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WVY 80-177

December 31, 1980

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

Attention: Darrell G. Eisenhut, Director
Division of Licensing

References:
(a) License No. DPR-28 (Docket No. 50-271)
(b) USNRC Letter, D. G. Eisenhut to All Licensees of Operating Plants, dated October 31, 1980
(c) Letter, D. G. Eisenhut (NRC) to S. T. Rogers (BWR Owners' Group), regarding Emergency Procedure Guidelines, October 21, 1980.

Subject: Submittal of Information on NUREG 0737 Item I.C.1; Guidance for the Evaluation and Development of Procedures for Transients and Accidents.

Dear Sir:

In the Clarification of the NUREG-0737 requirement "for reanalysis of transients and accidents and inadequate core cooling and preparation of guidelines for development of emergency procedures," NUREG-0737 states:

> Owners' group or vendor submittals may be referenced as appropriate to support this reanalysis. If owners' group or vendor submittals have already been forwarded to the staff for review, a brief description of the submittals and justification of their adequacy to support guideline development is all that is required.

Vermont Yankee has participated, and will continue to participate, in the BWR Owners' Group program to develop Emergency Procedure Guidelines for General Electric Boiling Water Reactors. Following are a brief description of the submittals to date, and a justification of their adequacy to support guideline development.

A. Description of submittals

(1) NEDO-24708, "Additional Information Required for NRC Staff Generic Report on Boiling Water Reactors," August, 1979; including additional sections submitted in prepublication form since August, 1979.

(a) Section 3.1.1 (Small Break LOCA).

Description and analysis of small break loss-of-coolant events, considering a range of break sizes, location, and conditions, including equipment failures and operator errors; description and justificaion of analysis methods.

(b) Section 3.2.1 (Loss of Feedwater) - revised and resubmitted in prepublication form March 31, 1980.

Description and analysis of loss of feedwater events, including cases involving stuck-open relief valves, and including equipment failures and operator errors; description and justificaton of analysis methods.

(c) Section 3.2.2 (Other Operational Transients) - submitted in prepublication form March 31, 1980; revised and resubmitted in prepublication form August 22, 1980.

Description and analysis of each FSAR Chapter 15 event resulting in a reactor system transient; demonstration of applicability of analyses of Sections 3.1.1, 3.2.1, and 3.5.2.1 to each event, demonstration of applicability of Emergency Procedure Guidelines to each event.

(d) Section 3.3 (BWR Natural and Forced Circulation)

Description of natural and forced circulation cooling; factors influencing natural circulation, including noncondensibles; reestablishment of forced circulation under transient and accident conditions.

(e) Section 3.5.2.1 (Analyses to Demonstrate Adequate Core Cooling) - submitted in prepublication form November 30, 1979; revised and resubmitted in prepublication form September 16, 1980.

Description and analysis of loss-of-coolant events, loss of feedwater events, and stuck-open relief valve events, including severe multiple equipment failures and operator errors which, if not mitigated, could result in conditions of inadequate core cooling.

(f) Section 3.5.2.3 (Diverse Methods of Detecting Adequate Core Cooling) - submitted in prepublication form December 28, 1979.

Description of indications available to the BWR operator for the detection of adequate core cooling (detailed instrument responses are described in Sections 3.1.1, 3.2.1, and 3.5.2.1).

(g) Section 3.5.2.4 (Justification of Analysis Methods) - submitted in prepublication form September 16, 1980.

Description and justification of analysis methods for extremely degraded cases treated in Section 3.5.2.1.

(2) BWR Emergency Procedure Guidelines (Revision 0) - submitted in prepublication form June 30, 1980.

Guidelines for BWR Emergency Procedures based on identification and response to plant symptoms; including a range of equipment failures and operator errors; including severe multiple equipment failures and operator errors which, if not mitigated, would result in conditions of inadequate core cooling; including conditions when core cooling status is uncertain or unknown.

B. Adequacy of Submittals

The submittals described in paragraph A have been discussed and reviewed extensively among the BWR Owners' Group, the General Electric Company, and the NRC staff. The NRC staff has found (NUREG-0737 p. I.C.1-3) that "the analysis and guidelines submitted by the General Electric Company (GE) Owners' Group...comply with the requirements [of the NUREG-0737 clarification]." In Reference (c), the Director of the Division of Licensing states, "we find the Emergency Procedure Guidelines acceptable for trial implementation [on six plants with applications for operating licenses pending]."

Vermont Yankee believes that in view of these findings, no further detailed justification of the analyses or guidelines is necessary at this time.

Reference (c) further states, "[d]uring the course of implementation we may identify areas that require modification or further anlaysis and justification." The enclosure to Reference (c) identifies several such areas. Vermont Yankee will work with the BWR Owners' Group in responding to such requests.

By our commitment to work with the Owners' Group on such requests, on schedules mutually agreed to by the NRC and the Owners' Group, and by reference to the BWR Owners' Group analyses and guidelines already submitted, our response to the NUREG-0737 requirement "for reanalysis of transients and accidents and inadequate core cooling and preparation of guidelines for development of emergency procedures" by January 1, 1981, is complete.

Very truly yours,

R L Smith

R. L. Smith
Licensing Engineer

RLS/cjp