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NED-85-867
2356N

November 27, 1985

Director of Nuclear Reactor Regulation
Attention: Mr. John F. Stolz, Chief
Operating Reactors Branch No. 4
Division of 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
EMERGENCY LIGHTING AND CIRCUIT BREAKER REVIEW

Gentlemen:

As previously indicated in Amendment 3 to the "Edwin I. Hatch Nuclear Plant Units 1 and 2 Response to 10 CFR 50.48 and Appendix R" (submitted by Georgia Power Company (GPC) letter NED-85-468 dated June 17, 1985), GPC is performing a reanalysis of the ability of Plant Hatch to achieve and maintain safe shutdown following a fire. This reanalysis is being performed to confirm the original analysis contained in the GPC "Response to 10 CFR 50.48 and Appendix R" submitted in June 1982, as amended in subsequent correspondence, and to incorporate the additional guidance from the NRC contained in NRC Generic Letter 85-01 and the NRC Regional Workshops on Appendix R.

This effort has included a reassessment of the adequacy of the present emergency lighting design with respect to plant procedural and physical modifications which have occurred since the original evaluation conducted pursuant to 10 CFR 50 Appendix R Paragraph III.J. The present emergency lighting was initially designed to comply with the requirements of 10 CFR 50 Appendix A to provide emergency lighting for the remote shutdown system.

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This system was upgraded in 1981 to provide emergency lighting for the areas where manual actions are required to achieve safe shutdown outside the control room in order to comply with the criteria of Appendix R III.J. The overall shutdown pathway analysis conducted per the requirements of Appendix R has resulted in additional manual actions to resolve conflicts between shutdown pathway equipment which were unknown at the time of the lighting upgrade in 1981. To address these new lighting requirements and return the system to full compliance with the criteria of Appendix R III.J, emergency lighting is being designed for these additional areas and will be installed on the same schedule as other Appendix R modifications.

During the assessment of the existing emergency lighting design and the procurement of additional emergency lighting for the other areas where required, a review of the manufacturer's data on the presently installed battery packs in the emergency lighting system revealed that these battery packs are no longer rated by the vendor for eight hours service as originally specified in the plant purchase order. The manufacturer has recently downgraded these battery packs to a six hour rating in applications such as at Plant Hatch due to the excessive maintenance and discharge testing requirements to maintain the eight hour rating. To correct the situation created by this derating, GPC has ordered different type battery packs which are rated for eight hours in applications such as at Plant Hatch. The existing emergency lighting battery packs, and those in the additional emergency lighting installations, are expected to be replaced in early 1986.

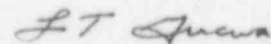
One other issue related to Appendix R requires clarification. The NRC Safety Evaluation Report (SER) dated February 11, 1983, for Appendix R Sections III.G and III.L indicated that all power circuits for Plant Hatch Units 1 and 2 are protected by coordinated circuit breakers. This finding was apparently based upon discussions conducted in an October 28, 1982, meeting with the NRC staff related to general design practice used at Plant Hatch; specifically, the practice of providing breaker sizing such that the breaker or fuse nearest the load should trip before the upstream main supply breaker. As part of the Appendix R reanalysis, GPC has performed a detailed circuit breaker coordination study to confirm this assumption. The study has identified some concerns with a few low voltage circuits which are presently being resolved. Modifications resulting from this study, such as replacement of breakers or fuses, will be performed on the same schedule as

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the other Appendix R modifications taking into account the availability of replacement parts and the requirement to perform the modifications during an outage. Should any difficulties in the meeting this modification schedule due to parts availability or outage restrictions arise, GPC will advise the NRC and establish an acceptable implementation date.

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

Sincerely yours,



L. T. Gucwa

JAE/RLK/mb

xc: Mr. J. T. Beckham, Jr.
Mr. H. C. Nix, Jr.
Dr. J. N. Grace (NRC-Region II)
Senior Resident Inspector