Susquehanna 2
1Q/2014 Plant Inspection Findings

Initiating Events

Significance: G Mar 31, 2014
Identified By: NRC
Item Type: FIN Finding
Reactor Scram due to Loss of Reactor Feed Pumps
A finding of very low safety significance (Green) for failure to implement work instructions for an engineering change to the Integrated Control System (ICS) was self revealed when Unit 2 lost control of reactor vessel level on September 14, 2013, requiring insertion of a manual scram. The cause of the loss of level control was determined to be a coding error in the ICS that resulted in the improper transition of feedwater control modes during a reactor shutdown. PPL's immediate corrective actions included entering the issue into their corrective action program (CAP) as condition report 1746169, correcting the coding error, and performing and extent of condition review of the ICS code to ensure no additional errors were present.
The performance deficiency was more than minor because it was associated with the Equipment Performance attribute of the Initiating Events cornerstone and affected its objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, the failure to implement work instructions associated with the engineering change resulted in an ICS logic code error which caused a loss of reactor feed requiring a manual reactor scram. The inspectors evaluated the finding in accordance with IMC 0609, Appendix A, "The SDP for Findings At-Power," Exhibit 1 for the Initiating Events cornerstone. The inspectors determined the finding was of very low safety significance (Green) because it did not cause both a reactor trip and the loss of mitigation equipment. This finding was determined to have a cross-cutting aspect in the area of Human Performance, Work Management because PPL did not implement a process of planning, controlling, and executing work activities such that nuclear safety is the overriding priority, including the identification and management of risk commensurate to the work. Specifically, the work instructions associated with the engineering change lacked the specificity commensurate with the complexity of the work such that it could be accomplished without error. [H.5]
Inspection Report# : 2014002 *(pdf)*

Significance: G Oct 04, 2013
Identified By: NRC
Item Type: FIN Finding
Reactor Scram due to Loss of Integrated Control System
A finding of very low safety significance (Green) for failure to evaluate and incorporate the operating experience PPL received regarding the integrated control system (ICS) was self-revealed when Unit 2 lost control of reactor vessel level on November 9, 2012, requiring insertion of a manual scram. The cause of the loss of level control was the lockup of one of the two ICS network core switches due to a data storm, a condition which had been described in various operating experience communications from April 2007 through September 2012. PPL's immediate corrective actions included entering the issue into their corrective action program as condition report 1640540, making changes to Unit 2's core switches to prevent a similar condition, and developing a procedure to allow operators to diagnose and respond to a similar condition in Unit 1.
The performance deficiency is more than minor because it was associated with the equipment performance attribute of the Initiating Events cornerstone and affected its objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, in this case, had the

operating experience been reviewed appropriately, compensatory actions could have been taken that would have reasonably prevented the scram with loss of main feedwater. The inspectors evaluated the finding in accordance with IMC 0609, "Significance Determination Process," Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 1, for the Initiating Events cornerstone. The Senior Reactor Analyst (SRA) used the SSES Standardized Plant Analysis Risk (SPAR) model, Revision 8.16, for Unit 2 and SAPHIRE 8 to conduct the detailed risk evaluation and determined the increase in core damage frequency (?CDF) for internal initiating events was 5E-7yr (Green). Specifically, to account for the increased chance for a loss of main feedwater, the initiating event frequency was increased by one order of magnitude. Additionally, model modifications were made to account for the plant specific depressurization strategy. The dominant sequence was a loss of main feedwater with a failure of all injection coupled with a failure to vent containment and control residual heat removal (RHR). The increase in risk from both external events and for a large early release was found to be negligible. This finding was determined to have a cross-cutting aspect in the area of Corrective Action Program, Operating Experience (OE), because PPL staff did not systematically collect, evaluate, and communicate to affected internal stakeholders in a timely manner relevant internal and external OE. Specifically, PPL did not enter the vendor advisories into the station's OE program and therefore, management was unaware of the core switch issues, no formal evaluation was conducted, and no corrective actions were specified to mitigate the vulnerability. [P.2(a)]
Inspection Report# : 2013011 *(pdf)*

