



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

March 7, 2013

Mr. Michael Mulligan  
P.O. Box 161  
Hinsdale, NH 03451

Dear Mr. Mulligan:

Your letter dated October 15, 2012, addressed to Mr. William Borchardt, Executive Director for Operations, has been referred to the Nuclear Regulatory Commission's (NRC) Office of Nuclear Reactor Regulation pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR), Section 2.206. In your petition, you requested a number of actions including immediate shutdown of Peach Bottom Atomic Power Station (PBAPS) Units 2 and 3, based on the Safety Relief Valve (SRV) actuators not being qualified for the postulated maximum temperature and radiation conditions in the containment, which would prevent the fulfillment of a safety function in accordance with 10 CFR 50.73(a)(2)(v)(D). It also included a request for Vermont Yankee Nuclear Power Station (VY) to be fined \$10 million for not declaring a 10 CFR 50.73(a)(2)(v)(D) on their SRV actuators, and that VY did not warn the other plants of these problems.

The Petition Review Board (PRB) met on November 1, 2012, and denied your request for immediate action to shutdown PBAPS. The PRB determined that there was no immediate safety concern to the plants or to the public health and safety justifying the immediate shutdown of PBAPS Units 2 and 3. On November 6, 2012, you were informed of the PRB's decision on the immediate action and you requested to address the PRB prior to its initial meeting to provide supplemental information for the PRB's consideration. By teleconference on December 3, 2012, you addressed the PRB to discuss your petition.

On January 10, 2013, the PRB held its internal meeting to make the initial recommendation, in accordance with the criteria provided in Management Directive (MD) 8.11, "Review Process for 10 CFR 2.206 Petitions." Your requests as you state in the petition are listed below, each followed by the PRB recommendation.

1. Request an immediate shutdown of Peach Bottom 2 and 3 for safety reasons based on the common mode failure of the SRV actuators not being qualified for the accident containment maximum temperature and radiation condition.

The petition did not provide sufficient information. The PRB concluded that there was no immediate safety concern which would justify the immediate shutdown of Peach Bottom Unit 2 and 3.

The Peach Bottom Automatic Depressurization System (ADS) can perform its safety function with the type-II SRV actuators that contain Buna-N seal material, based on the following defense-in-depth design capabilities of the ADS SRVs:

- The mechanical overpressure function of the SRV would not be impacted by even a complete failure of the ADS pneumatic actuator thread seals. Therefore, reactor vessel overpressure protection would remain intact.
  - Although Peach Bottom did document in their license event report (LER) dated November 18, 2011 that the Unit 3 71B ADS SRV thread seal leakage would have prevented fulfillment of its Technical Specification (TS) required function to perform multiple actuations, the operability determination concluded that the ADS system was operable but degraded. The SRV 71B is one of five PBAPS Unit 3 ADS reactor vessel relief valves. In order to perform the ADS system safety function, four of the five ADS SRVs are required to function. The four other ADS SRVs passed the leakage test, and remained capable of depressurizing the reactor pressure vessel for design basis events. Therefore, during the period the 71B SRV was inoperable, testing indicates the overall ADS safety function was maintained.
  - You expressed concerns about the temperature rating of Buna-N with respect to maximum containment temperature during the design basis accident. For example, a large break loss-of-coolant accident LOCA (LBLOCA), results in high temperature and pressure inside primary containment (approximately 62 psig and 300 degrees F). An ADS would not be used in a LBLOCA. An ADS is designed for small-to-medium break LOCA. For example, the ADS receives a permissive signal to open after primary containment reaches 2 psig.
  - The temperature rating for Buna-N does not equate to complete material failure once the rating is exceeded, but rather an accelerated degradation. Additionally, if the material were exposed to high temperature conditions during the worst case accident conditions, the exposure period would be small relative to normal operating conditions over a period of several years.
  - Peach Bottom installed a safety-grade, seismically qualified, long term-back-up supply to assure ADS valve operability for a period of 100 days following an accident. Peach Bottom installed this back-up in Unit 2 in 1981, and Unit 3 in 1982. This was performed in response to TMI NUREG-0737 Action Plan requirement II.K.3.28 (p. 199: <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr0737/final/sr0737.pdf>). NRC's safety evaluation report was issued May 14, 1984. One purpose of this modification was to ensure long term ADS functionality with air leakage in a hostile environment.
2. Request Vermont Yankee be fined \$10 million for not declaring a 10 CFR 50.73(a)(2)(v)(D) on their SRV actuators...they did not warn the other plants of these problems.

In accordance with MD 8.11, this request does not meet the criteria for review because the petitioner did not provide sufficient facts to warrant further inquiry. Entergy personnel at Vermont Yankee submitted a LER in accordance with the reporting requirements in 10 CFR 50.73(a)(2)(i)(B) as an operation or condition prohibited by TS. Due to the availability of a safety-class back-up nitrogen supply with separate pressure regulators, Vermont Yankee determined that adequate capacity for the ADS existed at all times. Therefore, requirements of 10 CFR 50.73(a)(2)(v)(D) do not apply.

3. Request a Department of Justice/FBI investigation of these events.

In accordance with MD 8.11, this request does not meet the criteria for review because the petitioner did not provide sufficient facts to warrant further inquiry. However, the petition and the transcript have been forwarded to the NRC's Office of the Inspector General for their consideration.

