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J. T. Beckham, Jr.  
Vice President - Nuclear  
Hatch Project



February 21, 1996

Docket Nos. 50-321  
50-366

HL-5004

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

Edwin I. Hatch Nuclear Plant  
Request to Revise Technical Specifications:  
Drywell Air Temperature

Gentlemen:

In accordance with the provisions of 10 CFR 50.90, as required by 10 CFR 50.59(c)(1), Georgia Power Company (GPC) hereby proposes a change to the Plant Hatch Unit 1 and Unit 2 Technical Specifications, Appendix A to Operating Licenses DPR-57 and NPF-5, respectively. The proposed revision changes the Drywell Air Temperature Limiting Condition for Operation (LCO) from  $\leq 135^{\circ}\text{F}$  to  $\leq 150^{\circ}\text{F}$ .

The proposed change provides a margin for the primary containment Drywell Air Temperature LCO when prolonged summer and high river temperatures are experienced. GPC requests the proposed amendment be approved prior to July 1, 1996.

Enclosure 1 provides a description of and the justification for the proposed change. Enclosure 2 details the bases for GPC's determination that the proposed change does not involve a significant hazards consideration. Enclosure 3 provides page change instructions for incorporating the proposed change, the revised Technical Specifications pages, and the corresponding marked-up pages. Enclosure 4 provides, for information, the Bases pages reflecting the proposed change and the corresponding marked-up pages. The Bases pages will be made effective upon receipt of the Technical Specifications amendments.

In accordance with the requirements of 10 CFR 50.91, the designated State official will be sent a copy of this letter and all applicable enclosures.

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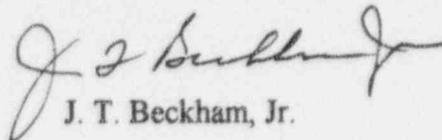
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February 21, 1996

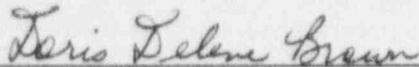
Page 2

Mr. J. T. Beckham, Jr. states he is Vice President of Georgia Power Company and is authorized to execute this oath on behalf of Georgia Power Company, and to the best of his knowledge and belief, the facts set forth in this letter are true.

Sincerely,

  
J. T. Beckham, Jr.

Sworn to and subscribed before me this 21<sup>st</sup> day of February, 1996.



Notary Public

MY COMMISSION EXPIRES NOVEMBER 3, 1997

DLP/eb

Enclosures:

1. Basis for Change Request
2. 10 CFR 50.92 Evaluation
3. Page Change Instructions and Revised Technical Specifications Pages
4. Revised Bases Pages

cc: Georgia Power Company  
Mr. H. L. Sumner, Nuclear Plant General Manager  
NORMS

U.S. Nuclear Regulatory Commission, Washington, D.C.  
Mr. K. Jabbour, Licensing Project Manager - Hatch

U.S. Nuclear Regulatory Commission, Region II  
Mr. S. D. Ebnetter, Regional Administrator  
Mr. B. L. Holbrook, Senior Resident Inspector - Hatch

State of Georgia  
Mr. J. D. Tanner, Commissioner - Department of Natural Resources

## Enclosure 1

### Edwin I. Hatch Nuclear Plant Request to Revise Technical Specifications: Drywell Air Temperature

#### Basis for Change Request

#### Proposed Change

This proposed revision changes the Drywell Air Temperature Limiting Condition for Operation (LCO) from  $\leq 135^{\circ}\text{F}$  to  $\leq 150^{\circ}\text{F}$ . A correction to an FSAR reference notation was made.

#### Basis for Proposed Change

As a part of the Plant Hatch Power Uprate Program (Ref. 1 through 3), the pertinent design basis analyses for the following areas of containment system performance were evaluated at an initial drywell average air temperature of  $150^{\circ}\text{F}$ :

- Short-term and long-term containment pressure and temperature responses to a design basis accident (DBA) loss of coolant accident (LOCA).
- Drywell pressure and temperature responses to small steam line breaks.

The short-term response evaluation utilized the M3CPT computer code. The long-term response and the small steam line break evaluations utilized the SHEX computer code. (Response to Question 19 of Ref. 2 provides details of the evaluations.) The analyses results are as follows:

- Operation with the drywell temperature at  $\leq 150^{\circ}\text{F}$  will not result in any safety concerns associated with primary containment system performance.
- Peak drywell pressures will remain below design drywell pressures, and drywell structure temperatures will remain below design temperatures.
- For Unit 2, the peak ambient drywell air temperature is below the drywell structure design temperature of  $340^{\circ}\text{F}$ .
- For Unit 1, the peak ambient drywell air temperature is slightly above the drywell structure design temperature of  $281^{\circ}\text{F}$  during the initial 15 seconds of the limiting accident. An evaluation concluded that the actual drywell structure design temperature is not exceeded.

