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the southern electric system

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March 27, 1986

Director of Nuclear Reactor Regulation
Attention: Mr. D. Muller, Project Director
BWR Project Directorate No. 2
Division of Boiling Water Reactor Licensing
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

NRC DOCKETS 50-321, 50-366
OPERATING LICENSES DPR-57, NPF-5
EDWIN I. HATCH NUCLEAR PLANT UNITS 1, 2
REQUEST TO REVISE REACTOR PROTECTION SYSTEM
INSTRUMENTATION SURVEILLANCE REQUIREMENTS

Gentlemen:

In accordance with the provisions of 10 CFR 50.90 as required by 10 CFR 50.59(c)(1), Georgia Power Company hereby proposes changes to the Technical Specifications, Appendix A to Operating Licenses DPR-57 and NPF-5.

The proposed changes would modify Reactor Protection System (RPS) instrumentation surveillance requirements for both Hatch Units. The requested changes fall into two areas: 1) Changes to the Hatch Unit 1 RPS (and Control Rod Block) Surveillance Requirements to provide for consistency with the Hatch Unit 2 Technical Specifications, and 2) Changes to RPS surveillance frequencies and outage times for both units resulting from GE Topical Report NEDC-30851P, which provides a probabilistic basis for RPS surveillance frequencies and allowed equipment outage times. We understand that an NRC Safety Evaluation Report (SER) approving NEDC-30851P will be issued in the near future.

The Plant Review Board and the Safety Review Board Subcommittee have reviewed and approved the proposed changes.

Attachment 1 provides a detailed description of the proposed changes and bases for the changes.

Attachments 2 and 3 are Hatch plant specific analyses documenting that the Hatch plants are enveloped by the Generic Analysis of NEDC-30851P. These attachments are proprietary to General Electric company and are requested to be exempt from public disclosure.

Attachment 4 details the basis for our determination that the proposed changes do not involve a significant hazards consideration.

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Page Two

Attachment 5 provides page change instructions for incorporating the proposed changes for Plant Hatch Unit 1.

Attachment 6 provides page change instructions for incorporating the proposed changes for Plant Hatch Unit 2.

The proposed changed Technical Specification pages for Hatch Units 1 and 2 follow Attachments 5 and 6, respectively.

Payment of filing fee is enclosed.

In order to allow time for procedure revision and orderly incorporation into copies of the Technical Specifications, we request that the proposed amendment, once approved by the NRC, be issued with an effective date to be no later than 60 days from the issuance of the amendment.

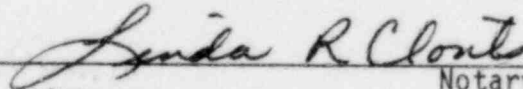
Pursuant to the requirements of 10 CFR 50.91, Mr. J. L. Ledbetter of the Environmental Protection Division of the Georgia Department of Natural Resources will be sent a copy of this letter and all applicable attachments.

J. P. O'Reilly, Jr. states that he is Vice President of Georgia Power Company and is authorized to execute this oath on behalf of Georgia Power Company, and that to the best of his knowledge and belief the facts set forth in the letter and attachment are true.

GEORGIA POWER COMPANY

By: 
J. P. O'Reilly

Sworn to and subscribed before me this 27th day of March, 1986.


Notary Public

Notary Public, Clayton County, Georgia
My Commission Expires Dec. 12, 1989

REB/TC
Attachments

c: Mr. H. C. Nix, Jr.
Senior Resident Inspector, Plant Hatch
Dr. J. N. Grace
Mr. J. L. Ledbetter
GO-NORMS

ATTACHMENT 1

NRC DOCKETS 50-321, 50-366
OPERATING LICENSES DPR-57, NPF-5
EDWIN I. HATCH NUCLEAR PLANT UNITS 1, 2
REQUEST TO REVISE TECHNICAL SPECIFICATIONS:
DESCRIPTION OF CHANGE AND
BASIS FOR CHANGE REQUEST

Proposed Change 1:

Change Unit 1 RPS and Control Rod Block instrumentation surveillance requirements to provide for consistency with Hatch Unit 2 Technical Specifications. All changes listed below affect Unit 1 Technical Specifications only. Proposed changes are as follows:

