



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
WASHINGTON, D.C. 20555-0001

November 3, 2016

Mr. Peter P. Sena, III  
President  
PSEG Nuclear LLC - N09  
P.O. Box 236  
Hancocks Bridge, NJ 08038

**SUBJECT: HOPE CREEK GENERATING STATION – REQUEST FOR ADDITIONAL  
INFORMATION REGARDING LICENSE AMENDMENT REQUEST TO PERMIT  
OPERABILITY OF LOW PRESSURE COOLANT INJECTION WHILE ALIGNED  
TO SHUTDOWN COOLING (CAC NO. MF8012)**

Dear Mr. Sena:

By letter dated June 17, 2016 (Agencywide Documents Access and Management System Accession No. ML16172A010), PSEG Nuclear LLC (PSEG or the licensee) submitted a license amendment request to permit operability of one low pressure coolant injection (LPCI) subsystem while the subsystem is aligned to shut down cooling for Hope Creek Generating Station. Specifically, this change would add a note to Technical Specification (TS) 3.5.2 allowing one LPCI subsystem of residual heat removal to be considered operable, while the subsystem is aligned and operating in the shutdown cooling mode during Operational Conditions 4 and 5.

The U.S. Nuclear Regulatory Commission staff has reviewed the licensee's application and, based upon this review, has determined that additional information is needed to complete our review. On October 3, 2016, a draft of these questions was sent to Mr. Paul Duke of your staff to ensure that the questions were understandable, the regulatory basis for the questions was clear, and to determine if the information was previously docketed. On October 28, 2016, a teleconference was held to clarify the questions. On November 1, 2016, Mr. Duke indicated that PSEG will submit a response within 45 days of the date of this letter.

P. Sena

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If you have any questions, please contact me at (301) 415-1603 or by e-mail at Carleen.Parker@nrc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'C. J. Parker', with a long horizontal flourish extending to the right.

Carleen J. Parker, Project Manager  
Plant Licensing Branch I-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-354

Enclosure:  
Request for Additional Information

cc w/enclosure: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION  
LICENSE AMENDMENT REQUEST TO PERMIT OPERABILITY OF  
LOW PRESSURE COOLANT INJECTION WHILE ALIGNED TO SHUTDOWN COOLING  
PSEG NUCLEAR LLC  
HOPE CREEK GENERATING STATION  
DOCKET NO. 50-354

By letter dated June 17, 2016 (Agencywide Documents Access and Management System Accession No. ML16172A010), PSEG Nuclear LLC (PSEG or the licensee) submitted a license amendment request (LAR) to permit operability of one low pressure coolant injection (LPCI) subsystem while the subsystem is aligned to shutdown cooling for Hope Creek Generating Station (Hope Creek). Specifically, this change would add a note to Technical Specification (TS) 3.5.2 allowing one LPCI subsystem of residual heat removal to be considered operable while the subsystem is aligned and operating in the shutdown cooling mode during Operational Conditions (OPCONs) 4 and 5.

The requirements in Title 10 of the *Code of Federal Regulations* Section 50.36, "Technical specifications," identify the requirements for the TS categories for operating power plants. One of these categories, limiting conditions for operation (LCOs), is "the lowest functional capability or performance levels of equipment required for safe operation of the facility." The proposed change modifies an existing Hope Creek TS LCO regarding the LPCI subsystem in OPCONs 4 and 5.

The U.S. Nuclear Regulatory Commission staff has reviewed the application and, based upon this review, determined that the following additional information is needed to complete our review:

1. The technical analysis states that the remaining methods of inventory loss in OPCONs 4 and 5 are boiloff and draindown. Discuss the expected time of boiloff and draindown and confirm that these results do not adversely impact existing safety analyses.
2. The LPCI mode of operation can be manually aligned from the control room. In the LAR, it states that, "sufficient time will be available to manually align and initiate LPCI subsystem operation to provide core cooling prior to postulated fuel uncover." Demonstrate that the time available to manually and remotely align and initiate LPCI operation is bounded by postulated fuel uncover time.

Enclosure

P. Sena

- 2 -

If you have any questions, please contact me at (301) 415-1603 or by e-mail at Carleen.Parker@nrc.gov.

Sincerely,

*/RA/*

Carleen J. Parker, Project Manager  
Plant Licensing Branch I-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

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**ADAMS Accession No.: ML16277A514**

\*by e-mail dated

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