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August 4, 2015

Docket Nos.: 50-321 50-366 NL-15-0407

U. S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, D. C. 20555-0001

Edwin I. Hatch Nuclear Plant

Request to Revise Typographical Error in Unit 1 Operating License and in Unit 2 Technical Specifications, and to add STAGGERED TEST BASIS to Unit 1 and Unit 2 Technical Specifications

Ladies and Gentlemen:

Pursuant to 10 CFR 50.90, Southern Nuclear Operating Company (SNC) hereby requests an amendment to the Edwin I. Hatch Nuclear Plant (HNP) Unit 1 Facility Operating License (FOL), and to the HNP Unit 1 and Unit 2 Technical Specifications (TS). This amendment corrects an obvious typographical error in the Unit 1 FOL, and on page 5.0.17 of the Unit 2 TS. The Degraded Voltage Protection license condition in Part 2.C of the Unit 1 FOL (DPR-57) is currently listed as condition number 10, whereas it should be listed as condition number 11. In addition, this paragraph should be further indented to the right, to clarify that it's a third level paragraph (i.e. level 2.C.11). In addition to the FOL change, this amendment corrects an incorrect Unit number in Hatch Unit 2 TS page 5.0.17. This page was inadvertently sent and issued stating Unit 1 on the bottom left, whereas it should clearly state Unit 2. Lastly, this amendment adds the term STAGGERED TEST BASIS to the Definitions section of the Unit 1 and Unit 2 TS. This term was removed from the TS and moved to the Surveillance Frequency Control Program (SFCP) when the NRC issued the TSTF-425 license amendment in 2012 to relocate specific surveillance frequency requirements to a licensee controlled program. This term, however, was reintroduced into Section 5 of the TS as a defined term when Hatch adopted the Control Room Envelope Habitability Program (TSTF-448). Since it's currently used as a defined term in Section 5 of the TS, it needs to be included in the Definitions section of the TS.

SNC requests approval of the proposed license amendments by February 1, 2016. The proposed changes would be implemented within 90 days of issuance of the amendment.

This letter contains no NRC commitments. If you have any questions, please contact Ken McElroy at (205) 992-7369.

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Mr. C. R. Pierce states he is Regulatory Affairs Director of Southern Nuclear Operating Company, is authorized to execute this oath on behalf of Southern Nuclear Operating Company and, to the best of his knowledge and belief, the facts set forth in this letter are true.

Respectfully submitted,

C. R. Previ

C. R. Pierce Regulatory Affairs Director

CRP/RMJ

Sworn to and supscribed before me this 4th day of August , 2015. Notarv Public

My commission expires: <u>1-2-201</u>8

Enclosures: 1. Description and Assessment

- 2. Proposed FOL and TS Pages (Marked)
- 3. Proposed FOL and TS Pages (Clean)

cc: Southern Nuclear Operating Company

Mr. S. E. Kuczynski, Chairman, President & CEO

Mr. D. G. Bost, Executive Vice President & Chief Nuclear Officer

Mr. D. R. Vineyard, Vice President – Hatch

Mr. M. D. Meier, Vice President - Regulatory Affairs

Mr. D. R. Madison, Vice President – Fleet Operations

Mr. B. J. Adams, Vice President - Engineering

Mr. G. L. Johnson, Regulatory Affairs Manager - Hatch RType: CHA02.004

U. S. Nuclear Regulatory Commission

Mr. V. M. McCree, Regional Administrator

Mr. R. E. Martin, NRR Senior Project Manager - Hatch

Mr. D. H. Hardage, Senior Resident Inspector - Hatch

State of Georgia

Mr. J. H. Turner, Director - Environmental Protection Division

Edwin I. Hatch Nuclear Plant Request to Revise Typographical Error in Unit 1 Operating License and in Unit 2 Technical Specifications

Enclosure 1

Description and Assessment

Enclosure 1 to NL-15-0407 Description and Assessment

1. <u>Summary Description</u>

The proposed amendment corrects an obvious typographical error in the Edwin I. Hatch Nuclear Plant (HNP) Unit 1 Facility Operating License (FOL), and in the HNP Unit 2 Technical Specifications (TS). In addition, this amendment adds the term STAGGERED TEST BASIS to the Definitions section of the Unit 1 and Unit 2 TS.