## Enclosure 1

### Request to Revise Technical Specifications:

#### Drywell Air Temperature

#### Basis for Change Request

Drywell equipment required to mitigate the effects of a DBA is qualified to operate under environmental conditions expected during normal operations followed by those predicted for an accident. Based upon the design bases analyses described above, accident equipment qualification is adequate for the proposed change.

The effect of ambient temperature on drywell equipment qualified life is evaluated periodically based upon input from individual temperature elements located within the drywell rather than the average bulk temperature. Component life is evaluated based upon past and predicted elevation-dependent temperatures in the area of the component. While prolonged drywell temperatures  $> 135^{\circ}\text{F}$  are not anticipated, any increase in the elevation-dependent temperatures will be factored into the qualified life calculations.

The reactor water level measurement instrumentation located in the drywell is the only safety-related instrumentation that may be affected by a change in the drywell allowable temperature. Originally, water level instrumentation was calibrated assuming the entire drywell temperature was  $135^{\circ}\text{F}$ . Upon implementation of the Unit 2 Power Uprate Program, the calibration methodology changed in that calibrations are now based upon historical actual temperatures in the vicinity of the instrument sensing lines, thereby providing more accurate level measurements (Ref. 4). The same methodology change will become effective upon implementation of the Unit 1 Power Uprate Program in April 1996.

Reactor water level calibrations were evaluated assuming drywell temperatures up to  $170^{\circ}\text{F}$ . The results showed that a change in calibration endpoints from  $135^{\circ}\text{F}$  to  $170^{\circ}\text{F}$  had a negligible effect upon setpoint available margins. This temperature bounds the expected actual temperature in the vicinity of the instrument sensing lines, assuming the drywell average allowable temperature is  $\leq 150^{\circ}\text{F}$ . Since the instrument calibration impact is negligible, no changes in instrument setpoints are required.

Based on the design bases analyses assumptions being met and the continued qualification of drywell equipment per 10 CFR 50.49, the revision of the Drywell Air Temperature LCO is acceptable.

Enclosure 1  
Request to Revise Technical Specifications:  
Drywell Air Temperature  
Basis for Change Request

References:

1. GPC letter HL-4724, "Request for License Amendment: Power Uprate Operation," dated January 13, 1995.
2. GPC letter HL-4812, "Response to Request for Additional Information: Power Uprate Submittal," dated April 5, 1995.
3. GPC letter HL-4865, "Response to Second Request for Additional Information: Power Uprate," dated June 20, 1995.
4. General Electric Service Information Letter 470, Supplement 1, dated April 20, 1989.

## Enclosure 2

### Edwin I. Hatch Nuclear Plant Request to Revise Technical Specifications: Drywell Air Temperature

#### 10 CFR 50.92 Evaluation

#### Proposed Change

This proposed revision changes the Drywell Air Temperature Limiting Condition for Operation (LCO) from  $\leq 135^{\circ}\text{F}$  to  $\leq 150^{\circ}\text{F}$ . A correction to an FSAR reference notation was made. This typographical error is strictly editorial.

#### 10 CFR 50.92 Evaluation

Georgia Power Company (GPC) reviewed the proposed Technical Specifications change and determined the change does not involve a significant hazards consideration based upon the following:

1. The proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated. The probability (frequency of occurrence) of previously evaluated accidents is not a function of the ambient drywell air temperature. Instrumentation setpoint calculations were assessed, and the increased ambient drywell air temperature does not affect any instrumentation setpoints or allowable values.

The design basis accidents were reevaluated utilizing the increased drywell air temperature as an initial assumption. The results indicated that no regulatory limits or equipment design requirements will be exceeded as the result of the proposed change. Therefore, the change in drywell air temperature does not result in a significant increase in the probability or consequences of any previously evaluated accidents.

2. The proposed change does not create the possibility of a new or different kind of accident from any accident previously analyzed. Revising the Drywell Air Temperature LCO does not physically modify the plant nor does it modify the operation of any existing equipment.
3. The proposed change does not involve a significant reduction in a margin of safety. Design bases analyses performed utilizing  $150^{\circ}\text{F}$  as the initial drywell temperature demonstrate that design and regulatory limits are not exceeded. Equipment in the drywell required to mitigate the effects of a DBA is qualified to operate under environmental conditions expected for an accident. Analysis results do not affect instrumentation setpoints or calibration, or accident equipment qualification.

Enclosure 2  
Request to Revise Technical Specifications:  
Drywell Air Temperature  
10 CFR 50.92 Evaluation

Equipment qualified life is evaluated by an existing program which uses elevation-dependent drywell temperature rather than bulk average temperature. Therefore, the margin of safety associated with safety and other limits identified in the Technical Specifications are not significantly reduced.