

official

JAN 26 1987

Florida Power Corporation  
ATTN: Mr. W. S. Wilgus  
Vice President Nuclear Operations  
P. O. Box 14042, M.A.C. C-2-M  
St. Petersburg, FL 33733

Gentlemen:

SUBJECT: NRC REPORT NO. 50-302/86-23

Thank you for your response of October 17, 1986, to our Notices of Violation and Deviation, issued on September 18, 1986, concerning activities conducted at your Crystal River facility. We have evaluated your responses and found that they meet the requirements of 10 CFR 2.201 for Violations A and C, and for the Deviation. We will examine the implementation of your corrective actions during future inspections.

With respect to Violation B and D, we have concluded, for the reasons presented in the enclosure to this letter, that the violation occurred as stated in the Notice of Violation. Therefore, in accordance with 10 CFR 2.201, please submit a supplemental response to the Notice of Violation for Violation B. The corrective actions for Violation D appear adequate and a revised response is not required.

The response directed by this letter and the enclosure are not subject to the clearance procedures of the Office of Management and Budget issued under the Paper Reduction Act of 1980, PL 96-511.

We appreciate your cooperation in this matter.

Sincerely,

ORIGINAL SIGNED BY:  
J. NELSON GRACE

J. Nelson Grace  
Regional Administrator

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PDR ADOCK 05000302  
Q PDR

Enclosure:  
Staff Assessment of Licensee Response  
to Inspection Report 50-302/86-23

cc w/encl:  
✓ P. F. McKee, Director, Nuclear  
Plant Operations  
✓ R. C. Widell, Manager, Nuclear  
Operations Licensing and Fuel  
Management

bcc w/encl:  
✓ NRC Resident Inspector  
Document Control Desk  
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ENCLOSURE

STAFF ASSESSMENT OF LICENSEE RESPONSE  
TO INSPECTION REPORT 50-302/86-23

Restatement of Violation B (86-23-03)

Technical Specification 6.8.1.a requires adherence to written procedures that cover those activities recommended in Appendix A of Regulatory Guide 1.33, November 1972.

Regulatory Guide 1.33, Appendix A, paragraph 1.5 recommends procedures for the control of maintenance, repair, replacement and modification work.

Procedure CP-114, Procedure for Handling Permanent Modifications, Temporary Modifications, Modification Revisions, Field Change Notices, and Advance Field Change Notices, was written to meet the requirements of Regulatory Guide 1.33 and requires, in step 3.11, the use of a Modification Approval Record (MAR) to document the safety evaluation, review, and approval for nuclear plant modifications.

Contrary to the above, on July 21, 1986, a physical alteration was made on the lube oil system for the "B" Emergency Diesel Generator (EDG-1B) without the appropriate safety evaluation, review, and approval required for a nuclear plant modification.

Summary of Licensee's Response

Florida Power Corporation (FPC) does not concur with the violation as stated.

The replacement of valve DLV-10 did not require a plant modification to accommodate installation but, in fact, was due only to a manufacturer part change. In response to a Field Problem Report, this part change and the initial review for conformance was handled in accordance with the FPC Nuclear Procurement and Storage Manual "Catalog" method covered under Section 6.3. This effort revealed that the original part number had been replaced by another part number as stated in a letter received from the manufacturer.

Procurement Engineering reviewed the new item against the original item to determine that no design inputs for the original part were affected. This review was documented accordingly on the "Safety-Related Procurement Requisition Checklist." The replacement part was adequately reviewed to perform its intended function, and a "New Part Add" was initiated to input this item into the FPC inventory system as the replacement for the original part.

A Drawing Change Notice (DCN) has been initiated to reflect the change in part numbers. This is also in accordance with established FPC procedural requirements. However, prior to investigating this alleged violation, it had been recognized that a mechanism to notify Nuclear Engineering of potential problems, the Field Problem Report (FPR), was not a procedurally controlled vehicle. This problem is being rectified, and the procedure for the "Preparation and Issuing of Field Problem Reports" should be finalized by January 30, 1987.

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NRC Evaluation

The NRC staff has carefully reviewed the licensee's response and has concluded that the licensee did not provide any information that was not already considered in determining the violation.

The licensee stated, "that the replacement of valve DLV-10 did not require a plant modification to accommodate installation but, in fact, was due only to a manufacturer part change." The part change involved the replacement of DLV-10, a three-way valve, with a pressure gauge piping assembly. This assembly included two separate valves.

