



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20565

50-346

DEC 17 1976

MEMORANDUM FOR: R. E. Heineman, Director, Division of Systems Safety  
H. R. Denton, Director, Division of Site Safety and  
Environmental Analysis  
R. Boyd, Director, Division of Project Management

THRU: J. Stolz, Chief, Light Water Reactors Branch No. 1 *JS*  
Division of Project Management

FROM: L. Engle, Project Manager, Light Water Reactors Branch  
No. 1, Division of Project Management

SUBJECT: DAVIS-BESSE, UNIT 1 ACRS SUBCOMMITTEE MEETING - TUESDAY  
DECEMBER 21, 1976

The Davis-Besse, Unit 1 ACRS Subcommittee meeting is scheduled for Tuesday December 21, 1976. The agenda for this meeting is provided in Attachment 1 to this memorandum.

There are presently 15 outstanding items in the SER that need resolution prior to issuance of an operating license. Attachment 2 to this memorandum list the outstanding items as listed in the SER. The SER also identifies the staff's current evaluation of seismic intensity data at the Davis-Besse site which will be addressed in a supplement to the SER.

We request that the following branch staff personnel be available for this ACRS subcommittee meeting:

- (1) Reactor Systems Branch
- (2) Core Performance Branch
- (3) Analysis Branch
- (4) Auxiliary and Power Conversion Branch
- (5) Containment Systems Branch
- (6) Electrical Instrumentation and Control  
System Branch
- (7) Geology-Seismology Branch

The appropriate staff members have already been notified by telephone.

*L. Engle*  
L. Engle, Project Manager  
Light Water Reactors Branch No. 1  
Division of Project Management

cc: See Page 2

8002060 708 0

DEC 17 1976

cc: B. Rusche  
E. Case  
D. DeYoung  
F. Schroeder  
D. Vassallo  
W. P. Gammill  
J. P. Knight  
D. Ross  
R. Tedesco  
D. Skovholt

Attachments: as stated

ATTACHMENT 1

SCHEDULE FOR DAVIS-BESSE  
UNIT 1  
SUBCOMMITTEE MEETING  
WASHINGTON, D.C.  
December 21, 1976

- 8:30 a.m. 1.0 Executive Session (Open)
- 9:00 a.m. 2.0 Meeting with Applicant and NRC Staff (Open)
- 2.1 Introduction by Applicant (20 minutes)
- Brief plant description and changes since CP review
  - Fuel load/operation schedule
  - Organization/staffing for operation
- 2.2 NRC Staff Report
- Summary of SER and status of review
  - Resolution of comments in ACRS report dated (8/29/70)
- 2.3 Outstanding Review Items (6 hours)
- Status of each outstanding issue (NRC Staff)
  - Response (Applicant)
  - Status of unresolved generic items (ACRS Report #4, dated 4/16/76) as related to other B&W reactors (NRC Staff)
- 2.4 Presentation by Applicant (40 minutes)
- Review of containment vessel paint problems
  - Status of modified surveillance specimen tube holders
  - + - Long term cooling capability without use of BOP components; steam generators; a.c. power
  - Other items requested by Subcommittee or Applicant

2.5 Emergency Plans (Applicant) (30 minutes)

- Status of fire protection evaluation in compliance with Appendix A to Branch Technical Position APCSB 9.5.1
- Instrumentation to follow the course of an accident
- Agreements with local and state agencies
- Ohio response plan

2.6 Plant Security (Closed) (20 minutes)

- Procedures
- Operation features to prevent sabotage

5:00 p.m. 3.0 Subcommittee Caucus and Adjournment (Open) (10 minutes)

## ATTACHMENT 2

### 1.7 Summary of Outstanding Review Items

At this time, we have not completed our review of a number of items, either because additional information is required from the applicant or because we have not yet completed our review of information submitted by the applicant. These items will be addressed in a supplement to this Safety Evaluation Report. The current status of each item, and the section(s) of this report in which the items are discussed are identified below.

