

**From:** Bob West <bmw@ftn-assoc.com>  
**To:** <rle@nrc.gov>  
**Date:** Mon, Sep 18, 2006 6:13 PM  
**Subject:** Fwd: VYNPS ER - Supplemental Information Chestnut Hill 115-kV Transmission Line Reference FTN 2006b

Rich:

I believe the email correspondence you need is attached and discussed below.  
Please let us know if you need anything else.  
thanks,

>Date: Mon, 31 Jul 2006 11:31:54 -0500  
>To: Rick Buckley  
>From: Bob West <bmw@ftn-assoc.com>  
>Subject: VYNPS ER - Supplemental Information Chestnut Hill 115-kV  
>Transmission Line Reference FTN 2006b  
>Cc: jbroc94@entergy.com  
>  
>Rick:  
>  
>For the ER supplemental information regarding the Chestnut Hill 115-kV  
>transmission line, we have summarized below relative info from  
>conversations and email correspondence with the Public Service Company of  
>New Hampshire and Northeast Utilities transmission engineering staff.  
>  
>1. Public Service of New Hampshire - Owns and operates the 115kV line  
>from VY to substation at Hindsdale, NH. (Technically, they only own the  
>line from the state boundary in the Connecticut River to Hindsdale; VELCO  
>owns the short segment on the VT side at VYNPS.) Talked to Katie Kenney  
>(603-634-2371) and Jim Myal the week of 22 November 2004. PSNH/NU uses no  
>herbicides for ROW management. All clearing is mechanical; they quit using  
>herbicides in the early 1980's. They are trying to use some innovative  
>planting of low growth vegetation and livestock grazing to reduce  
>maintenance costs. Stated ROW maintenance practices apply to the Amherst  
>345-kV, Chestnut Hill 115-kV, and the NH portion of the Northfield 345-kV  
>lines. Staff is unaware of any history of environmental issues or  
>operation concerns with these transmission lines since their construction  
>over 30 years ago.  
>  
>2. Information in item 1 above regarding herbicide use was confirmed via  
>email from Bob Gosling (NU) dated 19 June 2006. A brief summary provided  
>by the NU Arborist is attached. The ROW is on a 4-year cycle and was last  
>cleared in 2004. No formal management plan in place to document ROW  
>maintenance practices.  
>  
>3. Bob Gosling (goslirc@nu.com) in email dated 29 June 2006, confirmed  
>that the Chestnut Hill line meets the NESC code requirements for induced  
>shock hazard (see attached email).  
>  
>4. No information was available on ROW erosion control policies. Because  
>the Chestnut Hill 115 kV line occupies a small portion of the overall ROW  
>with the Amherst (Scobie) and Northfield 345-kV lines, it is assumed that  
>most potential erosion impacts would be attributed to the two 345-kV lines.  
>  
>5. Spoke with Paul Agrila (413-603-3632) of Western Massachusetts Electric

>in Northfield, MA. He confirmed that the 345 kV ROW from near Northfield  
>up the eastern side of the Connecticut River to the NH state line is  
>maintained using only mechanical methods and hand-applied herbicides. No  
>wide-spread use of herbicides is employed.

>

>

>Bob West  
>FTN Associates, Ltd.  
>#3 Innwood Circle  
>Little Rock, AR 72211  
>501-225-7779  
>501-225-6738 (fax)

>

>This e-mail, including any attached files, may contain confidential and  
>privileged information for the sole use of the intended recipient(s). Any  
>review, use, distribution or disclosure by others is strictly prohibited.  
>If you are not the intended recipient (or authorized to receive information  
>for the recipient), please contact the sender by reply e-mail and delete  
>all copies of this message. Thank you.

Bob West  
Project Manager  
FTN Associates, Ltd.  
Water Resources - Environmental Consultants  
#3 Innwood Circle  
Little Rock, AR 72211  
501-225-7779  
501-225-6738 (fax)

This e-mail, including any attached files, may contain confidential and  
privileged information for the sole use of the intended recipient(s). Any  
review, use, distribution or disclosure by others is strictly prohibited.  
If you are not the intended recipient (or authorized to receive information  
for the recipient), please contact the sender by reply e-mail and delete  
all copies of this message. Thank you.

