

UNITED STATES GOVERNMENT

Memorandum

TO : Roger S. Boyd, Assistant Director
for Reactor Projects, DRL
THRU: Robert L. Tedesco, Chief
Reactor Project Branch 2, DRL
FROM : V. Stello
Reactor Project Branch 2, DRL

DATE: July 7, 1967

SUBJECT: ACRS SUBCOMMITTEE MEETING JUNE 22, 1967, ON OYSTER CREEK NUCLEAR PLANT
DOCKET NO. 50-219

On June 22, 1967, an ACRS Subcommittee meeting on Jersey Central's Oyster Creek Nuclear Plant was held at the H Street offices. The subject of the meeting was restricted to the functional aspects of the Emergency Core Cooling Systems (ECCS). Our report to the ACRS had been submitted on June 16, 1967.

Attendees from DRL and ACRS:

DRL

R. S. Boyd
S. Levine
R. L. Tedesco
A. Rizzo
J. Buzy
V. Stello
J. Sears, NY CO

ACRS

J. E. McKee
S. H. Hanauer
C. W. Zabel
A. A. O'Kelly
W. Stratton

A list of persons representing Jersey Central including contractors and consultants is attached.

Major points of discussion were as follows:

1. An attempt was made to determine if GE uses a different criterion in the design of current BWR's than was used on OC. GE indicated that the criterion used for design of the ECCS for OC and all current BWR's was to prevent clad melting across the entire break spectrum. Further, with the jet pump feature on the current plants a system of different principle (flooding) is possible and had been added to improve what was believed to be an already "adequate system."
2. High temperatures (2400F) and many fuel rod perforations (45%) are calculated by GE for the small breaks. The issue then became "should some small portion of the break spectrum be considered as anticipated transients." If so, the no fuel failure criterion rather than GE's no melt criterion would apply. An attempt was made by GE to show that other equipment (control rod drive pumps) and calculational conservatism improve the situation but were not prepared to give quantitative



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results. It is expected that some questions will be generated by the ACRS in this regard.

3. Radiological consequences due to fuel rod perforations for small breaks (with on-site power only) were discussed in detail. Dose levels at both the site boundary and in the reactor building were of concern.
4. GE discussed the approach for incorporation of the second diesel on a preliminary basis. GE believed that the single failure criterion would be met for the AC, but that the limited capacity of the two batteries might create problems in the DC circuit. The Committee recommended that a fuel supply for seven days be stored on site. Current capacity is limited to a three-day supply.
5. Discussion of the criteria sent to the ACRS in June 1967 was held in a closed session between DRL and the ACRS. Major issues were: (1) passive element failures, (2) margin to be provided in applying the "no melt" criterion, and (3) alternate ECCS subsystems.
6. A backup system to the ECCS was examined. Because the change was recent (June 16, 1967) GE had not evaluated this aspect in enough detail to respond to all of the questions.


At the conclusion of the meeting, the ACRS Subcommittee informed the applicant that:

- the Subcommittee would not recommend that OC be taken to the full ACRS Committee at this time;
- more information would be required and the ACRS Subcommittee would provide DRL with questions for transmittal to the applicant; and
- a site visit would be combined with another ACRS Subcommittee meeting, possibly in late July 1967.

Attachment:

List of Attendees from J.C.

Distribution:

Suppl. ← 
 DRL Reading
 RPB 2 Reading
 Assistant Directors, DRL
 D. R. Muller
 C. G. Long
 R. Ireland
 Compliance (2)
 A. Rizzo

ATTENDEES AT ACRS SUBCOMMITTEE MEETING

Jersey Central Power & Light Company

George H. Ritter
Donald R. Rees
James V. Neely
Donald E. Hetrick
Ivan R. Finfrock
Thomas J. McCluskey

Consultants

William W. Lowe
Gerald Charnoff

Burns & Roe, Incorporated

John C. Archer
Guido A. Lari

General Electric Company

Robert A. Huggins
Leonard C. Koke
Edward M. Kratz - Plant Design Engr.
Thomas E. Bloom - Plant Design Engr.
Joseph E. Love, Jr. - Structural
Pio W. Ianni - Hydraulic and Heat Transfer
A. Philip Bray - Hydraulic and Heat Transfer
Andrew J. McCrocklin - Inst. and Controls
Milton R. Lane - Inst. and Controls
Franklin C. Rally - Core Internals and Stress Analysis
Manuel A. Head - Systems Analysis
Richard V. Poe - Safeguards