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U. S. Nuclear Regulatory Commission
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**SUSQUEHANNA STEAM ELECTRIC STATION**
**RESPONSE TO APPARENT VIOLATION;**
**EA-09-248** **Docket Nos. 50-387**
**PLA-6588** **and 50-388**

*References: (1) Letter from NRC (D. C. Lew) to PPL (T. S. Rausch), "Susquehanna Steam Electric Station – NRC Integrated Inspection Report 05000387/2009004 and 05000388/2009004," dated November 13, 2009.*
*(2) Letter from PPL (T. S. Rausch) to NRC Region I, "Susquehanna Steam Electric Station Operator Status Information Expired Medical Certification for SRO," dated August 19, 2009.*

The following is provided by PPL Susquehanna, LLC (PPL) in response to the apparent violation at the Susquehanna Steam Electric Station (SSES) identified in the referenced inspection report [Reference (1)].

This inspection report describes two examples of an apparent violation regarding failure to ensure that individual license holders met the prerequisites required for performing the duties of a licensed operator as required by 10 CFR 55.3. PPL fully recognizes the importance of ensuring that all medical requirements are met and acknowledges that there were two cases in which a license holder did not fully meet the prerequisite medical requirements necessary for full compliance with 10 CFR 55.3.

The conditions that existed, which led to the apparent violation, can be attributed to weaknesses in a SSES administrative process. In both cases, the condition was promptly self-identified and corrected with no consequence to safe operation of SSES. Actions have been taken to preclude reoccurrence, and PPL is in full compliance with 10 CFR 55.3.

The enclosure provides PPL's assessment of the details of these two cases. Based on the very low safety significance and timely entry and resolution in the corrective action program, the apparent violation should be characterized as a Level IV non-cited violation (NCV's).

If you have any questions or require additional information, please contact Mr. Michael Crowthers (610) 774-7766.

T. S. Rausch

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**Enclosure**

**PPL Susquehanna, LLC Response to an Apparent Violation in Inspection Report 05000387/2009004 AND 05000388/2009004; EA-09-248**

**Apparent Violation**

As noted in the subject Inspection Report, PPL self-identified two instances in which the company failed to ensure that a license holder met all of the prerequisites necessary to ensure full compliance with 10 CFR 55.3. Based on the reviews conducted and described below, PPL believes that these are one-time incidents resulting from an inadequate administrative process. The two instances are as follows.

**I. Medical Certification**

On October 13, 2008, a senior reactor operator (SRO) self-identified a medical issue that resulted in his disqualification. The SRO was appropriately removed from watch, and a medical restriction was entered into a corporate database (HRPR), which automatically updated the site's training and qualification database (NIMS/TMX). The SRO subsequently completed and passed a medical follow-up and was reinstated on December 12, 2008.

The Sr. Staff Specialist – Health Services cleared the SRO for the medical issue by deleting the medical restriction from HRPR. However, the deletion did not transfer to NIMS/TMX due to existing HRPR and NIMS/TMX interface programming logic. The Sr. Staff Specialist – Health Services recognized that NIMS/TMX did not update when HRPR was updated. As a result, the Sr. Staff Specialist – Health Services contacted the Nuclear Training Group to manually update the record in NIMS/TMX. When the restriction in NIMS/TMX was manually updated with a December 12, 2008 date, NIMS/TMX automatically changed the medical examination due date to October 31, 2010, to reflect a biennial requirement from the date of the SRO's self-identified medical issue. The original due date of March 31, 2009 was overridden by the new date.

During a medical record review on July 22, 2009, the Sr. Staff Specialist - Health Services discovered that the SRO had not received a biennial licensed medical examination by the original due date of March 31, 2009. The individual was relieved of his duties and the individual's qualifications were immediately revoked. PPL entered this issue into the Corrective Action Program under Condition Report 1166686 on July 22, 2009. A physical was scheduled for July 24, 2009. The operator passed the physical examination and was subsequently reinstated on July 30, 2009.

