

Peach Bottom 2 4Q/2013 Plant Inspection Findings

Initiating Events

Mitigating Systems

Barrier Integrity

Significance: G Mar 31, 2013

Identified By: NRC

Item Type: FIN Finding

Inadequate Operability Determination in Response to Power Load Unbalance Device Failure

The inspectors identified a Green finding for PBAPS's failure to follow the operability determination (OD) process described in Procedure OP-AA-108-115, "Operability Determinations." Specifically, on February 24, 2013, between 6:15 a.m. and 10:30 a.m., an immediate determination of operability was not made in a timely manner, and was not initially documented in accordance with the corrective action process (CAP), following discovery that Unit 2 was operating outside of the analyzed limits specified in the core operating limits report (COLR) with the power load unbalance (PLU) circuit out of service (OOS). Consequently, operators entered the Unit 2 minimum critical power ratio (MCPR) technical specification limiting condition for operation (TS LCO) 3.2.2, Condition A, after exceeding the two-hour required action completion time. The inspectors determined that the immediate determination of operability was not performed in a matter commensurate with the safety significance of the two-hour LCO required action completion time. The inspectors determined that this was not a violation of TSs because subsequent analysis by a third party vendor determined that MCPR thermal limits were satisfied between 85 percent and 100 percent reactor power with the PLU circuit OOS on Unit 2.

This finding is more than minor because it is associated with the design control attribute of the barrier integrity cornerstone and adversely affected the cornerstone objective of providing reasonable assurance that the physical design barriers (fuel cladding) protect the public from radionuclide releases caused by events. Using IMC 0609, Attachment 4, "Phase 1 – Initial Screening and Characterization of Findings," and IMC 0609, Appendix A, "The SDP for Findings At-Power," the inspectors determined that this issue screened to Green, because it was associated only with the fuel cladding barrier. The inspectors determined that this finding had a cross-cutting aspect in the area of Human Performance, decision-making, because PBAPS did not use conservative assumptions in decision making and did not adopt a requirement to demonstrate that the proposed action was safe in order to proceed rather than a requirement to demonstrate that it is unsafe in order to disprove the action [H.1(b)]. (Section 1R13)

Inspection Report# : [2013002](#) (*pdf*)

Emergency Preparedness

Significance:  Sep 30, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate EP Procedure Change Management Controls to Ensure Adequate EAL Classification and Assessment Capability for Effluent Parameters

The inspectors identified a Green non-cited violation (NCV) of Title 10 of the Code of Federal Regulation (CFR) 50.54(q)(2) associated with 50.47(b)(4) because PBAPS failed to control emergency planning (EP) procedure changes in a manner that would ensure timely emergency action level (EAL) classification for effluent parameters. On June 27, 2013, PBAPS issued Revision 27 to EP-AA-1007, "Exelon Nuclear Radiological Emergency Plan Annex for PBAPS." One of the plan changes involved removal of the 'A' ventilation and main stack radiation monitors from radiological effluent EAL matrix Table 3-1, and thereby rendered the 'B' ventilation and main stack radiation monitors as the only means of EAL classification for effluent releases. On July 24, 2013, the inspectors questioned shift operations on whether the ability to make timely and accurate EAL classifications was impacted with the 'B' reactor building (RB) ventilation stack radiation monitor inoperable. Shift operations did not have an immediate response, but later in the same shift provided a response to the inspectors that compensatory measures were required for degraded EP equipment, and the 'A' ventilation stack radiation monitor was established as a compensatory measure for the inoperable 'B' monitor in response to questions by the inspectors. Following the inspector's questions, PBAPS initiated issue report (IR) 1539674 to capture programmatic deficiencies that were revealed as a result of the inspector's questions. PBAPS corrective actions included a revision to the PBAPS Emergency Plan, a revision to the EP compensatory measure procedure, issuance of Operations Information Update (OIU) 13-10 to the shift managers (SMs) to clarify the purpose of the compensatory measure procedure, and an assignment to incorporate the latest revision of the compensatory measure procedure into licensed operator training program curriculum review committee (CRC).

