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JAN 18 1973

Docket No. 50-331

Angelo Giambusso, Deputy Director for Reactor Projects, D/L
THRU: R. S. Boyd, Assistant Director for BWR.

DEFERRED REVIEW MATTERS RE: DUANE ARNOLD'S SAFETY EVALUATION

We plan to issue the staff's Safety Evaluation on the Duane Arnold project on January 23, 1973. This date must be met to have the case reviewed by the ACRS at its February, 1973 meeting.

We consider our radiological safety review of the Duane Arnold project to be complete. In completing this review, we have elected to defer final conclusions on several matters. These matters and our reasons for deferring our final conclusions on them are summarized below. We plan to address each of these matters in a supplement to the Safety Evaluation prior to our final determination on issuance of an operating license.

1. Fuel Densification (paragraph 4.2.1)

Topical report on fuel densification has been submitted by General Electric Company. Staff review of this generic matter is just starting. No review plan or progress report available at this time. G. E. concludes in its topical report that no serious problems are anticipated for the BWR fuel.

2. Rod Sequence Control System (paragraph 4.2.3)

G. E. has not submitted its final analysis of the rod drop accident at 6500 MWD/T and at E.O.L. to show that the 280 calorie/gm enthalphy limit is not exceeded. Also analysis for determining the number of fuel pins which perforate during the postulated accident has not been finalized (estimated by G. E. to be 600 fuel pins compared to 330 fuel pins from the old analysis). Applicant will have a rod sequence control system (RSCS) installed prior to operations above 1% power level.

3. Main Steam Line Isolation Valve Seal System (paragraph 6.2.6)

The applicant has committed to installing an MSLIV seal system but has not yet submitted the design for staff review. Submittal of design description is scheduled for the first quarter of 1973 with installation of an approved system no later than the first refueling outage.

4. Anticipated Transients Without Scram (ATWS) (paragraph 7.5)
The staff analysis of ATWS is still in progress. G. E. has not yet submitted the additional information requested in June, 1972. Applicant will install the recirculation pump trip prior to the initial fuel loading date. This is a generic matter affecting all BWR plants.

5. Shield Plug & Head Drop Analyses (paragraph 9.1.4)
The analysis of the dropping of the shield plug or pressure vessel head will be submitted by the applicant in Amendment 12 to the FSAR on about February 5, 1973. We have indicated in the Safety Evaluation that this is a new generic concern and will be reviewed on a generic basis for all BWR plants.

6. Main Steam or Feedwater Line Rupture Outside Containment (paragraph 10.3)
Applicant is scheduled to meet with the staff on February 2, 1973, to discuss results of recent analyses and consequences of a rupture of a pipe containing high energy fluid, outside the containment. Complete analysis will be submitted by the applicant on February 5, 1973. Applicant has indicated verbally and the results of our preliminary review indicated that no problem was found as a result of its review.

Original signed by
Walter Butler

Walter R. Butler, Chief
Boiling Water Reactor Branch 1
Directorate of Licensing

OFFICE ▶	L: BWR-1	L: BWR-1	L/AD/BWR		
SURNAME ▶	R Powell:ln	W. Butler <i>WB</i>	R.S. Boyd		<i>Memo</i>
DATE ▶	1/18/73	1/18/73	1/18/73		