

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

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United States Nuclear Regulatory Commission
Attention: Document Control Desk
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Docket Nos. 50-280
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License Nos. DPR-32
DPR-37
NPF-4
NPF-7

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION UNITS 1 AND 2
NORTH ANNA POWER STATION UNITS 1 AND 2
RESPONSE TO GENERIC LETTER 88-20 SUPPLEMENT 4
INDIVIDUAL PLANT EXAMINATION OF EXTERNAL EVENTS
FOR SEVERE ACCIDENT VULNERABILITIES

INTRODUCTION

Generic Letter 88-20 Supplement 4, "Individual Plant Examination of External Events (IPEEE) for Severe Accident Vulnerabilities", requested holders of operating licenses to perform an Individual Plant Examination of External Events (IPEEE) for plant specific severe accident vulnerabilities. NUREG-1407, "Procedural and Submittal Guidance for the Individual Plant Examination of External Events (IPEEE) for Severe Accident Vulnerabilities", was issued along with Supplement 4 to Generic Letter 88-20. Generic Letter 88-20 Supplement 4 requests submittal of the IPEEE results within three years from its issuance date of June 28, 1991.

The program planned by Virginia Electric and Power Company to address Generic Letter 88-20 Supplement 4 for Surry and North Anna Power Stations is presented in the following paragraphs.

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METHOD OF EXAMINATION

Seismic

The guidance provided in Generic Letter 88-20 Supplement 4 and NUREG-1407 will be followed for performing the seismic portion of the IPEEE for both stations. The planned approach for Surry and North Anna is as follows:

- For Surry, a seismic probabilistic risk assessment (SPRA) methodology with enhancements will be used.
- For North Anna, a seismic margins method (SMM) developed by the Electrical Power Research Institute (EPRI) with enhancements will be used.

However, it should be noted that we may reconsider these planned seismic methodologies depending upon the resolution of open items associated with Unresolved Safety Issue (USI) A-46, "Seismic Qualification of Equipment in Operating Plants," and the content of the Supplemental Safety Evaluation Report (SSER) on Revision 2 of the Generic Implementation Procedure (GIP).

Internal Fires

The guidance in Generic Letter 88-20 Supplement 4 and NUREG-1407 will be followed for addressing internal fires. The fire evaluation methodology to be used for both Surry and North Anna is a probabilistic risk assessment (PRA). In the performance of the PRA, we intend to use applicable portions of the fire vulnerability evaluation (FIVE) methodology. Specifically, the FIVE methodology will be used to perform the screening analysis, perform the walkdown, assist in addressing fire risk scoping study issues, and provide generic database information.

The fire PRA will be a Level 1 PRA based on the Individual Plant Examination (IPE) PRA. It will be used to perform the detailed analysis required in Phase II, Step 4 of FIVE. The fire PRA will include an analysis of containment performance, as requested by Generic Letter 88-20 Supplement 4. No source term analysis is planned unless a plant damage state different than those defined for the IPE is created. If this occurs, accident progression will be investigated.

High Winds, Floods, Transportation and Nearby Facility Accidents

The guidance contained in Generic Letter 88-20 Supplement 4 and NUREG-1407 will be followed in a stepwise fashion to investigate high winds, floods, transportation and nearby facility accidents for Surry and North Anna. As indicated in Figure 1 of Generic Letter 88-20 Supplement 4, there are seven steps which involve review of the licensing basis, screening, bounding analysis, PRA, and documentation. These steps will be performed as required to determine if vulnerabilities exist for Surry and North Anna.

As indicated in Section 5 of NUREG-1407, no containment performance analysis is required for high winds, floods, transportation and nearby facility accidents.

Second Unit Considerations

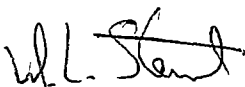
Based on the results of the Surry IPE and the progress to date on the North Anna IPE, the differences between the units at each station are of little significance. Therefore, consistent with the guidance in Generic Letter 88-20 Supplement 4, we intend to perform a limited analysis of the second unit at each site for the IPEEE. This analysis will be limited to a walkdown and the resolution of differences identified during the walkdown.

SCHEDULE

Generic Letter 88-20 Supplement 4 encourages coordination of the seismic IPEEE with USI A-46 "so that the objectives of both activities may be accomplished with a single walkdown effort." As stated in SECY-91-102, the procedures for the seismic walkdown portion of this program are "one of the most important ingredients in the seismic IPEEE and are similar to those that will be used in the implementation of Unresolved Safety Issue (USI) A-46." We are in agreement with the NRC staff that the walkdowns of each program should be combined into a single walkdown.

Both Surry and North Anna Power Stations are USI A-46 plants and we are a member of the Seismic Qualification Utility Group (SQUG). Because of the similarities of the two programs, we intend to conduct seismic IPEEE and A-46 walkdowns at the same time, as well as integrate other common features of the two programs, in order to avoid repetition of essentially the same work within a short time span. However, the NRC SSER for the SQUG's GIP, which resolves A-46, has not been issued at this time. Consequently, finalization of a coordinated plan and schedule for the seismic portion of the IPEEE, as well as the schedule for the IPEEE, cannot yet be identified. Therefore, we plan to submit the schedule for completion of the IPEEE subsequent to receipt and review of the SSER on the SQUG's GIP.

Very truly yours,



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