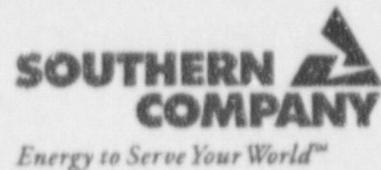


Dave Morey
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December 9, 1997

Docket Nos.: 50-348
50-364

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

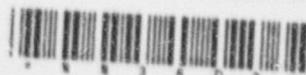
Joseph M. Farley Nuclear Plant (FNP)
Phone Conference to Discuss BE-LBLOCA Evaluation
For the Steam Generator Replacement Project

Ladies and Gentlemen:

On December 4, 1997, a phone conference was held between the NRR Staff, Westinghouse LOCA Staff and Southern Nuclear-Farley Project NEL Staff. In attendance on the phone conference were, Jake Zimmerman and Fred Orr representing NRR, Mike Watson and Sue Dederer representing Westinghouse, and John Garlington, Mark Ajluni, and Howard Mahan representing Southern Nuclear. The purpose of the conference was to discuss the type of evaluations Westinghouse would perform for the BE-LBLOCA calculation to support the replacement of the Steam Generators at Farley Nuclear Plant Units 1 and 2.

Sue Dederer of Westinghouse described the method that will be used to evaluate BE-LBLOCA for Farley Nuclear Plant. An open discussion was held with the NRR Staff to better understand the methods that are to be used. The Enclosure contains a description of the evaluation method that was discussed.

SNC & Westinghouse believe that the proposed approach for evaluating the replacement of Steam Generators is sound and that a full scope BE-LBLOCA reanalysis is not required. Due to the significant adverse impact to the licensing schedule for Steam Generator replacement, which would occur if this approach was deemed insufficient after submittal of the primary licensing package, SNC requests that the Staff review this proposed method and provide comments by January 16, 1998.



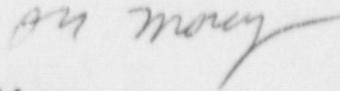
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If you have any questions, please advise.

Respectfully submitted,

SOUTHERN NUCLEAR OPERATING COMPANY

A handwritten signature in cursive script, appearing to read "Dave Morey".

Dave Morey

CHM/clt:nrc-1204.doc

Enclosure

cc: Mr. L. A. Reyes, Region II Administrator
Mr. J. I. Zimmerman, NRR Project Manager
Mr. T. M. Ross, Plant Sr. Resident Inspector

ENCLOSURE

BE-LBLOCA Analysis for Farley Nuclear Plant to Support
The Steam Generator Replacement Project

Enclosure

BE-LBLOCA Analysis for Farley Nuclear Plant to Support The Steam Generator Replacement Project

Steam Generator Replacement (SGR) programs for standard LBLOCA have been evaluated by running the limiting transient which resulted in the analysis of record (AOR) with the new steam generator parameters incorporated. This approach results in a PCT impact which is then incorporated into the PCT rack ups. For the Farley BE-LBLOCA analysis supporting the SGR, a similar approach is proposed in which the limiting reference transient is used as the basis for evaluation.

A SGR program of the type contracted by Southern Nuclear for the Farley Units 1 and 2 is not expected to yield any large changes in the BE-LBLOCA transient results. The SGR program for Farley has been set up such that there will be no changes to the major plant operating parameters listed in Table 13-1 of the response to RAI-3, question 13, for the Farley Uprate program, as transmitted under letter dated November 19, 1997. There will be no change to the analyzed thermal design flow, Tavg window, Tech Spec limits, ECCS parameters or fuel type. The only changes required will be the physical changes associated with the steam generator: the primary and secondary volume, fluid mass, physical dimensions, etc. Thus, the basis for the BE large break analysis for Farley will not change: the initial condition run matrix, power distribution run matrix and global model run matrix will all remain the same.

Westinghouse proposes to perform two WCOBRA/TRAC calculations for the replacement steam generator program using the limiting reference transient identified in the BE analysis for Farley at uprated conditions as the basis. The limiting reference transient is a CD=1.0 split break with low Tavg and no loss of offsite power for Unit 2 (as described in section 6.1.1.5.2 of WCAP 14722, dated November 1997). The replacement steam generators will be incorporated into the decks and two calculations will be performed, one at maximum and one at minimum tube plugging levels. The results of these two calculations will be compared to the result of the original reference transient. If the original reference transient remains limiting, the SGR will be considered to be bounded by the current BE-LBLOCA analysis, and no further analysis will be necessary.

If one of these two transients becomes more limiting than the original reference transient, a modified approach will be taken. Since the SGR program does not change any parameters associated with the three phases of uncertainty (initial condition, power distribution, or global model), only the final phase of the BE methodology would need to be assessed. This phase involves the combination of parameters which were not previously varied in combination in the first three phases of uncertainty, as discussed in Section 2.4.3.5 of the SER for the approved BE-LBLOCA methodology. As such, eight additional calculations, known as superposition calculations, which combine two or more of the limiting parameters in one calculation would be performed. The limiting SGR calculation would be used as the basis to perform the eight superposition runs with the SGR conditions. The results of these superposition runs will then be used to calculate a new 95% probability PCT. This would then be compared to the original 95% PCT for the Farley uprate analysis (2064 deg F). The difference in PCT would be used to assess a delta PCT to be used in the PCT rackup for the Farley units, similar to what is done for non-BE evaluation models. Other evaluations based on the final PCT, such as Zirc-4 vs. Zirlo fuel, will also be re-evaluated.