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March 14, 2002

Docket Nos. 50-321
50-366

HL-6212

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

Edwin I. Hatch Nuclear Plant
Request for Additional Information on
Diesel Generator Technical Specifications Change Request

Ladies and Gentlemen:

Following is a response to a request for additional information concerning our Technical Specifications change request on the Plant Hatch Unit 1 and Unit 2 diesel generators originally submitted to you on August 31, 2001.

The information in the enclosure was requested during the March 8, 2002, meeting between the NRC and SNC.

Mr. H. L. Sumner, Jr. states he is Vice President of Southern Nuclear Operating Company and 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,

H. L. Sumner, Jr.

Sworn to and subscribed before me this 14th day of March 2002.

Notary Public

My Commission Expires: May 25, 2003

OCV/eb

Enclosure: Additional Information on Diesel Generators

cc: (See next page.)

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U. S. Nuclear Regulatory Commission
Page 2
March 14, 2002

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 Additional Information on
Diesel Generator Technical Specifications Change Request

Additional Information on Diesel Generators

The following are estimates of incremental conditional large early release probability (ICLERP) for all five Plant Hatch diesel generators accounting for increased battery life and for recovery from the loss of 600 Bus C initiating event. A brief explanation follows the table.

Estimated ICLERP Values for Hatch Diesel Generators for a 14 Day AOT	
Diesel Generator	Value
ICLERP (A Diesel) Unit 1	6.62E-08
ICLERP (A Diesel) Unit 2	6.62E-08
ICLERP (C Diesel) Unit 1	6.93E-08
ICLERP (C Diesel) Unit 2	6.93E-08
ICLERP (B Diesel)	6.90E-08

The original submittal contains ICLERP values with calculation conservatism. A key contributor is the time allowed for unattended (i.e., no battery chargers) station service battery operation. A lesser contributor to the magnitude of ICLERP for the Unit 1 or Unit 2 C Diesel Generator has to do with the initiating event "Loss of the 600VAC Emergency Bus C". This bus as well as its Division II counterpart, 600VAC Emergency Bus D, power ECCS valves necessary for containment heat removal which account for their LERF worth. The C bus is powered from the 4160VAC Emergency Bus backed by the A Diesel Generator. Loss of this bus makes the 600VAC Emergency Bus D, which is powered from the 4160VAC Emergency Bus backed by the C Diesel Generator, more important. In the few cases of actual at-power loss of 600VAC Emergency Bus C, the recovery was in a matter of minutes. This recovery was never accounted for in the PSA model for the loss of Bus C.

The time allotted for unattended station service battery operation is a more realistic value of 4 hours for the estimates for ICLERP. Battery power is important for the LOSP events where no diesel generators are available, better known as the station blackout case. These cases depend on RCIC, a turbine drive-battery assisted pump, for reactor water level control. The longer RCIC can run, the longer time to core uncover-the longer time to core damage-the longer time to reactor vessel failure-and the longer time to containment failure and release. These increased time frames are an integral part of the calculations for power recovery factors for the Hatch PSA. These factors have been modified to account for the increase in time to core damage and subsequent vessel failure for this estimate.

Summarizing, the above ICLERP values account for the increased battery life and for recovery of the 600VAC Bus C during a loss of 600VAC Bus C initiating event.