VIRGINIA ELECTRIC AND POWER COMPANY RICHMOND, VIRGINIA 23261

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W. L. STEWART VICE PRESIDENT NUCLEAR OPERATIONS

September 7, 1984

Mr. James P. O'Reilly Regional Administrator Region II U. S. Nuclear Regulatory Commission 101 Marietta Street, Suite 2900 Atlanta, Georgia 30323 Serial No. 475 NO/JHL:acm Docket Nos. 50-338 50-339 License Nos. NPF-4 NPF-7

Dear Mr. O'Reilly:

We have reveiwed your letter of July 30, 1984, in reference to the inspection conducted at North Anna Power Station between June 6, 1984 and July 5, 1984 and reported in IE Inspection Report Nos. 50-338/84-19 and 50-339/84-19. Per a telephone conversation between Mr. R. C. Lewis and myself, on August 29, 1984, an extension until September 7, 1984 was granted to respond to this inspection report. Our response to the specific infraction is attached. Particular consideration of the root cause of the violation and corrective actions to preclude recurrence are included in paragraph 4 of the response.

The Control Operations group performs similar maintenance and testing activities at Surry Power Station. To prevent similar occurrences at Surry, the corrective actions described in paragraphs 3 and 4 of this response will be implemented.

We have determined that no proprietary information is contained in the report. Accordingly, the Virginia Electric and Power Company has no objection to this inspection report being made a matter of public disclosure. The information contained in the attached pages is true and accurate to the best of my knowledge and belief.

8410240401 840927 PDR ADOCK 05000338 Very truly yours,

W. L. Stewart

Attachment

cc: Mr. Richard C. Lewis, Director Division of Project and Resident Programs

> Mr. James R. Miller, Chief Operating Reactors Branch No. 3 Division of Licensing

Mr. M. W. Branch NRC Resident Inspector North Anna Power Station

## RESPONSE TO NOTICE OF VIOLATION INSPECTION REPORT NOS. 50-338/84-19 AND 50-339/84-19

### NRC COMMENT:

Technical Specification 6.8.1.c requires that written procedures be established, implemented, and maintained covering surveillance and test activities of safety-related equipment.

Contrary to the above, on June 12, 1984, EMP-P-RT-30 "Protective Relay Maintenance for Breaker 15H2 Emergency Supply to Bus 'lH' and EMP-P-RT-38 "Protective Relay Maintenance for Bus 'lH' were not followed in that, numerous steps in these procedures were not signed as verified or completed. The failure of the licensee's authorization and control personnel to follow procedures is a repeat violation.

This is a Severity Level IV violation (Supplement I), and applies to both units.

#### RESPONSE:

## (1) ADMISSION OR DENIAL OF THE ALLEGED VIOLATION:

This violation is correct as stated except for the reference to the Vepco group involved. Rather than "authorization and control personnel" or the "automation and control group" this reference should be to the Control Operations group.

#### (2) REASONS FOR VIOLATION:

This violation was due to personnel error resulting from the improper attention to procedural compliance and the lack of proper supervisory control.

## (3) CORRECTIVE STEPS WHICH HAVE BEEN TAKEN AND THE RESULTS ACHIEVED:

When notified of the violation, the testing activities by the Control Operations group were halted. Subsequently, the Vepco senior management personnel responsible for the Control Operations group activities met with Station Management to determine corrective actions. As a result of these meetings, the following immediate corrective actions were instituted:

a. Control Operations personnel were reinstructed on the need for strict procedural compliance, the administrative controls placed on the use of procedures and the need for realizing the potential ramifications of their testing activities.

# (3) CORRECTIVE STEPS WHICH HAVE BEEN TAKEN AND THE RESULTS ACHIEVED (Cont.)

- b. The supervision of these activities was increased by placing an additional Control Operations Supervisor onsite or by designating a Lead Technician to perform this function as required by the amount of activity in progress. This additional supervision was instituted for the remainder of the Unit 1 testing and served as a verification step for technical instructions of the governing procedure.
- c. Prior to initiating the testing on Unit 2 by Control Operations during the current refueling outage, the following actions, in addition to parts a and b will be taken:
  - The Electrical Maintenance Procedures to be utilized during the outage by the Control Operations personnel will be amended to provide verification sign-off steps for the technical instructions.
  - The Electrical Maintenance Procedure governing the relay testing of the emergency bus feeder breakers will be amended to clarify the location of the components.
  - 3. Control Operations personnel assigned to work at the station are being trained in the "Therence to procedural requirements and procedure administrative controls. Until the training is completed, increased pervision will be maintained.
  - 4. The Control Operations Supervisor will hold an orientation briefing on a daily basis or prior to the commencement of a major activity. These bilefings will concentrate on the procedure to be used, the progression of the activity and potential problem areas.

## (4) CORRECTIVE STEPS WHICH WILL BE TAKEN TO AVOID FURTHER VIOLATIONS:

Based on the review of the previous violation (50-338/83-18 and 50-339/83-18) and a comparison to the events reported herein, the following root causes have been determined:

a. The use of an off-site maintenance and testing group raises certain unanticipated concerns; specifically, the integration of these activities into routine maintenance and testing normally conducted by station personnel. This requires additional specificity in the governing procedures for equipment location, interfaces with the safety functions of other equipment and the accuracy of the instructions and references.

b. The training of testing personnel involved in these safety related evolutions is an additional concern. Training in these instances is twofold: (1) the technical competency of the personnel and (2) the administrative control program training that provides the guidelines in which the activity must be accomplished. The technical competency of the personnel was never considered an issue in the root cause determination. However, the guidelines for conducting these activities are not well understood by the persons involved.

In the previous response to the violation in this area, the fundamental causes were not thoroughly addressed. The problems experienced previously, although not under the same circumstances, still indicate a lack of understanding of nuclear power station work practices.

In order to correct these problems and to preclude further violations of this nature, the following additional corrective actions will be taken:

- a. A procedure coordinator position will be added to the Control Operations group to act as a procedure writer and to integrate the maintenance and testing activities into the station administrative guidelines. This position will be created and filled by October 31, 1984. It is intended that this position will be filled by a person having both the technical ability necessary to develop the procedures and the station experience necessary to adequately integrate the work activities into the station's work guidelines.
- b. Following the assignment of a person to the procedure coordinator position, the procedures that govern the work activities of the Control Operations group at North Anna will be revised to include:
  - 1. Signature slots for verification of the technical instructions of the procedure that require verification.
  - QC hold points for independent verification of the critical steps of the procedure.
  - 3. Any additional references to source information needed to safely perform the work activity.
  - 4. Human factors considerations such as those specified in the Station Administrative Procedure 5.3.

These activities are expected to be completed by March 31, 1985.

c. The Control Operations Technician training/development program will be upgraded by the inclusion of a lesson specifically addressing work activities at a nuclear station. This lesson will be completed by March 31, 1985.

- d. Departmental instructions for the Control Operations group will be formalized and will include the:
  - Technical guidelines on procedures and work activities at nuclear stations.
  - 2. Daily work orientations or briefings prior to major evolutions.

These instructions will be issued by October 31, 1984.

e. The Station Administrative Procedure 5.28 will be revised to include the Supervisor-Control Operations onto the Controlled Document Review and Revision form so that they will review design modifications and review their procedures for potential revision.

This procedure revision will be completed by October 31, 1984.

## (5) THE DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

The corrective actions will be completed by the respective dates outlined in paragraphs 3 and 4.