# VIRGINIA ELECTRIC AND POWER COMPANY RICHMOND, VIRGINIA 23261

W. L. STEWART VICE PRESIDENT NUCLEAR OPERATIONS

July 20, 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. 403 NO/JDH:LMS Docket Nos. 50-280 50-281 License Nos. DPR-32 **DPR-37** 

Dear Mr. O'Reilly:

We have reviewed your letter of June 20, 1984 in reference to the inspection conducted at Surry Power Station on April 1 - May 5, 1984, and reported in IE Inspection Report Nos. 50-280/84-15 and 50-281/84-15. Our response to the specific violations are attached.

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.

Very truly yours,

W. L. Stewart F

Attachment

cc: (w/attachment)

Mr. Steven A. Varga, Chief Operating Reactors Branch No. 1 Division of Licensing

Mr. D. J. Burke NRC Resident Inspector Surry Power Station

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# RESPONSE TO NOTICE OF VIOLATION INSPECTION REPORT NOS. 50-280/84-15 and 50-281/84-15

The following violations were identified during an inspection conducted on April 1 - May 5, 1984. The Severity Levels were assigned in accordance with the NRC Enforcement Policy (10 CFR Part 2, Appendix C).

### NRC COMMENT

Technical Specification 6.4.A.2 requires that detailed written procedures with appropriate check-off lists and instructions shall be provided for the calibration and testing of instruments, components, and systems involving the nuclear safety of the station.

Contrary to the above requirement, the following periodic test procedures and post-maintenance testing procedure examined during the inspection period April 1 to May 5, 1984, did not provide appropriate check-off lists and instructions for testing the safety related instruments and components described below:

- The Unit 1 and 2 Fire Protection Systems Periodic Test (PT) procedures do 1. not insure that the applicable sections of Technical Specification 3.21, "Fire Detection and Suppression Systems", are met. For example, the fire detection instruments (heat and smoke detectors) in Table 3.21-1 of the TS (revised 1-17-84) are required to be functionally tested every six months. However, 1-PT-24.3B, PT-24.2A, and PT-24.2C which test the heat detectors in the cable tray room, the emergency diesel generator rooms (1 and 3), the fuel oil tank room, and the fuel oil transfer pump house, are scheduled to be performed during refueling outages (every 18 months). In addition, the periodic tests do not specifically identify (by ID number or location) the detectors to be tested. The testing techniques were also not defined, which resulted in the testing of certain smoke detectors by blowing inhaled cigarette smoke at the detectors in "No Smoking" areas. A major review of the program and procedures for fire protection systems testing is necessary.
- 2. Electrical preventative maintenance procedure PC-DB-E/RI, "Clean, Adjust and Service Breaker", describes the post-maintenance testing for the Westinghouse DB-50 reactor trip and bypass breakers. However, appropriate instructions for independently testing the undervoltage (UV) and shunt trip coils during various plant conditions were not provided in the procedure. "or example, the procedure did not address reactor trip breaker shunt coil testing during shutdown conditions when the Reactor Protection System and undervoltage coils are deenergized, even though this is normally when the testing occurs. Consequently, deviations from the procedure occur when this testing is performed.

This is a Severity Level V violation (Supplement I).

#### **RESPONSE:**

- (1) ADMISSION OR DENIAL OF ALLEGED VIOLATIONS:
  - 1. The violation is correct as stated.
  - 2. The violation is correct as stated.

#### (2) REASONS FOR VIOLATIONS:

1. At the time of the Fire Protection Technical Specification amendment (revised 1-17-84), implementation procedure change requests were submitted on the subject PT's based on a change in the frequency requirement for functionally testing the CO<sub>2</sub> systems in the respective areas. However, the PT's were also used to satisfy the functional test requirements for the smoke and heat detectors in those areas but the frequency for these tests was not changed by the amendment and remain at every six months. This discrepancy was not discovered during the review and approval process and resulted in the violation.

In regard to the identification concern, the number of Technical Specification heat and smoke detectors in these areas was minimal and specifically listed in the PT's. As such, it was felt that the possibility of one being missed during surveillance testing was remote.

The testing technique in effect was considered safe and the best method available at the time.