Mitigating Systems

Significance: G Sep 30, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Procedural Guidance for Maintaining RPV Level During Anticipated Transient Without Scram
The inspectors identified a Green NCV of TS 5.4.1, "Procedures," because PPL's emergency operating procedure step for terminating injection sources during a rapid depressurization required for an anticipated transient without scram (ATWS) was inadequate to ensure that cold unborated water was not injected into the core. Specifically, PPL's emergency operating procedure (EOP) does not terminate injection from the high pressure coolant injection (HPCI) system during the transient and procedural guidance is insufficient to ensure that operators will maintain level in the prescribed ATWS band while injecting with HPCI. In addition to entering the issue into the CAP as CRs 1708885 and 1745775, PPL's immediate corrective actions included issuance of Operations Directive
13-02 which states that HPCI must be controlled, up to and including overriding injection, to ensure that reactor pressure vessel water level is maintained in the prescribed ATWS band during the duration of the rapid depressurization. Planned corrective actions include requiring termination of HPCI injection prior to initiation of a rapid depressurization (Action Request 1719605).
The performance deficiency is more than minor because it was associated with the procedure quality attribute of the Mitigating Systems cornerstone and affected the objective to ensure the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the inadequate procedure for terminating injection prior to rapidly depressurizing the reactor during an ATWS could have resulted in operators failing to control level in the prescribed EOP band, potentially resulting in cold unborated water being injected into the core. In accordance with IMC 0609.04, "Initial Characterization of Findings," and Exhibit 2 of IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power," the inspectors determined that this finding is of very low safety significance (Green) because the performance deficiency was not a design or qualification deficiency, did not involve an actual loss of safety function, did not represent actual loss of a safety function of a single train for greater than its Technical Specification (TS) allowed outage time, and did not screen as potentially risk-significant due to a seismic, flooding, or severe weather initiating event. The finding is related to the cross-cutting area of problem identification and resolution (PI&R), in that PPL did not identify a performance issue

completely, accurately, and in a timely manner commensurate with the safety significance. Specifically, PPL failed to identify that guidance in EOP basis document was insufficient to ensure that operators maintained level in the EOP band. [P.1(a)]

Inspection Report# : 2013004 *(pdf)*

Significance: G Aug 29, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Verify Operation of Safety-Related 125Vdc Molded Case Circuit Breakers
The team identified a finding of very low safety significance (Green) involving a non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," in that PPL failed to verify or check the adequacy of the design of molded case circuit breakers (MCCB). The team reviewed PPL response to NRC Information Notice 93-64, "Periodic Testing and Preventive Maintenance of Molded Case Circuit Breakers" and determined that PPL had not included certain 125Vdc and 120Vac MCCBs in their evaluation. Subsequently the team determined that PPL had not performed any maintenance or testing on these breakers since original construction. The team found that several 125Vdc breakers were credited as one of the two isolation devises required to ensure primary containment electrical penetrations are not damaged during overload or fault conditions on the circuit. The team concluded that PPL did not verify that these safetyrelated 125Vdc MCCBs would perform this safety function. PPL entered the issue into their corrective action program and performed an operability evaluation on the penetrations determining them to be operable but non-conforming because the second isolation device would perform the intended safety function. The team reviewed the evaluation and determined it to be reasonable.
The finding was determined to be more than minor because it was associated with the Barrier Integrity Containment Design Control and Configuration Control attribute and affected the cornerstone's objective. Using the NRC IMC 0609, "Significance Determination Process," Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," Exhibit 3, Section B, the finding was determined to be of very low safety significance (Green). There was no crosscutting aspect assigned to the finding because it was not indicative of current performance. (Section 1R21.2.2.2)
Inspection Report# : 2013010 *(pdf)*

