

UNITED STATES ATOMIC ENERGY COMMISSION WASHINGTON, D.C. 20545

APA 1 5 1971

R. C. DeYoung, Assistant Director for Pressurized Water Reactors, DRL THRU: Charles G. Long, Chief, PWR Project Branch No. 2, DRL

MEETING WITH METROPOLITAN EDISON ON THREE MILE ISLAND UNIT 1 (DOCKET NO. 50-289)

We met with Metropolitan Edison Co. on April 6, 1971, to discuss resolution of several items relevant to the operating license review of Unit 1. These items are discussed in the enclosure. Also enclosed is a list of attendees.

We told Met-Ed that we anticipate meeting with the ACRS in June 1971, which was agreeable with Met-Ed. We also notified Met-Ed that our 2-hour dose calculation for the LOCA is 328 rem, and that we have concluded that the allowable leak rate for the containment must be reduced from 0.2% per day to 0.1% per day. This was not agreeable to Met-Ed, and they plan to discuss this further with Regulatory management.

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Denwood F. Ross PWR Project Branch No. 2 Division of Reactor Licensing

Enclosures: 1. List of Attendees 2. Items Discussed in Meeting

Compliance (2)
DRL & DRS Branch Chiefs
D. F. Ross
D. Lange
J. Knight
A. Dromerick
A. Gluckman
G. Arndt
F. W. Karas
R. W. Klecker

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ENCLOSURE 1 LIST OF ATTENDEES

AEC/DRL/DRS

- D. Ross
- C. G. Long
- D. Lange
- J. Knight
- A. Dromerick
- A. Gluckman
- G. Arndt

NOL

J. Proctor

GAI

C. H. Bitting F. W. Symons K. K. Croneberger K. E. Nodland C. Chen

PLA

Keith Woodard W. W. Lowe

Met-Ed

J. R. Thorpe D. H. Reppert G. Charnoff J. Bachofer, Jr. G. Bierman

B&W

W. S. Delicate E. G. Ward

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ENCLOSURE 2

ITEMS DISCUSSED IN MEETING WITH MET-ED (THREE MILE ISLAND UNIT 1)

1. NFSH for ESF Pumps

We told Met-Ed that they should file a summary of their calculations on NPSH. They will. They cannot comply with Safety Guide 1 as printed. For some time period after a LOCA the containment sump temperature is 222°F. They assume containment pressure is Psat, or about 17.9 psia, instead of the 14.7 psia inferred from SG #1. The difference is 3.2 psi or 7.4 feet of water. They said that, in order to maintain the needed NPSH, flow would have to be throttled.

We said that we would reserve decision until the details were filed.

2. Decay Heat Valve Interlocks

We said that we wanted (a) an interlock on both DH isolation valves (between primary and DH system) instead of just one valve, and (b) an analysis of the response to the plant to an inadvertent startup with both valves open.

They saw no difficulty in providing (a) and said that high-pressure alarms on the DH system could be tied to the annunciator board. taking care of (b). However, they did not want to make a firm commitment at the meeting.

3. BAW-10003, Topical on Instrumentation Qualification

We noted recent (April 1, 1971) receipt of the topical BAW-10003. We said that we would try to have preliminary comments in about one month.

4. Startup Tests

A summary description of startup tests will be provided in the next amendment.

5. Industrial Security

We discussed the essential elements necessary for industrial security assurance, using FP&L Turkey Point 3 as guidance. Met-Ed understands what is required, but did not commit to a filing date.

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We asked for three additional pieces of meteorology information:

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- a. The unavailability times of the 2-year on-site program
- b. The revised cumulative distribution charts of X/Q
- c. An explanation of the unusual distribution of Pasquill conditions, particularly D, E, and F.

7. Fuel Pool Filter

We told Met-Ed that if they wanted to bottle up the fuel pool building in the event of high exhaust radiation, they should in some manner test its leak rate. Otherwise they should continue filtering the effluents.

We did not object to isolating the ventilation system in the event of an aircraft crash.

8. Dynamic Analyses of Piping and Structures

Gilbert Assoc. (Chang Chen and Don Croneburger) representatives discussed some recent (unfiled) work on comparison of dynamic analysis methods. We thought the work to be very interesting and requested that it be filed. We discussed the commentary of Newmark Assoc., and requested additional information in several areas, including:

- a. Calculation of vertical motion
- b. Treatment of piping in trenches
- c. Class I items in Class 2 buildings
- d. Typical stress values in piping systems
- e. Consideration of water hammer effects during plant startup

9. Aircraft Impact

The applicant intends to completely revise Appendix 5A of the FSAR concerning aircraft impact. They discussed the draft revision, and some detailed stress analysis in the dome.

(In general it appears that this revision will satisfy our concerns).

10. Reactor Cavity

We asked for some ductility information on the rebar in the reactor cavity concrete, as it appears that the steel will be in yield for the large (14.1 ft^2) break within the cavity.

11. Water Velocity During PMF

In the next amendment Met-Ed will furnish information on the local water velocity adjacent to the rip-rap of the site dike.