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Edwin I. Hatch Nuclear Plant – Unit 2  
Response to Request for Additional Information for Alternative RR-V-11 Regarding Main  
Steam Safety Valve Testing Requirements

Ladies and Gentlemen:

By letter dated August 3, 2017 (Agencywide Documents Access and Management System Accession No. ML17215A558), 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 body test frequency, allowing the required testing to be performed at the next Hatch Unit 2 refueling outage in February 2019. The NRC staff has reviewed the information provided by SNC, and has determined that additional information is needed to complete its evaluation. This additional information was requested via emailed correspondence dated March 8, 2018.

By letter dated March 29, 2018, SNC responded to NRC request for additional information #1 – 3. The Enclosure provides the SNC response to NRC request #4.

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

Respectfully submitted,

Cheryl A. Gayheart  
Regulatory Affairs Director

CAG/RMJ

Enclosure: Response to NRC Request for Additional Information #4

Cc: Regional Administrator, Region II  
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Edwin I. Hatch Nuclear Plant – Unit 2  
Response to Request for Additional Information for Alternative RR-V-11  
Regarding Main Steam Safety Valve Testing Requirements

Enclosure

Response to NRC Request for Additional Information #4

#### **NRC RAI #4**

What information is available from the inspection and testing of the Hatch Unit 1 SRVs during the just completed February 2018 refueling outage? Discuss how these results will be applied to the ongoing evaluation of the condition of the Unit 2 valves, and what impact those results may have on the justification for extending the current test interval.

#### **SNC Response to NRC RAI #4**

Five main valve bodies (MVBs) removed from Hatch Unit 1 during the February 2018 refueling outage were tested at the NWS Technologies laboratory. Previously, a Part 21 notification issued by Target Rock identified damage to MVBs caused by limited flow testing at operating pressure. In response, corrective measures were implemented. These corrective measures included: 1) augmented as-left inspections to verify/correct the torque on the main disc retaining nut and ring before installing the valves in the plant and 2) dropping test pressure to 400 psi with full flow during as-left and as-found testing. The inspection results and as-found testing after two years in service showed no deformation or loosening of the main disc retaining nut. All five valves were as-found tested using the improved MVB low pressure (400 psi) test, and then disassembled satisfactorily, with no loose jam nuts or retaining rings.

The test results support the improved low-pressure testing method as a solution to the Part 21 notification. The Unit 2 valves currently installed were as-left tested and inspected with the same methodology and standards used on the five MVBs removed during the February 2018 refueling outage and found in NWS procedure NWS-T-91 R5 TR3. Plant Hatch has reasonable confidence that the valves currently installed and Part 21 inspected have no issues. The same testing method and inspection criteria will continue to be applied to all future rebuilds.