CC: <rbuckle@entergy.com>

**Mail Envelope Properties** (450F19EC.133 : 1 : 37171)

**Subject:** Fwd: VYNPS ER - Supplemental Information Chestnut Hill 115-kV  
Transmission Line Reference FTN 2006b  
**Creation Date** Mon, Sep 18, 2006 6:17 PM  
**From:** Bob West <bmw@ftn-assoc.com>

**Created By:** bmw@ftn-assoc.com

**Recipients**

nrc.gov  
OWGWPO02.HQGWDO01  
RLE (Richard Emch)

entergy.com  
rbuckle CC

**Post Office**

OWGWPO02.HQGWDO01

**Route**

nrc.gov  
entergy.com

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	3841	Monday, September 18, 2006 6:17 PM
TEXT.htm	4388	
VY Chestnut Hill ROW maintenance.doc		19456
VY Chestnut Hill NESC.doc	26624	
Mime.822	1	

**Options**

**Expiration Date:** None  
**Priority:** Standard  
**ReplyRequested:** No  
**Return Notification:** None

**Concealed Subject:** No  
**Security:** Standard

**Junk Mail Handling Evaluation Results**

Message is eligible for Junk Mail handling  
This message was not classified as Junk Mail

**Junk Mail settings when this message was delivered**

Junk Mail handling disabled by User  
Junk Mail handling disabled by Administrator

Junk List is not enabled  
Junk Mail using personal address books is not enabled  
Block List is not enabled

## **N-186 Vegetation Management Practice**

PSNH current practice of vegetation control on the N-186 line from VT / NH state line to Chestnut Hill substation in Hinsdale NH is performed by mowing unwanted vegetation on a 4 year cycle(next scheduled mowing 2008). Any wet land areas are kept cleared by manually cutting the undesirable vegetation species. Side trimming of the edge of right of way is currently on a 10 year cycle(next scheduled cycle side trimming 2010).

X-Modus-BlackList: 159.108.1.41=OK;goslirc@nu.com=OK  
X-Modus-RBL: 159.108.1.41=OK  
X-Modus-Trusted: 159.108.1.41=NO  
Subject: Re: Fwd: Re: N-186  
Sensitivity:  
To: Bob West <bmw@ftn-assoc.com>  
Cc: jbroc94@entergy.com, ldewald@entergy.com, bradspj@nu.com,  
rbUCKLE@entergy.com, bradspj@nu.com  
X-Mailer: Lotus Notes Release 6.5.2 June 01, 2004  
From: goslirc@nu.com  
Date: Thu, 29 Jun 2006 12:41:54 -0400  
X-MIMETrack: Serialize by Router on nunotesmta4/NUS(Release 6.5.4FP3 | January 13, 2006) at  
06/29/2006 12:41:55  
X-Virus-Scanned: by local mailserver

Bob

Answer to

1 Yes It is very likely the line would have been located there (had a  
345Kv line been necessary without VY)  
There is no documentation available, however .

2

- a.) Line does meet NESC criteria stated
- b.) Still waiting for an answer from our Arborist

Have a great 4th  
Bob

---

Mr. Constant:

Thank you for taking my call this afternoon. As you requested, I'm forwarding to you additional information regarding the objective of our transmission line assessments for Entergy's Vermont Yankee Nuclear Power Station (VYNPS).

Entergy is preparing information for an application to the Nuclear Regulatory Commission for a renewed operating license. We are required to address a specific list of issues related to potential environmental impacts for the plant and those transmission lines which were originally constructed in the 70's to connect VYNPS to the grid. As I described during our telephone call, the only PSNH line we need to address is the 115-kV line (# N-186) that spans the Connecticut River and connects at a substation near Hinsdale, NH.

The following information is needed for this line and ROW.

1. a brief description of ROW vegetation control practices and any other applicable environmental management issues for the ROW. (Other issues could include issues such as threatened and endangered species, cultural resources, wetlands, etc. This info is typically addressed in old environmental assessments or current environmental management plans.)
2. does the N-186 line meet the following criteria?

"Design criteria that limit hazards from steady state currents are based on the National Electric Safety Code (NESC 1981). Adherence to this code requires that utility companies design transmission lines so that the short-circuit current to ground, produced from the largest anticipated vehicle or object, is limited to less than 5 mA. In practice, this limits the electric field near roadways to about 7-8 kV/m."

"Most transmission lines were designed to be in compliance with the (NESC) recommendations for electric shock hazard. However, unless that utility has had an active program of transmission line management aimed at reviewing changes in the uses of the land in the right-of-way and the operating characteristics of the transmission line, and ensuring compliance with changes in the NESC, the line may not meet current NESC recommendations."

We basically need documentation that the line meets today's NESC induced shock hazard code of 5 mA. If not, we'll need profiles or clearance measurements so we can calculate the values for the line. We have access to an EPRI program that models the induced shock hazard.

We are on a very short schedule to provide the needed information to the NRC staff.

As discussed with you today, my firm (FTN Associates) is under contract with Entergy Nuclear, Inc. to coordinate the completion of the assessment. So, please contact me at 501.225.7779 with any questions, or feel free to contact any of the following Entergy employees:

Rick Buckley, rbuckle@entergy.com, ph: 601-368-5372  
Mike Stroud, mstroud@entergy.com, ph:479-858-4549  
Paul Johnson, pjohnso@entergy.com, ph: 802-452-6742 x-3178 (at VYNPS)

Thank you,

**Bob West**  
**FTN Associates, Ltd.**  
#3 Innwood Circle  
Little Rock, AR 72211  
501-225-7779  
501-225-6738 (fax)