

SEP 27 1973

POOR ORIGINAL

DOCKET NO.: 50-289

APPLICANT : METROPOLITAN EDISON COMPANY

FACILITY : THREE MILE ISLAND UNIT 1

SUMMARY OF ACRS SUBCOMMITTEE AND FULL COMMITTEE MEETINGS

Subcommittee Meeting

The ACRS Subcommittee meeting on Three Mile Island Unit 1 (TMI-1) was held in Washington, D. C. on July 25, 1973. The agenda was provided by the ACRS staff in a July 19, 1973 memorandum which is enclosed. The Subcommittee meeting followed the agenda; the following were some of the specific items of discussion:

1. 1972 Flood

There was some discussion of the amount of flooding experienced at the plant during the 1972 flood (tropical storm Agnes).

2. Core Flooding Tanks

There was some discussion of the need to insulate the core flooding tanks because of their high NDT temperature (85°F vs 45-50°F in other plants of this type).

3. High Energy Line Rupture

The staff position, which accepts some inspection in lieu of encapsulation, was explained. Dr. Stratton asked if this was evidence of an evolving staff policy with regard to accepting inspection in lieu of modification.

4. Loose Parts Monitoring

The loose parts and vibration monitoring system for TMI-1 was discussed.

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5. Relief Valve Discharge Loads

Dr. Etherington asked a number of questions about the design approaches used.

6. Aircraft Hazard

The applicant described the structural and fire protection system design provisions made for this hazard. The staff explained the probability analysis. Dr. Isbin questioned the staff on why we did not implement our NASA consultant's recommendation to require a full scale test of the fire suppression system. Dr. Stratton questioned the conservatism of the impact area we used for the plant.

7. Sodium Thioulfate Spray

B&W made a presentation on the spray design and technology. Dr. Isbin questioned the reliability of pH control by sodium hydroxide addition.

8. ECCS and Peaking Factors

B&W made a presentation. ACRS questions centered on fuel densification and small break analysis. Dr. Isbin asked how many independent calculations the staff has performed considering the effects of fuel densification. There was extensive discussion of the operating limits and the proposed alarm systems which will be required.

9. Quality Assurance

The applicant commented extensively on steps it had taken to provide adequate quality assurance. Dr. Isbin asked if there were any open items between the applicant and RO (apparently of a gravity sufficient to warrant civil penalty). Dr. Isbin was told that the only open items were routine matters.

10. Emergency Plan

The members questioned the applicant on the status of the State plan, drills and other emergency plan aspects. The applicant explained the use of the high range gamma monitor in the reactor building for establishing the seriousness of an accident.

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Fullcommittee Meeting

The ACRS fullcommittee meeting on TMI-1 was held on August 10, 1973 in Washington, D. C. No agenda was furnished by the ACRS. The TMI-1 meeting was held the day after the ACRS meetings which addressed B&W reactor design considerations in general for three current cases (Oconee 2/3, Arkansas 1, and TMI-1) and the specific case meetings on Oconee 2/3 and Arkansas 1. As a result the TMI-1 meeting was of limited scope and length. The following were some of the specific items of discussion:

1. Operation of TMI-1 during TMI-2 Construction

The applicant was questioned about interfaces between the two plants and security measures. Dr. Bender exacted from the applicant a commitment to escort construction workers in the operating reactor area.

2. Tendon Bearing Plates

The ACRS was told of the current concern about data indicating tendon bearing plate recession upon stressing the vertical tendons. Dr. Siess pursued the matter and expressed concern about the magnitude of recession indicated. The applicant was unable to satisfy Dr. Siess that their allowable value of indicated recession (0.25 inch) was acceptable.

3. Operating Procedures

Dr. Bender pursued a line of questioning to determine how the detailed plant operating procedures are prepared and approved.

4. ECCS and Peaking Factors

Dr. Okrent returned to this subject which had been covered in the generic meeting the day before. He expressed particular interest in the accuracy of the alarms that bound the allowable operating range of power and flux balance.

5. Staff Qualifications

There was some discussion of the qualifications of the corporate staff people in health physics.

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7. Net Positive Suction Head

Dr. Ukrent noted that the SER said TMI-1 does not meet Regulatory Guide 1.1. He asked over what period of time it does not; no one was able to answer.

ACRS Letter

The resulting ACRS letter on TMI-1 is enclosed.

Original Signed

Robert M. Bernero, Project Manager  
Pressurized Water Reactors Br. No. 4  
Directorate of Licensing

**Enclosures:**

1. ACRS Subcommittee Meeting Agenda
2. ACRS Letter

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