Significance: G Jun 30, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Operability Assessment of Synchroscope Switch
Inspectors identified a Green NCV of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," when PPL performed an inadequate operability determination for a synchroscope switch failure that rendered offsite power and the four emergency diesel generators (EDGs) inoperable. This resulted in PPL being in violation of Unit 1 TSs 3.8.1, 3.8.2, and 3.0.3, and Unit 2 TSs 3.6.4.1 and 3.8.2. PPL entered the issue in their CAP as CR 1703293, re-evaluated past operability and submitted a licensee event report (LER) for the associated condition prohibited by plant Technical Specifications (TS) on July 8, 2013 (ADAMS Accession No. ML13190A104).
The performance deficiency was determined to be more than minor since it was associated with the equipment performance attribute of the Mitigating Systems cornerstone and adversely affected its objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was evaluated using the SDP of IMC 0609.04. The finding was evaluated under both the

Mitigating Systems Exhibit of IMC 0609 Appendix A when Unit 1 was at power and Appendix G for the times when one or both units were in a shutdown condition. Under IMC 0609, Appendix A, the finding screened to Green since it was not a design or qualification deficiency and was not a potential or actual loss of system or safety function. Under IMC 0609, Appendix G, Attachment 1, Checklists 5 through 7, the inspectors screened the issue to Green since it affected the requirement for operable DGs under TS 3.8.1 and TS 3.8.2. The inspectors determined that a Phase 2 analysis was not warranted since it did not match those criteria listed for further analysis in these checklists. Specifically, since all automatic transfer functions of off-site power and the EDGs remained functional, inspectors determined that none of the functions evaluated under the SDPs were affected. The finding had a cross-cutting aspect in Problem Identification and Resolution (PI&R), corrective action program (CAP), because PPL staff did not thoroughly evaluate problems such that the resolutions address the causes and extent of conditions, to include properly classifying, prioritizing and evaluating for operability. Specifically, PPL staff did not appropriately evaluate the effect that the synchroscope switch failure had on offsite power and emergency diesel generator operability.

Inspection Report# : 2013003 *(pdf)*

Significance: G Jun 30, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Unacceptable Preconditioning of RPS and EOC-RPT Time Response Test
Inspectors identified a Green NCV of 10 CFR 50, Appendix B, Criterion XI, “Test Control,” because PPL staff performed unacceptable preconditioning by performing corrective maintenance prior to recording the as-found time response of the reactor protection system (RPS) and end-of-cycle recirculation pump trip (EOC-RPT) for the turbine control valve (TCV) fast closure function. Specifically, corrective maintenance was performed with the potential to improve the time response of the system without verifying that the as-found condition was within the acceptance criteria assumed in the accident analysis. PPL entered the issue into their CAP as CR 1712564 and verified as-left data was verified to be within acceptance criteria which provided reasonable assurance that the SSC would perform satisfactorily during the subsequent operational period.
Inspectors determined the performance deficiency is more than minor because it was associated with the equipment performance attribute of the Mitigating Systems cornerstone and affected the objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the failure to collect as-found data could result in the inability to verify the operability of structures, systems, and components (SSC). Additionally, in this case, the test had exhibited low margin and unreliable performance during its previous surveillance test. The inspectors determined, through a review of IMC 0609, Appendix A, Exhibit 2, that the finding was Green because the finding was not related to a design or qualification deficiency, did not represent a loss of a mitigating system safety function, and did not screen as potentially risk significant due to external initiating events. The finding is related to the cross-cutting area of PI&R, CAP, in that PPL did not take appropriate corrective actions to address safety issues and adverse trends in a timely manner, commensurate with their safety significance and complexity. Specifically, though degraded performance was identified during previous testing, PPL staff did not take timely and effective corrective actions to ensure the required maintenance did not unacceptably precondition the following 24-month surveillance test.

Inspection Report# : 2013003 *(pdf)*

Significance: G May 22, 2013
Identified By: NRC
Item Type: VIO Violation
Failure to Implement an Effective Licensed Operator Medical Program
(Initial Entry)
The inspectors identified: 1) an apparent violation (AV) of Title 10 of the Code of Federal Regulations (10 CFR)

