

December 26, 2001

MEMORANDUM TO: James W. Clifford, Chief, Section 2  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

FROM: Richard B. Ennis, Sr. Project Manager, Section 2 **/RA/**  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

SUBJECT: HOPE CREEK GENERATING STATION, FACSIMILE TRANSMISSION,  
ISSUES TO BE DISCUSSED IN AN UPCOMING CONFERENCE CALL  
(TAC NO. MB0955)

The attached information was transmitted by facsimile on December 26, 2001, to Mr. John Nagle of PSEG Nuclear LLC (the licensee). This information was transmitted to facilitate a upcoming conference call in order to clarify the licensee's submittal dated January 8, 2001, as supplemented on February 6, 2001, and December 7, 2001. In the submittal, the licensee requested a revision to the Hope Creek Generating Station Technical Specifications to reduce the acceptable surveillance test values for core spray flow. This memorandum and the attachment do not convey or represent an NRC staff position regarding the licensee's request.

Docket No. 50-354

Attachment: Issues for Discussion in Upcoming Telephone Conference

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Issues for Discussion in Upcoming Telephone Conference  
Related to PSEG License Change Request H00-009  
Hope Creek Generating Station  
Core Spray Flow Surveillance Requirements

Verify that the information shown in the following table is consistent with the proposed change:

	Current	Proposed
<b>Core Spray Flow to Reactor Vessel</b> (This is the design-basis core spray flow delivered to the reactor vessel that is demonstrated by meeting the Technical Specification (TS) 4.5.1.b.1 minimum acceptable flow requirement during surveillance testing)	6350 gpm	6150 gpm
<b>Core Spray Flow to Fuel</b> (This is the flow value, assumed in the Appendix K LOCA analysis, that is delivered to the fuel based on the TS 4.5.1.b.1 surveillance testing meeting the minimum acceptable flow value minus 100 gpm assumed for core shroud bypass flow)	6250 gpm	6050 gpm
<b>Bounding Value</b> (This was the flow value provided by PSEG to the fuel vendors to use as a bounding value to generate core spray pump curves to assess the impact of the revised mechanical calculations on the existing LOCA analysis. Since the 6058 gpm value was a preliminary PSEG design engineering number at the time the value was provided to General Electric (GE) and Westinghouse (W), the fuel vendors were asked to use conservatively lower flow values in generating the pump curves.)	N/A	6058 gpm
<b>Fuel Vendor Degraded Core Spray Flow Curves</b> (These curves (shown in 2/6/01 submittal) were used by GE and W to evaluate the impact on the existing LOCA analysis. Curves were generated with flow values less than 6058 gpm at 105 psid for conservatism)	N/A	< 6000 gpm at 105 psid

After the change is implemented, if the surveillance testing meets the new acceptance criteria of 6150 gpm, this means that at least 6050 gpm will actually be delivered to the fuel (i.e., meets the core spray flow assumed in the LOCA analysis). UFSAR Table 6.3-2 (Significant Input Variables Used in LOCA Analysis) will be revised to indicate that minimum Core Spray flow is 6050 gpm at 105 psid.

The fuel vendors have determined the impact on the existing LOCA analysis by using the degraded pump curves. Although specific values are not shown on the curves (in the 2/6/01 submittal), it can clearly be seen that the flow value on each curve at a head equivalent to 105 psid (105 psid  $\approx$  242 ft H<sub>2</sub>O) is less than 6000 gpm (i.e., less than 6000 gpm is needed for acceptable ECCS performance based on fuel vendors evaluation and at least 6050 gpm will actually be delivered to fuel if TS acceptance criteria is met).