telephone Operations LLC d/b/a FairPoint Communications-NNE
Petition to Construct and Maintain Temporary Telecommunications Cables across a New Hampshire Railroad

TO: Commission
Debra Howland, Executive Director

On March 4, 2013, Northern New England telephone Operations LLC d/b/a FairPoint Communications-NNE (FairPoint) filed a petition to construct and maintain a temporary telecommunications cable across a New Hampshire railroad in the town of Somersworth.

The location of the crossing in this petition is as follows:

- NH North Coast Railroad, parallel to West side of Market Street in Somersworth, NH
 - Between Utility Pole 42/1 in Somersworth, NH and Pole 42/2 in Berwick, Maine.(FP reference: 263821/259263)

The railroad crosses state land and therefore requires a license pursuant to RSA 371:17.

1. **Review of public need and public impact.**

The Maine Department of Transportation in conjunction with the New Hampshire Department of Transportation will rebuild a bridge over the Salmon Falls River, between Somersworth, New Hampshire and Berwick, Maine. Currently FairPoint cables are located under railroad tracks running parallel to the river. As a result of this project, FairPoint is required to temporarily relocate its telecommunications facilities over a state owned railroad, and thus has petitioned the Commission for a license.

During the bridge reconstruction period, FairPoint will temporarily relocate its facilities to an existing pole line crossing the railroad tracks to continue delivery to its customers.

Upon completion of the bridge reconstruction project, FairPoint will remove its temporary aerial cables over the railroad tracks and permanently relocate these cables underneath the railroad track.

This effort is part of the project described in FairPoint's water crossing petition in Docket DT 13-052, and has been the subject of a pre-coordination utility and stakeholder meeting held on November 29, 2011 in Somersworth, NH.

2. Review of NESC code requirements.

According to the petition the proposed temporary crossing will be designed, constructed, maintained and operated according to the National Electrical Safety Code (NESC). Staff reviewed documents and data provided by FairPoint, including detailed diagrams, descriptions, and maps of the crossings. Staff confirmed the information provided in the filing complies with the requirements of the NESC. The attached worksheets provide a summary of Staff's review.

Staff noted an absence of detail relating to sag and some inconsistency in span length and subsequent calculation in the supporting technical diagrams. Additionally, Staff was unable to confirm whether any other utility crossing at this location is licensed and also complies with the NESC. Following further FairPoint communications dated March 15, and subsequent Modified exhibits A & B received by the Commission on April 16, 2013, Staff was able to determine that the sag under heavy load conditions met the NESC.

3. Recommendations and Conclusions.

Based upon Staff's analysis, the proposed temporary railroad crossing will not substantially affect the public rights on state land and Staff concludes that FairPoint has demonstrated a need in order to provide service to the public for the proposed temporary crossing. Accordingly, Staff recommends that the Commission grant the license for the FairPoint NH North Coast Railroad crossing in this petition, with the following conditions;

1. FairPoint will cooperate fully with pole owners to ensure that all pole attachments on these poles comply with the NESC and state law.
2. FairPoint maintain proper clearances between its cables and any adjacent to it at all times across the entire span pursuant to NESC 235C2b and 235H.
3. FairPoint construct, operate and maintain the attachments at all times in accordance with both the 2002 and 2007 editions of the NESC as required by NH Admin. Code Puc 433.01 and 1303.07.

Info provided is intended to be used in conjunction with the NESC and does not in any way supersede or replace the NESC. The NESC should always be considered as the primary basis for making clearance determinations.

Telecommunications Fiber Optic Cable¹ Railroad Crossing on State Land Checklist

Docket #: DT 13-068

Applicant: Northern New England Telephone Operations LLC d/b/a/
FairPoint Communications-NNE

Date: April 19, 2013

Analyst: Stachow

Location: NH North Coast Railroad, parallel to west side of Market Street in Somersworth, NH; between utility pole 42/1, in Somersworth, NH, and 42/2, in Berwick, Maine. FP reference: 263821/259263

| | | |
|---|-----------|---|
| 1 | Yes | Is Railroad on state land? http://www.nh.gov/dot/org/aerorailtransit/railandtransit/documents/RailRoad_by_Owner_State_2011.pdf |
| 2 | No | Does petition indicate DOT or DES approvals needed? |
| 3 | N/a | If DOT or DES approvals needed, ask applicant for contact at applicable state agency and call to determine status of approvals. Are DOT or DES approvals expected? |
| 4 | Yes | Compare facts stated in petition to "as built" drawings. Are facts consistent? Check things like pole numbers, span length, location, railroad. |
| 5 | Yes | Compare make ready requirements from pole owner to "as built" drawing. Confirm necessary appurtenances (e.g. guys) are included in drawing and all existing attachments are depicted. |
| 6 | Yes | Does petition attest the proposed crossing is designed and will be built and maintained in accordance with the NESC? |
| 7 | Not known | Are existing attachments licensed? If not, notify existing attachers in writing and request license application. |

¹As defined by NESC 230 F 1e and NESC 230 F 2

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| | | |
|----|--------------|---|
| 8 | Yes | Is lowest attachment 23.5 feet above rail track under Heavy Load conditions? NESC Table 232-1 |
| 9 | N/A | Is there a minimum of 40 inches between electric neutral and proposed attachment on each pole? NESC Table 235-5 1a |
| 10 | Yes | Is there a minimum 12 inch clearance between proposed attachment and adjacent communications attachments at each pole? NESC 235H1 |
| 11 | 53"* | What is maximum sag of proposed attachment under Heavy Load conditions? NESC Table 250-1 |
| 12 | Correct * | Run tension numbers to verify maximum sag calculation. |
| 13 | N/A | If data not available on lowest attachment, is proposed attachment, under Heavy Load conditions, at least 23.5 feet plus 1 foot per attachment below proposed attachment? (e.g if two existing attachments are below proposed attachment, is clearance under Heavy Load of proposed attachment at least 25.5 ft?) |
| 14 | N/A | Is there a minimum 75% of distance required at supports at every point in the span (30 inches between electric neutral and proposed attachment) under all conditions? NESC 235C2b |
| 15 | Yes | Is there a minimum 4 inch clearance between proposed attachment and any conductor, cable or equipment of adjacent communications attachments at every point in the span under Heavy Load conditions? NESC 235H2 |

NOTES:

FP submitted an initial technical diagram on Jan 14, 2013
Following Staff comments, FP submitted a revised technical diagram on March 19, 2013,
and subsequently a further revised Exhibit A and B on April 16, 2013.

FP routinely uses standard sag tables to determine cable sag, and despite a span of 155 ft calculates sag based on 175 ft span information, erring on the side of caution. Stringing tension is determined at zero degrees, and consequent span sag per cable is 53 inches. See cells above marked thus: (*)

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