It was determined that the SRO stood a total of 52 watches between April 1, 2009 and July 22, 2009 without the necessary certifying medical examination as outlined in ANSI/ANS-3.4-1983, "Medical Certification and Monitoring of Personnel Requiring Operator Licenses for Nuclear Power Plants." However, the SRO did not act in a solo capacity during any of these watches, and the minimum Technical Specification manning requirements were always met without credit for the SRO.

**a. Reason for Violation**

The expiration date for medical certification was incorrect in NIMS/TMX due to an inadequate process for making manual updates to an individual's medical information in NIMS/TMX.

**b. Basis for Disputing the Need for Escalated Enforcement**

1) The SRO did not act in a solo capacity during the time period in question (April 1, 2009 through July 22, 2009).
2) The SRO was never the only SRO credited to meet minimum Technical Specification manning requirements.
3) The situation was licensee-identified and immediately entered into the Corrective Action Program.
4) Comprehensive corrective actions were completed in a timely manner (details below).
5) PPL was timely in its reporting of the missed medical exam once it was known; although the incident was not reportable under 10 CFR 50.73 and 50.74, PPL submitted a voluntary report to NRC [Reference (2)].
6) Information provided to NRC for the original licensing decision was complete and accurate.
7) The late biennial medical certification did not impact the original licensing decision as evidenced by the successful medical certification once completed.
8) There were no actual consequences during the "unqualified" time period.
9) There were no adverse operational events during the "unqualified" time period.
10) There was no willful violation of 10 CFR Part 55.

**c. Corrective Steps that Have Been Taken and Results Achieved**

Upon identification of the late medical certification, the SRO was immediately relieved of duty, and a medical restriction was entered into a corporate database (HRPR), which automatically updated the site's training and qualification database (NIMS/TMX).

Subsequently, the SRO successfully completed his medical certification.

Upon identification of the late medical certification, PPL Susquehanna reviewed the entire NIMS/TMX database (not just medical records for operations licensed individuals) for any instance of records being updated from "fail" to "pass" to ensure that effective dates and expiration dates were correct. No other incidents were identified.

An additional review of records with a trend code of "training/qualifications/ unqualified" was performed back through January 1, 2006. Forty-five records were identified and reviewed. There were no instances of qualifications, including licensed operator qualifications, being lost due to inaccurate manual updating of HRPR and NIMS/TMX to reflect the required expiration date. Additional searches were completed to identify TMX qualification issues, but none related to manual updates affecting TMX expiration calculations was identified.

PPL concluded that this situation was an isolated incident associated with an administrative process.

PPL also evaluated the medical certification process to determine whether there was a benefit to transferring ownership of the process from Operations to the Nuclear Training Group. No changes were recommended.

As a compensatory measure, no manual overrides from "fail" to "pass" are permitted in the system without two levels of approval. The Nuclear Training Group has completed administrative action to ensure manual overrides are approved and verified.

**d. Corrective Steps that Will Be Taken to Avoid Further Apparent Violations**

1) A process/procedure for updating HRPR and NIMS/TMX for medical certifications and tracking manual inputs into all records will be developed and implemented. (CRA 1178282)
2) An HRPR/TMX interface logic change will be developed for all record re-instatements that will provide for an update in NIMS/TMX to the original expiration date. (CRA 1178296)
3) A Performance Indicator (PI) will be established to track license medical certifications expiration by operator and due dates via use of a PI similar to operator training. (CRA 1178298)
4) An effectiveness review will be conducted of all medical transactions six months after the last corrective action is due to verify that no processing errors have occurred. (CRA 1178304)

**e. Date When Full Compliance Will Be Achieved**

PPL is in full compliance with 10 CFR 55.3.

## II. Near Vision Exam

On August 18, 2009, the Sr. Staff Specialist – Health Services determined that an on-shift SRO did not pass the near vision examination which had been performed during the previous week. Upon discovery, the SRO was disqualified for the licensed position and was immediately relieved of his duties. PPL operations management promptly entered the issue into the Corrective Action Program as Condition Report 1173182. PPL subsequently implemented actions to request a conditional license for the SRO to add a condition to the SRO's license requiring that corrective lenses be worn for near vision.

