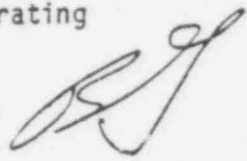




UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

JUL 17 1979

MEMORANDUM FOR: D. Eisenhut, Acting Director, Division of Operating Reactors

THRU: B. Grimes, Assistant Director for Systems and Engineering, Division of Operating Reactors 

FROM: G. Lainas, Chief, Plant Systems Branch, Division of Operating Reactors

SUBJECT: RESOURCE NEEDS TO COMPLETE GENERIC ISSUES TASK B-07, STEAM GENERATOR FEEDWATER FLOW INSTABILITY

As of this date there are 23 docket, listed in Table 1, which have not had steam generator feedwater flow instability evaluations issued. As currently planned, EG&G would provide 20 of these evaluations; J. Reece, our consultant, would evaluate Robinson 2; and S. MacKay would evaluate the remaining three plants (Calvert Cliffs 1 and 2 and Fort Calhoun). At our present rate of progress, we would not complete all of these evaluations until March 1980.

After discussions with my staff, EG&G and project people, I conclude that to conduct the level of review currently being performed and complete this effort by the end of December 1979, the following would be needed:

1. An additional \$57K for EG&G to fund 4 persons through November.
2. A commitment from our consultant J. Reece, that he would be completed with Robinson 2 by the first of September 1979.
3. An additional staff member within NRR 1/2 time in July and full time August through December to assist S. MacKay in managing the EG&G reviews and Reece's review. Y. Huang, PSB can be reassigned to assist S. MacKay. This will result in a six month delay in Appendix J reviews and ACAD system reviews.
4. An ideal situation with respect to all remaining licensees to avoid delaying problems such as have occurred on:
 - a. Indian Point 2 - PSB completed in January 1979. ORB Branch Chief did not wish to issue until the structural integrity of the piping was addressed. Recently issued July 1979.

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- b. Salem 1 - PSB completed in January 1979. The licensee perceives some conflict between his license restriction C.(3) "Steam Generator Water Rise Rate" and statements concerning auxiliary feedwater flow rate presented in our evaluation. The ORPM has not had an opportunity to resolve this due to involvement in hearings and job reassignments.
 - c. Zion 1 and 2 - PSB position prepared for issuance to ORB 5/79 but conversations with the licensee were suggested to address our differences. The licensee had taken a position late May that they did not need "J" tubes but now has agreed to install them on all 7 remaining steam generators at the rate of one steam generator during each refueling outage in light of his waterhammer experience of June 8.
5. There are 4 people available at EG&G, and they can become productive almost instantly. We understand that Byron Hansen is working part time on these reviews at EG&G and, if he were relieved of responsibilities under FIN A6167, could be made available immediately full time. We also understand that Mark Hanner, EG&G, who is working on reviewing Standard Review Plans under FIN A6279, is also knowledgeable and could be made available full time if NRC realigned its priorities.
 6. S. MacKay is not requested to commit time on any activity other than the 3 weeks requested on A-10 and those 3 weeks will be made available at PSB's discretion to reduce the impact on the feedwater flow instability reviews.

This large resource requirement is necessary because these reviews encompass a great deal of what the licensees should have done in response to our requests in May 1975 and September 1977. A additional request to the licensees at this time would certainly not result in completion of this task by 12/31/79. A number of the above conditions may also be difficult to attain. For example, it may not be possible to have Hansen and Hanner reassigned to this effort at EG&G as Hanner is working on TAP A-1 and EG&G has no one else available. However, these resources should produce a completed PSB review by December, and the ORPM's should be able to issue a month later.

There is an associated problem currently delaying the issuance of the Salem 1 evaluation as discussed above, which may arise on 4 other dockets. We estimate it would take about 3 man-months to remove the license conditions

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and coordinate with improved auxiliary feedwater designs resulting from TMI. However, we do not believe this to be a part of the SG feedwater flow instability problem, and it should be addressed at a later date. Without a management decision to treat it this way, we may have a difficult time convincing projects.

G. Lainas for

G. Lainas, Chief
Plant Systems Branch
Division of Operating Reactors

Contact:
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Enclosure:
As stated

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J. Huang

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TABLE 1
 STEAM GENERATOR FEEDWATER FLOW INSTABILITY
 DOCKETS NOT YET ISSUED AN EVALUATION

<u>Docket Name</u>	<u>Contractor* Completion To meet 12/79</u>	<u>Scheduled PSB Completion To meet 12/79</u>
Conn. Yankee	9/79	10/79
Ginna	9/79	10/79
Kewaunee	6/79C	7/79
Point Beach 1	6/79C	7/79
Point Beach 2	6/79C	7/79
Prairie Island 1	7/79	7/79
Prairie Island 2	7/79	7/79
Salem 1	11/78C	1/79C
San Onofre	9/79	10/79
Trojan	9/79	10/79
Turkey Point 3	9/79	10/79
Turkey Point 4	9/79	10/79
Yankee Rowe	10/79	11/79
Zion 1	4/79C	8/79
Zion ?	4/79C	8/79
Calvert Cliffs 1	---	11/79
Calvert Cliffs 2	---	11/79
Fort Calhoun	---	11/79
Maine Yankee	11/79	12/79
Millstone 2	11/79	12/79
Palisades	11/79	12/79
St. Lucie 1	10/79	11/79
Robinson 2	?	

"C" indicates completed

*Assuming 4 people at EG&G assigned in July.

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