

Washington Public Power Supply System

Box 1223 Elma, Washington 98541 (206) 482-4428

Docket No. 50-508

June 16, 1983
G03-83-482

Director of Nuclear Reactor Regulation
ATTN: Mr. G. W. Knighton, Chief
Licensing Branch No. 3
Division of Licensing
US Nuclear Regulatory Commission
Washington, D. C. 20555

Subject: NUCLEAR PROJECT 3
RESPONSES TO NRC ACCEPTANCE
REVIEW QUESTIONS (April - May 1983)

References: a) Letter D. G. Eisenhut to
R. L. Ferguson, dated 08/20/82
b) Letter #G03-82-830
G. D. Bouchey to H. R. Denton,
date 08/20/82
c) Letter #G03-82-1085
G. D. Bouchey to
J. D. Kerrigan, dated 11/22/82

Reference a) transmitted a set of questions generated during the NRC's acceptance review of the WNP-3 Operating License Application (reference b). Reference c) represents the initial Supply System response to these questions and provided a schedule for those cases where our evaluations were not yet complete.

This letter transmits those responses scheduled to be provided for NRC review in April and May. In those cases where it is considered necessary or desirable to amend the FSAR due to our responses, we have provided marked up FSAR pages which show the changes which will be included in a subsequent amendment.

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Mr. G. W. Knighton

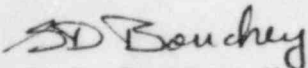
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RESPONSES TO NRC ACCEPTANCE REVIEW QUESTIONS

If you require additional information or clarification, the Supply System point of contact for this matter is Mr. K. W. Cook, Licensing Project Manager (206/482-4428 ext. 5436).

Sincerely,



G. D. Bouchey, Manager
Nuclear Safety and Regulatory Programs

AJM/ss

Attachments: 1. NRC Question 280.4
2. NRC Question Enclosure 4 Item 5 (040.79)

cc: D. J. Chin - Ebasco NYO
N. S. Reynolds - D&L
E. F. Beckett - NPI
J. A. Adams - NESCO
D. Smithpeter - BPA
A. Vietti - NRC
AA Tuzes - Comb. Engr.
Ebasco - Elma
WNP-3 Files - Richland

NRC QUESTION NO. 230.4 (9.5.1.3)

Many items in Appendices 9.5-1 through 9.5-21, "Fire Hazard Analyses by Fire Areas" are marked "Later". In the proposed completion of these items, they should be evaluated against the Standard Review Plan, (NUREG-0800).

RESPONSE

As committed to in letter G03-82-1085 dated October 22, 1982, the items marked "Later" in Appendices 9.5A-1 through 9.5A-21 have been dispositioned in the following manner:

- 1) Clarification of "Later" for cable trays: All "Later" designations for cable tray functions have been deleted. The function of cable trays have been marked "not applicable".

FSAR Appendices 9.5A-1 through 9.5A-21 have been amended to remove all "Later" for cable trays (Amendment 2).

The function of cables essential for safe shutdown, in case of fire, will be evaluated where A and B safety divisions are present in the same fire area. The fire impact on the redundant cables will be assessed and documented in the Fire Hazard Analysis which is estimated to be completed by October 1983. The findings will be reviewed and evaluated against NUREG-0800.

- 2) The function of equipment now designated as "Later" within Appendices 9.5A-1 through 9.5A-21 will be amended coincident with the completion of the Fire Hazards Analysis. Accordingly, the original completion date of 4/83 will be deferred until October 1983.

Enclosure 4 Item 5 (040.79)

The Residual Heat Removal System is generally a low pressure system that interfaces with the high pressure primary coolant system. To preclude a LOCA through this interface, we require compliance with the recommendations of Branch Technical Position RSB 5-1. Thus, this interface most likely consists of two redundant and independent motor operated valves with diverse interlocks in accordance with Branch Technical Position LCSB 3. These two motor operated valves and their associated cable may be subject to a single fire hazard. It is our concern that this single fire could cause the two valves to open resulting in a fire-initiated LOCA through the subject high-low pressure system interface. To assure that this interface and other high-low pressure interfaces are adequately protected from the effects of a single fire, we require the following information:

- a. Identify each high-low pressure interface that uses redundant electrically controlled devices (such as two series motor operated valves) to isolate or preclude rupture of any primary coolant boundary.
- b. Identify each device's essential cabling (power and control) and describe the cable routing (by fire area) from source to termination.
- c. Identify each location where the identified cables are separated by less than a wall having a three-hour fire rating from cables from the redundant device.
- d. For the areas identified in Item 5.c above (if any), provide the bases and justification as to the acceptability of the existing design or any proposed modifications.

RESPONSE

As committed to in letter G03-82-1085 dated October 22, 1982 the following is our response to the subject concern:

The only high-low pressure interfaces which use two electrically controlled motor operated isolation valves in series occur on redundant lines ISI-16-175SABR and ISI-16-176SABR. These lines are used for shutdown cooling during normal operation. The valves associated with these lines are ISI-VP-091SAR (SI-653) and ISI-VP-092SAR (SI-651) on line ISI-16-175SABR and valves ISI-VP-097SBR (SI-654) and ISI-VP-098SBR (SI-652) on line ISI-16-176SABR. The cables for valves ISI-VP-091SAR and ISI-VP-092SAR run through the same "A" designated fire zones. The cables for redundant valves ISI-VP-097SBR and ISI-VP-098SBR run through the same "B" designated fire zones.

In the event of a fire in any given fire zone where cables for one set of these valves is located, safe shutdown would not be affected as the other set of valves located on the redundant line would be opened and shutdown cooling can take place.

In order to prevent the spurious opening of both valves on one line, the MCC breaker compartment for valves ISI-VP-091SAR and ISI-VP-097SBR (one valve on each line) is padlocked in the trip position. In the event of a short circuit of any cable associated with these valves, the valves will not travel from the close to open position. An Administrative procedure will be developed to operate these valves when they are required to open in the shutdown cooling mode of reactor operation.

This response will be included in the Fire Hazards Analysis.