



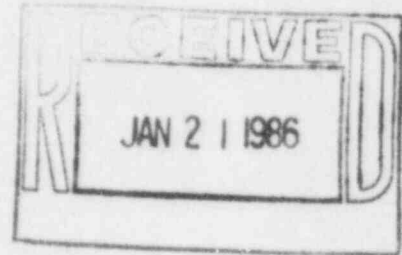
Public Service™

16805 WCR 19 1/2, Platteville, Colorado 80651

Public Service  
Company of Colorado

January 17, 1986  
Fort St. Vrain  
Unit No. 1  
P-86046

Regional Administrator  
Attn: Mr. Dorwin Hunter  
Region IV  
U. S. Nuclear Regulatory Commission  
611 Ryan Plaza Drive, Suite 1000  
Arlington, Texas 76011



Docket No. 50-267

SUBJECT: I&E Inspection Report 85-31

REFERENCE: NRC Letter, Gagliardo to  
Lee, dated 12/18/85  
(G-85500)

Dear Mr. Hunter:

This letter is in response to the Notice of Violation received as a result of inspections conducted at Fort St. Vrain during the period October 21-25, 1985. The following response to the items contained in the Notice of Violation is hereby submitted:

A. Maintenance Procedures

1. Station Battery Maintenance

- a. Technical Specification (TS) paragraph 5.6.2a requires that the temperature of cells adjacent to the pilot cell be measured every week.

Contrary to the above, the weekly battery surveillance test procedure SR 5.6.2a-w did not direct measurement of the temperatures of the cells adjacent to the pilot cell and there were no individual cell measurements taken or recorded.

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- (1) The reason for the violation if admitted:

The surveillance procedure SR 5.6.2a-w as previously written did not meet the required scope of the Technical Specification. Although, the referenced procedures did not direct the measurement of the temperatures of the cells adjacent to the pilot cells on a weekly basis, it should be noted that Public Service Company has been recording this information for all cells on a monthly basis. This practice has been in addition to the testing required by the Technical Specifications.

- (2) The corrective steps which have been taken and the results achieved:

The Surveillance Procedure (SR 5.6.2a-w) was revised on November 22, 1985. Temperature readings for adjacent cells have subsequently been taken.

- (3) Corrective steps which will be taken to avoid further violations:

The above action will preclude recurrence.

- (4) The date when full compliance will be achieved:

Completed.

A. Maintenance Procedures

1. Station Battery Maintenance

- b. TS paragraph 5.6.2.b requires that the height of the electrolyte be measured every 3 months for every fifth cell.

Contrary to the above, neither the monthly nor quarterly surveillance test procedures SR 5.6.2b-M and SR 5.6.2b-Q provided a record of the sampled individual cell heights.

- (1) The reason for the violation if admitted:

The level measurements required by the Technical Specifications were not properly addressed by the quarterly surveillance test. Beyond the requirements of the station battery surveillance requirements, Public Service Company electricians monitored individual cell levels routinely (approximately, weekly basis). However, these cell levels were not recorded. Consequently, credit could not be taken for this weekly monitoring to satisfy the quarterly measurement requirement.

- (2) The corrective steps which have been taken and the results achieved:

As an immediate action, the internally-required monthly surveillance was revised to require electrolyte level measurements. It should be noted that the internally-required monthly surveillance already measured all cell temperatures, all cell specific gravities, and all individual cell voltages.

- (3) Corrective steps which will be taken to avoid further violations:

The quarterly Technical Specification surveillance has been revised.

- (4) The date when full compliance will be achieved:

The quarterly surveillance has been revised and is in use.

## 2. Station Battery Procedures

10 CFR 50, Appendix B, Criterion V, requires that activities affecting safety-related equipment be accomplished in accordance with procedures appropriate to the circumstances. This includes activities which are accepted industry practices and standards such as IEEE-450.

Contrary to the above, the licensee did not have a procedure to evaluate the need to equalize station batteries based on gravity drop nor were there procedures for periodic cleaning, inspecting, intercell connector maintenance and water addition.

- (1) The reason for the violation if admitted:

The existing Technical Specification SR 5.6.2 does not require a procedure to evaluate the need for an equalizing charge based on gravity drop. Recognizing the need for a periodic battery equalization, Fort St. Vrain has made it a long-standing practice to implement Public Service Company's policy of performing an equalization charge on a monthly basis. When combined with the internally-required monthly surveillance for individual measurements on all cell temperatures, all cell specific gravities, and all cell individual voltages, we have been able to ascertain cell and battery condition. However, we do recognize the potential benefits of determining the need for an equalization charge based on gravity drop and will generate such a procedure.

The existing Technical Specification SR 5.6.2 does not require procedures for periodic cleaning, inspecting, intercell connector maintenance and water addition. However, these types of activities have been taking place on an informal basis as evidenced by the battery cell condition.

- (2) The corrective steps which have been taken and the results achieved:

An inspection of battery cell cleanliness has been performed. Water levels have been obtained and level recording has been added to appropriate surveillance tests. Intercell connector bolt torques have been checked as well as micro-ohm resistances for these connectors.

