

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

January 29, 1974

Docket Nos. 50-424
50-425
50-426
50-427

Applicant: Georgia Power Company
Facility: Alvin W. Vogtle Nuclear Plant

SUMMARY OF MEETING TO DISCUSS REMAINING AREAS OF STAFF CONCERN
REGARDING MECHANICAL DESIGN

A meeting was held with the applicant in Chevy Chase on January 17, 1974, to discuss remaining areas of concern regarding the mechanical design of the Vogtle plant. Attendees at the meeting are listed in the enclosure. A summary of the points covered the meeting is presented below.

Seismic Qualification of Equipment

Request for information 3.44 had forwarded to the applicant the staff position regarding the seismic qualification of equipment. The response from the applicant was considered not a definitive commitment. During the meeting, the applicant stated that it would commit to IEEE 344, 1971, with attention paid to cross coupling. Depending upon the wording of the actual commitment, this is considered acceptable to satisfy the previously stated staff position.

Pipe Whip Restraint Design Criteria

The applicant stated that WCAP 8082 will be used for the design analysis of primary coolant system and that BN-TOP-2 "Design for Pipe Breaks Effect" will be used for branch lines from the primary loop and for all balance-of-plant piping. The design will consider the effects of pipe whip, blowdown jet, and reactive forces. The applicant stated that the design will provide restraints at a minimum of two intermediate locations on each high-energy piping run, regardless of calculated stress levels.

The applicant questioned the staff position recently taken on Arkansas 1 (Docket 50-313) regarding augmented inservice inspection of high energy lines in compartments and areas not otherwise calculated to contain high stressed piping. Briefly, the staff position expands the criteria stated in the December 15, 1972, letter to incorporate an augmented inservice inspection of the piping, regardless of stress level, in

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those plant areas where the consequences of a break would be unacceptable. For example, if a high energy line runs near the control room and if a break could result in knocking down the control room wall, prudence dictates that the piping be inspected periodically even though calculations indicate that the stress levels in the pipe at this point do not warrant special restraints & shields.

The LPM will prepare a letter to the applicant documenting this staff position and incorporating it as a requirement for the Vogtle plant.

Vibration Test Program

The applicant stated that Indian Point 2 (Docket No. 50-247) has been selected as the prototype plant for Vogtle to determine the vibrational characteristics of the reactor intervals. The Trojan plant (Docket No. 50-344) will be instrumented to confirm the vibrational characteristics of the changes to the neutron shielding pads and the 17 X 17 fuel assembly in lieu of the previously tested thermal shield and 15 X 15 fuel assembly. The confirmatory test program for Vogtle will satisfy Regulatory Guide 1.20.

Allowable Primary Stresses

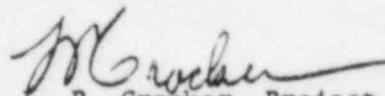
Request for Information 5.1 and 5.13 asked for a designation of specific procedures to be applied for design analysis of the primary system under faulted conditions. The response to date is considered inadequate. At the meeting, the applicant stated that the specific response to 5.13 would be a reference to RESAR. However, R. Bosnak pointed out that RESAR Tables 5.2-8 and 3A-2 have not as yet been approved. These identical tables present allowable primary stresses for the faulted plant condition. Some discussion ensued regarding the acceptability of this table, but without resolution. The applicant will be required to provide acceptable stress limits as a part of the Vogtle docket. He was told that if he designed to Appendix F of Section III of the ASME Code for these stress limits and methods of evaluation, they would be accepted.

Experimental Stress Analysis

Requests for Information 5.2 and 5.14 asked for an identification of components whose design is based on experimental stress analysis. The response to date was considered inadequate. During the meeting, the applicant provided a draft revision to page 5.2-3 of the PSAR which should take care of our concerns. R. Bosnak is evaluating and we will inform the applicant as to the acceptability of the draft response for docketing.

Mechanical Systems and Components

There was considerable discussion at the meeting regarding stress limits and loading combination for the various ASME classes of vessels, piping, pumps and valves as furnished by Westinghouse and Bechtel. The applicant indicated that Section 3.9 of the PSAR, which addresses these matters for Class 2 and 3 components, was in the process of revision and would be submitted in the next amendment on January 28, 1974. There would also be changes to Section 5.2. The oral responses from the applicant and draft tables presented by the applicant during the meeting appear to be acceptable with the exception of the faulted stress limits for Class 1 components as previously discussed.



L. P. Crocker, Project Manager
Light Water Reactors Branch 2-2
Directorate of Licensing

Enclosure:
As Stated

ENCLOSURE

VOGTLE MEETING

JANUARY 17, 1974

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