

# VERMONT YANKEE NUCLEAR POWER CORPORATION



Ferry Road, Brattleboro, VT 05301-7002

February 28, 1991  
BVY 91-21

James P. Pelletier  
Vice President, Engineering

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United States Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555

References:

- a. License No. DPR-28 (Docket No. 50-271)
- b. Letter, VYNPC to NRC, "Response to Station Blackout, Rule 10 CFR 50.63" (BVY 89-36) dated April 12, 1989
- c. Letter, VYNPC to NRC, "Supplement to Response to Station Blackout, Rule 10 CFR 50.63" (BVY 90-038) dated March 30, 1990

Subject: Vermont Yankee Station Blackout Plan -  
Use of Vernon hydro station

Dear Sir:

In our meeting at NRC headquarters on February 12, 1991, you requested Vermont Yankee to submit under oath and affirmation a letter detailing our understandings with the Vernon hydro station regarding power supplied from Vernon hydro to Vermont Yankee via the existing direct, dedicated tie line. As we understand it, your concern in this matter centers around electrical supply and availability to Vermont Yankee from the Vernon hydro station. The Vernon hydro station tie line provides an alternate AC power source in a Station Blackout scenario. The purpose of this letter is to respond to your request.

As discussed in our Station Blackout submittal [References (b) and (c)], Vermont Yankee plans to utilize the existing tie line between Vermont Yankee and the nearby Vernon hydro station to satisfy Station Blackout Alternate AC power requirements. The availability and reliability of this power source has been proven over many years of Vernon hydro station operation. Additionally, Vermont Yankee plans to upgrade the tie line to provide further assurance that the line will not be damaged from external events.

Vermont Yankee recently confirmed by telecon with Vernon hydro station management that "to the best of [the hydro station operators'] ability, [they] will keep the Vernon tie line energized at all times and that both the hydro station and NEPOOL consider this line a high priority line." In addition, a contract is currently in place obligating Green Mountain Power/NEPCO to supply "emergency power" to Vermont Yankee from the Vernon hydro station.

Vermont Yankee has a mutual understanding, recently confirmed with Vernon hydro station management, that Vermont Yankee will be notified of an anticipated unavailability of the tie line that supplies Vermont Yankee from the Vernon hydro station. It is a long-standing, customary practice for Vermont Yankee, the Vernon hydro station, and all other electrical suppliers on the grid to

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notify individuals that may be affected prior to any planned switching, connection, or disconnection of electrical supply, and changes in the availability of the tie line with Vermont Yankee would be no exception. In addition, the availability in the Vermont Yankee control room of voltage indication for the tie line and Vernon hydro station total power output indication provide information regarding the unavailability of voltage on the tie line and loss of the Vernon hydro station generator output for any reason.

As was discussed in our submittal of Reference (b), the tie line between the Vernon hydro station and Vermont Yankee is normally energized and the breaker to control connection of the tie line to emergency busses is under Vermont Yankee control. Connection of Vernon hydro power to emergency busses can be made directly from the Vermont Yankee control room. Vermont Yankee has indication in the control room which provides Vernon hydro tie line voltage and Vernon hydro total power output. In addition, even in the rare instance where the Vernon hydro power station output is zero, power can still be provided by the separate 69K. grid through the Vernon hydro tie line to Vermont Yankee.

The 69 kV transmission system emanating from the Vernon hydro station is routed on rights of way which are physically separate from the 115 kV and 345 kV transmission lines which are the normal source of off-site power for Vermont Yankee. In addition, the 69 kV system is considered electrically independent from Vermont Yankee's 115 kV and 345 kV transmission system because no single line fault or relay actuation on the 115 kV or 345 kV system will cause loss of the 69 kV system.

We believe that the above-described mutual understanding between the Vernon hydro station and Vermont Yankee, combined with the technical features of the tie line and the inherent reliability of the Vernon hydro station, satisfactorily fulfills the alternate power requirements of the Station Blackout rule for Vermont Yankee.

Should you have any further questions regarding this matter, please contact this office.

Very truly yours,

*James P. Pelletier*  
James P. Pelletier  
Vice President, Engineering

cc: USNRC Region I Administrator  
USNRC Resident Inspector - VYNPS  
USNRC Project Manager - VYNPS

STATE OF VERMONT }  
WINDHAM COUNTY } ss.

Then personally appeared before me, James P. Pelletier, who, being duly sworn, did state that he is Vice President, Engineering of Vermont Yankee Nuclear Power Corporation, that he is duly authorized to execute and file the foregoing document in the name and on the behalf of Vermont Yankee Nuclear Power Corporation, and that the statements therein are true to the best of his knowledge and belief.

*Janice B. Bennett*  
Janice B. Bennett, Notary Public  
My Commission expires February 10, 1995