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

Edwin I. Hatch Nuclear Plant – Unit 2  
Response to Request for Information Regarding Safety Relief Valve Main Valve Body Testing  
Extension

Ladies and Gentlemen:

By letter dated August 3, 2017, and as supplemented by letters dated March 29, 2018 and April 17, 2018, Southern Nuclear Operating Company (SNC) submitted a request for alternative for the Edwin I. Hatch Nuclear Plant, Unit 2 (Hatch Unit 2). The requested alternative would authorize a one-time extension of the main steam safety relief valve (SRV) main valve body (MVB) test frequency, allowing the required testing to be performed at the next Hatch Unit 2 refueling outage in February 2019.

On May 1, 2018, the Nuclear Regulatory Commission (NRC) staff and SNC staff held a conference call to clarify SNC's April 17, 2018 response. By emailed correspondence dated May 8, 2018, the NRC requested additional information based on this clarification call. The Enclosure provides the additional information.

This letter contains no NRC commitments. If you have any questions, please contact Jamie Coleman at 205.992.6611.

Respectfully submitted,

C. A. Gayheart  
Regulatory Affairs Director

CAG/RMJ

Enclosure: Response to NRC Request for Additional Information

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Edwin I. Hatch Nuclear Plant – Unit 2  
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Enclosure

Response to NRC Request for Additional Information

## **NRC RAI**

In the course of the [May 1, 2018] discussion, SNC described how it developed and performed the MVB low pressure (400 psi), full flow test in response to the prior testing problems addressed in the Part 21 notification. SNC stated the reason that 400 psig was selected for the modified test pressure was that Target Rock had informed them that 400 psig is the lowest pressure at which the valves can be stroked. The NRC staff requests SNC to supplement its April 17, 2018 RAI response to provide that additional information on the docket.

## **SNC Response to NRC RAI**

The low pressure safety relief valve (SRV) main valve body (MVB) test was developed in conjunction with NWS Technologies. The 400 psig actuation requirement was developed through full flow (ungagged) tests at various incremental pressures starting at 50 psig and increasing up to 400 psig. During each test at incremental pressures, MVB disc stroke/travel was measured using the test stand linear variable differential transformer (LVDT). With pressure removed, the MVB was also stroked by hand to validate travel. The goal was to validate full stroke of the MVB disc (2.78-inch or greater) at the lowest pressure while eliminating rapid cycling of the disc. This goal was achieved consistently at 400 psig. At pressures lower than 400 psig, the MVB disc would open, but would either not consistently achieve full stroke or have rapid cycling following the initial stroke. These results have been replicated during 400 psig MVB testing in 2018.