

SUPPLEMENTAL SAFETY EVALUATION REPORT
MASONRY WALL DESIGN, IE BULLETIN 80-11
PEACH BOTTOM ATOMIC POWER STATIONS UNITS 2 AND 3
DOCKET NOS. 50-277 AND 50-278

In the Safety Evaluation Report (SER), the staff concluded that except for five walls (out of a total of 86) qualified by the licensee via the use of the energy balance technique to resist the out-of-plane seismic forces, Items 2(b) and 3 have been fully implemented at the Peach Bottom facility for the remaining walls. The SER also included a staff position on the energy-balance technique and stated that the implementation of this position was required to render the above walls acceptable to the staff.

The licensee in response to the staff position decided to reanalyze these five walls using linear analysis (working stress approach) with higher damping values than those used in the original analysis (Reference 1). The original analysis was based on 2 percent and 5 percent damping values for OBE and SSE load conditions, respectively. In re-analysis, the licensee used 4 percent and 7 percent damping values consistent with the staff acceptance criteria. The results of the re-analysis indicate that the above five walls can now be qualified in accordance with the conventional working stress methodology consistent with the staff acceptance criteria.

Based on the above findings, the staff concludes that the Items 2(b) and 3 have been fully implemented at Peach Bottom and that there is a reasonable assurance that all safety-related masonry walls at Peach Bottom facility will withstand the specified design load conditions without impairment of (a) wall integrity or (b) the performance of the required function.

Reference:

1. Letter from S. Daltroff of Philadelphia Electric Company to D. Eisenhut of NRC, dated January 9, 1985.

The NRC personnel performed the review for this Supplemental SE: N. Chokshi

Dated: June 14, 1985

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