



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION I  
2100 RENAISSANCE BLVD., SUITE 100  
KING OF PRUSSIA, PA 19406-2713

August 28, 2014

Mr. Michael Massaro, Site Vice President  
Peach Bottom Atomic Power Station Units 2 and 3  
1848 Lay Road  
Delta, PA 17314

SUBJECT: NOTICE OF ENFORCEMENT DISCRETION FOR EXELON REGARDING  
PEACH BOTTOM ATOMIC POWER STATION UNITS 2 and 3  
(NOED NO. 14-1-04)

Dear Mr. Massaro:

By letter (CCN: 14-67) dated August 26, 2014, you requested that the U.S. Nuclear Regulatory Commission (NRC) exercise discretion not to enforce compliance with the actions required in Technical Specification (TS) 3.7.2, "Emergency Service Water (ESW) System," Condition B for both Peach Bottom Atomic Power Station Units 2 and 3 (PBAPS). Condition B requires that, when in Mode 1 with both ESW subsystems inoperable, the unit be placed in Mode 3 within 12 hours and Mode 4 within 36 hours. Both ESW systems were declared inoperable because any through wall leak in an American Society of Mechanical Engineers (ASME) Code Class III elbow is not compliant with the ASME code. Specifically, you requested an extension to allow an additional 48 hours for evaluation of possible repairs or the completion of calculations that would demonstrate that a through-wall leak in ESW piping would meet the eligibility requirements for an emergency, one-time relief request from the ASME code for evaluating leaks in low to moderate energy systems. Your letter also documented information previously discussed with the NRC in telephone conferences held on the evening of August 23, 2014, and information you developed to support your requested Notice of Enforcement Discretion (NOED).

Exelon entered Technical Specification (TS) Limiting Condition for Operation (LCO) 3.7.2.B at 1:00 p.m., August 23, 2014, declaring both Emergency Service Water (ESW) systems inoperable for PBAPS Unit 2 and Unit 3 after identifying a pinhole leak on an elbow of pipe between hand valve HV-2-33-502 and nearby check valve Chk-2-33-513. TS 3.7.2, "Emergency Service Water (ESW) System," requires that two ESW subsystems and the normal heat sink be operable.

On August 23, 2014, you verbally requested that a NOED be issued pursuant to the NRC's policy regarding the exercise of enforcement discretion for an operating facility as detailed in the NRC Enforcement Policy and NRC Inspection Manual Chapter (IMC) 0410, "Notices of Enforcement Discretion," dated March 13, 2013. The NOED was verbally granted at 7:22 p.m., August 23, 2014, and extended the original LCO expiration from 1:00 a.m., August 24, 2014, for 48 hours until 1:00 a.m., August 26, 2014. You stated that the request satisfied Section 3.0.3 (b) of IMC 0410 in that compliance with this TS would result in an unnecessary shutdown of the reactor without a corresponding public health and safety benefit. This letter documents our telephone conversations on August 23, 2014, as well as our verbal granting of this NOED during a subsequent call at 7:22 pm on, August 23, 2014. The principal staff members who

participated in these telephone conferences, which met the minimum NRC staffing requirement for considering a NOED request, are noted in Enclosure 1. The Exelon teleconference participants are listed in Enclosure 2. The staff confirmed that your August 26, 2014, letter was consistent with the NOED request made verbally on August 23, 2014.

During the teleconferences on August 23, 2014, and further elaborated in your August 26, 2014, letter your staff indicated that from a risk perspective, it was unnecessary to place PBAPS Unit 2 and Unit 3 into a plant shutdown given that the units were operating in a stable configuration with only a minimal amount of leakage from the common ESW suction piping. Based on actual plant conditions, your staff estimated the Incremental Conditional Core Damage Probability (ICCDP) to be much less than  $5E-07$  (zero increase) for the requested duration of the NOED, and the Incremental Conditional Large Release Probability (ICLERP) to be much less than  $5E-08$  (zero increase). Both of these probabilities were well below the thresholds established by NRC Inspection Manual Chapter 0410 that support issuance of a NOED. Additionally, your staff stated that the estimated ICCDP and ICLERP values did not take into account various additional conservatisms associated with compensatory actions which had been put in place. The results of your staff's quantification were independently corroborated by NRC risk analysts and were confirmed to be within the guidance thresholds in Inspection Manual Chapter IMC 0410.

While the common ESW piping was inoperable, your staff stated that they implemented the following actions, among others, to reduce the risk of the ongoing ESW leakage to plant safety by: 1) not allowing activities involving operational risk that was not required by TS if these activities could present a risk of causing an initiating event, 2) taking no planned unavailability of risk significant equipment, 3) performing operator rounds taking twice per shift in the Unit 2 Reactor Building Closed Cooling Water (RBCCW) Room, and 4) conducting a briefing on isolation of a flood in the Unit 2 RBCCW Room. These additional compensatory risk management measures remained in place during the period of the NOED and were independently verified by the NRC resident inspectors.

