

July 9, 2008

Mr. Dennis R. Madison  
Vice President - Hatch  
Edwin I. Hatch Nuclear Plant  
11028 Hatch Parkway North  
Baxley, GA 31513

SUBJECT: EDWIN I. HATCH NUCLEAR PLANT, UNIT NOS. 1 AND 2, REQUEST FOR  
ADDITIONAL INFORMATION REGARDING ALTERNATE SOURCE TERM  
APPLICATION (TAC NOS. MD2934 AND MD2935)

Dear Mr. Madison:

By letter to the U.S. Nuclear Regulatory Commission (NRC) dated August 29, 2006, Southern Nuclear Operating Company, Inc. (SNC, the licensee), proposed to revise the Edwin I. Hatch Nuclear Plant, Units 1 and 2 licensing and design-basis with a full scope implementation of an alternative source term. The NRC staff determined that several license conditions, as shown in the enclosure, will be necessary to confirm certain actions that you have indicated will be undertaken to support the revised licensing and design-basis.

A draft version of these conditions was provided to SNC's staff during the week of June 23, 2008, and the draft version of these conditions was discussed with SNC's staff on July 8, 2008. In order to support the timely completion of the NRC staff review, SNC is requested to submit a supplement to the application, within one week of receipt of this letter, accepting the license conditions proposed in the enclosure to this letter. It should be noted, however, that your acceptance does not constitute completion of the NRC staff review of the application.

Sincerely,

**/RA/**

Robert E. Martin, Senior Project Manager  
Plant Licensing Branch II-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-321 and 50-366

Enclosure:  
Request for Additional Information

cc w/encl: See next page

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DATE	07/9/08	07/08/08	07/9/08

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PROPOSED NEW LICENSE CONDITIONS  
BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
EDWIN I. HATCH NUCLEAR PLANT, UNIT NOS. 1 AND 2  
SOUTHERN NUCLEAR OPERATING COMPANY, INC.  
DOCKET NOS. 50-321 AND 50-366  
OPERATING LICENSE NOS. DPR-57 AND NPF-5

As part of the proposed AST amendment for the Edwin I. Hatch Nuclear Plant, Unit Nos. 1 and 2 (HNP), license conditions would be added to Facility Operating Licenses DPR-57 and NPF-5 as follows:

For HNP, Unit 1:

2.C(9) Alternate Source Term

- 1) Southern Nuclear Operating Company, Inc (SNC, the licensee) shall complete actions by April 30, 2010, as described in SNC's letters dated October 18, 2007, and March 13, 2008, to complete the design modifications to the HNP turbine building ventilation exhaust systems. Specifically, the HNP Units 1 and 2 turbine building exhaust fans shall be capable of being manually switched over from normally operating power supplies, to a Class 1E circuit that will be isolated by an appropriately rated safety related, environmentally and seismically qualified thermal-magnetic circuit breaker. For further protection and isolation, the licensee shall also use fuses that will be located in a seismically qualified manual transfer switch housing. The aforementioned circuit breaker and fuses shall be adequately coordinated with the upstream load center breaker over the entire range. These devices shall be adequately rated to prevent adverse effects of a fault to the rest of the distribution system.
- 2) SNC shall complete actions by May 31, 2010, as described in Enclosure 1, page 4, of SNC's letter dated August 29, 2006, to modify the logic for cable spreading room fan control to automatically trip supply and exhaust fans on initiation of the pressurization mode in the main control room.
- 3) SNC shall complete actions by May 31, 2010, as described in SNC's letter response to Request for Additional Information number 20 in SNC's letter dated December 11, 2007, to walk down the HNP Unit Nos. 1 and 2 turbine building motor control centers credited in the analyses to validate their seismic characteristics.

