



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

Oh 50-320

May 2, 1979

*ru
str*

Note to: E. Case ✓
From: D. Ross, Jr.

new

The persons listed in Enclosure 1 met on 5/1/79 to discuss some proposed changes to the Oconee order. This meeting arose from a desire to consolidate matters expressed in other documents (see Bibliography). The consensus of the meeting for Oconee is enclosed.

Based on the sense of the meeting I extrapolated the disposition for Rancho Seco.

→ D. Ross, Jr. (rk)

Enclosure:
As stated

- cc: H. Denton (w/o encl.)
- R. Mattson (w/o encl.)
- R. Boyd (w/o encl.)
- D. Eisenhut (w/o encl.)

(750)

552137

Roisman 79-98

7907160361

P

Enclosure 1

	<u>Room</u>	<u>Ext.</u>
P. Check	516	28030
S. Varga	116	27411
D. Thatcher	P-722	27233
A. Oxfurth	P-321	27741
F. Rosa	P-832	27122
F. Schroeder	P-1102	27303
W. Haass	P-320D	27741
V. Benaroya	P-802B	28057
S. Israel	P-1132D	27591
R. Satterfield	P-722	27635
R. McDermott	P-320	27741
D. Beckham	280	27741
R. Reid	328	27381
B. Clayton	280	27741
B. Boger	366	27476

552138

BIBLIOGRAPHY

1. Rancho Seco Feedwater Systems
H. B. Clayton & D. Beckham; 4/28/79
2. Additional Information Applicable to B&W Reactors
B. McDermott; 4/24/79
3. Additional Information Applicable to B&W Reactors
B. McDermott; 4/25/79
4. Additional Information Applicable to B&W Reactors
B. McDermott; 4/24/79
5. Information Applicable to B&W Reactors
B. McDermott; 4/23/79
6. Problems Surfaced in Reviewing Responses to Bulletin 05-A
F. J. Williams/ 4/24/79
7. Followup Action Items From B&W Bulletin Review; Memo No. 1
D. Eisenhut; 4/25/79
8. Responses to Bulletins
S. Varga; 4/26/79
9. Draft Letter & Evaluation to SMUD
(prepared by Varga, et al.; undated)
10. Draft Letter & Evaluation to DPC
(prepared by Varga, et al.; undated)

552139

11. Letters, DPC to H. Denton
 - a. April 25, 1979 from W. O. Parker
 - b. April 25, 1979 from W. S. Lee
 - c. April 25, 1979 from W. O Parker
 - d. April 25, 1979 from W. Owen
 - e. April 26, 1979 from W. S. Lee

12. Letter, SMUD to Denton

April 27, 1979; by J. J. Matt

13. Proposed Orders
 - 13a DPC
 - 13b SMUD

14. Comments on Ocone Order by Beckham, Clayton of 4/30/79

15. Comments on Rancho Seco order by Clayton, Beckham

552140

Recommended Changes to the Order to Duke (Oconee)

1. Page 4. item e - Any additional personnel stationed in the control room should have training in the TMI-2 event. The order specifies this training only for previously licenses SRO's not for current SRO's.

Disposition

B. Boger, OLB, advises that all licensed personnel will receive TMI training prior to standing a watch. Could amend language, but this is style, not substance.

552141

2. Long Term Modifications, Item 1 - The additional EFW pumps which are to be installed should also be qualified as Seismic Category I. The pumps and associated piping should be located in buildings designed to withstand the Safe Shutdown Earthquake.

Disposition

We will consider, when the conceptual design is submitted, the extent to which the new EFW meets the SRP, and justifications for deviations. To be covered on Long-Term Review.

552142

3. Item a, page 1 of letter from Duke Power (Lee) to NRC (Denton) dated April 26, 1979 implies that the common EFW header for the three Oconee units will be interconnected. This interconnection should be reviewed immediately to verify that a single failure will not cause loss of EFW flow to one or more units.

Disposition

Already considered and found not to be a problem, but will be reconfirmed by the Restart Review.

552143

4. The order should specifically state that, as a long term modification, the instrumentation and controls associated with starting all EFW pumps should be safety grade. Also, the steam generator level control for the EFW system should be independent of the ICS and should be safety grade.

Disposition

Long-term review, as per #2.

552144

5. Realignment of EFW from surveillance mode to injection mode should be automatic and accomplished by safety grade equipment.

Disposition

Long-term review, as per #2.

552145

6. Verify that the EPC system capacities are in accordance with the assumptions of the accident analysis. Modify the technical specifications to ensure that surveillance testing verifies that the system does not degrade below accident analysis assumptions.

Disposition

Restart-review should verify performance (i.e., delivery capability)

552146

7. Verify that the final system design includes indication of EFW flow to each steam generator in the control room.

Disposition

Long-term review, as per #2.

5521A7

8. Review and revise, as necessary, the procedures and training for providing alternate sources of water to the suction of the EFW pumps.