Upon review, it was determined that the SRO had stood watch on August 14, 2009 and August 18, 2009 without the necessary certifying medical examination as outlined in ANSI/ANS-3.4-1983, "Medical Certification and Monitoring of Personnel Requiring Operator Licenses for Nuclear Power Plants." The SRO also assumed the role of refueling SRO on August 17, 2009 during fuel moves in the spent fuel pool for a dry fuel storage campaign. However, this activity is not a Part 55 licensed activity.

**a. Reason for Apparent Violation**

1) The operator was not informed by the examining doctor verbally or in writing prior to leaving the medical exam that he had failed the near vision portion of the vision test.
2) There was no requirement that the examining physician present the employee with the results of the vision test at the time of the exam.
3) Results were not made available to PPL until several days after the medical exam.

**b. Basis for Disputing the Need for Escalated Enforcement**

1) As soon as the Sr. Staff Specialist – Health Services was aware of the failed test, she notified the Shift Manager who in turn relieved the SRO of duty.
2) The SRO was never the only SRO credited to meet minimum Technical Specification manning requirements.
3) The situation was licensee-identified and immediately entered into the Corrective Action Program.

4) The SRO retested on the same day as being notified of the failure; the SRO passed the near vision retest using reading glasses (the magnification required was 1.5X).
5) PPL was timely in its reporting of the failed vision exam once it was known that corrective lenses (in this case, reading glasses) would be required; NRC Form 396 was processed and submitted to the NRC on September 2, 2009, well within the 30 day requirement of 10 CFR 55.25. The NRC Resident Inspector was also notified by the Shift Manager that the SRO had failed the test.
6) This situation did not impact NRC's original operator licensing decision for the time period prior to this incident. No information previously provided to NRC was inaccurate or incomplete. The NRC Form 396 on-record was complete and accurate as the operator had successfully passed previous biennial near vision exams. The operator had also passed an interim eye exam conducted by his personal eye doctor in January 2009 and subsequently reviewed by the Sr. Staff Specialist – Health Services.
7) The SRO did not act in a solo capacity during the time period in question, 8/14 through 8/18. More specifically, during that time period, the operator worked only on 8/14, 8/17 and 8/18.
   (i) While on duty in the Control Room on 8/14 and 8/18, at no time did the operator stand watch without additional personnel available.
   (ii) On 8/17, the SRO assumed duties related to the dry fuel storage canister campaign. The SRO's involvement in this activity is procedurally required by PPL, not regulatory required. In this role, the SRO was overseeing the movement of spent fuel in the fuel pool and was on the bridge with the Reactor Operator (RO), who performed the actual spent fuel moves. Although the SRO was not wearing reading glasses at the time, the activities performed by the SRO were 100% peer checked by the RO. As required by Operations Procedure, "Reactivity Manipulations Standards and Communication Requirements," 3-part communications are required and used throughout the entire canister campaign.
8) There were no actual consequences during the "unqualified" time period between 8/14 and 8/18.
9) There were no adverse operational events during the "unqualified" time period between on 8/14 and 8/18.
10) There was no willful violation of 10 CFR Part 55.

**c. Corrective Steps that Have Been Taken and Results Achieved**

The SRO retested upon notification of the failure and passed with the same corrective lenses as used in the initial exam.

NRC Form 396, notifying NRC of a change in medical status for the subject SRO, was submitted to the NRC on September 2, 2009, which is within the 30 days required of 10 CFR 55.25.

PPL Health Services and the Berwick Hospital developed and implemented a form that must be completed at the conclusion of the visual and audiometric testing for any employee receiving a Licensed Operator Medical Examination. The form states that the physician is to provide a copy to the operator and requests that any negative response be immediately reported to PPL Sr. Staff Specialist - Health Services via the phone numbers provided on the form.

The Operations Procedure, "Control of Licensed Operator License Status, Restrictions, and Requirements," has been revised to incorporate the new form.

Two Operations Bulletins were issued to communicate the change and remind licensed individuals of their Part 55 responsibilities.