2. Detailed Description

The Degraded Voltage Protection license condition in Part 2.C of the Unit 1 FOL is currently listed as condition number 10, whereas it should be listed as condition number 11. In addition, this paragraph should be further indented to the right, to clarify that it's a third level paragraph (i.e. level 2.C.11). When SNC submitted this request to amend the FOL for Degraded Voltage Protection in December of 2012, Part 2.C of the Unit 1 FOL only had nine conditions. Consequently, the Degraded Voltage Protection condition was submitted as condition number 10. Subsequent to the issuance of the revised FOL for Degraded Voltage Protection, however, SNC received approval of an unrelated amendment request that added a condition number 10. While the Degraded Voltage Protection license condition should have been updated to condition number 11, this was overlooked. The indentation of this license condition was also shifted to the left from what was originally intended in SNC's December 2012 license amendment request.

This amendment also corrects an incorrect Unit number in Hatch Unit 2 page 5.0-17. This page was inadvertently sent by SNC and issued by the NRC stating Unit 1 on the bottom left, whereas it should clearly state Unit 2. By comparing the contents on this page with the information on Unit 2 page 5.0-16 and 5.0-18, and by comparing the contents on this page with the actual Unit 1 page 5.0-17, it is obvious that the correct Unit number on the bottom left of the page should state Unit 2.

Lastly, this amendment adds the term STAGGERED TEST BASIS to the Definitions section of the Unit 1 and Unit 2 TS. This term was deleted from the Definitions section of the TS and moved to the Definitions section of the Surveillance Frequency Control Program (SFCP) when the NRC issued the TSTF-425 license amendment in 2012 to relocate specific surveillance frequency requirements to a licensee controlled program. In 2014, the NRC issued the TSTF-448 license amendment which added the Control Room Envelope Habitability Program to the Programs and Manuals section of the TS. TSTF-448 states that the Control Room Envelope Habitability Program shall include "Measurement, at designated locations, of the CRE pressure at a Frequency of [18] months on a STAGGERED TEST BASIS....". The definition currently in the SFCP matches the definition that was previously in the TS, so there are no concerns regarding the TS requirements for the Control Room Habitability Program being met. However, since the SFCP is a licensee controlled program, it would be possible for SNC to modify this definition (and hence modify the TS Control Room Habitability Program requirements) without prior NRC approval. This term therefore must be defined in the TS.

Enclosure 1 to NL-15-0407 Description and Assessment

3. <u>Technical Evaluation</u>

The proposed amendment contains no technical changes; all proposed changes are administrative. These changes are consistent with the intent of what the Nuclear Regulation Commission has already approved for each of these pages.

- 4. Regulatory Evaluation
 - 4.1 Applicable Regulatory Requirements

The proposed amendment contains no technical changes; all proposed changes are administrative. Therefore, there are no applicable regulatory requirements for these proposed changes.

4.2 No Significant Hazards Consideration Determination

The proposed amendment corrects an obvious typographical error in the Edwin I. Hatch Nuclear Plant (HNP) Unit 1 Facility Operating License (FOL), and in the HNP Unit 2 Technical Specifications (TS). In addition, this amendment adds the term STAGGERED TEST BASIS to the Definitions section of the Unit 1 and Unit 2 TS. This term was removed from the TS and moved to the Surveillance Frequency Control Program (SFCP) when the NRC issued the TSTF-425 license amendment in 2012 to relocate specific surveillance frequency requirements to a licensee controlled program. This term, however, was reintroduced into Section 5 of the TS as a defined term when Hatch adopted the Control Room Envelope Habitability Program (TSTF-448). Since it's currently used as a defined term in Section 5 of the TS, it needs to be included in the Definitions section of the TS.

As required by 10 CFR 50.91(a), Southern Nuclear Operating Company (SNC) has evaluated the proposed changes to the HNP Unit 1 FOL and to the Unit 2 TS and has determined that the proposed changes do not involve a significant hazards consideration. An analysis of the issue of no significant hazards is presented below:

1) Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No

The proposed amendment contains no technical changes; all proposed changes are administrative. These changes are consistent with the intent of what has already been approved by the Nuclear Regulatory Commission (NRC). There are no accidents affected by this change, and therefore no increase in the probability or consequences of an accident previously evaluated.

2) Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No

The proposed amendment contains no technical changes; all proposed changes are administrative. These changes are consistent with the intent of what has already been approved by the Nuclear Regulatory Commission (NRC). There are no accidents affected by this change, and therefore no possibility of a new or different kind of accident from any accident previously evaluated.

3) Does the proposed amendment involve a significant reduction in a margin of safety?

Response: No

The proposed amendment contains no technical changes; all proposed changes are administrative. These changes are consistent with the intent of what has already been approved by the Nuclear Regulatory Commission (NRC). There are no accidents affected by this change, and therefore no reduction in a margin of safety.