Disposition

Put in bulletin SER and reconsider in long-term review, as per #2.

552148

9. Design review and modification, as necessary, should be conducted to provide control room annunciation for all auto start conditions of the EFW system.

Disposition

Long-term review, as per #2.

552149

10. The EFW system should be modified to provide for automatic switchover to a Seismic Category I water supply on low suction pressure.

Disposition

Long-term review, as per #2.

552150

11. The order should include requirements for the High Pressure Injection System as follows:

- a. System testing to verify that flow has not degraded to less than accident analysis assumptions.
- b. Technical specifications should be modified to require periodic verification of system head and flow for HPI.
- c. The system design should be modified to provide for automatic realignment from the surveillance test mode to the injection mode on an SFAS signal.

Disposition

Covered by ASME-XI. Varga will categorize, send to Eisenhut. Not a contributor to, or aggravator of, TMI.

552151

12. All modified systems and their power supplies should be preoperationally tested in accordance with the current revisions to all applicable regulatory guides (e.g., R.G. 1.68, Rev. 2, R.G. 1.41). Proposed test abstracts should be submitted to the staff for review.

Disposition

Long-term review as per #2.

552152

13. Revisions should be proposed to the plant technical specifications to reflect all design changes and to ensure operability of the affected systems.

Disposition

Covered by Bulletin; Varga to put in SER. Long-term EFW has its own TS.

552153

14. A quality assurance program complying with the requirements of Appendix B to 10 CFR 50 should be applied to all design, procurement, installation, testing, and operation of the proposed changes.

Disposition

Long-term as per #2; put EFW in Appendix B.

5521

15. A schedule should be provided by the licensee for implementation of the long term modifications proposed.

Disposition

Covered by incorporation of April 25 letter.

552155

16. An analysis should be performed to ensure that if EFW flow is directed to the lower header in the steam generator, sufficient cooling is maintained in the upper half of the tube bundle to correspond to the minimum heat transfer assumed in the natural circulation analysis.

Disposition

Schrøeder to eemand to AB for analysis.

552156

Recommended Changes to the Order to SMUD (Rancho Seco)

Comments on Order

1. Comments on Enclosure 1 to Letter from SMUD to NRC dated April 27, 1979 (Referenced in Item 1 of Order)
 - a) Item 1 - Starting of auxiliary feedwater pumps should be automatic. Analysis should ensure that diesels would not be overloaded, that injection by both pumps at design rates will not create undesirable plant transients, and that start signals are initiated by Class 1E and Seismic Category I equipment.

Disposition

This should be considered in the longer-term review, as proposed on p. 2, para. (9) of SMUD letter of 4/27/79.

552157

- b) Item 2 - Realignment of AFW from surveillance mode to injection mode should be automatic and accomplished by safety grade equipment.

Disposition

Long-term as per # 1.

- c) Item 3 - Control of steam generator level by AFW should be accomplished with a safety grade automatic system independent of the ICS. The AFW bypass valve is a full open/full shut valve and should not be relied on for system operation except in the event of failure of the safety grade level control system.

Disposition

Long term, as per #1.

552159

- d) Item 4 - Verification should include system response time as well as pump capacity.

Disposition

Order seems to have time as well as capacity; include in Restart Review.

552160

- e) Item 5 - Modifications should require indication of AFW flow rate to each steam generator in the control room rather than verification of flow.

Disposition

Agree; this should be specifically covered in long-term review (as per #1).

552161

- f) Item 8 should be changed to ensure that the operator verifies proper response of the AFW system including flows, instead of verifying initiation (i.e., pump running indication).

Disposition

This should be covered in long-term assessment (and be consistent with para. f, regarding flow meters).

552162

2. The order should include requirements for the High Pressure Injection system as follows:
 - a. System testing to verify that flow has not degraded to less than accident analysis assumptions.
 - b. Technical Specifications should be modified to require periodic verification of system head and flow for HPI.
 - c. The system design should be modified to provide for automatic realignment from the surveillance test mode to the injection mode on an SFAS signal.

Disposition

Covered by ASME-XI. Varga will categorize, send to Eisenhut. Not a contributor to, or aggravator of TMI.

552163

3. All modified systems and their power supplies should be preoperationally tested in accordance with the current revisions to all applicable Regulatory Guides (e.g., R.G. 1.68, Rev. 2, R.G. 1.41). Proposed test abstracts should be submitted to the staff for review.

Disposition

Long-term review as per #1.

4. Revisions should be proposed to the plant technical specifications to reflect all design changes and to ensure operability of the affected systems.

Disposition

Covered by Bulletin; Varga to put in SER.

552165

5. A quality assurance program complying with the requirements of Appendix B to 10 CFR 50 should be applied to all design, procurement, installation, testing, and operation of the proposed changes.

Disposition

Long-term as per #1.

552165