Compliance Procedure CP-114, section 3.10, defines a modification as a planned change in plant design or operation and accomplished in accordance with the requirements and limitations of applicable codes, standards, specifications, licenses, and predetermined safety restrictions. Additionally, the licensee's Quality Assurance Program as implemented by FSAR section 1.7 complies with the requirements of NRC Regulatory Guide 1.64, "Quality Assurance Requirements for the Design of Nuclear Power Plants."

Regulatory Guide 1.64 endorses ANSI N45.2.11-1974. Sections 8 and 8.1 of the standard state:

#### 8. DESIGN CHANGE CONTROL

Documented procedures shall be provided for design changes to approved design documents, including field changes, which assure that the impact of the change is carefully considered, required actions documented and information concerning the change is transmitted to all affected persons and organizations. These changes shall be justified and subjected to design control measures commensurate with those applied to the original design.

#### 8.1 REASONS FOR CHANGES

Design changes frequently result from such things as the following:

1. Qualification, preoperational, or operational test results are not satisfactory.
2. Interference problems discovered during construction.
3. Failures of structures, systems, or components to meet functional requirements.
4. Disposition of nonconforming items.
5. Changes in regulatory or other requirements.
6. Operational experience.
7. Design improvements.

The replacement of a three-way valve (DLV-10) for two separate valves and piping assembly, changes the way the system is operated and was a result of a design improvement (by the manufacturer) and/or failures of structures, systems, or components (three-way valve) to meet functional requirements. Therefore, the valve replacement is considered a plant modification.

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The licensee additionally states that the new item was reviewed in accordance with the "Safety-Related Procurement Requisition Checklist." A material procurement review is not the same as a plant modification review. A plant modification review takes into account the impact of the change on other systems and ensures that other required actions are accomplished. These actions may include, system drawing updates, procedure changes, and training of personnel on the changes.

#### NRC Conclusion

For the above reasons, the violation occurred as stated.

#### Restatement of Violation D (86-23-02)

10 CFR Part 50, Appendix B, Criterion V as implemented by the approved Florida Power Corporation Operational Quality Program, paragraph 1.7.1.5, requires that procedures or drawings include adequate instructions for work affecting quality.

Contrary to the above, as of July 30, 1986, plant modification procedures (MARs 79-11-70-01 and 79-11-70-02) were inadequate in that they caused the Containment Hydrogen Monitoring System to be installed incorrectly and failed to identify the incorrect installation during subsequent post-installation testing.

#### Summary of Licensee's Response

Florida Power Corporation agrees with the stated violation in that (a) the Containment Hydrogen Monitoring System was installed incorrectly, and (b) post-installation testing failed to identify the incorrect installation. FPC does not agree that plant modifications procedures (MARs 79-11-70-01 and 02) were inadequate.

- (a) Incorrect installation of the MAR appears to be a result of personnel error.
- (b) There appears to be two possible reasons for failure of the MAR Functional Test TP-70-1 to identify the incorrect installation, neither of which can be positively determined without bringing the plant to cold shutdown.
  - (1) Improper interpretation of a test instruction by the test engineer.
  - (2) Back leakage through a check valve connecting the two incorrectly installed tubing runs.

Item 1 refers to step 8.5.1 of the MAR Test Procedure. The intent of this step was to direct the valve lineup for either Channel A or Channel B Hydrogen Analyzers. Sign-offs for each channel were in the back of the procedures. If, inadvertently, both channel inlet/outlet valves were opened during the performance of Step 8.5.1, a flow path to each analyzer would have existed considering the crossed inlet procedure.

It should be noted that explicit instructions prohibiting simultaneous work in both channels were not defined in the procedure.

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Item 2 refers to the drain line between the inlet tubing runs. This drain line is protected for cross flow by check valves WSV-659 and WSV-660. Backflow through either of these check valves would provide an inlet flow path to the hydrogen analyzers.

Regardless of which item provided a flow path to the inlet of the hydrogen analyzers, it must be emphasized that a flow path must have existed. Otherwise, Section 8.6, of the test (Alarm Test) could not have been successfully performed. (Section 8.6 verified flow through both analyzers to be 3.0 SCFH).

#### NRC Evaluation

The NRC staff notes that while the licensee agrees with the stated violation, the licensee does not agree that the plant modification procedures were inadequate. During review of the section of the licensee's response that addresses the apparent cause of the violation, the staff notes the following statement; "It should be noted that explicit instructions prohibiting simultaneous work in both channels were not defined in the procedure...." From this statement it appears that the licensee has identified the inadequate MAR Functional Test procedure. If this test had been adequate, the construction error would have been identified.

#### NRC Conclusion

For the above reason, the Violation occurred as stated. The corrective actions stated in your response appear adequate to prevent recurrence and a revised response to this item is not required.