4.3 Conclusion

In conclusion, based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

5. Environmental Considerations

SNC has evaluated the proposed change and determined that the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or a significant increase in the amounts of any effluents that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

Edwin I. Hatch Nuclear Plant Request to Revise Typographical Error in Unit 1 Operating License and in Unit 2 Technical Specifications

Enclosure 2

Proposed FOL and TS Pages (Marked)

c. The first performance of the periodic measurement of CRE pressure, Specification 5.5.14.d, shall be within 24 months, plus the 6 months allowed by SR 3.0.2, from the date of the most recent successful pressure measurement test.

(1011) Degraded Voltage Protection

SNC shall implement the Degraded Voltage modifications to eliminate the manual actions in lieu of automatic degraded voltage protection to assure adequate voltage to safety-related equipment during design basis events by completion of the Unit 1 2020 Spring Outage, U1R29.

SNC shall implement the Degraded Voltage modifications to eliminate the manual actions in lieu of automatic degraded voltage protection to assure adequate voltage to safety-related equipment during design basis events by completion of the Unit 1 2020 Spring Outage, U1R29.

- D. Southern Nuclear shall not market or broker power or energy from Edwin I. Hatch Nuclear Plant, Unit 1.
- 3. This renewed license is effective as of the date of issuance and shall expire at midnight, August 6, 2034.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Somulations

Samuel J. Collins, Director Office of Nuclear Reactor Regulation

Attachments: Appendix A – Technical Specifications Appendix B – Environmental Protection Plan

Note: Paragraph

shifted to right, as shown by

inserted text

should be

Date of Issuance: January 15, 2002

- 8 -

SHUTDOWN MARGIN (SDM)	SDM shall be the amount of reactivity by which the reactor is subcritical or would be subcritical throughout the operating cycle assuming that:			
	a.	The reactor is xenon free;		
	b.	The moderator temperature is \geq 68°F, corresponding to the most reactive state; and		
	C.	All control rods are fully inserted except for the single control rod of highest reactivity worth, which is assumed to be fully withdrawn. With control rods not capable of being fully inserted, the reactivity worth of these control rods must be accounted for in the determination of SDM.		
STAGGERED	A STA	GGERED TEST BASIS shall consist of the testing of one of the		
TEST BASES	syster	systems, subsystems, channels, or other designated components during		
		erval specified by the Surveillance Frequency, so that all systems.		
		subsystems, channels, or other designated components are tested during <i>n</i> Surveillance Frequency intervals, where <i>n</i> is the total number of		
	systems, subsystems, channels, or other designated components in the			
	assoc	iated function.		
THERMAL POWER	THERMAL POWER shall be the total reactor core heat transfer rate to the reactor coolant.			
TURBINE BYPASS SYSTEM RESPONSE TIME	The TURBINE BYPASS SYSTEM RESPONSE TIME consists of two components:			
	a.	The time from initial movement of the main turbine stop valve or control valve until 80% of the turbine bypass capacity is established; and		
	b.	The time from initial movement of the main turbine stop valve or control valve until initial movement of the turbine bypass valve.		
	The response time may be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured.			

PHYSICS TESTS	PHYSICS TESTS shall be those tests performed to measure the fundamental nuclear characteristics of the reactor core and related instrumentation. These tests are:		
	a.	Described in Chapter 14, Initial Tests and Operation, of the FSAR;	
	b.	Authorized under the provisions of 10 CFR 50.59; or	
	C.	Otherwise approved by the Nuclear Regulatory Commission.	
RATED THERMAL POWER (RTP)	RTP shall be a total reactor core heat transfer rate to the reactor coolant of 2804 MWt.		
REACTOR PROTECTION SYSTEM (RPS) RESPONSE TIME	The RPS RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its RPS trip setpoint at the channel sensor until de-energization of the scram pilot valve solenoids. The response time may be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured.		
SHUTDOWN MARGIN (SDM)	SDM shall be the amount of reactivity by which the reactor is subcritical or would be subcritical throughout the operating cycle assuming that:		
	a.	The reactor is xenon free;	
	b.	The moderator temperature is \geq 68°F, corresponding to the most reactive state; and	
	C.	All control rods are fully inserted except for the single control rod of highest reactivity worth, which is assumed to be fully withdrawn. With control rods not capable of being fully inserted, the reactivity worth of these control rods must be accounted for in the determination of SDM.	
STAGGERED TEST BASES	A STAGGERED TEST BASIS shall consist of the testing of one of the systems, subsystems, channels, or other designated components during the interval specified by the Surveillance Frequency, so that all systems, subsystems, channels, or other designated components are tested during <i>n</i> Surveillance Frequency intervals, where <i>n</i> is the total number of systems, subsystems, channels, or other designated components in the associated function.		
THERMAL POWER	THERMAL POWER shall be the total reactor core heat transfer rate to the reactor coolant.		

