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Bases Change H00-08

United States Nuclear Regulatory Commission  
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Gentlemen:

**TECHNICAL SPECIFICATION BASES CHANGE  
HOPE CREEK GENERATING STATION  
FACILITY OPERATING LICENSE NPF-57  
DOCKET NO. 50-354**

Public Service Electric and Gas Company (PSE&G) is providing a revised Technical Specification (TS) Bases page for Specification 3/4.1.4. The revised page was reviewed in accordance with the requirements of 10 CFR 50.59 by the Station Operations Review Committee and approved by the Vice President – Operations.

TS 3/4.1.4 pertains to control rod program controls. The TS Bases have been revised to define the conditions for Rod Block Monitor Operability.

Attachment 1 contains the revised page for the Hope Creek Technical Specification Bases. Please incorporate this change into the Technical Specification Bases.

Should you have any questions regarding this submittal, please contact Mr. Paul Duke at 856-339-1466.

Sincerely,

A handwritten signature in black ink, appearing to read "G. Salamon", with a long horizontal flourish extending to the right.

G. Salamon  
Manager – Licensing

Attachment

A001

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**HOPE CREEK GENERATING STATION  
FACILITY OPERATING LICENSE NPF-57  
DOCKET NO. 50-354  
REVISIONS TO THE TECHNICAL SPECIFICATIONS BASES**

## REACTIVITY CONTROL SYSTEMS

### BASES

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#### 3/4.1.4 CONTROL ROD PROGRAM CONTROLS

Control rod withdrawal and insertion sequences are established to assure that the maximum insequence individual control rod or control rod segments which are withdrawn at any time during the fuel cycle could not be worth enough to result in peak fuel enthalpy greater than 280 cal/gm in the event of a control rod drop accident. The specified sequences are characterized by homogeneous, scattered patterns of control rod withdrawal. When THERMAL POWER is greater than 10% of RATED THERMAL POWER, there is no possible rod worth which, if dropped at the design rate of the velocity limiter, could result in a peak enthalpy of 280 cal/gm. Thus requiring the RWM to be OPERABLE when THERMAL POWER is less than or equal to 10% of RATED THERMAL POWER provides adequate control.

The RWM provides automatic supervision to assure that out-of-sequence rods will not be withdrawn or inserted.

The analysis of the rod drop accident is presented in Section 15.4.9 of the FSAR and the techniques of the analysis are presented in a topical report, Reference 1.

The RBM is designed to automatically prevent fuel damage in the event of erroneous rod withdrawal from locations of high power density during high power operation. Two channels are provided. Tripping one of the channels will block erroneous rod withdrawal soon enough to prevent fuel damage. This system backs up the written sequence used by the operator for withdrawal of control rods. Operability of a RBM channel is assured for a given control rod when  $\geq 50\%$  of the LPRM inputs for each detector level are available for that rod. When  $< 50\%$  of the LPRM inputs on either detector level are available, a case-by-case evaluation of channel operability is required.