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U. S. Nuclear Regulatory Commission  
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Washington, D. C. 20555-0001

Edwin I. Hatch Nuclear Plant  
Reply to a Notice of Violation; EA-10-009  
Failure to Establish Appropriate Preventive Maintenance  
for Electrolytic Capacitors

Ladies and Gentlemen:

On February 12, 2010, the NRC issued an inspection report (No. 2009005) concerning timer card failure on the 2A Emergency Diesel Generator at the Edwin I. Hatch Nuclear Plant (HNP). The inspection report included a finding preliminarily determined to be greater than green when assessed using the Significance Determination Process. On May 12, 2010, NRC issued Enforcement Action EA-10-009, the final significance determination of a White finding and notice of violation (NOV) in this matter, having concluded, even with considering the additional information supplied by SNC, that the risk significance of the finding should be characterized as a White finding. Enclosure 1 of this letter provides the SNC reply to the NOV, while Enclosure 2 provides a related commitment made to the NRC.

A root cause determination is in progress that will address the broadness review and extent of condition of issues associated with preventive maintenance schedules for safety-related components that have a service life. The root cause determination will identify any additional corrective actions necessary, and those additional corrective actions will be tracked within the corrective action program. If further actions develop as a result that impact compliance, then this response letter will be updated to include additional actions. The root cause determination will be completed in time to support the NRC Inspection Procedure 95002 inspection at HNP, at this time expected to be the week of August 16<sup>th</sup>, 2010.

If you have any questions, please advise.

Respectfully submitted,



D. R. Madison  
Vice President - Hatch

DRM/JLS

Enclosures: 1. Reply to a Notice of Violation; EA-10-009  
2. Commitment Table

cc: Southern Nuclear Operating Company  
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State of Georgia  
Mr. C. Clark, Commissioner – Department of Natural Resources

**Edwin I. Hatch Nuclear Plant  
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**Enclosure 1**

**Reply to a Notice of Violation; EA-10-009**

## **Enclosure 1**

### **Reply to a Notice of Violation; EA-10-009**

#### **Statement of Violation**

During a U. S. Nuclear Regulatory Commission (NRC) inspection, completed on December 31, 2009 for the Edwin I. Hatch Nuclear Plant (HNP), a violation of NRC requirements was identified. The violation is stated below:

Technical Specification 5.4.1 requires, in part, that procedures shall be established, implemented, and maintained covering the applicable procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978.

Regulatory Guide 1.33, Appendix A, section 9.b states, in part, preventive maintenance schedules should be developed to specify replacement of parts that have a specific lifetime.

Procedure NMP-ES-006, Predictive Maintenance Implementation and Continuing Equipment Reliability Improvement, is the licensee's current procedure which requires that component preventive maintenance activities be developed and scheduled to replace parts that have a specific lifetime. Specifically Section 5.4 of NMP-ES-006 requires, in part, that the licensee develop and maintain a documented maintenance strategy with recommended time-based preventive maintenance taking into account Original Equipment Manufacturer (OEM)/Vendor recommendations and other data affecting component reliability.

Contrary to the above, between 1988 and 2009, the licensee failed to implement site procedures to develop preventive maintenance schedules that specify replacement of electrolytic capacitors, which are parts that have been identified as having a specific lifetime, for Unit 2 emergency diesel generator loss of coolant accident/loss of offsite power timer cards and their associated power supplies.

This violation is associated with a White significance determination process finding for Unit 2 in the Mitigating Systems cornerstone.

#### **Reason for Violation**

Southern Nuclear Operating Company (SNC) offers the following reason for the violation:

Failure to adequately implement site procedures to develop preventive maintenance schedules that specify replacement of electrolytic capacitors associated with the Unit 2 emergency diesel generator (EDG) loss of coolant accident/loss of offsite power (LOCA and LOSP) timer cards and power supplies.

#### **Corrective Steps That Have Been Taken and the Results Achieved**

The following actions describe the corrective actions which have been taken:

- Replaced LOCA and LOSP timer cards and power supplies with components whose electrolytic capacitors are within their service life.

## **Enclosure 1**

### **Reply to a Notice of Violation; EA-10-009**

- HNP has established repetitive tasks, based on service life recommendations, to replace electrolytic capacitors for the LOCA and LOSP timer cards and power supplies.
- Perform walkdown of the timers once per shift to check the LOCA and LOSP timer cards for illumination of their input/output error lights (which would be indication of a failed timer card) and perform functional test of the LOCA and LOSP timer cards monthly in association with the monthly EDG test.

The results achieved for these corrective actions is that HNP is now in compliance regarding the specific details related to the violation for the Unit 2 EDG LOCA and LOSP timer cards and power supplies containing electrolytic capacitors.

#### **Corrective Steps That Will Be Taken**

A root cause determination is in progress that will address the broadness review and extent of condition for issues associated with preventive maintenance of safety-related components that have a service life. The root cause determination will identify any additional corrective actions necessary, and those additional corrective actions will be tracked within the corrective action program. If further actions develop as a result that impact compliance, then this response letter will be updated to include additional actions. The root cause determination will be completed in time to support the NRC Inspection Procedure (IP) 95002 inspection at HNP.

#### **Date When Full Compliance Will Be Achieved**

The Unit 2 EDG LOCA and LOSP timer cards and power supplies have been changed out with timer cards and power supplies containing electrolytic capacitors that are within their service life, and repetitive tasks have been established to ensure continued replacement at the correct frequencies. With consideration of the specific violation issue related to the LOCA and LOSP timer cards and power supplies, compliance has been achieved. The scheduled date of full compliance will be determined as part of the root cause process and will be determined in time to support the NRC IP 95002 inspection at HNP, now scheduled for August 16, 2010. The Unit 1 LOSP and LOCA timer cards are of a different design and do not have electrolytic capacitors, thus are not subject to the type of failure found on Unit 2.

#### **Conclusion**

SNC's corrective actions to improve procedures, guidance, and oversight of the HNP preventive maintenance schedules provide reasonable assurance that components with electrolytic capacitors, that are associated with the Unit 2 LOSP and LOCA timer cards, are replaced prior to their service life being exceeded. Preventive maintenance schedules will be developed, as necessary, for other safety-related components with a service life.

**Edwin I. Hatch Nuclear Plant  
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**Enclosure 2**

**Commitment Table**

## Enclosure 2

### Commitment Table

The following table identifies the regulatory commitment in this document. Any other statements in this submittal represent intended or planned actions, they are provided for information purposes and are not considered to be regulatory commitments.

<u>Regulatory Commitment</u>	<u>Due Date</u>
A root cause determination will be completed which addresses the broadness review and extent of condition for issues associated with preventive maintenance schedules of safety-related components that have a service life. If further actions develop as a result that impact compliance, then this response letter will be updated to include additional actions.	August 16, 2010