4. Request an investigation nationwide regarding equipment and components not being accident qualified in any nuclear plant containments, especially concerning maximum temperatures and radiation.

The petitioner stated that the NRC allowed nuclear plants to operate knowingly with unsafe components with inoperable safety functions. However, this request does not meet the criteria for review per MD 8.11 because the petitioner did not provide sufficient information to support the claims. Subsequently, the petition and the transcript have been forwarded to the NRC's Office of the Inspector General for their consideration. The NRC has a rigorous Reactor Oversight Program (ROP) in which inspections are conducted throughout the year to ensure that power reactor facilities are operated safely and the licensee activities do not pose an undue risk to public health and safety.

5. Request the formation of a local public oversight panel around every plant.

This request is not an enforcement-related action and is not within the scope of 10 CFR 2.206. This request does not meet the criteria for a 2.206 petition.

6. Request the formation of an emergency NRC senior official oversight panel with the aims of reforming the ROP.

This request is not an enforcement-related action and is not within the scope of 10 CFR 2.206. This request does not meet the criteria for a 2.206 petition.

7. Request the formation of a national NRC oversight panel of outsiders.

This request is not an enforcement-related action and is not within the scope of 10 CFR 2.206. The Inspector General, who provides oversight of NRC actions, reports directly to the U.S. Congress. Any further oversight would have to be authorized by the U.S. Congress. This request does not meet the criteria for a 2.206 petition.

8. Request massive reforms within the 2.206 system and its directives. The system doesn't serve the public and their communities.

This request is not an enforcement-related action and is not within the scope of 10 CFR 2.206. This request does not meet the criteria for a 2.206 petition.

9. Request a \$10 million fine to Peach Bottom. They failed to submit and comply with 10 CFR 50.73(a)(2)(v)(D).

M. Mulligan

- 4 -

In accordance with MD 8.11, this request does not meet the criteria for review because the petitioner did not provide sufficient facts to warrant further inquiry. The PBAPS has submitted the LER in accordance with the reporting requirements in 10 CFR 50.73(a)(2)(i)(B) as an operation or condition prohibited by TS. The PBAPS installed a safety-grade, seismically qualified, long-term back-up air supply to assure ADS valve operability for a period of 100 days following an accident. Peach Bottom installed this back-up in Unit 2 in 1981, and Unit 3 in 1982. Therefore, the reporting requirements in 10 CFR 50.73(a)(2)(v)(D) did not apply to this condition.

On January 30, 2013, you were informed of the PRB's initial recommendation. You requested a second opportunity to address the PRB to provide additional information in support of the petition request. On February 13, 2013, you addressed the PRB by teleconference to discuss the PRB's initial recommendation.

The PRB's final determination is to reject your petition for review under the 10 CFR 2.206 process because it does not meet the criteria for review under 10 CFR 2.206. Therefore, these requests were not accepted for review pursuant to 10 CFR 2.206.

Sincerely,

A handwritten signature in black ink that reads "Michele G. Evans". The signature is fluid and cursive, with the first name "Michele" and last name "Evans" clearly legible.

Michele G. Evans, Director  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-277 and 50-278

cc: Distribution via Listserv

M. Mulligan

- 4 -

In accordance with MD 8.11, this request does not meet the criteria for review because the petitioner did not provide sufficient facts to warrant further inquiry. The PBAPS has submitted the LER in accordance with the reporting requirements in 10 CFR 50.73(a)(2)(i)(B) as an operation or condition prohibited by TS. The PBAPS installed a safety-grade, seismically qualified, long-term back-up air supply to assure ADS valve operability for a period of 100 days following an accident. Peach Bottom installed this back-up in Unit 2 in 1981, and Unit 3 in 1982. Therefore, the reporting requirements in 10 CFR 50.73(a)(2)(v)(D) did not apply to this condition.

On January 30, 2013, you were informed of the PRB's initial recommendation. You requested a second opportunity to address the PRB to provide additional information in support of the petition request. On February 13, 2013, you addressed the PRB by teleconference to discuss the PRB's initial recommendation.

The PRB's final determination is to reject your petition for review under the 10 CFR 2.206 process because it does not meet the criteria for review under 10 CFR 2.206. Therefore, these requests were not accepted for review pursuant to 10 CFR 2.206.

Sincerely,

/ra/

Michele G. Evans, Director  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-277 and 50-278

cc: Distribution via Listserv

**DISTRIBUTION: G20120819**

**PUBLIC**

LPL1-1 R/F	RidsNrrDorl	RidsNrrDorlLpl1-1	MGray,RI
RidsNrrPMPeachBottom	RidsNrrLAKGoldstein	RidsNrrMailCenter	RidNrrPMMillstone
RidsNrrOd	RidsEDOMailCenter	MBanic, NRR	JBillerbeck, NRR
RidsOGCRp Resource	RidsOeMailCenter	RidsOiMailCenter	RidsOpaMail
RidsRgn1MailCenter	RidsOcaMailCenter	MRazzaque, NRR	

**Package: ML13052A668      Incoming: ML12296A653      Response: ML13052A698      \*Via email**

OFFICE	LPL1-1/PM	LPL1-1/LA	R1/BC*	DPR/PM	LPL1-1/BC(A)	DORL/D
NAME	JKim	KGoldstein	MGray	MBanic	SMeighan	MEvans
DATE	2/28/13	02/26/13	02/28/13	2/28/13	3/3/13	3/7/13

**OFFICIAL RECORD COPY**