Charles R. Pierce
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SOUTHERN NUCLEAR
A SOUTHERN COMPANY

MAY 0 9 2016

Docket Nos.: 50-321
50-366

NL-16-0655

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

Edwin I. Hatch Nuclear Plant Unit 1 and 2
Response to Request for Additional Information on Secondary Containment
Drawdown Time Technical Specifications Amendment Request

Ladies and Gentlemen:

By letter dated October 15, 2015, and as supplemented by letter dated March 16, 2016, Southern Nuclear Operating Company (SNC) submitted a license amendment request for the Edwin I. Hatch Nuclear Plant (HNP), Units 1 and 2. The proposed amendment would revise Unit 1 and 2 HNP Technical Specifications Surveillance Requirement (SR) 3.6.4.1.3 to increase the allowable time for the Standby Gas Treatment System (SGTS) to draw down the secondary containment to the required negative pressure from 2 minutes to 10 minutes.

By letters dated February 18, 2016 and April 15, 2016, the Nuclear Regulatory Commission (NRC) issued requests for additional information (RAI). The enclosure to this letter provides SNC's response to the April 15, 2016 RAI. Please note that the remaining SNC response to the NRC RAI dated February 18, 2016 will be provided to NRC no later than May 18, 2016.

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

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. Pierce

C. R. Pierce
Regulatory Affairs Director

CRP/OCV/

Sworn to and subscribed before me this 9th *day of* May, *2016.*

Laura L. Crabb
Notary Public

My commission expires: 10-8-2017

Enclosure: Response to Request for Additional Information

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
Ms. C. Haney, Regional Administrator
Mr. M. D. Orenak, NRR 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 Unit 1 and 2
Response to Request for Additional Information on Secondary Containment Drawdown Time Technical Specifications Amendment Request

Enclosure

Response to Request for Additional Information

RAI-10

In the response to RAI-7 of the March 16, 2016, supplement, SNC states: This reduction was justified by noting that wind speeds of greater than 24 mph are not frequent, based on Plant Hatch meteorological conditions. At this wind speed, exfiltration would occur at 0.12 inches of water vacuum.

a) Please provide further detail as to what "exfiltration would occur at 0.12 inches of water vacuum" means. Does it mean that the exfiltration would not occur at 0.125 inches of water vacuum?

b) Please provide the basis for the required 0.12 inches of water vacuum with 24 mph wind speed in the form of a one-page summary of the test or analysis.

SNC Response:

a) The effect of wind blowing on a side of a building will result in positive pressure on that side; this is referred to as the *windward* side of the building. The opposite side of the building, the *leeward* side, will be at a negative pressure. The original design consideration of a 35 mph wind will result in a pressure of -0.25 inches of water (wg) on the leeward side. So, by maintaining a pressure of -0.25 wg inside the building, the differential pressure between the inside of the building and the leeward side of the building will be zero. Consequently, there will be no infiltration or exfiltration to or from the building.

   The required pressure with a 24 mph wind speed is determined by the square of the ratio of the 24 and 35 mph wind speeds. Therefore, for a wind speed of 24 mph, the pressure at the leeward side of the building will be:

   $[(24 \text{ mph}/35 \text{ mph})^2 \times (-0.25 \text{ inches wg})] = -0.12 \text{ inches wg}.$

   This means that if the building is maintained at a pressure which is more negative than -0.12 inches wg there will be no exfiltration from the building, but there will be infiltration, which is acceptable. Hence, if the building is maintained at -0.125 inches wg, corresponding to the 24 mph wind, there will be no exfiltration.

b) As described in the above response to a., the required pressure with a 24 mph wind speed is determined by the square of the ratio of the 24 and 35 mph wind speeds. As described in the RAI response of March 16, 2016, the 24 mph wind speed was used in the original submittal (which reduced the Technical Specification required vacuum from 0.25 inches wg to 0.20 inches wg) because wind speeds in excess of 24 mph are rare at HNP.