



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION II  
SAM NUNN ATLANTA FEDERAL CENTER  
61 FORSYTH STREET, SW, SUITE 23T85  
ATLANTA, GEORGIA 30303-8931

[REDACTED]

June 29, 2007

Mr. R. P. Cochrane, General Manager  
BWX Technologies, Inc.  
Nuclear Products Division  
P. O. Box 785  
Lynchburg, VA 24505-0785

SUBJECT: LICENSEE PERFORMANCE REVIEW (LPR) OF LICENSED ACTIVITIES FOR  
BWX TECHNOLOGIES, INC., DOCKET NUMBER 70-27

Dear Mr. Cochrane:

Managers and staff in Region II, the Office of Nuclear Material Safety and Safeguards, and the Office of Nuclear Security and Incident Response, completed a review of the BWX Technologies, Inc.; (BWXT) facility's performance in conducting NRC licensed activities. The review evaluated the facility's performance during the period beginning April 16, 2006, and ending May 19, 2007. This letter and the enclosure provide to you the results of our review, and will be used as a basis for establishing the NRC oversight program for your conduct of licensed activities during the next 12 months.

BWXT continued to conduct its activities safely and securely during the review period. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

In Safety Operations, our review noted the identification and validation of safety controls required by safety analyses in the Integrated Safety Analysis (ISA) summary as an area needing improvement. Thorough validations of Items Relied On For Safety (IROFS) are essential to ensure the risks of high- and intermediate-consequence events are limited. Procedural compliance was also noted as an area for improvement as seven violations, associated with conformance to nuclear criticality safety (NCS) postings and procedural requirements, occurred in the area of Plant Operations during the review period. We recognize that your human performance initiative resulted in improved performance with respect to procedure compliance during the previous LPR period, but the examples of noncompliance identified in the current LPR period indicate continued management emphasis is warranted on adherence to procedures and NCS postings.

[REDACTED]

[REDACTED]

The results of our review will be discussed with you at your facility during a meeting closed to the public on July 31, 2007. During the meeting, we expect you to discuss your view of your performance in the same major areas that the NRC evaluated. We ask you to specifically address the actions you have taken or are planning to take to improve performance with respect to the Safety Operations [REDACTED] areas that the NRC has identified as needing improvement.

[REDACTED]

Questions and comments about NRC's review of BWXT's performance should be referred to Mr. David Ayres, who can be reached by telephone at 404-562-4711.

Sincerely,

/RA/

Douglas M. Collins, Director  
Division of Fuel Facility Inspection

Docket No. 70-27  
License No. SNM-42

Enclosure: Licensee Performance Review Summary Outline

cc w/encl:  
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P. O. Box 785  
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[REDACTED]

LICENSEE PERFORMANCE REVIEW  
BWXT  
ASSESSMENT PERIOD: April 16, 2006 to May 19, 2007

The following is a summary of the performance of BWXT, in the conduct of NRC licensed activities.

**PERFORMANCE AREA: SAFETY OPERATIONS**

This area is comprised of chemical safety, nuclear criticality safety (NCS), plant operations, and fire safety.

**Program Areas Needing Improvement**

- Identification and verification of safety controls required by safety analyses in the Integrated Safety Analysis (ISA) summary.
  - ▶ Fire safety controls described in the Fire Safety Analysis were found to be inoperable to perform their intended function. **VIO 2006-08-01**
  - ▶ A work table containing an NCS posting was removed from the [REDACTED] process area without proper change control approval. The posting implemented several administrative Items Relied on For Safety (IROFS) listed in the ISA. **VIO 2007-02-01**
  - ▶ The licensee failed to implement a passive engineered IROFS for required vertical separation between the concrete floor and the bottom tier of a fuel storage [REDACTED] as specified in the NCS evaluation. **VIO 70-27/2007-202-02**
  - ▶ The licensee failed to establish IROFS, as required by 10 CFR 70.61(a), in the ISA summary to prevent hydraulic fluid (moderator) from accumulating [REDACTED]. **VIO 70-27/2007-02-03**

Enclosure

[REDACTED]

- Management oversight to ensure procedural compliance with operating procedures and NCS postings. Procedural compliance weaknesses were identified in the areas of Nuclear Criticality Safety and Plant Operations.
  - ▶ Fire protection technicians failed to perform fire protection system testing and calibration in accordance with the approved procedure. Annual testing of this fire protection system is credited in the Fire Safety Analysis as an administrative control. **VIO 2006-08-02**
  - ▶ An NCS engineer failed to follow the NCS quality assurance procedure for resolving configuration discrepancies after noting a deviation during the pre-operational walkdown of a modification in [REDACTED]. The unauthorized removal of a work table and the associated NCS posting required further evaluation and Change Review Board approval prior to releasing the affected equipment to Operations. **VIO 2007-02-02**
  - ▶ [REDACTED], of a form not authorized for storage within an area by the NCS posting, was stored on a shelf with [REDACTED] approved for storage. **VIO 70-27/2006-204-02**
  - ▶ The licensee failed to remove an unattended [REDACTED] piping elbow from the [REDACTED] as required by the NCS posting and the [REDACTED] procedure. **VIO 70-27/2007-01-01**
  - ▶ The licensee failed to maintain a required log or other readily available means to verify compliance with the special nuclear material (SNM) mass limit on the applicable NCS posting. **VIO 70-27/2007-01-02**
  - ▶ An operator failed to wear a face shield while transferring an acidic solution containing SNM in an open container. **VIO 70-27/2007-01-03**
  - ▶ A non-cited violation occurred when SNM [REDACTED] solution was transferred into an unfavorable geometry waste drum without following the applicable procedure requirements. As a result, two controls designated as IROFS were not used. **NCV 70-27/2007-03-01**

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]

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[REDACTED]  
[REDACTED]

[REDACTED]  
[REDACTED]

[REDACTED]

**PERFORMANCE AREA: RADIOLOGICAL CONTROLS**

This area is comprised of radiation protection, environmental protection, waste management, and transportation.

**Program Areas Needing Improvement**

- None

**PERFORMANCE AREA: FACILITY SUPPORT**

This area is comprised of maintenance and surveillance, training, emergency preparedness, and management controls.

**Program Areas Needing Improvement**

- None

**PERFORMANCE AREA: SPECIAL TOPICS (LICENSING ACTIVITIES)**

This area is comprised of safety licensing.

**Program Areas Needing Improvement**

- None