VERMONT YANKEE NUCLEAR POWER CORPORATION

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REPLY TO:
ENGINEERING OFFICE
TURNPIKE ROAD
WESTBORO, MASSACHUSETTS 01581
TELEPHONE 617-366-9011

October 23, 1980

United States Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Nuclear Reactor Regulation

References: (a) License No. DPR-28 (Docket No. 59-271)
(b) Inspection No. 50-271/80-05
(c) Meeting Minutes dated January 16, 1980, re: December 11, 1979 Meeting Between Vermont Yankee, NRC, and General Electric Company

Dear Sir:

Subject: Fuel Inspection Plans

In References (b) and (c), it is indicated that Vermont Yankee will be inspecting four modified surveillance assemblies during the 1980 refueling outage. These four assemblies were modified during the 1979 refueling outage to obtain lead information on the in-reactor performance of short end plugs. The modification consisted of replacement of the water rods with spacer capture rods with short end plugs.

All testing and theoretical treatment of the water rod wear problem would indicate or support the thesis that the wear is caused by flow-induced vibration which would be reduced by shortening the lower end plug. Consequently, there is no reason to expect that the modified end plugs will wear at a faster rate than the standard production end plugs and in fact, all theory and data at this time would indicate a reduced wear rate. It is now our plan to inspect only one of these bundles to confirm that some unexpected phenomenon is not operative. The fact that the spacer capture rods wear at a lesser rate than the water rod, reduces the value of data from these assemblies after a single operating cycle. It is long-term performance that is of primary interest.

We will be inspecting four standard fuel bundles which have been irradiated for two full operating cycles. We will also be doing

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other fuel inspections during the outage which are unrelated to the water rod wear problem and, assuming time is available, we may examine additional fuel bundles for water rod wear. We believe that this program will satisfy any reasonable requirements or concerns regarding water rod wear at the Vermont Yankee plant and we will proceed in the fashion described unless we receive information to the contrary.

We will advise you of our inspection program for our 1981 refueling outage within 60 days after startup of the next operating cycle.

Very truly yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION

W F Conway

William F. Conway
Vice President & Manager of Operations

WFC/jh