



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

October 24, 1980

50-271

MEMORANDUM FOR: H. R. Denton, Director
Office of Nuclear Reactor Regulation

E. G. Case, Deputy Director
Office of Nuclear Reactor Regulation

FROM: D. G. Eisenhut, Director
Division of Licensing

SUBJECT: INFORMATION REGARDING INERTING OR AND NTOL BWRs

You recently asked that I provide you with information on design, procurement, and installation of inerting systems in OR and NTOL BWRs. This information is as follows:

Hatch 2

Plant was originally designed for inerted operation; the system is installed. The system needs only to be hooked up to an N₂ supply. The system was pre-operationally tested 1 1/2 years ago during Hatch 2 start-up. Facility could be operable within 7 days.

Vermont Yankee

In order to operate in an inerted mode, the Vermont Yankee design will require a number of additional components to be added since the plant was originally designed to operate in a de-inerted mode. A partial list of components would include:

1. N₂ Storage Tank
2. Vaporizer System
3. Controls and Instrumentation
4. Piping Modifications and Penetrations
5. O₂ Analyzer

Vermont Yankee estimates that it would take about 10 months to design, procure, install, and final test the system. Equipment availability is the critical path in this estimate of time. Vermont Yankee is obliged by the Vermont Public Service Board to follow a competitive bid procurement policy. This time estimate is based on the use of non-safety grade equipment except for those items required to assure containment integrity (consistent with other BWRs).

8011140 491

D

October 24, 1980

We have had a number of discussions with Vermont Yankee management in an effort to achieve schedular improvement beyond the June 30, 1981 date noticed in the Proposed Rule Change. Licensee Management says schedular improvement beyond June 30, 1981 (proposed rule) is unlikely because:

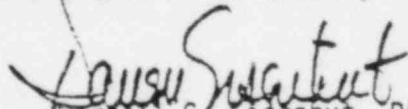
1. They believe that departure from competitive bid practices is not justified for safety reasons in this case. They cite the Federal Register Notice (Vol. 45, No. 193, P. 65467) which says with respect to Vermont Yankee and Hatch 2 inerting that "the decrease in residual risk due to inerting these containments is small." They note that the Chairman of the Vermont State Nuclear Advisory Panel (also Chairman of the State Public Service Board) quoted the above conclusions to the Board and to the press. Nevertheless, when licensee management was pressed to estimate the schedule improvement from departing from their normal bid practices, they estimated May 1 was achievable, with the long lead time item being 10-12 weeks for procurement of the tank and vaporizer. This schedule would involve significant operating inconvenience and cost from using Nitrogen "feed and bleed" to maintain a torus/drywell ΔP .
2. Installation problems are anticipated if it is required that foundations for Nitrogen tanks be laid during the winter months.
3. Design problems which have not yet been solved include:
 - a) Torus/drywell ΔP maintenance for Mark I program
 - b) Purge and vent paths
 - c) Revision of air-operated valves within containment for Nitrogen operation.

LaSalle

Plant has been designed for inerted operation and material and equipment has been ordered. If required, the system will be installed in the summer of 1981.

Zimmer

Plant has not been designed for inerted operation, but some pipes and valves have been procured already for this contingency. Design of system, procurement, and installation would take 12-13 months, if required.


Darrell G. Eisenhut, Director
Division of Licensing