(continued)

Amendment No.-217

5.5 Programs and Manuals

5.5.12 Primary Containment Leakage Rate Testing Program (continued)

The provisions of SR 3.0.3 are applicable to the Primary Containment Leakage Rate Testing Program.

5.5.13 Surveillance Frequency Control Program

This program provides controls for the Surveillance Frequencies. The program shall ensure that Surveillance Requirements specified in the Technical Specifications are performed at intervals sufficient to assure the associated Limiting Conditions for Operation are met.

- a. The Surveillance Frequency Control Program shall contain a list of Frequencies of those Surveillance Requirements for which the Frequency is controlled by the program.
- b. Changes to the Frequencies listed in the Surveillance Frequency Control Program shall be made in accordance with the NEI 04-10 "Risk-Informed Method for Control of Surveillance Frequencies," Revision 1.
- c. The provisions of Surveillance Requirements 3.0.2 and 3.0.3 are applicable to the Frequencies established in the Surveillance Frequency Control Program.

5.5.14 <u>Control Room Envelope Habitability Program</u>

A Control Room Envelope (CRE) Habitability Program shall be established and implemented to ensure that CRE habitability is maintained such that, with an OPERABLE Main Control Room Environmental Control (MCREC) System, CRE occupants can control the reactor safely under normal conditions and maintain it in a safe condition following a radiological event, hazardous chemical release, or a smoke challenge. The program shall ensure that adequate radiation protection is provided to permit access and occupancy of the CRE under design basis accident (DBA) conditions without personnel receiving radiation exposures in excess of 5 rem total effective dose equivalent (TEDE) for the duration of the accident. The program shall include the following elements:

- a. The definition of the CRE and the CRE boundary.
- b. Requirements for maintaining the CRE boundary in its design condition including configuration control and preventive maintenance.
- c. Requirements for (i) determining the unfiltered air inleakage past the CRE boundary into the CRE in accordance with the testing methods and at the Frequencies specified in Sections C.1 and C.2 of Regulatory Guide 1.197, "Demonstrating Control Room Envelope Integrity at Nuclear Power Reactors," Revision 0, May 2003, and (ii) assessing CRE habitability at the

(continued)

HATCH UNIT 12

Edwin I. Hatch Nuclear Plant Request to Revise Typographical Error in Unit 1 Operating License and in Unit 2 Technical Specifications

Enclosure 3

Proposed FOL and TS Pages (Clean)

- c. The first performance of the periodic measurement of CRE pressure, Specification 5.5.14.d, shall be within 24 months, plus the 6 months allowed by SR 3.0.2, from the date of the most recent successful pressure measurement test.
- (11) <u>Degraded Voltage Protection</u>

SNC shall implement the Degraded Voltage modifications to eliminate the manual actions in lieu of automatic degraded voltage protection to assure adequate voltage to safety-related equipment during design basis events by completion of the Unit 1 2020 Spring Outage, U1R29.

- D. Southern Nuclear shall not market or broker power or energy from Edwin I. Hatch Nuclear Plant, Unit 1.
- 3. This renewed license is effective as of the date of issuance and shall expire at midnight, August 6, 2034.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Samuel J. Collins, Director Office of Nuclear Reactor Regulation

Attachments:

Appendix A – Technical Specifications Appendix B – Environmental Protection Plan

Date of Issuance: January 15, 2002

Renewed License No. DPR-57 Amendment No.

SHUTDOWN MARGIN (SDM)	SDM shall be the amount of reactivity by which the reactor is subcritical or would be subcritical throughout the operating cycle assuming that:		
	a.	The reactor is xenon free;	
	b.	The moderator temperature is \geq 68°F, corresponding to the most reactive state; and	
	C.	All control rods are fully inserted except for the single control rod of highest reactivity worth, which is assumed to be fully withdrawn. With control rods not capable of being fully inserted, the reactivity worth of these control rods must be accounted for in the determination of SDM.	
STAGGERED TEST BASES	A STAGGERED TEST BASIS shall consist of the testing of one of the systems, subsystems, channels, or other designated components during the interval specified by the Surveillance Frequency, so that all systems, subsystems, channels, or other designated components are tested during <i>n</i> Surveillance Frequency intervals, where <i>n</i> is the total number of systems, subsystems, channels, or other designated components in the associated function.		
THERMAL POWER	THERMAL POWER shall be the total reactor core heat transfer rate to the reactor coolant.		
TURBINE BYPASS SYSTEM RESPONSE TIME	The TURBINE BYPASS SYSTEM RESPONSE TIME consists of two components:		
	a.	The time from initial movement of the main turbine stop valve or control valve until 80% of the turbine bypass capacity is established; and	
	b.	The time from initial movement of the main turbine stop valve or control valve until initial movement of the turbine bypass valve.	
	The response time may be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured.		