55.21, “Medical Examination;” Part 55.25 “Incapacitation because of disability or illness;” Part 55.33, “Disposition of an Initial Application,” for the failure of the licensee to restrict operators from performing licensed duties when they had disqualifying medical conditions; and 10 CFR 50.74, “Notification of change in operator or senior operator status,” for PPL’s failure to notify the NRC within 30 days of changes in licensed operators’ medical conditions; and, 2) a related finding of very low safety significance (Green) for PPL’s failure to implement effective corrective actions to prevent this recurring AV. Specifically, the inspectors identified that four licensed operators developed disqualifying medical conditions that were not properly evaluated by PPL staff in accordance with ANSI/ANS-3.4-1983, “American National Standard Medical Certification and Monitoring of Personnel Requiring Operator Licenses for Nuclear Power Plants.” Additionally, PPL did not restrict the operators from performing licensed duties or obtain NRC approval (by requesting conditioned licenses) to continue to perform licensed duties, which caused the operators to not meet the requirements of 10 CFR 55.33(a)(1). Additionally, the inspectors identified eight instances in which PPL failed to notify the NRC within 30 days of learning of changes in licensed operator medical conditions that involved permanent disabilities/illnesses as required by 10 CFR 50.74. This resulted in the operators performing licensed operator duties without properly restricted licenses. PPL has taken actions to correct these issues by formally notifying the NRC and requesting conditioned licenses, as necessary, training the licensed operators and medical staff in the applicable requirements, and revising related procedures to provide additional guidance and require annual training. PPL entered this issue into their corrective action program. (CR-1709539)

The inspectors reviewed this issue in accordance with NRC IMC 0612, Appendix B, “Issue Screening” for traditional enforcement and as part of the Reactor Oversight process (ROP). Under the ROP, the inspectors also identified a related finding of very low safety significance (Green) involving PPL’s failure to prevent this recurring AV.

(Update)
[IR 05000387;388/2013012 combined AVs 2013008-01 and 2013008-02 into a single problem statement and finalized the significance of the violations.]

The first violation [05000387;388/2013008-01] involved multiple occurrences between August 2007 and June 2012, in which PPL: (a) did not restrict licensed reactor operators from performing licensed duties when they had disqualifying medical conditions; and (b) did not properly notify the NRC after learning of changes in licensed reactor operator medical conditions that involved permanent disabilities/illnesses. Specifically, four licensed reactor operators at SSES developed disqualifying medical conditions that were not properly evaluated by PPL staff. PPL did not restrict the operators from performing licensed duties or obtain NRC approval (by requesting conditioned licenses) for the operators to continue to perform licensed duties. Additionally, the NRC identified eight instances in which PPL did not notify the NRC within 30 days of learning of changes in licensed operator medical conditions that involved permanent disabilities/illnesses. This resulted in the operators performing licensed operator duties without their licenses being properly amended to add requirements to accommodate the medical conditions (such as requiring an operator to wear prescribed corrective lenses if (s)he did not meet the minimum vision requirements).

The second violation [05000387;388/2013008-02] involved PPL's submittal of information to the NRC that was not complete and accurate in all material respects. Specifically, between 2010 and 2011, PPL submitted three licensed operator renewal applications and one initial license application, each of which certified the medical fitness of the applicants and that no restricting license conditions were necessary. However, the applicants, in fact, each had medical conditions that did not meet the minimum standards of 10 CFR 55.33(a)(1) and, therefore, required specific license conditions in order to perform licensed activities. Based, in part, on this inaccurate information, the NRC issued the licenses without the required restricting license conditions.

The NRC has concluded that both violations occurred as a result of PPL's failure to: (1) oversee the licensed operator medical examination process; (2) train staff on the applicable NRC requirements; and (3) implement an effective licensed operator medical program that maintained awareness of NRC and industry guidance. Specifically, when PPL's Medical Review Officer (MRO) assumed the position in 2007, he was not provided turnover or training from PPL regarding licensed operator medical requirements. The PPL MRO relied upon exams that were performed by a

physician and his staff at a local hospital. Similarly, the physician that performed the exams at the local hospital had not been trained on, nor had knowledge of, the applicable NRC requirements. Accordingly, these violations have been categorized collectively as a SL III problem to emphasize the importance of providing suitable training, oversight, and focus on licensed operator medical requirements.

