

April 11, 2003

Mr. Roy A. Anderson
Chief Nuclear Officer & President
PSEG Nuclear LLC - X04
Post Office Box 236
Hancocks Bridge, NJ 08038

SUBJECT: HOPE CREEK GENERATING STATION - REQUEST FOR ADDITIONAL
INFORMATION REGARDING REACTOR PRESSURE VESSEL NOZZLE WELD
INSPECTION (TAC NO. MB7839)

Dear Mr. Anderson:

By letter dated February 20, 2003, PSEG Nuclear, LLC requested relief from the examination requirements of Figures IWB-2500-7 (a) and (b) of Section XI of the ASME Boiler and Pressure Vessel Code. The U.S. Nuclear Regulatory Commission staff has begun its review of the proposed relief and requests that you answer the enclosed questions regarding your submittal. These questions were discussed with Mr. Howard Berrick of your staff in a telephone call on April 9, 2003.

In order that we may complete our review in a timely manner, we understand that you intend to submit your response to the enclosed request for additional information within 30 days of the date of this letter. If this is incorrect or if you have any questions, please do not hesitate to call. I can be reached at (301) 415-1494.

Sincerely,

/RA/

George F. Wunder, Project Manager, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-354

Enclosure: As stated

cc w/encl: See next page

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Hope Creek Generating Station

cc:

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Municipal Building, P.O. Box 157
Hancocks Bridge, NJ 08038

REQUEST FOR ADDITIONAL INFORMATION

REGARDING USE OF CODE CASE N-566-2

HOPE CREEK GENERATING STATION, UNIT NO. 1

DOCKET NO. 50-354

Question 1: You are proposing to reduce the examination volume currently described in Figure IWB-2500-7 of Section XI of the ASME Boiler and Pressure Vessel Code (Code) to a volume that would encompass the weld and base metal one-half inch on either side of the weld. The basis for relief describes the examination volume as one-half inch base metal on either side of the weld at the widest part of the weld, for reactor pressure vessel (RPV) nozzles. Provide a sketch showing the configuration [IWB-2500 (a), or (b)] and examination volume. Please list all nozzle-to-vessel welds included within the scope of this request.

Question 2: You state that the current Code requirements for base material adjacent to these welds (Code-required volume extends to one-half the vessel wall thickness) contain volumes not prone to inservice cracking, and you further state that creation of flaws during plant service is unlikely due to the low stresses in the base metal away from the weld.

(a) Please provide a technical basis to conclude that portions of the base metal over the entire regions currently specified by the Code are not susceptible to service-induced degradation.

(b) Please provide analyses to indicate the extent and magnitude of stresses associated with RPV nozzle-to-vessel welds at Hope Creek in support of the contention that creation of flaws during plant service is unlikely due to the low stresses in the base metal away from the weld.

Question 3: A significant issue is related to as-built weld configurations that may exist at Hope Creek, the interpretation of ultrasonic signals, and assurance of volumetric coverage. Because the examination of the subject nozzles is primarily by remote (automated ultrasonic methods that are implemented from the inner clad surface of the RPV), it is unclear how you will be able to locate the extremities (widest sections) of the nozzle-to-vessel welds precisely. It is not clear how repaired areas (fabrication or inservice) extending beyond the ideal weld cross-sectional area are identified and how these areas will be examined.

(a) Please discuss the documentation available of the actual cross-sectional dimensions and precise locations of repaired areas for all RPV nozzle-to-vessel welds at Hope Creek. Please discuss the process for defining new examination volumes that encompass these repair weld areas.

(b) Please describe the process for accurately determining the location of ultrasonic reflectors with respect to the proposed new examination volumes.