Your staff stated that the proposed change did not involve a significant hazard based on the three standards set forth in 10 CFR 50.92(c), and did not involve adverse consequences to the environment such that the proposed NOED meets the categorical exclusion set forth in 10 CFR 51.22(c)(9). The PBAPS Plant Operations Review Committee reviewed and concurred with the NOED request.

Based on the NRC's staff's evaluation of your request, the NRC concluded that you have adequately addressed the criteria in IMC 0410 which demonstrates that granting this NOED was consistent with the NRC's Enforcement Policy. Specifically, based on the risk evaluations performed by Exelon and the NRC, as well as the compensatory measures put in place during the NOED, the staff concluded that granting the NOED would not adversely affect public health and safety or the common defense and security. The staff found that criterion b. in Inspection Manual Chapter 0410, Section 03.03 (avoiding an unnecessary downpower or reactor shutdown without a corresponding health and safety benefit) was satisfied. Therefore, as communicated to your staff at 7:22 pm on, August 23, 2014, the NRC exercised discretion not to enforce compliance with TS 3.7.2. Condition B, for an additional period of 48 hours, which would have expired at 1:00 a.m., August 26, 2014.

Subsequent to the granting of enforcement discretion, you requested emergency relief from the requirements of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section XI, IWD-3120(b) and IWA-4000, for Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3, in a telephone conference on August 24, 2014. A summary of this telephone conference and the verbal authorization of this relief request was documented in

an NRR memo (ML14237A434) dated August 26, 2014. Following your implementation of the approved relief, this NOED was terminated at 3:48 a.m. on August 25, 2014, which extended the original LCO by approximately 27 hours.

As discussed on August 23, 2014, the NRC staff agreed with your determination that a follow-up TS amendment is not needed. The staff concluded that an amendment (either a temporary or permanent amendment) is not necessary because this NOED involves a nonrecurring noncompliance and only involves a single request to not enforce compliance for 48 hours with TS 3.7.2., Condition B, to restore the ESW system for both units to an operable status within 48 hours of the original expiration time.

As stated in the NRC Enforcement Policy, action will be taken, to the extent that any violation was involved, for the root cause that led to the noncompliance for which this NOED was necessary.

Sincerely,

**/RA/**

Ho K. Nieh, Director  
Division of Reactor Projects

Docket Nos: 50-277, 50-278  
License Nos: DPR-44, DPR-56

Enclosure 1: Key NRC staff participants in the NOED evaluation

cc w/encl: Distribution via ListServ

## Enclosure 1: Key NRC staff participants in the two NOED evaluation teleconferences

- Michael Scott, Deputy Director, Division of Reactor Projects (DRP), Region I
- James Trapp, Acting Director, Division of Reactor Safety (DRS)
- Fred Bower, Branch Chief, DRP
- Mel Gray, Branch Chief, DRS
- Wayne Schmidt, Senior Reactor Analyst, DRS
- Brian Smith, Resident Inspector, PBAPS
- Michael Markley, Acting Deputy Director, Division of Operating Reactor Licensing (DORL) , Office of Nuclear Reactor Regulation (NRR)
- Robert Schaaf, Acting Branch Chief, DORL, NRR
- Richard Ennis, Senior Project Manager, NRR
- Scott Barber\*, Senior Project Engineer, DRP
- Brian Benney - NOED Process Expert
- David Alley – EPNB/BC
- John Tsao – EPNB Technical Reviewer
- Antonios Zoulis – DRA Risk Analyst

\*participant in the first teleconference only

Enclosure 2: Key Exelon staff participants in the NOED teleconferences

- Mike Massaro – VP – Peach Bottom
- Pat Navin, Plant Manager
- Matt Herr, Operations Director
- Tim Moore, Engineering Director
- Madison Long, Sr. Mgr. Systems Engineering
- Dave Henry, Sr. Mgr. Design Engineering
- Jim Barstow, Licensing Director – Mid-Atlantic
- Dan Dullum, Sr. Regulatory Engineer
- Dave Foss, Sr. Regulatory Engineer
- Josh Meisel, PRA Specialist
- Chad Dye, System Engineer
- Ron DiSabatino, Mgr. Balance-of-Plant Engineering
- Lacy Dean, Communications Manager
- Wendy Croft, Licensing Engineer
- Tom Loomis, Licensing Engineer
- Chris Mudrick, Sr. VP – Mid-Atlantic Exelon Generation

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Sincerely,

**/RA/**

Ho Nieh, Director  
Division of Reactor Projects

Docket Nos: 50-277, 50-278

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Enclosure 1: Key NRC staff participants in the NOED evaluation

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ADAMS Accession No.: **ML14240A499**

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OFFICE	NRR	RI/DRS	RI/ORA	RI/DRP	
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DATE	08/28/14	08/ 27 /14	08/28/14	08/28/14	

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\*changes incorporated from 8/27/14, 4pm email

\*\*changes incorporated from R. Schaaf 8/28/14,10:14am email