Finally, the stated performance deficiency (PPL's failure to implement adequate corrective actions to prevent this recurrence) was determined to not be indicative of current performance. As a result, the NRC has concluded that a CCA should not be assigned to the Green finding.
Inspection Report# : 2013008 *(pdf)*
Inspection Report# : 2013012 *(pdf)*
Inspection Report# : 2014002 *(pdf)*

Barrier Integrity

Significance: G Dec 31, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Missed Technical Specification Surveillance for Secondary Containment Drawdown Testing
The inspectors identified a Green NCV of 10 CFR 50, Appendix B, Criterion XI, “Test Control,” because PPL did not ensure all testing required to demonstrate that structures, systems, and components will perform satisfactorily in service was identified and performed in accordance with written test procedures which incorporate the requirements and acceptance limits contained in applicable design documents. Specifically, PPL’s procedure used to implement the requirements of TS Surveillance Requirements (SR) 3.6.4.1.4 and 3.6.4.1.5 did not ensure that secondary containment integrity was tested in all required configurations. PPL’s immediate corrective actions included entering the issue into their CAP as CR-2013-03891 and applied a status control tag to the railroad access bay door-101 as an administrative control until corrective actions can be completed and the configuration tested satisfactorily.
The finding is more than minor because it is associated with the procedure quality attribute of the Barrier Integrity cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Specifically, the inadequate surveillance procedure resulted in missed surveillances for SRs 3.6.4.1.4 and 3.6.4.1.5. Additionally, it was similar to example 3.d in IMC 0612 Appendix E, ”Examples of Minor Issues,” in that the failure to implement the TS SR as required is not minor if the surveillance had not been conducted. In this case, the surveillance requirement had not been completed for all configurations of secondary containment. In accordance with IMC 0609.04, “Initial Characterization of Findings,” and IMC 0609, Appendix A, “The SDP for Findings At-Power,” the inspectors determined that this finding is of very low safety significance (Green) because the performance deficiency only represented a degradation of the radiological barrier function provided for the Standby Gas Treatment system. This finding was determined to have a cross-cutting aspect in the area of Human Performance Resources area because the licensee failed to ensure that personnel, equipment, procedures, and other resources are available and adequate to assure nuclear safety. Specifically, those necessary for: complete, accurate and up-to-date design documentation, procedures, and work packages, and correct labeling of components [H.2(c)]. (Section 1R22)

Inspection Report# : 2013005 *(pdf)*

Significance: G Sep 30, 2013
Identified By: NRC
Item Type: NCV NonCited Violation

Procedure Failed to Verify Design Requirements for RHR Suction Piping
The inspectors identified a green, self-revealing, non-cited NCV of 10 CFR 50 Appendix B, Criterion 5, "Instructions, Procedures, and Drawings," which states, in part, that procedures shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished. The inspectors determined that PPL's residual heat removal (RHR) shutdown cooling procedure failed to ensure that water properties (pressure and temperature) in the suction piping was controlled to ensure water hammer event would not happen when establishing a low pressure injection standby lineup. As a result, a water hammer occurred in the piping which caused the suction relief valve to fail open. PPL's immediate corrective actions included entering the issue into their CAP as CRs 1746612 and 1754913, replacing the relief valve, walking down the piping and associated supports and communicating to operations personnel to declare RHR inoperable when aligned to shutdown cooling (SDC) while reactor coolant temperature is above 200 degrees Fahrenheit.
This finding is more than minor because it is associated with the procedure quality attribute of the Barrier Integrity cornerstone and affected the cornerstone objective to provide reasonable assurance that physical design barriers (containment) protect the public from radionuclide releases caused by accidents or events. Specifically, the water hammer event resulted in a stuck open relief valve on the RHR suction piping whose leak rate exceeded the assumed leakage from engineered safeguard systems in PPL's post-event control room dose calculations. Because conditions for RHR system operation had been established, the team assessed this finding in accordance with the NRC Inspection Manual Chapter (IMC) 0609, "Significance Determination Process," Appendix G, "Shutdown Operations Significance Determination Process," using Attachment 1, Checklist 5. The finding did not require a quantitative assessment because none of the checksheet guidelines requiring a phase 2 analysis were affected. Therefore, the finding was determined to be of very low safety significance (Green). The finding had a cross cutting aspect in the problem identification and resolution area associated with operating experience because PPL did not implement and institutionalize operating experience through changes to station processes, procedures, equipment, and training programs. Specifically, PPL's review of IN 2010-11 did not ensure the transition of RHR from SDC to LPCI standby was completed successfully by incorporating adequate steps into the operating procedure. [P.2(b)].

