



Public Service
Electric and Gas
Company

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Vice President - Nuclear Engineering

NLR-N94103

LCR 94-07

JUN 14 1994

United States Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Gentlemen:

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION
REQUEST FOR LICENSE AMENDMENT FOR VANTAGE+ FUEL
SALEM GENERATING STATION UNIT NOS. 1 AND 2
FACILITY OPERATING LICENSES DPR-70 AND DPR-75
DOCKET NOS. 50-272 AND 50-311

The purpose of this letter is to provide Public Service Electric and Gas Company's (PSE&G's) response to questions received from Mr. Steven Dembek (NRR, Division of Reactor Projects) relative to our request for amendment to allow the use of Vantage+ fuel at the Salem Generating Station (SGS). This letter also documents our agreement that the model Technical Specification (TS) wording of Generic Letter 90-02, Supplement 1 should be used instead of the wording of the improved standard Technical Specifications of NUREG-1431.

The request for amendment was made via PSE&G letter dated March 4, 1994 (NLR-N94019). The questions were received via telecon on May 19, 1994, and are restated here for convenience.

Question 1

Page 3 of Enclosure 2 of the October 9, 1991 NRC Safety Evaluation Report (SER) for ZIRLO clad fuel (Reference 1), states "since WCAP-12610, Appendix G does not provide details of the specific reference plant containment, each licensee or applicant referencing these analyses must provide justification that the containment pressure used in these analyses meets the requirements of 10 CFR Part 50, Appendix K, paragraph I.D.2, for its plant." How does SGS demonstrate compliance with Appendix K, par. I.D.2?

Response

PSE&G currently uses the BASH (WCAP-10266-P-A) and the COCO (WCAP-8327) codes in the Salem Large Break LOCA analysis as documented in WCAP-12192 (Salem Units 1 and 2 10% Tube Plugging Large Break LOCA BASH Analysis). WCAP-10266-P-A and WCAP-8327

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provide a description on how all 10CFR50, Appendix K requirements are met including containment pressure criteria. These documents are referenced in the SGS UFSAR, Section 15.4.9, and in the Westinghouse Topical Report for Vantage+ (WCAP-12610). As discussed in response to Question 2, LBLOCA analyses for SGS core designs using Vantage+ fuel would continue to be consistent with the BASH and COCO code methodologies.

Question 2: Page 6 of Enclosure 2 of Reference 1 states that the NRC's approval of the WCAP-12610 LOCA methodology applies to the reference plant, and other applications of the methodology must be justified. How do we demonstrate that the reference plant evaluation is applicable to Salem?

Response

The BASH, COCO and NOTRUMP code methodologies are the NRC-approved LOCA methodologies in use at SGS. The LOCA methods described in WCAP-12610 consist of BASH, COCO and NOTRUMP, and therefore are applicable to SGS. These approved methods would continue to be used for the SGS Vantage+ core designs pending approval of our March 4, 1994 amendment request.

The evaluation of the LBLOCA analysis with Vantage+ fuel (with ZIRLO cladding), consistent with the BASH and COCO methodologies, would be reported as part of the Reload Safety Evaluation report for Salem 2 Cycle 9. The PCT changes would be reported in accordance with 10CFR50.46. The Salem design basis analysis for Small Break LOCA (WCAP-13657, approved by the NRC per reference 2) uses the NOTRUMP methodology and bounds both V5H and Vantage+ fuel.

References

- 1) Letter From A. C. Thadani (NRC) to S. R. Tritch (Westinghouse) dated October 9, 1991, "Acceptance for Referencing of Licensing Topical Reports WCAP-12610, Appendices F, 'LOCA NOTRUMP Evaluation Model: ZIRLO Modifications,' and G, 'LOCA Plant Specific Accident Evaluations' (TAC No. 77258)."
- 2) Letter from J. C. Stone (NRC) to S. E. Miltenberger (PSE&G) dated August 25, 1993, "Small Break Loss of Coolant Accident NOTRUMP Analysis Methodology, Salem Nuclear Generating Station, Units 1 and 2 (TAC Nos. M86144 and M86145)."

Difference in Wording Between NUREG-1431 and GL90-02, Supp 1

The March 4, 1994 request for amendment used the Improved Standard Technical Specification (NUREG-1431) wording for "Fuel Assemblies" Technical Specifications. The Generic Letter 90-02,

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Supplement 1 wording differs from that of NUREG-1431 in that the GL 90-02 Supplement says ". . . Limited substitutions of zirconium alloy or stainless steel filler rods for fuel rods, in accordance with NRC-approved applications of fuel rod configurations, may be used" [emphasis added]. The NUREG-1431 TS subsequently omitted "NRC-". Our amendment request used the NUREG-1431 wording because it is the most recent generic TS approved by the NRC. However we agree that "approved applications" in this context means "NRC-approved." Therefore, we hereby modify our amendment request to include "NRC-" in the proposed TS revision.

The information provided herein does not affect our Determination of No Significant Hazards Consideration in the March 4, 1994 amendment request.

Sincerely,



Affidavit

C Mr. T. T. Martin, Administrator - Region I
U. S. Nuclear Regulatory Commission
475 Allendale Road
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Mr. J. C. Stone, Licensing Project Manager - Salem
U. S. Nuclear Regulatory Commission
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Mr. C. Marschall (S09)
USNRC Senior Resident Inspector

Mr. K. Tosch, Manager, IV
NJ Department of Environmental Protection
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STATE OF NEW JERSEY)
) SS.
COUNTY OF SALEM)

S. LaBruna, being duly sworn according to law deposes and says:

I am Vice President - Nuclear Engineering of Public Service Electric and Gas Company, and as such, I find the matters set forth in the above referenced letter, concerning the Salem Generating Station, Unit Nos. 1 and 2, are true to the best of my knowledge, information and belief.



Subscribed and Sworn to before me
this 14th day of June, 1994


Notary Public of New Jersey

My Commission expires on April 21, 1998