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SOUTHERN COMPANY
Energy to Serve Your World℠

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50-366

NL-05-2333

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555-0001

Edwin I. Hatch Nuclear Plant
10 CFR 50, Appendix R Exemption Request

Ladies and Gentlemen:

By letter dated September 1, 2003, NRC issued non-cited violation (NCV) number 50-366/03-06-04, Unapproved Manual Operator Actions for Post-Fire Safe Shutdown. By letter dated October 1, 2003, Southern Nuclear Operating Company (SNC) provided a response to the NCV and requested that it be withdrawn. In a subsequent letter dated February 5, 2004, NRC denied the request to withdraw that portion of NCV 50-366/03-06-04 which addressed the operator action to re-energize the station service battery chargers following a postulated fire-induced loss of offsite power.

In subsequent discussions with the NRC Region II, SNC clarified our belief that re-energizing the battery chargers from their control station meets the requirements of 10 CFR 50, Appendix R, Section III.G.1.a and does not constitute an unapproved safe shutdown manual action. However, NRC stated that its position regarding this specific scenario was that the control panel for the battery chargers does not qualify as an "emergency control station" under Appendix R, Section III.G.1. Therefore, in order to resolve the situation, SNC hereby submits the enclosed request for exemption from the requirements of 10 CFR 50, Appendix R, Section III.G.2 for the operator action to re-energize the station service battery chargers following a loss of offsite power.

This letter contains no NRC commitments. If you have any questions, please advise.

Sincerely,

H. L. Sumner, Jr.

HLS/IFL/daj

Enclosure: Request for Exemption from the Requirements of 10 CFR 50, Appendix R, Section III.G.2., Operator Action to Re-energize the Station Service Battery Chargers Following a Loss of Offsite Power

cc: Southern Nuclear Operating Company
Mr. J. T. Gasser, Executive Vice President
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RTYPE: CHA02.004

U. S. Nuclear Regulatory Commission
Dr. W. D. Travers, Regional Administrator
Mr. C. Gratton, NRR Project Manager – Hatch
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Enclosure

Request for Exemption from the Requirements of
10 CFR 50, Appendix R, Section III.G.2.

Operator Action to Re-energize the Station Service
Battery Chargers Following a Loss of Offsite Power

Enclosure

Request for Exemption from the Requirements of
10 CFR 50, Appendix R, Section III.G.2.,
Operator Action to Re-energize the Station Service
Battery Chargers Following a Loss of Offsite Power

Requested Exemption

Exemption is requested from the requirements of 10 CFR 50, Appendix R, Section III.G.2, for the power and control cables for offsite power, to allow an operator action to re-energize the station service battery chargers at their control station following a loss of offsite power.

In the past, the Hatch Safe Shutdown Analysis did not consider offsite power to be required for hot shutdown. This was based on guidance provided in Generic Letter 81-12 Enclosure 1. This guidance, BWR Equipment Generally Necessary for Hot Shutdown, describes support equipment required for hot shutdown as: "Support capability e.g., onsite power source (AC & DC) and their associated distribution systems to provide for the shutdown equipment." This document also described BWR Equipment Generally Necessary for Cold Shutdown, which describes cold shutdown support equipment as "Onsite sources (AC & DC) or offsite after 72 hours and their associated distribution systems to provide for shutdown equipment."

Although Plant Hatch has multiple sources of offsite power, these sources are not divisionalized or separated as redundant trains. Furthermore, it is not possible to separate the two sources of offsite power to meet Appendix R section III.G.2 requirements because they make up the normal and alternate supplies to the 4kv switchgears from the Unit Aux (normal) or Startup Aux (alternate) transformers.

On a loss of power, the 4kV buses will trip the offsite power sources, start the diesel generators, and automatically tie the diesels to the unaffected buses once power is available. The 600V switchgear and battery charges will not be damaged by the postulated fire that would induce loss of power to the 4Kv buses and will also load shed on a loss of power.

The 600V buses will automatically reload following restoration of power to the 4kV buses but the battery chargers will not. The batteries are capable of supplying all required loads for a minimum of 2 hours before requiring recharging; thus there is at least 2 hours to re-energize the battery chargers. The battery chargers do not have main control room control and can only be operated from their control station. The battery chargers in themselves meet the requirements of Section III.G.2. That is, there are no fire areas containing redundant cables that could prevent operation or cause maloperation of the battery chargers due to hot shorts, open circuits, or shorts to ground.

It should be noted that an exemption from 10 CFR 50 Appendix R, Section III.J for 8-hour battery backed lights for the main control room was requested previously and granted by the NRC. The response to the RAI associated with that exemption request stated that operators must use local switches on the battery charger control panels to re-energize the battery chargers following a postulated loss of offsite power. The response also stated the batteries have the capability to power the control room emergency lights and other required loads without the emergency diesels for a minimum of 120 minutes.

Enclosure

Request for Exemption from the Requirements of
10 CFR 50, Appendix R, Section III.G.2.,
Operator Action to Re-energize the Station Service
Battery Chargers Following a Loss of Offsite Power

This exemption request is being submitted in order to align the licensing basis with NRC's stated position that the control panel for the battery chargers does not qualify as an emergency control station. For that reason, re-energizing the battery chargers is not considered by NRC as an Appendix R, Section III.G.1 action but as an operator manual action required for safe shutdown under Appendix R, Section III.G.2. Therefore, an exemption for the operator manual action is requested.

The following paragraphs are consistent with the requirements for manual actions as described in Enclosure 2 to IP 71111.05T.

DIAGNOSTIC INSTRUMENTATION

There are numerous indications of a loss of offsite power. LOSP annunciation, 4kv transfer to the emergency source, diesel start annunciation and tie, and transfer of emergency control room lighting from ac lighting to dc lighting to name a few.

In accordance with operations procedure 34SO-R42-001-2, instructional guidance is provided to energize the 125/250 VDC Station Service System from its battery or battery chargers. The 125/250 VDC Buses are normally energized in all plant conditions.

ENVIRONMENTAL CONSIDERATIONS

There are only a limited number of fire areas containing cables which could cause a loss of offsite power. Fire in any of these areas will not prevent plant Operators from restoring the battery chargers at their control stations.

STAFFING

With the exception of the main control room, cable spreading room and computer room (fire area 0024) which utilize alternative shutdown, all other operator actions (excluding restoring the battery chargers) necessary to achieve safe shutdown are performed from the main control room. The batteries are capable of supplying all required loads for a minimum of 2 hours before requiring recharging; thus there is at least 2 hours to perform the action. Only one operator will be required to restore the battery chargers following a total loss of offsite power.

COMMUNICATIONS

The restoration of the battery chargers does not require communication between the operator performing the action and the main control room.

SPECIAL TOOLS

The restoration of the battery chargers is by control switches on the control stations. There are no tools required.

Request for Exemption from the Requirements of
10 CFR 50, Appendix R, Section III.G.2.,
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Battery Chargers Following a Loss of Offsite Power

TRAINING

The restoration of the battery chargers is the normal operating procedure for the battery chargers following a loss of power. This is part of operations annual training.

ACCESSIBILITY

There are no areas where a fire induced LOSP could occur that could also prevent restoring the battery chargers.

PROCEDURES

Fire procedures 34AB-X43-001-1 and 34AB-X43-001-2 direct the Operators to restore the battery chargers following a loss of offsite power per system operating procedures 34SO-R42-001-1S and 34SO-R42-001-2S.

VERIFICATION AND VALIDATION

The safe shutdown analysis, safe shutdown and system operating procedures, and operating training meet all requirements for verification and validation.