PHYSICS TESTS	PHYSICS TESTS shall be those tests performed to measure the fundamental nuclear characteristics of the reactor core and related instrumentation. These tests are:		
	a.	Described in Chapter 14, Initial Tests and Operation, of the FSAR;	
	b.	Authorized under the provisions of 10 CFR 50.59; or	
	C.	Otherwise approved by the Nuclear Regulatory Commission.	
RATED THERMAL POWER (RTP)		hall be a total reactor core heat transfer rate to the reactor t of 2804 MWt.	
REACTOR PROTECTION SYSTEM (RPS) RESPONSE TIME	The RPS RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its RPS trip setpoint at the channel sensor until de-energization of the scram pilot valve solenoids. The response time may be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured.		
SHUTDOWN MARGIN (SDM)	SDM shall be the amount of reactivity by which the reactor is subcritical or would be subcritical throughout the operating cycle assuming that:		
	a.	The reactor is xenon free;	
	b.	The moderator temperature is \geq 68°F, corresponding to the most reactive state; and	
	С.	All control rods are fully inserted except for the single control rod of highest reactivity worth, which is assumed to be fully withdrawn. With control rods not capable of being fully inserted, the reactivity worth of these control rods must be accounted for in the determination of SDM.	
STAGGERED TEST BASES	A STAGGERED TEST BASIS shall consist of the testing of one of the systems, subsystems, channels, or other designated components during the interval specified by the Surveillance Frequency, so that all systems, subsystems, channels, or other designated components are tested during n Surveillance Frequency intervals, where n is the total number of systems, subsystems, channels, or other designated components in the associated function.		
THERMAL POWER	THERMAL POWER shall be the total reactor core heat transfer rate to the reactor coolant.		

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Amendment No.

5.5 Programs and Manuals

5.5.12 Primary Containment Leakage Rate Testing Program (continued)

The provisions of SR 3.0.3 are applicable to the Primary Containment Leakage Rate Testing Program.

5.5.13 Surveillance Frequency Control Program

This program provides controls for the Surveillance Frequencies. The program shall ensure that Surveillance Requirements specified in the Technical Specifications are performed at intervals sufficient to assure the associated Limiting Conditions for Operation are met.

- a. The Surveillance Frequency Control Program shall contain a list of Frequencies of those Surveillance Requirements for which the Frequency is controlled by the program.
- b. Changes to the Frequencies listed in the Surveillance Frequency Control Program shall be made in accordance with the NEI 04-10 "Risk-Informed Method for Control of Surveillance Frequencies," Revision 1.
- c. The provisions of Surveillance Requirements 3.0.2 and 3.0.3 are applicable to the Frequencies established in the Surveillance Frequency Control Program.

5.5.14 Control Room Envelope Habitability Program

A Control Room Envelope (CRE) Habitability Program shall be established and implemented to ensure that CRE habitability is maintained such that, with an OPERABLE Main Control Room Environmental Control (MCREC) System, CRE occupants can control the reactor safely under normal conditions and maintain it in a safe condition following a radiological event, hazardous chemical release, or a smoke challenge. The program shall ensure that adequate radiation protection is provided to permit access and occupancy of the CRE under design basis accident (DBA) conditions without personnel receiving radiation exposures in excess of 5 rem total effective dose equivalent (TEDE) for the duration of the accident. The program shall include the following elements:

- a. The definition of the CRE and the CRE boundary.
- b. Requirements for maintaining the CRE boundary in its design condition including configuration control and preventive maintenance.
- c. Requirements for (i) determining the unfiltered air inleakage past the CRE boundary into the CRE in accordance with the testing methods and at the Frequencies specified in Sections C.1 and C.2 of Regulatory Guide 1.197, "Demonstrating Control Room Envelope Integrity at Nuclear Power Reactors," Revision 0, May 2003, and (ii) assessing CRE habitability at the

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HATCH UNIT 2

Amendment No.