2. Preventive Maintenance Procedure PC-DB-E/R1 was used to test Unit 1 and 2 reactor trip and bypass breakers in April, 1983. This procedure provided instructions to independently test undervoltage (UV) and shunt trip attachments, providing all reactor trip relays in reactor protection racks are energized. Instructions were not provided to cover situations when reactor trip relays and undervoltage coil in breakers were de-energized. PC-DB-E/R1 required a deviation to restrain the UVTA prior to closing the breaker to independently test the shunt trip attachment. This was adequate and all testing was satisfactorily completed.

#### (3) CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED

1. The discrepancy identified above was corrected and the PT's were performed such that the six month interval was not violated.

All smoke and heat detector PT's have been changed to include up to date testing techniques using a heat gun test gas.

2. Preventive Maintenance Procedure PC-DB-E/R1 (refueling testing cycle) was since revised to PC-DB-E/A1 (annual testing cycle) which includes recent Westinghouse recommendations on testing type DB-50 reactor trip breakers. This procedure was recently used to perform maintenance on Unit 1, Unit 2 trip and bypass breakers(May & June, 1984). The use of a deviation was not necessary for Unit 1 breakers (unit was shutdown) as all reactor trip relays remained energized.

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

1. Since the number of heat and smoke detectors has increased dramatically, all smoke and heat detectors will be properly identified and marked and the PT's changed accordingly to preclude the possibility of missed surveillance.

Presently, the entire Technical Specification surveillance program is under independent review to ensure all requirements are met. In addition all the corresponding PT's will be reviewed for procedural and technical adequacy.

 PC-DB-E/Al is currently undergoing minor changes. Step 6 Post Maintenance Checkout will be revised to take into consideration all unit conditions when performing independently verification of shunt trip and UV coils.

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

1. The identification, marking and procedural changes will be completed by September 1, 1984.

The completion date for the review program is September 30, 1984. Although an internal program similar to this has been performed for fire protection Technical Specifications and it is felt the program is accurate and adequate, if discrepancies are discovered during the independent review, they will be reviewed and corrected as necessary within 90 days of the project completion date.

 Full compliance is presently being achieved by procedure deviations. Revisions to the procedure to preclude the use of deviations will be completed by August 2, 1984.

### NRC COMMENT

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Technical Specification 6.4.J requires that the facility fire protection program and implementing procedures established for the station shall be implemented.

Contrary to the above requirement, Administrative Procedure (ADM)-56, "Special Processes Involving Ignition Sources", was not implemented on April 24, 1984, in that:

- Daily inspections of three areas in the turbine and service building were required by the welding and flame permits, but were not documented on the permits.
- Several copies of the Welding and Flame permits were not available in the reactor control room and certain Flame Permits were not attached to the Maintenance Request (MR) following completion of the work.
- 3. A fire watch was not maintained for at least one half hour after completion of cutting or welding operations to detect and extinguish any potential smoldering fires in the three areas inspected in item 1. above.

This is a Severity Level V Violation (Supplement I).

#### **RESPONSE:**

(1) ADMISSION OR DENIAL OF THE ALLEGED VIOLATION:

The violation is correct as stated.

# (2) REASONS FOR VIOLATION:

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Requirements outlined in Administrative Procedure (ADM)-56, "Special Processes Involving Ignition Sources" were not properly followed by individuals to whom responsibilities had been delegated.

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

ADM-56 was revised on June 7, 1984 to address weaknesses identified by this inspection. The level of authority for the issuance of welding and flame permits has been restricted. Only a welding foreman or a member of the Loss Prevention staff is authorized to issue and update welding and flame permits. During the absence of these individuals, only those certified in writing by the Superintendent of Maintenance and approved by the Loss Prevention Supervisor may issue and/or update welding and flame permits. With responsibility restricted to this level, proper implementation of ADM-56 requirements fall under the cognizance of fully trained and qualified individuals. These individuals are accountable for ensuring that daily inspections are conducted when required, that copies of active welding and flame permits are available in the control room annex, that flame permits are attached to maintenance requests following completion of work, that fire watches are properly maintained, and that other requirements of ADM-56 are met.

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

Cognizant supervisors and foremen will continue to ensure that ADM-56 requirements are fulfilled.

### (5) THE DATE WHEN FULL COMPLIANCE WAS ACHIEVED:

Full compliance was achieved on June 7, 1984.