- The first Bulletin informed Operations personnel that the License Operator Physical process did not have the needed rigor to ensure that eye and hearing test results were transmitted in a timely manner and that delays in receiving test results could have an operator scheduled and reporting to work in a required position when test results are not known. The Bulletin described and provided Operations personnel with the new form to be used by the attending physician to provide immediate feedback on test results for the eye and hearing testing.

- The second Bulletin reinforced that the ANSI standards regarding the passing criteria for the eye and hearing tests for Licensed Operators are clearly defined and can be determined at completion of testing. The Bulletin further stated that to ensure each operator meets these criteria during their biennial physical exam, the form (which was attached) will be completed by the staff at Berwick Hospital documenting the outcome of testing and a copy will be given to the employee.

**d. Corrective Steps that Will Be Taken to Avoid Further Apparent Violations**

All corrective actions have been completed.

**e. Date When Full Compliance Will Be Achieved**

PPL is in full compliance with 10 CFR 55.3.

**Evaluation of Information Notice 2004-20**

The Inspection Report states that "the finding was determined to have a cross-cutting aspect in the area of Problem Identification and Resolution, Operating Experience, because PPL did not systematically collect, evaluate, and communicate relevant external operating experience [P.2(a)]." The Inspection Report further states that "PPL failed to evaluate NRC Information Notice 2004-20 for medical examination issue applicability in accordance with their operating experience review program as evidenced by the 2008 SL-IV NCV (NRC IR 50-387 & 50-388 2008302-01), for an initial licensed operator application submitted to the NRC with a disqualifying medical condition, as well as these two events in July and August of 2009."

PPL does not believe that a cross-cutting aspect applies for the following reasons.

Upon receipt from the NRC, IN 2004-20 was entered into the Corrective Action Program as CR 622658. Subsequently CR 625137 was created by the Operating Experience Coordinator to capture review of the same Information Notice, and Form NDAP-QA-0725 was attached as a guideline for completing the evaluation. However, upon subsequent review, it was determined that CR 625137 was a duplicate to 622658 and was therefore closed.

CR 622658 was classified as a Level 3 Eval. In accordance with the SSES corrective action program, an evaluation to determine extent of condition and corrective actions was completed by the Sr. Staff Specialist – Health Services. Most of the examples described in the Information Notice pertained to disqualifying medical conditions that were not correctly reflected as restrictions or reported to NRC as required. In one example, some tests as specified in the ANSI/ANS standard were not completed. This operating experience was adequately reviewed for lessons learned as part of the Level 3 Eval. Specifically the medical files for all active licensed operators were reviewed to ensure that the situations described in the examples did not exist. All NRC 396 medical certification documentation was found to be correct. Medical conditions requiring conditional licenses were found to be properly documented with supporting medical information. Therefore, there were no corrective actions required. Furthermore, none of the examples cited in the Information Notice would have led to actions that five years later would have precluded the issues associated with the late medical certification or the failed near vision exam.

IN 2004-20 states that "the purpose of the IN is to remind facility licensees (1) that licensed operators and the personnel who perform and interpret their medical examinations need to be familiar with the regulatory requirements and guidelines; (2) that any time a licensed operator fails to meet any of the medical standards outlined in the applicable version of ANSI/ANS-3.4, the failure must be reported to the appropriate NRC

regional office on Form-396; and (3) that Form-396 must include a copy of all supporting medical information and, if deemed necessary, the specific recommended wording for the conditional license to be issued to the affected operator."

The 2008 NCV referred to by NRC in the Inspection Report involved inaccurate interpretation of the medical results by the examining physician, similar to those examples identified in IN 2004-20. However, in the two examples cited as an apparent violation, PPL and the personnel performing the medical examinations understood the 10 CFR Part 55 requirements and the ANSI/ANS standards and requirements associated with NRC Form 396. The reason for the apparent violation was associated with an administrative process, not inaccurate interpretation of medical requirements and results. Also, in the first example, there was no need for a change to Form 396 as the SRO passed the medical exam. In the second example, PPL submitted Form 396 within the required 30 days. All requirements associated with NRC Form 396 were met.

Based on the above, PPL does not believe that there is a cross-cutting aspect in the area of Problem Identification and Resolution.