

JAN 28 1985

MEMORANDUM FOR: C. J. Heltemes, Jr., Director
Office for Analysis and Evaluation
of Operational Data

FROM: Harold R. Denton, Director
Office of Nuclear Reactor Regulation

SUBJECT: ABNORMAL OCCURRENCE REPORT TO CONGRESS
FOR FOURTH QUARTER CY 1984

We have reviewed your memorandum of December 31, 1984, containing the first draft of proposed events to be included in the Abnormal Occurrence (AO) Report to Congress for the Fourth Quarter CY 1984. The only proposed abnormal occurrence for commercial nuclear facilities is the event at McGuire Unit 1 pertaining to the discovery on November 1, 1984, that the upper head injection (UHI) system water accumulator isolation valves were incapable of required automatic closure. The reactor had been operated for about five months in this condition. Had a LOCA large enough to depressurize the reactor coolant system below 1200 psi occurred, nitrogen could have been injected into the reactor coolant system. Although the effects of injection of non-condensable gas into the system has not yet been analyzed in detail, it could interfere with cooling the reactor core. This condition is beyond the design bases for the plant and is not specifically analyzed in the safety analysis report. Therefore, we concur with your proposal that this event is reportable as an AO (Criterion 4 for Commercial Nuclear Power Plants-Discovery of a major condition not specifically analyzed in the Safety Analysis Report (SAR) or Technical Specifications that requires immediate remedial action).

The effect of nitrogen in the reactor during a LOCA has not yet been analyzed, however, NRR is placing a work order with Sandia National Laboratory (SNL) to assess the effect of isolation valve failure during a large LOCA in a UHI plant. The analysis will be performed with the advanced computer code TRAC, which now has the capability to handle non-condensable gasses such as nitrogen. The results of this study are expected to be available in about a year. NRR is also considering initiation of additional studies regarding the net safety benefit of the UHI system and changes in Technical Specification requirements.

We have provided the additional information requested and updated the previously reported AOs where significant developments have occurred in Enclosure 1.

Original Signed by
H. R. Denton

Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Enclosure:
Additional Information

*PREVIOUS CONCURRENCES OBTAINED

ORAB:DL*	ORAB:DL*	ORAB:DL*	C:ORAB:DL*	AD/SA:DL	DEISENHUT
DTarnoff:c1	SNewberry	DWessman	GHolahan	DCrutchfield	11/18/85
01/17/85	01/17/85	01/17/85	01/18/85	01/18/85	

DD/NRR	D/NRR
ECasa	HDeaton
01/27/85	01/25/85

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Handwritten: OAM-8 REPORT TO CONGRESS

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DD/NRR	D/NRR				
ECall	HDeaton				
01/27/85	01/27/85				

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Enclosure 1

Updating Material (Appendix B to take AO Report)

AO 76-11 Steam Generator Problems

As a result of routine eddy current examination of the Three Mile Island Unit 1 steam generator tubes, indications of defects in a number of tubes were found. GPUN is reviewing the situation to determine the number of tubes affected and the cause of the defects, and will make appropriate repairs. A complete report is expected in January, 1985.

AO 83-15 Emergency Diesel Generator Problem

The plants whose TDI Diesels have been approved by the issuance of SERs for operation until the first refueling outage are now Grand Gulf, Catawba, Commanche Peak, Shoreham and San Onofre.

One of the diesels at Shoreham, DG 103, completed 740 hours of operation at a load of 3300 Kw. Teardown for inspection began on November 2, 1984. This diesel will be considered the lead engine for the DSR-48 series of engines (in-line 8) at a qualified load of 3300 Kw.

Cross examination regarding all filed testimony before the Shoreham ASLB was completed and the hearing adjourned on November 16, 1984. The hearing is to resume on February 12, 1985, in consideration of a motion by LILCo to partially reopen the record in the following areas: a) requalification of diesels at a load of 3300Kw and b) discussion of recent DG 103 test results, especially with regard to the crankshaft and cylinder block.

Phase I SER reports are still expected to be completed by the first calendar quarter of 1985 and the Phase II Design Review/Quality Revalidations (DR/QRs) by the third quarter of 1985.

AO 84-2 Through Wall Crack in Vent Header Inside BWR Containment Torus

During meetings with the BWR Regulatory Response Group (RRG) in February 1984, actions to be taken to assure the integrity of the containment and associated systems were discussed. The agreed upon recommendations were documented in GE Service Information Letter (SIL) number 402. As stated in the First Quarter AO report, these actions involve evaluations of inerting system design and operation, performance of a leakage test to confirm the integrity of the vent system, inspection of the nitrogen injection line, and inspection of containment components and equipment. The owners' group letter transmitting the SIL requested that the licensees and applicants report their findings to the NRC. All responses were submitted to the NRC by September 1984. The NRC staff has reviewed the licensee's responses to the SIL recommendations and is finalizing its report to close out this issue.

Additional Information Requested From NRR

1) License suspensions:

There have been no license suspensions for commercial nuclear power reactors during the fourth quarter CY 1984.

2) Orders Covering license Modifications for Safety Reasons:

Three Mile Island Unit 2-Amendment of Order 800211 to reflect post accident conditions of the facility.

3) Identification of those generic safety concerns approved by the Director of NRR:

Generic Issue 86, "NRC pipe cracking review study"-Approved 10/1/84

Generic Issue 93, "Steam binding of Auxiliary Feedwater Pumps"-Approved 10/19/84

Dick - response to your question

- ① 84-9, 84-10 We gave AEOO everything we had ~~of~~ for 3rd quarter report. I discussed with AEOO (Bobe). They received that info ~~after~~ after this memo was sent out.
- ② 76-11, 83-15 These AOs are old ~~and~~ ^{but} are included in Encl. 1 of AEOO incoming. Although not on ~~the~~ list of 6 - they want update where applicable
- ③ "reasons for change" only refers to McGuire - we had no change - only gave them words they wanted on NZ