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September 30, 1998

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

Edwin I. Hatch Nuclear Plant  
Request for NRC Finding of Exigent Circumstance Concerning  
License Amendment for Extended Power Uprate Operation

Ladies and Gentlemen:

By letter dated August 8, 1997, Southern Nuclear Operating Company (SNC) submitted to the Nuclear Regulatory Commission (NRC) a request for a license amendment for extended power uprate operation for Plant Hatch Units 1 and 2. Within this request, a schedule was proposed to begin operation on Unit 2 with the extended power uprate upon startup from the Fall 1998 outage. SNC has been responsive in all manners concerning this licensing submittal, including the NRC's Requests for Additional Information (RAIs) concerning power uprate and the ACRS's request addressing the proposed subject. Based upon informal assurances by the Hatch Project Manager, SNC believed it to be prudent to plan on modifying procedures, various setpoints, and instrumentation to accommodate the necessary technical requirements of power uprate. All of this was done relative to a scheduled startup for Unit 2 of October 18, 1998. Presently, we are 4 to 5 days late relative to the scheduled startup. We have received informally from the Hatch Project Manager a date of November 4, 1998, that we could receive the license amendment if there is a 30-day comment period. Based upon the Unit 2 startup time, all procedures, setpoints, and instruments will have to be modified again to reflect the existing licensed power.

Additionally, SNC intends for the new extended power uprate on Unit 2 to be implemented at power if the amendment is received on November 4, 1998; thus, procedures, setpoints, and instruments will be modified with the plant on line. While it is possible to modify the setpoints and instruments on line in accordance with the Technical Specifications, the possibility of a scram of the plant is increased, introducing unnecessary transients on the plant systems. Thus, based upon the provisions of 10 CFR 50.91(a)(6), SNC requests this amendment be processed on an exigent basis by shortening the comment period of the license amendment to permit the orderly, timely, and safe implementation of the necessary changes during the current outage. If the amendment period is not shortened, SNC would be required to postpone the changes on Unit 2 until after startup and power ascension of the plant. The changes would be made while the plant is operating, which as stated previously, has the potential to create unnecessary plant transients.

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U.S. Nuclear Regulatory Commission

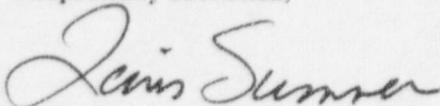
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SNC believes the NRC has the flexibility to tailor the notice and comment period "to the exigency of this need for the license amendment" (51 FR 7744, March 6, 1986), to a 2-week period for public comment. This is our request. Based upon the circumstances necessitating this request and the information provided in the enclosure, SNC's judgement is that a net increase in safety and reliability will be associated with the shortening of the comment period.

Should you have any questions in this regard, please contact this office.

Respectfully submitted,



H. L. Sumner, Jr.

DMC/eb

Enclosure: Request for NRC Finding of Exigent Circumstance Concerning  
License Amendment for Extended Power Uprate Operation

cc: Southern Nuclear Operating Company  
Mr. P. H. Wells, Nuclear Plant General Manager  
SNC Document Management (R-Type A02.001)

U.S. Nuclear Regulatory Commission, Washington, D.C.  
Mr. L. N. Olshan, Project Manager - Hatch

U.S. Nuclear Regulatory Commission, Region II  
Mr. L. A. Reyes, Regional Administrator  
Mr. J. T. Munday, Senior Resident Inspector - Hatch

## Enclosure

### Edwin I. Hatch Nuclear Plant Request for NRC Finding of Exigent Circumstance Concerning License Amendment for Extended Power Uprate Operation

Southern Nuclear Operating Company (SNC) has evaluated the impact of the schedule change and the on-line implementation of extended power uprate (EPU) and concluded that receiving the amendment prior to startup (as opposed to after startup) will result in a net increase in plant safety and reliability. Reliability benefits include a reduced potential for an inadvertent reactor scram while adjusting instrumentation on line and human performance issues associated with training and procedures. The following are detailed items that would have to be modified if SNC receives the power uprate license amendment after startup and the plant is on line.

#### Setpoint Adjustments

Implementation of EPU requires adjustment of the direct scram from turbine stop valve and main steam control valve fast closure. Four instruments that sense turbine first stage pressure require isolation prior to adjustment. When a switch is valved out, a half scram signal is generated. The technician then modifies the setpoint using test equipment to pressurize and adjust the switch. The instrument is then valved back in service. This evolution is repeated for each instrument and is judged to have a moderate risk of affecting unit reliability, because a sensed or real half scram coming in from another instrument in the plant when one of the four pressure switches is valved out will scram the reactor. Such an incident occurred at Plant Hatch in the early 1990's when a reactor scram occurred during on-line adjustments of these switches.

Implementation also includes adjusting the main steam line high flow isolation setpoints. The 16 dP transmitters were replaced with new instruments with a higher range to accommodate the increased steam flows. On-line adjustment would be accomplished in the control room analog transmitter trip system (ATTS) panels by defeating the trip with jumpers, one instrument at a time. There is a potential to initiate a half scram during the adjustment. However, this is not a high risk evolution.

Implementation of EPU also requires adjustment of the average power range monitor (APRM) setpoints, including the APRM simulated thermal power scram. Plant Hatch has a digital power range neutron monitor (PRNM) which is now a four channel system. This evolution involves removing one channel from service at a time and adjusting the APRM gains. Placing the unit in a half scram condition is not required.

From a human factors standpoint, 15 to 20 Instrumentation and Control procedures would require separate revisions if the uprate amendment is not received until after startup.

#### Operator Performance Associated with Training and Procedures

Implementation of EPU requires a new power-to-flow operating map and process computer changes for revised fuel thermal limits. Making these changes at power without endangering the unit is possible; however, such action is undesirable from an operator performance standpoint. As



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an example, we will discuss changes associated with the power-to-flow map and how on-line implementation within a few weeks of the outage could affect performance and training.

Several changes that affect operator training are occurring during this outage. These changes are currently being integrated with the changes for EPU implementation. The oscillating power range monitor (OPRM) is being activated this cycle as the Plant Hatch long-term solution to BWR thermal-hydraulic stability. This change affects the power-to-flow map and operating procedures. Permissible regions of operation on the map are changed, as well as operator response to power changes. EPU also affects permissible regions of operation on the power-to-flow map. Training the operators on the OPRM-related changes, and then training them a few days later with the new EPU power-to-flow map and new setpoints (e.g., the APRM simulated thermal power scram) could cause confusion, potentially affecting operator performance.

From a human factors standpoint, approximately 30 Operations procedures would require separate revisions if the uprate amendment is not received before startup. A separate Core Operating Limits Report (COLR) will be required to reflect a minor change in fuel thermal limits.

Summary

In aggregate, implementation of EPU while in Mode 4 or 5 prior to startup, as opposed to a week or so after startup, results in a net benefit in plant safety and reliability.