

New Hampshire Yankee

Ted C. Feigenbaum
President and
Chief Executive Officer

NYN- 91059

April 12, 1991

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

Attention: Document Control Desk

Reference: Facility Operating License No. NPF-86, Docket No. 50-443

Subject: Request for License Amendment; Rod Cluster Control Assembly (RCCA)
Repositioning Program

Gentlemen:

Pursuant to 10CFR50.90, New Hampshire Yankee (NHY) hereby proposes to amend the Seabrook Station Operating License (Facility Operating License NPF-86) by incorporating the proposed changes provided herein as Enclosure 1, into the Seabrook Station Technical Specifications. This request for a license amendment is submitted in support of NHY's plans to implement a Rod Cluster Control Assembly (RCCA) repositioning program. The proposed RCCA repositioning program permits the axial repositioning of the RCCAs between (and including) 225 and 232 steps withdrawn during power operation. The implementation of the RCCA repositioning program is expected to yield even distribution of RCCA wear on the rodlet cladding and a longer operating lifetime for the RCCAs. The RCCA wear phenomenon in Westinghouse plants was described in USNRC Information Notice 87-19, "Perforation and Cracking of Rod Cluster Control Assemblies".

The proposed changes effect the following Technical Specifications and Bases:

Technical Specification 3.1.4 (Rod Drop Time) page 3/4 1-20

Currently, rod drop times are determined by dropping rods from the "fully withdrawn" position (228 steps withdrawn). The change to this specification will require that rods be dropped from the "mechanical fully withdrawn" position which is expected to be either 230 steps or 231 steps during hot conditions. Engineering evaluations of the RCCA repositioning program have addressed rod positions between 225 and 232 steps withdrawn to envelope the expected mechanical fully withdrawn position. The drop time requirement of 2.2 seconds contained in this specification is not changed, therefore all accident analyses which credit rod insertion remain valid. NHY will not utilize the rod positions above 228 steps until drop times above 228 steps are confirmed to be within this Technical Specification limit. The maximum measured rod drop time at Seabrook Station of 1.45 seconds is estimated to increase to

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1.498 seconds if rods were dropped from 232 steps (eg. 4 steps beyond 228), nevertheless, NHY will test the drop times for positions above 228 prior to use.

Technical Specification 3.1.3.5 (Shutdown Rod Insertion Limit) page 3/4 1-21

The change to this specification involves the addition of a definition for "fully withdrawn" (eg. "The fully withdrawn position is defined as the interval within 225 to the mechanical fully withdrawn position, inclusive"). This change allows the axial repositioning of the shutdown rod banks within this band during power operation. NHY will develop procedures for implementation of the RCCA repositioning program for the shutdown rod banks.

Technical Specification 3.1.3.6 (Control Rod Insertion Limits) Figure 3.1-1, page 3/4 1-23

The change to figure 3.1-1 which depicts the required positions for control rod banks as a function of thermal power level involves the addition of a definition for "fully withdrawn" consistent with the change to specification 3.1.3.5 above. This change allows control rod banks that were previously maintained at a parked position of 228 steps to be axially repositioned within the range of 225 steps to the mechanical fully withdrawn position, inclusive. NHY will develop procedures for implementation of the RCCA repositioning program for the control rod banks.

Technical Specification Bases 3/4.1.3 page B 3/4 1-4 (Movable Control Assemblies)

The changes to this Bases section are consistent with the Technical Specification changes proposed herein and specify that rod drop times are measured from the "mechanical fully withdrawn position" and that the fully withdrawn position of shutdown rod banks and control rod banks can be varied between 225 steps and the mechanical fully withdrawn position (up to 232 steps) inclusive. The changes to this Bases section also specify that the 225 to 232 step interval allows axial repositioning to minimize RCCA wear.

In accordance with 10CFR50.36 these Bases are not considered to be part of the Technical Specifications.

New Hampshire Yankee has evaluated the proposed Technical Specification changes utilizing the criteria specified in 10CFR50.92 and has determined that the proposed changes do not involve a Significant Hazards Consideration pursuant thereto. The Significant Hazards Consideration evaluation is provided herein as Enclosure 2.


United States Nuclear Regulatory Commission
Attention: Document Control Desk

April 12, 1991
Page three

New Hampshire Yankee requests approval of the Technical Specification changes proposed herein by September 1, 1991, in support of expeditious implementation of the RCCA repositioning program.

Should you have any questions regarding this request, please contact Mr. Terry L. Harpster, Director of Licensing Services, at (603) 474-9521, extension 2765.

Very truly yours,


Ted C. Feigenbaum

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