

April 14, 2010

Mr. Thomas Joyce
President and Chief Nuclear Officer
PSEG Nuclear LLC
P.O. Box 236
Hancocks Bridge, NJ 08038

SUBJECT: HOPE CREEK GENERATING STATION, LICENSE RENEWAL APPLICATION -
REQUEST FOR ADDITIONAL INFORMATION FOR SECTION 2.2.5, BORAL
MONITORING PROGRAM (TAC NO. ME1832)

Dear Mr. Joyce:

By letter dated August 18, 2009, as supplemented by letter dated January 23, 2009, Public Service Enterprise Group Nuclear, LLC, submitted an application pursuant to Title 10 of the *Code of Federal Regulation* Part 54 for renewal of Operating License No. NPF-57 for the Hope Creek Generating Station. The staff of the U.S. Nuclear Regulatory Commission (NRC or the staff) is reviewing this application in accordance with the guidance in NUREG-1800, "Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants." During its review, the staff has identified areas where additional information is needed to complete the review. The staff's requests for additional information are included in the Enclosure. Further requests for additional information may be issued in the future.

Items in the enclosure were discussed with John Hufnagel and other members of your staff during a telephone call on April 7, 2010, and a mutually agreeable date for the response is within 30 days from the date of this letter. If you have any questions, please contact me by telephone at 301-415-3191 or by e-mail at donnie.ashley@nrc.gov.

Sincerely,

/RA/

Donnie J. Ashley, Sr. Project Manager
Projects Branch 1
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket No. 50-354

Enclosure:
As stated

cc w/encl: See next page

April 14, 2010

Mr. Thomas Joyce
President and Chief Nuclear Officer
PSEG Nuclear LLC
P.O. Box 236
Hancocks Bridge, NJ 08038

SUBJECT: HOPE CREEK GENERATING STATION, LICENSE RENEWAL APPLICATION -
REQUEST FOR ADDITIONAL INFORMATION FOR SECTION 2.2.5, BORAL
MONITORING PROGRAM (TAC NO. ME1832)

Dear Mr. Joyce:

By letter dated August 18, 2009, as supplemented by letter dated January 23, 2009, Public Service Enterprise Group Nuclear, LLC, submitted an application pursuant to Title 10 of the *Code of Federal Regulation* Part 54 for renewal of Operating License No. NPF-57 for the Hope Creek Generating Station. The staff of the U.S. Nuclear Regulatory Commission (NRC or the staff) is reviewing this application in accordance with the guidance in NUREG-1800, "Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants." During its review, the staff has identified areas where additional information is needed to complete the review. The staff's requests for additional information are included in the Enclosure. Further requests for additional information may be issued in the future.

Items in the enclosure were discussed with John Hufnagel and other members of your staff during a telephone call on April 7, 2010, and a mutually agreeable date for the response is within 30 days from the date of this letter. If you have any questions, please contact me by telephone at 301-415-3191 or by e-mail at donnie.ashley@nrc.gov.

Sincerely,

/RA/

Donnie J. Ashley, Sr. Project Manager
Projects Branch 1
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket No. 50-354

Enclosure:
As stated

cc w/encl: See next page

DISTRIBUTION: See next page
ADAMS Accession No. ML100970350

OFFICE	LA:DLR	PM:DLR:RPB1	BC:DLR:RPB1	PM:DLR:RPB1
NAME	S. Figueroa	D. Ashley	B. Pham	D. Ashley
DATE	04/12/10	04/12/10	04/14/10	04/14/10

OFFICIAL RECORD COPY

Letter to T. Joyce from D. Ashley dated April 14, 2010

SUBJECT: HOPE CREEK GENERATING STATION, LICENSE RENEWAL APPLICATION -
REQUEST FOR ADDITIONAL INFORMATION FOR SECTION 2.2.5, BORAL
MONITORING PROGRAM (TAC NO. ME1832)

DISTRIBUTION:

HARD COPY:

DLR RF

E-MAIL:

PUBLIC

RidsNrrDir Resource

RidsNrrDirRpb1 Resource

RidsNrrDirRpb2 Resource

RdsNrrDirRarb Resource

RidsNrrDirRasb Resource

RidsNrrDirRapb Resource

RidsOgcMailCenter Resource

BPham

DAshley

CEccleston

REnnis

CSanders

MModes, RI

DKern, RI

JBrand, RI

RConte, RI

RBellamy, RI

MMcLaughlin, RI

Hope Creek Generating Station

cc:

Mr. Robert Braun
Senior Vice President Nuclear
PSEG Nuclear LLC
One Alloway Creek Neck Road
Hancocks Bridge, NJ 08038

Mr. Brian Booth
Director Nuclear Oversight
PSEG Nuclear
P.O. Box 236
Hancocks Bridge, NJ 08038