- a. IRM High High Flux (Table 4.1-1) - Change instrument calibration frequency from Once/Week to Once/Operating Cycle. Delete reference to "during refueling", since applicable operational conditions are provided in Table 3.1-1 and note c. to Table 4.1-1. Move requirement for testing within 24 hours of startup from Table 4.1-1 to note 1.
- b. IRM Inoperative (Table 4.1-1) - Change instrument calibration frequency from Once/Week to not applicable (NA). Delete reference to "during refueling", since applicable operational conditions are provided in Table 3.1-1 and note c. to Table 4.1-1. Move requirement for testing within 24 hours of startup from Table 4.1-1 to note 1.
- c. APRM Fixed High High Flux (Table 4.1-1) - Change instrument calibration frequency from Twice/Week to Once/Week and Semi Annually (SA) and add note explaining two calibrations.
- d. APRM Inoperable (Table 4.1-1) - Change instrument calibration frequency from Twice/Week to not applicable (NA).
- e. APRM Downscale (Table 4.1-1) - Change instrument calibration frequency from Twice/Week to not applicable (NA).
- f. APRM Flow Referenced Simulated Thermal Power Monitor (Table 4.1-1) - Change instrument calibration frequency from Twice/Week to Once/Week and Semi-Annually (SA) and add note explaining two calibrations.

ATTACHMENT 1 (Continued)

- g. APRM 15% Flux (Table 4.1-1) - Change instrument functional test frequency from "within 24 hours of startup" to "Once/Week during refueling" and add clarifying notes. Also add note requiring APRM, IRM, SRM overlap testing. Add statement that instrument calibration minimum frequency applies during refueling and add clarifying notes.
- h. Move LPRM (Table 4.1-1) from item 12 to item 8.
- i. There are currently no channel check requirements on Unit 1. Adopt Hatch Unit 2 channel check requirements and minimum frequencies for all Unit 1 RPS instrumentation (Table 4.1-1).
- j. Replace Unit 1 Table 4.2-7, "Check, Functional Test, and Calibration Minimum Frequency for Neutron Monitoring Instrumentation Which Initiates Control Rod Blocks," with a new table based on Hatch Unit 2 and Standard Technical Specification requirements and formats.

Basis for Proposed Change 1:

Plant Hatch Units 1 and 2 contain essentially identical Reactor Protection System designs. However, Technical Specification format and requirements for RPS surveillance testing vary considerably between the units. These differences result primarily from the custom format of the Hatch Unit 1 Technical Specifications versus the Standard Technical Specification (STS) format for Hatch Unit 2. It is appropriate that the RPS (and Control Rod Block) instrumentation testing requirements for each unit be made as similar as possible. This will reduce confusion and allow for better maintenance and surveillance practice. Plant procedures are already in place to ensure that the Hatch Unit 2 RPS testing requirements, which are more thorough than the Unit 1 requirements, are applied to Unit 1 wherever possible without creating a conflict with the Unit 1 Technical Specifications. In order to fully resolve this situation, changes to the Unit 1 Technical Specifications are proposed which will essentially adopt the current Unit 2 requirements. These changes, as identified in items a. through j. above, are justified as follows:

- a. The requested Once/Cycle interval is consistent with Hatch Unit 2 Technical Specifications and ENR STS. Calibration on a Once/Week basis, due to the time required for calibration and the number of IRM channels, involves almost constant

ATTACHMENT 1 (Continued)

calibration and declaration of inoperable channels. Having less than the optimum number of channels operable at most times could result in some degradation of as-designed RPS reliability. Therefore, approval of this change should increase the margin of safety.

- b. The requested change to NA is consistent with Hatch Unit 2 Technical Specifications and BWR STS. According to General Electric, this equipment is not intended to be calibrated.
- c. The requested change is consistent with Hatch Unit 2 Technical Specifications and BWR STS. Two types of calibrations are required. One is performed on a weekly basis and one on a semi-annual basis. The requested change explicitly provides these requirements.
- d. The requested change to NA is consistent with the Hatch Unit 2 Technical Specifications and BWR STS. According to General Electric, this equipment is not intended to be calibrated.
- e. The requested change to NA is consistent with the Hatch Unit 2 Technical Specifications. Latest versions of BWR STS no longer contain requirements for the APRM downscale trip. According to General Electric, this equipment is not intended to be calibrated.
- f. The requested change is consistent with Hatch Unit 2 Technical Specifications and BWR STS. Two types of calibrations are required. One is performed on a weekly basis and one on a semi-annual basis. The requested change explicitly provides these requirements.
- g. According to Hatch Unit 2 Technical Specifications and BWR STS, a functional test and channel calibration is required: 1) Weekly while in the refueling mode; 2) Within 24 hours of startup, if not performed within the previous seven days; and 3) When changing from the Run to the Start and Hot Standby mode. Addition of notes l. and m. to Table 4.1-1, and addition of "during refueling" to the weekly surveillance requirements, explicitly provide the correct requirements. Additionally, note n. is added to require performance of overlap testing during each startup.
- h. This change is for clarification only. No requirements are affected.