Inspection Report# : 2013004 *(pdf)*

Significance:  Jun 30, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Procedure to Control and Monitor Reactor Coolant System Heatup Rate
Inspectors identified a Green NCV of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," because PPL did not adequately incorporate the acceptance criteria for heatup rate specified in the plant TSs, as amplified in its basis, into the surveillance test implementing procedure for monitoring adherence to pressure and temperature requirements during plant heatup and cooldown. Based on this procedure inadequacy, operators exceeded the TS limit during a plant startup on May 28, 2013. PPL entered the issue into their CAP as CR 1709058 and revised plant procedures to appropriately incorporate the acceptance criteria.
This performance deficiency is more than minor because it was associated with the human performance and procedure quality attribute of the Barrier Integrity cornerstone and affected the objective to provide reasonable assurance that physical design barriers (fuel cladding, reactor coolant system (RCS), and containment) protect the public from radionuclide releases caused by accidents or events. Using IMC 0609, "Significance Determination Process," Appendix A, Exhibit 3, "Barrier Integrity Screening Questions," the inspectors determined that this issue required a detailed risk evaluation. In consultation with a Region I Senior Reactor Analyst, the inspectors completed a qualitative risk assessment and determined this issue is of very low safety significance (Green). Specifically, there was no impact on the integrity of the reactor vessel due to the short duration temperature gradient imposed by exceeding the TS heatup rate. Consistent with PPL's evaluation, the observed heatup rate minimally exceeded the specified limit during plant startup and remained within the acceptable bounds of the current plant pressure and temperature analysis. The finding is related to the cross-cutting area of PI&R, Corrective Actions, in that PPL did not take appropriate corrective actions to address safety issues and adverse trends in a timely manner, commensurate with their safety significance

and complexity. Specifically, PPL did not take effective corrective actions to correct an inadequate procedure for monitoring adherence to pressure/temperature (P/T) limits after it was identified by inspectors.
Inspection Report# : 2013003 *(pdf)*

Emergency Preparedness

Significance: G Dec 31, 2013
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Instrumentation to Implement EALs for Fission Product Barrier Degradation
The inspectors identified a Green NCV of 10 CFR 50.54, "Conditions of Licenses," paragraph (q), because PPL did not maintain the Emergency Plan to adequately meet the standards of 50.47(b). Specifically, PPL did not have temperature indication installed in some areas of the reactor building that are required to support assessment and determination of entry conditions into the fission product barrier emergency action levels (EALs). PPL entered this issue into their CAP as CR 1727229.
The inspectors determined that the failure to have temperature indication installed in certain areas of the reactor building was a performance deficiency that was within PPL's ability to foresee and correct. The performance deficiency is more than minor because it is associated with the Facilities and Equipment attribute of the Emergency Preparedness cornerstone, and adversely affected the cornerstone objective of ensuring that a licensee is capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. Specifically, the lack of installed temperature instrumentation and the reliance on local temperature indications were insufficient to ensure a timely and accurate EAL classification could be made. Using IMC 0609, Appendix B, section 5.4, the finding is of very low safety significance (Green) because the finding was determined to be an example of an ineffective EAL initiating condition, such that a Site Area Emergency would be declared in a degraded manner. The cause of this finding has a cross-cutting aspect in the area of Human Performance Resources because PPL did not ensure that facilities and equipment were adequate and available, including emergency facilities and equipment. Specifically, PPL did not provide temperature instrumentation to operators to ensure a timely and accurate declaration of an emergency for an un-isolable reactor coolant leak in the reactor building. [H.2.d]. (Section 1EP6)
Inspection Report# : 2013005 *(pdf)*

