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**DUKE POWER**

April 3, 1996

\* Mr. James Lieberman, Director  
Office of Enforcement  
U. S. Nuclear Regulatory Commission  
One White Flint North, 11555 Rockville Pike  
Rockville, MD 20852-2738

Subject: Oconee Nuclear Station  
Docket Nos. 50-269, 50-270, 50-287  
Reply to Notice of Violation and Proposed  
Imposition of Civil Penalty

By letter dated March 5, 1996, the NRC issued a Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$50,000. The Notice of Violation involved the failure to provide adequate procedures to control fuel assembly movement in the spent fuel pool. Duke Power Company acknowledges this violation. Pursuant to 10 CFR 2.201 and 10 CFR 2.205, attached is the Reply to Notice of Violation and Proposed Imposition of Civil Penalty. A check for \$50,000 is enclosed as full payment for the imposed civil penalty.

This violation is significant in that a fuel assembly was left suspended in the fuel bridge mast for a period of approximately three weeks. As described in the attached Reply to Notice of Violation, Duke Power Company has taken comprehensive corrective actions to prevent recurrence of fuel handling events. A Duke Power Company Significant Event Investigation Team (SEIT) thoroughly investigated this event and provided recommendations to positively impact fuel handling. Oconee Nuclear Station is in the process of implementing all of the SEIT recommendations. In addition, a Self Initiated Technical Audit (SITA) of fuel handling activities is underway. The SITA will perform a broad-based assessment of fuel handling activities. The results of this SITA will provide a solid foundation for the implementation of further improvements in fuel handling work practices.

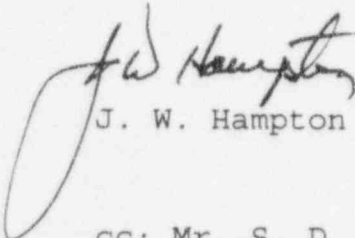
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The March 5, 1996, NRC letter states that the violation is of safety significance because of the potential for the suspended fuel assembly to be uncovered during an event requiring use of the Standby Shutdown Facility (SSF). Although not directly related to the subject violation, Duke Power Company is also implementing enhancements to minimize the drawdown of the spent fuel pool during events that require the use of the SSF. These additional enhancements were described at the February 21, 1996, predecisional enforcement conference.

I declare under penalty of perjury that the statements set forth herein are true and correct to the best of my knowledge.

Very truly yours,

  
J. W. Hampton

cc: Mr. S. D. Ebnetter, Regional Administrator  
U. S. Nuclear Regulatory Commission, Region II

Mr. P. E. Harmon  
Senior Resident Inspector  
Oconee Nuclear Site

Mr. L. A. Wiens, Project Manager  
Office of Nuclear Reactor Regulation

U. S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

Attachment 1  
Reply to Notice of Violation  
Violation 96-02-01 (EA 96-019)

Restatement of the violation

10 CFR 50, Appendix B, Criterion V, Instructions, Procedures and Drawings, requires, in part, that activities affecting quality shall be prescribed by documented instructions, procedures and drawings of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures or drawings.

Oconee Nuclear Site Directive 4.1.7(SA), Site Procedures, Step 4.2, states, in part, that procedures shall be written to a level of detail sufficient for a qualified person to perform the task with no direct supervision required. Procedure OP/O/A/1506/01, Fuel and Component Handling, was established by the licensee to implement activities affecting quality with regard to fuel and component handling, specifically, those actions required to move fuel assemblies using the fuel handling bridge in the spent fuel pool.

Contrary to the above, on December 14, 1995, Procedure OP/O/A/1506/01 did not provide adequate instructions for the movement of fuel assemblies in the spent fuel pool. Specifically, the movement of an irradiated fuel assembly was not controlled in that it was not returned to its required location in the spent fuel pool after the assembly was moved on December 14, 1995, but was left suspended and attached to the refueling bridge mast until January 8, 1996.

1. Admission of alleged violation:

Duke Power Company acknowledges this violation.

Attachment 1  
Reply to Notice of Violation  
Violation 96-02-01 (EA 96-019)

2. The reasons for the violation:

Duke Power Company has investigated this failure in depth using the Significant Event Investigation Team (SEIT) process and has concluded that there were two primary root causes for the failure to properly lower the fuel assembly into its storage location:

- a. Lack of Management expectations for formality in some fuel handling or core component movement processes.
- b. The failure of the bridge operator to self-check actions following completion of the fuel handling activities.

The first root cause indicates that there were inadequate barriers in place to prevent fuel handling errors. The second root cause indicates that the workers did not use existing self-checking barriers to avoid human performance errors. It is also recognized that the scope of corrective actions to previous fuel handling violations focused primarily on fuel movements to and from the core. With broader application of the corrective actions, the adequacy of procedures for all fuel movement work practices would have been addressed.

3. The corrective steps that have been taken and the results achieved:

- a. The fuel assembly was returned to its specified Spent Fuel Pool (SFP) storage location on January 8, 1996.
- b. All fuel handling activities were suspended until an investigation of the event was completed and appropriate corrective actions were implemented.

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Violation 96-02-01 (EA 96-019)

- c. Fuel handling procedures in use, including OP/0/A/1506/01, have been reviewed and appropriately revised to assure that adequate instructions are provided anytime fuel is moved. Specifically, procedures currently in use to control fuel movement have been revised to include the following:
1. Require that Operations Control Room personnel be notified prior to any fuel movement, anytime fuel handling is suspended, and at the completion of fuel handling activities.
  2. Include specific instructions for any movement of fuel or fuel-related components. There will be no movement of fuel without a procedure.
  3. Verify that all fuel assemblies are returned to a proper end state. This verification is required any time fuel handling is suspended or concluded.
  4. A procedure enclosure for a formal pre-job briefing. The pre-job briefing communicates the expectations and roles of the fuel handlers, emphasizing the importance of self-checking and a questioning attitude.

All fuel handling procedures not currently in use are on administrative hold. Any necessary revisions will be made prior to use.

- d. Affected personnel have been trained on all revised procedures.
- e. Personnel disciplinary actions have been taken in accordance with Duke Power Company policies.

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Violation 96-02-01 (EA 96-019)

4. The corrective steps that will be taken to avoid further violations:
  - a. All inactive fuel handling procedures (those not currently in use) will be reviewed and appropriate revisions will be made to assure that adequate instructions are provided anytime fuel is moved.
  - b. Affected personnel will be trained on all future procedure revisions.
  - c. A Self Initiated Technical Audit (SITA) will be conducted to review SFP and fuel handling activities. The audit team consists primarily of offsite personnel, including an industry expert. This audit will assess movement of fuel in the SFP, movement of fuel from the pool to the core and vice versa, and the associated equipment required for fuel movement activities. The SITA will also assess whether the design basis requirements are properly implemented in procedures and work practices. This broad assessment of fuel handling and SFP-related activities will provide valuable input to enhance our fuel handling work practices further.
  
5. The date when full compliance will be achieved.

All active fuel handling procedures have been appropriately revised. Therefore, Duke Power Company is in full compliance. The corrective steps described in Section 4 will further enhance our fuel handling work practices.