ATTACHMENT 1 (Continued)

- i. This change adopts Hatch Unit 2 Channel Check Requirements to Hatch Unit 1, which currently contains none. This is clearly a conservative change, and again, is provided for consistency.
- j. The Hatch Unit 2 Control Rod Block Instrumentation surveillance requirements are adopted to the Unit 1 Technical Specifications. Hatch Unit 2 and BWR STS do not contain requirements for channel checks for Control Rod Block instrumentation. In general, the affected instruments display no information which would provide a useful channel check. Therefore, it is appropriate to delete the current channel check requirements for this instrumentation.

The proposed changes are in some cases more conservative, and in other cases less conservative, than the present Unit 1 RPS surveillance requirements. However, overall, testing requirements for Unit 1 will be made more stringent under the proposed change. In all cases the proposed changes are consistent with the NRC approved requirements for Hatch Unit 2. Additionally, the requested changes are generally consistent (given format differences) with BWR STS and are consistent with General Electric technical instructions for the affected instrumentation.

Approval of the proposed changes will result in consistent and correct RPS and Control Rod Block instrumentation surveillance requirements for both Hatch Units, identified in similar format. Adaptation of correct and equivalent surveillance requirements for essentially identical equipment will improve overall plant safety.

Proposed Change 2:

The proposed changes for both Hatch Units result from General Electric Topical Report NEDC-30851P, and corresponding plant specific analyses for Plant Hatch Unit 1 (MDE-76-0485) and Unit 2 (MDE-76-0485). These plant specific analyses are included as Attachments 5 and 6, respectively, to this letter, and identify the differences between the parts of the RPS that perform the trip functions in the Hatch Plants and those of the base case plant analyzed in NEDC-30851P. These reports provide a probabilistic basis for extending RPS surveillance and (in the case of Hatch Unit 2) allowed equipment outage times. The methodology shows that the requested interval extensions can be enacted without negatively

ATTACHMENT 1 (Continued)

affecting the functional capability or reliability of the RPS. An NRC Safety Evaluation Report (SER) generically endorsing the methodology and changes provided by the above reports is expected to be issued imminently. Following issuance of this SER, we request that the following changes, as described in the above reports, be approved for Plant Hatch Units 1 and 2 (Changes a. through c.) and Plant Hatch Unit 2 (Changes d. and e.):

- a. Change instrument functional test frequency (Table 4.1-1 for Unit 1, Table 4.3.1-1 for Unit 2) for Manual Scram from quarterly to weekly. (This change is necessary to ensure that the K-14 scram contactors continue to be tested at a frequency which will not degrade RPS reliability.)
- b. Change the following RPS instrumentation functional test frequencies (Table 4.1-1 for Unit 1, Table 4.3.1-1 for Unit 2) from monthly to quarterly:
 1. Reactor vessel steam dome high pressure scram
 2. High drywell pressure scram
 3. Reactor vessel water low level scram
 4. Scram discharge volume high level scram
 5. Main steam isolation valve closure scram
 6. Turbine control valve closure scram
 7. Turbine stop valve closure scram
- c. Change the following RPS instrumentation functional test frequencies (Table 4.1-1 for Unit 1, Table 4.3.1-1 for Unit 2) from weekly to quarterly:
 1. APRM high high flux scram
 2. APRM inoperable scram
 3. APRM flow referenced simulated thermal power monitor scram
 4. Main steam line high radiation scram
- d. For Hatch Unit 2 only, change Action Statement 3.3.1.a. to allow twelve hours (instead of one hour) to place an inoperable channel in the tripped condition when the requirements for the minimum number of Operable channels cannot be met.

ATTACHMENT 1 (Continued)

- e. For Hatch Unit 2 only, change note a. to Table 3.3.1-1, "Reactor Protection System Instrumentation", to allow a channel to be made inoperable for surveillance purposes without placing the channel in the tripped condition for 6 hours (instead of 2 hours).

Appropriate detailed justifications for each of the above changes are contained in NEDC-30851P and will be approved by a generic NRC SER. Therefore, no further justification is necessary. A determination of no significant hazards is included under Attachment 2.

ATTACHMENT 2

NRC DOCKETS 50-321, 50-366
OPERATING LICENSES DPR-57, NPF-5
EDWIN I. HATCH NUCLEAR PLANT UNITS 1, 2
REQUEST TO REVISE TECHNICAL SPECIFICATIONS:

GENERAL ELECTRIC REPORT MDE-75-0485
TECHNICAL SPECIFICATION IMPROVEMENT ANALYSIS
FOR THE REACTOR PROTECTION SYSTEM FOR EDWIN. I
HATCH NUCLEAR PLANT, UNIT 1

NOTICE: This information is proprietary to General Electric Company and should be withheld from public disclosure.