- Resolved → (1) ~~Acceptability of the second year of onsite meteorological data (Section 2.3.4).~~
- (2) Analysis of reactor coolant system response to pressure transients that can potentially occur during startup and shutdown (Section 5.2.2).
- (3) Leakage Detection System (Section 5.2.4).
- (4) Performance of surveillance capsule specimen holder tube based on reactor internals vibration test assessment (Section 5.3).
- (5) Analysis of the decay heat removal system relief capacity (Section 5.5.3).
- (6) Evaluation of the reactor cavity pressure response analysis (Section 6.2.1).
- (7) Analysis for pressure response of the shield building following a postulated loss-of-coolant accident (Section 6.2.3).
- (8) Evaluation of emergency core cooling system performance considering minimum containment pressure, submerged valves, effects of boron precipitation, and single failure criteria (Section 6.3.3).
- Resolved → (9) ~~Review of door seals and control room pressure tests to verify control room habitability (Section 6.4). Applicant has been requested to provide additional information.~~
- Resolved → (10) ~~Review of the safety related electrical logic and schematic diagrams and the verification of the implementation of the design (Section 7.1).~~
- (11) Verification of the reactor protection system equipment qualification testing (Section 7.2). Applicant will submit test results in December 1976.
- (12) Modification in redundant reactor coolant flow transmitters in order to meet single failure criteria (Section 7.2).
- (13) Evaluation that inadvertent closure of the low pressure to high pressure valves will not preclude decay heat removal to cold shutdown (Sections 7.3.4 and 5.5.3).

(14) Evaluation of the modified steam and feedwater line rupture control system (Section 7.4.1).

(15) Evaluation of separation criteria for redundant safety related electrical cables in trays, wireways, and conduits (Section 7.4.2).

Resolved → ~~(16) Evaluation of backup protection and short circuit interrupt tests for containment electrical penetrations (Section 7.10).~~

(17) Evaluation of the qualification of safety-related equipment in a postulated main steamline break accident environment (Section 7.7).

(18) Equipment failures due to degraded grid voltage drop (Section 8.2). The applicant has provided information which the staff is presently evaluating.

(19) Evaluation of the applicant's financial qualifications to operate the facility (Section 20.0).

1.8 Generic Issues

The following issues are generic in nature and are being pursued primarily with the vendor in question, and through the applicant where appropriate. We will require that any design or procedural change resulting from these generic reviews be incorporated in Davis Besse, Unit 1 as appropriate.

(1) Evaluation of reactor vessel supports under loss-of-coolant loadings (Section 3.9.3).

(2) Pellet cladding mechanical interaction (Section 4.2.1).

(3) Evaluation of fuel rod bowing effects (Section 4.4).

(4) Emergency core cooling analysis modifications (Section 6.3.3). Revisions by Babcock and Wilcox are expected by December 1976.

(5) Anticipated transients without scram (Section 7.2.2). Applicant has been requested to furnish additional information.

(6) Evaluation of facility fire protection capability for Appendix A to Branch Technical Position APCS 9.5-1 (Section 9.6.1). Applicant will provide evaluation in February 1977.

MEETING NOTICE DISTRIBUTION

Docket File ←  
NRC PDR  
Local PDR  
TIC  
LWR 1 File  
NRR Reading  
B. Rusche  
E. Case  
J. Miller  
R. Boyd  
R. C. DeYoung  
D. Skovholt  
F. J. Williams  
J. Stolz  
K. Kniel  
O. Parr  
W. Butler  
D. Vassallo  
L. Crocker  
R. Clark  
T. Speis  
P. Collins  
C. Heltemes  
R. Houston  
R. Heineman  
R. Denton  
ACRS (16)  
S. Varga  
H. Berkow  
Project Manager  
Attorney, ELD  
IE  
SD (7)  
E. Hylton  
Receptionist  
Principal Staff Participants  
B. Faulkenberry, IE

J. Knight  
D. Ross  
R. Tedesco  
S. Pawlicki  
I. Sihweil  
P. Check  
T. Novak  
Z. Rosztoczy  
T. Ippolito  
V. Benaroya  
G. Lainas  
V. Moore  
R. Vollmer  
M. Ernst  
W. Gammill  
G. Knighton  
B. Youngblood  
W. Regan  
D. Bunch  
J. Collins  
W. Kreger  
R. Ballard  
M. Spangler  
J. Stepp  
L. Hulman  
H. Smith  
V. Stello  
Dr. Harold L. Ornstein