Mr. John Perry
Station Vice President – Hope Creek
PSEG Nuclear
P.O. Box 236
Hancocks Bridge, NJ 08038

Mr. Larry Wagner
Plant Manager - Hope Creek
PSEG Nuclear LLC
One Alloway Creek Neck Road
Hancocks Bridge, NJ 08038

Mr. Michael Gallagher
Vice President – License Renewal Projects
Exelon Nuclear LLC
200 Exelon Way
Kennett Square, PA 19348

Mr. Jeffrie J. Keenan, Esquire
Manager - Licensing
PSEG Nuclear LLC
One Alloway Creek Neck Road
Hancocks Bridge, NJ 08038

Mr. Greg Sosson
Director Corporate Engineering
PSEG Nuclear LLC
One Alloway Creek Neck Road
Hancocks Bridge, NJ 08038

Mr. Michael Gaffney
Manager - Hope Creek Regulatory
Assurance
PSEG Nuclear LLC
One Alloway Creek Neck Road
Hancocks Bridge, NJ 08038

Mr. Ali Fakhar
Manager, License Renewal
PSEG Nuclear LLC
One Alloway Creek Neck Road
Hancocks Bridge, NJ 08038

Township Clerk
Lower Alloways Creek Township
Municipal Building, P.O. Box 157
Hancocks Bridge, NJ 08038

Mr. Paul Bauldauf, P.E., Asst. Director
Radiation Protection Programs
NJ Department of Environmental
Protection and Energy, CN 415
Trenton, NJ 08625-0415

Mr. Brian Beam
Board of Public Utilities
2 Gateway Center, Tenth Floor
Newark, NJ 07102

Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Mr. Paul Davison
Vice President, Operations Support
PSEG Nuclear LLC
One Alloway Creek Neck Road
Hancocks Bridge, NJ 08038

Hope Creek Generating Station

- 2 -

cc:

Ms. Christine Neely
Director – Regulator Affairs
PSEG Nuclear LLC
One Alloway Creek Neck Road
Hancocks Bridge, NJ 08038

Senior Resident Inspector
Hope Creek Generating Station
U.S. Nuclear Regulatory Commission
Drawer 0509
Hancocks Bridge, NJ 08038

Mr. Earl R. Gage
Salem County Administrator
Administration Building
94 Market Street
Salem, NJ 08079

HOPE CREEK GENERATING STATION
LICENSE RENEWAL APPLICATION
REQUEST FOR ADDITIONAL INFORMATION FOR
SECTION 2.2.5, BORAL MONITORING PROGRAM (TAC NO. ME1832)

The Boral Monitoring Program is described in Appendix B as an existing program that is consistent without exception or enhancement to the 10 elements of an Aging Managing Program (AMP), as shown in The Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants NUREG-1800, Revision 1.

RAI 2.2.5-1

Element 2 (Preventive Actions), Element 4 (Detection of Aging Effects), and Element 5 (Monitoring and Trending) of the Boral Monitoring Program contain the sentence, "The assumption is that the spent fuel pool environments, including the pool's water chemistry and radiation field, and the Boral material characteristics are consistent enough so that the results at other BWR [boiling water reactor] sites are representative of the results if the Hope Creek Boral test coupons were inspected and/or tested."

The position that spent fuel pool environments between different BWR plants can be considered to come from a single population has not been supported by the staff. The draft Interim Staff Guidance of November 2009 (LR-ISG-2009-01), cited specific examples of industry operating experience that have shown extrapolations on plant-specific data that were incorrect in trying to determine the future condition of neutron absorbing material in spent fuel pools. The staff clarified that an applicant should consider both plant-specific and industry operating experience in a license renewal application (LRA), and that the plant-specific operating experience should include data from an on-going inspection and monitoring program.

Please discuss your plan to implement changes to your Boral Monitoring Program that will include regular inspections of the spent fuel pool test coupons at Hope Creek Unit 1.

RAI 2.2.5-2

Element 6 (Acceptance Criteria) contains the following sentences:

If the test report conclusion indicates at least one of the two acceptance criteria is unsatisfactory, the test report information will be entered into the Hope Creek corrective action program for further evaluation. Additionally, this could trigger the requirement to retrieve one Boral test coupon from the Hope Creek spent fuel pool and initiate inspection, testing and evaluation in accordance with the Boral Monitoring Program.

Please describe the test results that would require a spent fuel pool test coupon to be retrieved, inspected, tested, and evaluated.

ENCLOSURE

RAI 2.2.5-3

Please discuss the following regarding the spent fuel pool racks:

- a. If and how the racks are vented.
- b. What constitutes a drag test.
- c. The basis for the conclusion that the 15 cells marked as "DO NOT USE" did not suffer from Boron deformation.