Occupational Radiation Safety

Significance: N/A Sep 30, 2013
Identified By: NRC
Item Type: VIO Violation
Contract Employee Willfully Failed to Follow SSES Procedure Pertaining to Personnel Contamination Monitoring
Susquehanna Steam Electric Station Technical Specification 5.4.1.a requires that written procedures be established, implemented, and maintained covering the activities recommended in Regulatory Guide 1.33, Revision 2, Appendix A, dated February 1978. Regulatory Guide 1.33, Revision 2, Appendix A, dated February 1978, Item 7.e recommends the establishment of written Radiation Protection procedures for personnel monitoring activities. PPL Susquehanna, LLC implementing procedure, NDAP-QA-0627, "Radiation Protection Program" requires personnel who receive a second alarm on any monitor to stay in the area and contact Health Physics.

Contrary to the above, when attempting to exit the Susquehanna Steam Electric Station Protected Area (PA) on October 11, 2011, a contract employee who received a second alarm on a radiation portal monitor willfully, with careless disregard, did not stay in the area and contact Health Physics. Instead, the individual (through a co-worker) contacted Security, used a different portal monitor, and then exited the PA after the second monitor did not alarm. This is a Severity Level IV violation.
Inspection Report# : 2013013 *(pdf)*

Significance: N/A Sep 30, 2013
Identified By: NRC
Item Type: VIO Violation
Contract Employee Deliberately Moved a High Radiation Area Posting
Specifically, on March 30, 2012, a contract carpenter was assigned, along with some other carpenters, to erect a scaffold in the isolation phase bus area of the SSES Turbine Building. An area near the job location was roped off and a posting on a stanchion indicated that a HRA existed in the overhead. After an RP technician who had accompanied the workers to conduct a radiation survey left, the contract carpenter moved the stanchion and roping out of the way to make room for the scaffold. When there was still not enough room to build the scaffold, the materials were dismantled and eventually removed from the area.

SSES TS 5.4.1, in part, requires that written procedures shall be implemented covering the procedures recommended in RG 1.33, Rev 2, App A, February 1978. RG 1.33, Rev 2, App A, recommends the establishment of radiation protection procedures for access control to radiation areas and for contamination control. PPL implementing procedure NDAP-QA-0626, “Radiologically Controlled Area Access and Radiation Work Permit System” states that individuals are not allowed to move radiological postings, barricades, and barriers and to contact HP if there is a need to have any of these items moved or modified. Contrary to the above, on March 30, 2012, a contract carpenter did not contact the SSES HP department and, instead, moved an HRA posting on his own.
Inspection Report# : 2013013 *(pdf)*

Significance: N/A Sep 30, 2013
Identified By: NRC
Item Type: VIO Violation
Violation of Procedureal Requirements for RCA Egress
On April 6, 2011, a contract insulator, after receiving an initial contamination alarm from his hardhat when using a personal contamination monitor (PCM) prior to exiting the radiologically controlled area (RCA), appropriately made a second monitoring attempt, but deliberately leaned his head out of the PCM to avoid receiving a second alarm. The insulator then exited the RCA although he hadn’t been appropriately monitored for radioactive contamination. Additionally, on April 7, 2011, a contract electrician willfully used an inoperable portal monitor (PM) while exiting the RCA. Specifically, after receiving no alarms from a PCM, the electrician appropriately entered a PM, but noticed that the volume seemed lower than normal and that no lights were on when he exited. The electrician testified to OI that he believed the monitor had worked properly and, therefore exited the RCA. However, as identified by PPL, the PM was, in fact, inoperable, although it was not labeled as being out of service. The NRC determined that the electrician should have assessed why the volume was low and the lights were out before exiting the RCA, and that he should not have assumed the monitor was working.

SSES TS 5.4.1, in part, requires that written procedures shall be implemented covering the procedures recommended in RG 1.33, Rev 2, App A, February 1978. RG 1.33, Rev 2, App A, recommends the establishment of radiation protection procedures for access control to radiation areas and for contamination control. Contrary to the above, on April 6 and April 7, 2011, contract employees left the SSES RCA without successfully passing through both a PCM and a PM.

Inspection Report# : 2013013 *(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

Last modified : May 30, 2014