This finding was more than minor because it was associated with the procedure quality attribute of the Emergency Preparedness cornerstone, and adversely affected the associated cornerstone objective to ensure that the licensee is capable of implementing adequate measures to protect the public health and safety in the event of a radiological emergency. Using IMC 0609, Attachment 4, "Phase 1 – Initial Screening and Characterization of Findings," and IMC 0609, Appendix B, "Emergency Preparedness SDP," the inspectors determined that this finding was of very low safety significance (Green) using Table 5.4.1. Specifically, this finding rendered an EAL ineffective such that an unusual event (UE) declaration could be delayed. The inspectors determined that this finding had a cross-cutting aspect in the area of Human Performance, Work Control, because PBAPS did not appropriately coordinate work activities by incorporating actions to address the impact of work on different job activities, and the need for work groups to communicate, coordinate, and cooperate with each other during activities in which interdepartmental coordination is necessary to assure plant and human performance [H.3(b)]. Specifically, the impact of a PBAPS Emergency Plan Annex revision was not communicated properly or coordinated between the EP department and operations department, to assure that shift operations could implement compensatory measures as necessary for degraded EP equipment [H.3.(b)]. (Section 1R22)

Inspection Report# : [2013004](#) (*pdf*)

Occupational Radiation Safety

Significance:  Sep 30, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

Failure of Conspicuously Post and Lost/Guard a HRA on the Unit 3 Turbine Deck Scaffold.

The inspectors identified a NCV of very low safety significance of Technical Specification (TS) 5.7.2 because Exelon did not control the access point to a Locked High Radiation Area (LHRA). The performance deficiency (PD) was related to not controlling access to a Unit 3 LHRA. The LHRA became accessible when temporary scaffold was built on the south shield wall between the electrical generator and the main turbine. On August 19, the inspectors identified a permanent ladder from the top of the north side of the shield wall to the turbine deck floor that could allow access to the LHRA. Radiation Protection (RP) procedure RP-AA-460, "Controls for High and LHRA," Revision 24, provides guidance for the control of high radiation areas (HRAs). By the procedure definition of accessible area, the area was accessible after the scaffold was built, and no tools or other exceptional measures were needed to gain access. The violation was entered into Exelon's corrective action program (CAP) as action request (AR) 01548397.

The PD was more than minor because it is associated with the cornerstone attribute of Program and Process (RP controls), and negatively affected the Occupational Radiation Safety cornerstone objective to ensure the adequate protection of the worker health and safety from exposure to radiation from radioactive material during routine civilian nuclear power operation. There was also an example of this PD in example 6.g. of IMC 0612, Appendix E, "Examples of Minor Issues." This example concludes that the issue is more than minor because actual dose rates in excess of the posting requirements existed in the area. LHRAs are required to be posted and controlled properly to avoid unnecessary worker exposure. The finding was evaluated using the Occupational Radiation Safety SDP and was determined to be of very low safety significance (Green) because it was not related to As Low As is Reasonably Achievable (ALARA) planning, it did not involve an overexposure, did not constitute a substantial potential for overexposure, and the ability to access dose was not compromised. The finding included a cross-cutting aspect in the area of Work Controls, Human Performance component, because Exelon did not appropriately plan the work activities and identify the potential job site conditions (radiological hazards) associated with building scaffold next to a LHRA wall [H.3.(a)]. (Section 4OA5)

Inspection Report# : [2013004](#) (*pdf*)

Public Radiation Safety

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Significance: N/A May 24, 2013

Identified By: NRC

Item Type: FIN Finding

2013 Problem Identification and Resolution (PI&R) Inspection Summary

The inspectors concluded that Exelon was generally effective in identifying, evaluating, and resolving problems. Exelon personnel identified problems, entered them into the corrective action program at a low threshold, and in general, prioritized issues commensurate with their safety significance. Exelon appropriately screened issues for operability and reportability, and performed causal analyses that appropriately considered extent of condition, generic issues, and previous occurrences. The inspectors also determined that Exelon implemented corrective actions to address the problems identified in the corrective action program in a timely manner.

The inspectors concluded that Exelon adequately identified, reviewed, and applied relevant industry operating experience to Peach Bottom operations. In addition, based on those items selected for review, the inspectors determined that Exelon's self-assessments and audits were thorough.

Based on the interviews the inspectors conducted over the course of the inspection, observations of plant activities, and reviews of individual corrective action program and employee concerns program issues, the inspectors did not identify any indications that site personnel were unwilling to raise safety issues, nor did they identify any conditions that could have had a negative impact on the site's safety conscious work environment.

No findings were identified.

Inspection Report# : [2013008](#) (*pdf*)

Last modified : February 24, 2014