Enclosure

- 4) SNC shall implement modifications by May 31, 2010, as described in Enclosure 1, section 2.7.3.2, of the LAR and section 5.7 of SNC's letter dated February 25, 2008 (NL 08-0175) to modify the design for the air supply to the turbine building exhaust ventilation dampers, such that operating air to the dampers will be supplied from a non-interruptible instrument air source to eliminate single failure point vulnerability to loss of system/instrument air.
- 5) SNC shall complete actions by May 31, 2010, as described in SNC's letter dated February 25, 2008 (NL-08-0175) to install and implement the capability for Standby Liquid Control System hand switch jumpers for HNP Units 1 and 2.
- 6) SNC shall complete actions by May 31, 2012 for HNP Unit 1, as described in SNC's letters dated February 25, 2008 (NL-08-0175) and July 2, 2008 (NL-08-1022), to modify the following Main Steam Isolation Valve alternate leakage treatment boundary valves, such that they can be closed in the event of a loss of offsite power without requiring local operation:  
  
1N38-F101A, 1N38-F101B, 1N33-F012, 1N33-F013
- 7) SNC shall implement actions by May 31, 2010, as described in SNC's letter dated February 27, 2008, to assure that temperature switches which monitor charcoal bed temperature meet the environmental qualification requirements of 10 CFR 50.49.

For HNP, Unit 2:

2.C.3(g) Alternate Source Term

- 1) Southern Nuclear Operating Company, Inc (SNC, the licensee) shall complete actions by April 30, 2010, as described in SNC's letters dated October 18, 2007, and March 13, 2008, to complete the design modifications to the HNP turbine building ventilation exhaust systems. Specifically, the HNP Units 1 and 2 turbine building exhaust fans shall be capable of being manually switched over from normally operating power supplies, to a Class 1E circuit that will be isolated by an appropriately rated safety related, environmentally and seismically qualified thermal-magnetic circuit breaker. For further protection and isolation, the licensee shall also use fuses that will be located in a seismically qualified manual transfer switch housing. The aforementioned circuit breaker and fuses shall be adequately coordinated with the upstream load center breaker over the entire range. These devices shall be adequately rated to prevent adverse effects of a fault to the rest of the distribution system.
- 2) SNC shall complete actions by May 31, 2010, as described in Enclosure 1, page 4, of SNC's letter dated August 29, 2006, to modify the logic for cable spreading room fan control to automatically trip supply and exhaust fans on initiation of the pressurization mode in the main control room.
- 3) SNC shall complete actions by May 31, 2010, as described in SNC's letter response to Request for Additional Information number 20 in SNC's letter dated December 11, 2007, to walk down the HNP Unit Nos. 1 and 2 turbine building motor control centers credited

in the analyses to validate their seismic characteristics.

- 4) SNC shall implement modifications by May 31, 2010, as described in Enclosure 1, section 2.7.3.2, of the LAR and section 5.7 of SNC's letter dated February 25, 2008, (NL 08-0175) to modify the design for the air supply to the turbine building exhaust ventilation dampers, such that operating air to the dampers will be supplied from a non-interruptible instrument air source to eliminate single failure point vulnerability to loss of system/instrument air.
- 5) SNC shall complete actions by May 31, 2010, as described in SNC's letter dated February 25, 2008 (NL-08-0175) to install and implement the capability for Standby Liquid Control System hand switch jumpers for HNP Units 1 and 2.
- 6) SNC shall complete actions by May 31, 2011, for HNP Unit 2, as described in SNC's letters dated February 25, 2008 (NL-08-0175) and July 2, 2008 (NL-08-1022), to modify the following Main Steam Isolation Valve alternate leakage treatment boundary valves, such that they can be closed in the event of a loss of offsite power without requiring local operation:  
  
2N11-F004A, 2N11-F004B, 2N33-F003, 2N33-F004
- 7) SNC shall implement actions by May 31, 2010, as described in SNC's letter dated February 27, 2008, to assure that temperature switches which monitor charcoal bed temperature meet the environmental qualification requirements of 10 CFR 50.49.

Edwin I. Hatch Nuclear Plant, Units 1 & 2

cc:

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