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Docket Nos. 50-338, 50-339  
License Nos. NPF-4, NPF-7  
EA 90-221

Virginia Electric and Power Company  
ATTN: Mr. W. L. Stewart  
Senior Vice President - Nuclear  
5000 Dominion Boulevard  
Glen Allen, VA 23060

Gentlemen:

SUBJECT: NOTICE OF VIOLATION  
(NRC INSPECTION REPORT NOS. 50-338/90-29 AND 50-339/90-29)

This refers to the Nuclear Regulatory Commission (NRC) inspection conducted by M. Lesser on November 18 - December 18, 1990. The inspection included a review of activities authorized for your North Anna facility. The report documenting this inspection was sent to you by letter dated December 28, 1990. NRC concerns relative to the inspection findings were also discussed in an Enforcement Conference held on January 8, 1991. A summary of this Enforcement Conference was sent to you on January 17, 1991.

Areas examined during the inspection are identified in the report. Within these areas, the inspection consisted of selective examinations of procedures and representative records, and observation of activities in progress.

The inspection findings indicate that certain activities appeared to violate NRC requirements. The violation described in the enclosed Notice of Violation (Notice) involves procedural inadequacies which contributed to a degraded recirculation spray system. This violation has been categorized at Severity Level IV based on the safety significance of the event and involved the failure of operating procedures to adequately control service water pump operability, which led to conditions where service water design flow rates to the recirculation spray system were not met.

The procedure inadequacies became evident when you failed, during the 1990 Unit 2 refueling outage, to declare a service water pump inoperable when its respective emergency diesel generator was declared inoperable, resulting in required compensatory measures not being taken. This incorrect determination of service water pump operability resulted from a failure to recognize the emergency electrical power Technical Specification requirements for a service water pump, associated with a shutdown unit, being used as necessary attendant cooling for the recirculation spray system on an operating unit.

Your subsequent analysis of the condition showed that, although the service water flows to the recirculation spray heat exchangers would have been less than the assumed values in the Updated Final Safety Analysis Report (UFSAR), the

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recirculation spray system would have been able to perform its intended safety function. In addition, we recognize that both the plant conditions and sequence of events for this degraded recirculation spray system condition to exist, occur infrequently. While this reduces the significance of the violation, it indicates that review of your service water system design basis was less than complete. It is expected that procedures and administrative controls, implemented for the purpose of operating systems differently than described in the UFSAR, thoroughly consider the design basis. This is particularly true of shared systems, since postulated scenarios involving multiple units may be more complex.

We also recognize that while you did not conduct a formal safety evaluation to address methods of operating the component cooling system differently than described in the UFSAR, the intent was essentially accomplished through a series of safety review committee meetings and administrative controls developed through testing. We are concerned, however, with recently identified examples where the facility has been operating inconsistently with the UFSAR and without the benefit of a front-end safety evaluation. In each case, after the fact, evaluations have verified that no unreviewed safety questions existed. We will continue to monitor your performance in this area during future inspections.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with Section 2.720 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

The responses directed by this letter and its enclosure are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, Pub. L. No. 96-511.

Should you have any questions concerning this letter, please contact us.

Sincerely,

Original signed by  
Ellis W. Merschoff (for)

Luis A. Reyes, Director  
Division of Reactor Projects

Enclosure:  
Notice of Violation

cc w/encl: (See page 3)

cc w/encl:

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