It should be noted that Public Service Company has proposed changes to the battery surveillance requirements to be consistent with the intent of IEEE-450 as part of its Technical Specification Upgrade Program.

- (3) Corrective steps which will be taken to avoid further violations:

The evaluation to determine the need to perform an equalization charge based on gravity drop will be developed in plant procedures.

A more formal mechanism for performing periodic cleaning, inspection, intercell connector maintenance, and water addition will be incorporated in plant procedures.

- (4) The date when full compliance will be achieved:

Procedures for determining the need for performing an equalizing charge based on gravity drop will be developed by February 28, 1986.

The above cited inspection/maintenance requirements are being formally incorporated into appropriate plant procedures. These revisions will be fully implemented by February 28, 1986.

### 3. System Lineup Procedures

10 CFR 50, Appendix B, Criterion V, requires that activities affecting safety-related equipment be specified in and accomplished by procedures appropriate to the circumstances. The diesel generators are safety-related, and therefore, the valve lineups for them are a safety function.

Contrary to the above, diesel generator procedures did not include valve positions for the following valves which had to be positioned correctly for operation: cooling water temperature control valves, air valves on the temperature control valve regulators, lube oil drain valves, lube oil drain plugs and lube oil heater inlet and outlet valves.

This is a Severity Level IV violation (Supplement I) (50-267/8531-01).

#### (1) The reason for the violation if admitted:

Fort St. Vrain emergency diesel engines do not have lube oil heaters. We assume this portion of the violation refers to the engine water jacket heaters.

Existing procedure SOP 92-04, Section 2.2, Startup Check List for automatic operation, instructs the operators to confirm the availability of service water, to check the lube oil level, and to verify that the engine water jacket heaters are operating.

Existing surveillance tests require that the engine oil level be checked, the temperature control valve is operating properly after diesel engine start, and that the engine water temperature is checked. Public Service Company presumes that the basis for the inspector's concern is that some of the valves necessary to accomplish the above activities are not specifically identified in the valve lineup list. However, the text of the above procedures does provide assurance of proper valve positioning, as evidenced by previous successful operation of the diesel engines over many years.

Therefore, we do not believe a violation should be levied.

#### (2) The corrective steps which have been taken and the results achieved:

Public Service Company recognizes the importance of incorporating human factors considerations into procedures to improve "user friendliness". Consequently, procedural revisions to improve the emphasis of items associated with the temperature control valves, the lube oil drains, and the engine heaters have been drafted.

(3) Corrective steps which will be taken to avoid further violations:

The procedural enhancements described in item 2) above will provide further assurance that Public Service Company continues to comply with Federal Regulations in this area.

(4) The date when full compliance will be achieved:

Public Service Company believes that compliance with 10 CFR 50, Appendix B, Criterion 5 was being met.

The Procedural enhancements described above will be completed by February 28, 1986.

B. Replacement Parts Procurement

10 CFR 50.54 required licensees to implement a Quality Assurance (QA) plan. The Updated Final Safety Analysis Report (FSAR), Revision 3, Section B.5.4, which is part of the QA plan, requires that safety-related purchase requisitions include adequately defined technical requirements and include acceptance and rejection criteria. FSAR Section B.5.7.3 requires that examination be performed on delivered items to the extent necessary to determine that the requirements of the purchase orders are satisfied.

Contrary to the above, the licensee purchased and accepted for use safety-related O-rings without defining technical requirements or acceptance criteria.

This is a Severity Level IV violation (Supplement I) (50-267/8531-02).

(1) The reason for the violation if admitted:

PSC's purchasing implementation procedures define the procurement methods for safety related material in accordance with our licensing commitments. The non compliance resulted from procuring commercial quality products without sufficient post receipt testing and/or inspection to justify the dedication of this material to a safety related use.

- (2) The corrective steps which have been taken and the results achieved:

The "O" rings pertaining to this violation were identified in NCR-86-020. The generation of this NCR provides the documentary evidence of this non compliance as required by our QA Program and provides a means of specifying additional post receipt inspection to allow this material to be dedicated to a safety related use. The final acceptability of the subject material will be based upon satisfactory completion of the NCR supplemental testing.

- (3) Corrective steps which will be taken to avoid further violations:

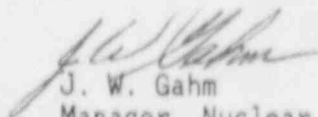
Engineering personnel associated with the specification of post receipt inspection and testing necessary to allow commercial grade products to be dedicated to safety related use have been retrained to ensure adequate procedural knowledge to mitigate the recurrence of this violation. This training emphasized the importance of defining the technical requirements associated with the dedication of commercial quality material for safety related use.

- (4) The date when full compliance will be achieved:

With the completion of the training and the successful completion of the supplemental testing requirements of NCR-86-020, PSC will be in full compliance. This will be completed by January 24, 1986.

Should you have any further questions, please contact Mr. Frank J. Novachek, (303) 571-7436, ext. 201.

Sincerely,



J. W. Gahm  
Manager, Nuclear Production  
Fort St. Vrain Nuclear  
Generating Station

JWG/kls