

VIRGINIA ELECTRIC AND POWER COMPANY  
RICHMOND, VIRGINIA 23261

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U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D. C. 20555

Serial No. 04-764  
NL&OS/GDM R0  
Docket Nos. 50-280, 281  
License Nos. DPR-32, 37

**VIRGINIA ELECTRIC AND POWER COMPANY (DOMINION)**  
**SURRY POWER STATION UNITS 1 AND 2**  
**IE BULLETIN NO. 80-11 MASONRY WALL DESIGN**  
**SUPPLEMENTAL RESPONSE**

On May 8, 1980 the NRC issued IE Bulletin 80-11, "Masonry Wall Design." The bulletin required licensees to 1) identify all masonry walls in their facility which are in the proximity to or have attachments from safety-related piping or equipment such that wall failure could affect a safety-related system, 2) provide a re-evaluation of the design adequacy of the walls and determine whether the walls will perform their intended function under all postulated loads and load combinations, and 3) submit the results of these efforts to the NRC. Dominion performed the actions and provided the information required by the bulletin in numerous letters to the NRC from 1980 through 1989. The NRC accepted Dominion's resolution of the masonry block wall issues identified in the bulletin in their safety evaluation dated October 2, 1989, and closed the bulletin for Surry in NRC Inspection Report 50-280/89-37 and 50-281/89-37 dated January 12, 1990.

In August 2004, Surry construction personnel were preparing to penetrate the east masonry block wall of the Lube Oil Room in the Turbine Building to implement security modifications. The workers were aware of the programmatic constraints for penetrating masonry block walls; consequently, they contacted engineering for approval to penetrate the block wall. During subsequent walkdowns by engineering personnel, it was observed that safety-related conduit was attached to the wall and that safety-related equipment, located in the nearby Service Water Valve Pit, was within the collapse envelope of this wall. According to IE Bulletin 80-11 project criteria, this wall would have a high probability of adversely affecting safety-related equipment upon failure and should have been assigned a Class I-N status (i.e. high adverse potential for a masonry block wall located in a non-seismic area of the plant). However, the Lube Oil Room masonry walls had not been included in the evaluation performed under the original IE Bulletin 80-11 effort.

When Dominion originally assessed the block walls in response to IE Bulletin 80-11, the intent was to identify and classify all masonry block walls shown on existing architectural, concrete and mechanical drawings. According to the original IE Bulletin 80-11 analytical procedure, all identified masonry block walls were then inspected in the field to determine if they posed a threat to any safety-related equipment. Based on their

potential to adversely affect nearby safety-related equipment, all masonry block walls identified in non-seismic areas of the population, such as the Turbine Building, were classified as either Class I-N (high adverse potential), Class II-N (low adverse potential), or Class III-N (no adverse potential), as appropriate. Only Class I-N and II-N masonry block wall panels were required to undergo further evaluation to determine if any modifications were required to protect safety-related equipment.

Since masonry block walls are typically shown on FA (architectural) series drawings, the existing Surry 11448/11548-FA series plant drawings were primarily used to identify the applicable masonry block walls. However, the subject Lube Oil Room masonry block walls are not shown on the FA series drawings at Surry. The Lube Oil Room masonry block walls are unique in that they rest on top of a reinforced concrete half-wall, which extends 6'-10" above the floor at EL. 9'-6." This may explain why they were not included on the 11448-FA series drawings. It is likely the absence of these walls on FA series drawings and the low incidence of encountering safety-related equipment in the Turbine Building resulted in these walls not being identified during the original masonry block wall identification and field walkdown efforts. In spite of the oversight, Surry construction personnel had the programmatic awareness to ensure these walls were walked down by engineering for any IE Bulletin 80-11 concerns prior to performing work that would affect the walls.

To ensure that no other Class I-N or II-N masonry block walls had been inadvertently omitted from the original IE Bulletin 80-11 review, engineering personnel performed a field walkdown of all masonry block walls within the Surry Turbine Building. The walkdown verified that the Lube Oil Room masonry block walls were the only walls in the Turbine Building that had not been identified under the original IE Bulletin 80-11 response effort at Surry. Since the Lube Oil Room masonry block walls were inadvertently omitted from the IE Bulletin 80-11 review due to their unique drawing circumstances, and all other masonry block walls in the SPS Turbine Building were properly identified and classified, this discrepancy is considered to be an isolated case.

Engineering performed an analysis of the Lube Oil Room masonry block wall panels and verified that they meet the original requirements of IE Bulletin 80-11 as currently constructed with no adverse consequences to safety-related equipment. No modifications to the masonry block walls were required.

If you have any questions or require additional information, please contact Mr. Gary D. Miller at (804) 273-2771.

Very truly yours,



Leslie N. Hartz  
Vice President – Nuclear Engineering

Commitments made in this letter: None

cc: U.S. Nuclear Regulatory Commission  
Region II  
Sam Nunn Atlanta Federal Center  
61 Forsyth Street, SW  
Suite 23 T85  
Atlanta, Georgia 30303-8931

Mr. S. R. Monarque  
U. S. Nuclear Regulatory Commission  
One White Flint North  
11555 Rockville Pike  
Mail Stop 8H12  
Rockville, MD 20852

Mr. N. P. Garrett  
NRC Senior Resident Inspector  
Surry Power Station

