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# STATE OF NEW HAMPSHIRE

Inter-Department Communication

**DATE:** May 2, 2013

**AT (OFFICE):** NHPUC

*David*

**FROM:** David Goyette, Utility Analyst III - Telecommunications

**SUBJECT:** DT 13-052 FairPoint Communications - NNE  
Petition to Cross Public Waterway in Somersworth

**TO:** Commissioners  
Debra Howland, Executive Director

The checklist on the pages that follow should be attached to Staff's memo dated April 29, 2013.

*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 Cable<sup>1</sup> Water Crossing Checklist

Docket #: DT 13-052

Applicant: FairPoint

Date: 4/9/2013

Analyst: David

Location: Salmon Falls River, Somersworth  
P 42/1 to P 42/2

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1	Yes	Is water body on DES list: <a href="http://des.nh.gov/organization/commissioner/pip/publications/wd/documents/olpw.pdf">http://des.nh.gov/organization/commissioner/pip/publications/wd/documents/olpw.pdf</a>
2	NA	If Merrimack River from the MA-NH State line to Concord, NH; Lake Umbagog within NH; or the Connecticut River to Pittsburg, NH., has Army Corps of Engineers approved?
3	Not needed	Does petition indicate DOT or DES approvals needed?
4	NA	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?
5	Yes	Compare facts stated in petition to "as built" drawings. Are facts consistent? Check things like pole numbers, span length, location, water body.
6	NA, see note	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.
7	Yes	Does petition attest the proposed crossing is designed and will be built and maintained in accordance with the NESC?
8	Unk	Are existing attachments licensed? If not, notify existing attachers in writing and request license application.
9	Yes	If lowest attachment is not licensed, verify minimum water clearances plus one foot per attachment beneath proposed attachment are met under Heavy

<sup>1</sup>As defined by NESC 230 F 1e and NESC 230 F 2

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		Load conditions and recommend conditional approval. (e.g if water is not suitable for sailing and there are 2 existing attachments below proposed, add 2 feet to 14 foot clearance requirement and determine if proposed attachment with maximum sag is greater than 16 feet from water surface). If water suitable for sailing, use 10 year flood elevation.
10	NA	If lowest attachment is licensed, does make ready indicate lowest attachment will be moved closer to water? (If no, skip to step 15. If yes, what is max sag of lowest attachment at 0 deg F, 0.5 inch ice, 4 psf wind?)
11	No	Is water suitable for sailing?
12	Yes	If not suitable for sailing is there <b>14 feet</b> clearance from lowest point in sag of lowest attachment to water surface under Heavy Load conditions? (preferably measured from water surface at 10 year flood elevation, but not required)  NESC Table 232-1, 6
13	NA	If suitable for sailing is there appropriate clearance from lowest point in sag of lowest attachment to water surface under Heavy Load conditions at 10 year flood elevation. Size of rivers and streams based upon largest surface area of any 1 mile segment that includes the crossing (circle applicable standard) <ul style="list-style-type: none"> <li>a. Less than 20 acres: <b>17.5 feet</b></li> <li>b. Over 20 to 200 acres: <b>25.5 feet</b></li> <li>c. Over 200 to 2000 acres: <b>31.5 feet</b></li> <li>d. Over 2000 acres: <b>37.5 feet</b></li> </ul> NESC Table 232-1, 7 and notes 18 and 19.
14	NA, see note	Is there a minimum of <b>40 inches</b> between electric neutral and proposed attachment on each pole?  NESC Table 235-5 1a
15	Unk, see note	Is there a minimum 75% of distance required at supports at every point in the span ( <b>30 inches</b> between electric neutral and proposed attachment) under all conditions?  NESC 235C2b
16	53 inches	What is maximum sag of proposed attachment under Heavy Load Conditions?  NESC Table 250-1
17	Done	Run tension numbers to verify maximum sag calculation.
18	Yes	Is there a minimum <b>12 inch</b> clearance between proposed attachment and adjacent communications attachments at each pole?

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		NESC 235H1
19	Unk	Is there a minimum <b>4 inch</b> 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

**NOTE:** If the crossing is within 10 feet horizontally of an existing bridge structure that may already limit use of the waterway, a simplified drawing may be submitted with vertical distances measured to the bridge deck. If bridge deck is 15 feet above water surface, water is not suitable for sailing, and height of lowest crossing is above the bridge deck, clearance to water does not need to be measured. In this instance, flood elevation information is not required.

**NOTES:**

- 6. FairPoint is the pole owner so there is no make-ready form.
- 14. There is no secondary electric on the poles.
- 15. Not provided.
- 19. Not provided.