

January 28, 2010

EA-09-248

Mr. Timothy S. Rausch
Senior Vice President and Chief Nuclear Officer
PPL Susquehanna, LLC
769 Salem Boulevard, NUCSB3
Berwick, PA 18603

SUBJECT: SUSQUEHANNA STEAM ELECTRIC STATION - NOTICE OF VIOLATION
NRC Inspection Report Nos. 05000387/2009004 and 05000388/2009004

Dear Mr. Rausch:

This refers to the inspection completed on September 30, 2009, at Susquehanna Steam Electric Station Units 1 and 2 (Susquehanna). The purpose of the inspection was to examine activities completed under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. During the inspection, the NRC reviewed two instances of a failure by PPL Susquehanna, LLC (PPL) to obtain NRC approval for two senior reactor operators (SROs) to continue to conduct NRC-licensed activities after each SRO did not meet a specific medical prerequisite for performing the duties of a licensed operator, as required by 10 CFR 55.3. These failures, which were identified by your staff, were discussed during an exit meeting that Mr. Paul Krohn and the Susquehanna resident inspectors held with your staff on October 9, 2009. The apparent violation was described in detail in the subject NRC inspection report dated November 13, 2009 (Inspection Report Nos. 05000387/2009004, 05000388-2009004; ADAMS Accession Number ML093170375).

With respect to the first instance, during August 2009, a medical examination for an SRO identified a disqualifying condition, namely, that the SRO's vision did not meet the health requirements stated in ANSI/ANS 3.4-1983, Section 5.4.5, "Eyes." Nonetheless, the SRO continued to perform licensed watchstanding duties on three different occasions following the examination, without the NRC first being informed to ensure that the individual's license was conditioned to require corrective lenses. With respect to the second instance, another SRO had not received the required biennial medical examination, which was due by April 1, 2009, until July 22, 2009. During that time, the SRO performed licensed operator duties 52 times.

The NRC recognizes that PPL discovered both of these instances, and upon discovery of the issues, notified the NRC and removed both individuals from watchstanding duties pending follow-up medical evaluations. PPL requested a conditional NRC license for the first SRO, and administered the biennial examination to the second SRO, which he passed. Both issues were also entered into PPL's corrective action program.

On November 9, 2009, Mr. David Lew and Mr. Krohn of my staff spoke with Mr. Jeff Helsel, Plant Manager, and other members of your staff, and provided them the opportunity to address the apparent violation by either attending a predecisional enforcement conference or by providing a written response before we made our final enforcement decision. On November 10,

2009, Mr. Michael Crowthers, Manager, Nuclear Regulatory Affairs, responded that PPL planned to submit a written response. The NRC received the PPL response on December 10, 2009 (ML100150702).

In its response, PPL acknowledged that both SROs did not fully meet the prerequisite medical requirements in each case. PPL also noted that it promptly identified the conditions, developed root causes, and corrected the conditions with no consequence to safe operation of the plant. PPL contended that the safety significance of both instances was very low and represented Severity Level (SL) IV violations that should be dispositioned as non-cited violations. PPL indicated that: 1) neither SRO was ever the only SRO credited to meet minimum Technical Specification staffing requirements; and, 2) there were no actual consequences during the times that the SROs were on-shift without having met the appropriate licensing requirements. PPL also stated that the situations did not impact the NRC's initial licensing decisions in the time period prior to these incidents, in that both NRC Forms (Form 396) on-record were complete and accurate as of the time of the last successfully completed medical examinations, and, in the case of the second example, the SRO subsequently passed the 2009 biennial examination.

The NRC evaluated the information developed during the inspection, as well as the information PPL provided in its response, and has concluded that each instance constituted a violation of NRC requirements, one of which has been classified at SL III and the other of which has been classified at SL IV. The violations are cited in the enclosed Notice of Violation (Notice) and the circumstances surrounding them are described in detail in the subject inspection report.

In determining the significance of the violations, the NRC recognizes that although both SROs did not meet their medical prerequisites, they were never in a solo-status and no operational errors were identified while on shift. In addition, in the second instance, the SRO for whom the medical physical was not completed in a timely manner was later found to meet all medical fitness requirements when the physical was subsequently completed. This violation has been categorized at SL IV because the failure to receive the physical in a timely manner did not invalidate the licensing basis for this individual since the SRO was subsequently determined to be medically fit. However, the first instance, involving the SRO for whom vision problems were identified, did impact the licensing basis for that individual because the SRO was required to have his license conditioned to wear corrective lenses while performing licensed activities. This violation has been categorized in accordance with the NRC Enforcement Policy at SL III.

In accordance with the NRC Enforcement Policy, a base civil penalty in the amount of \$70,000 is considered for a SL III violation. Because your facility has been the subject of escalated enforcement actions within the last 2 years¹, the NRC considered whether credit was warranted for *Identification* and *Corrective Action* in accordance with the civil penalty assessment process in Section VI.C.2 of the Enforcement Policy. The NRC has concluded that credit for *Identification* is warranted because PPL discovered the issue through internal reviews and informed the NRC in a timely manner upon discovery. Additionally, the NRC has concluded that credit for *Corrective Action* is warranted because PPL's actions in response to the issue were prompt and comprehensive. The immediate actions included: (1) disqualifying the SRO with the vision issue from the licensed position and removing him from standing watch until receipt of a revised NRC license which added a condition that corrective lenses be worn; and, (2) immediately revoking the second SRO's qualifications until administering the physical examination to him on July 24, 2009. In addition, specific actions were taken and/or are

¹ A "Greater-than Green" finding with a related Notice of Violation was issued on August 11, 2009 (EA-09-108) for a security-related issue.

planned by PPL to prevent recurrence, including: (1) developing and implementing use of a form, to be completed at the conclusion of the visual and audiometric testing for any employee receiving a Licensed Operator Medical Examination, which states that any negative response be immediately reported to the PPL senior staff specialist of Health Services; (2) issuing two operations bulletins, to inform operators of the new form that will be used by the attending physician to provide immediate feedback on test results for eye and hearing testing, and to reinforce the ANSI standards regarding the passing criteria for eye and hearing tests; (3) checking the site database to ensure that all biennial examination expiration dates were correct; (4) ensuring that no manual overrides are permitted in the site database system without two levels of approval; (5) establishing a performance indicator to track medical certification expirations; and, (6) conducting an effectiveness review of all medical transactions six months after the last corrective action is complete to verify that no processing errors have occurred.

Therefore, to encourage prompt and comprehensive correction of violations, I have been authorized, after consultation with the Director, Office of Enforcement, not to propose a civil penalty in this case. However, significant violations in the future could result in a civil penalty.

The NRC has also concluded that information regarding the reason for the violations, the corrective actions taken and planned to correct the violations and prevent recurrence and the date when full compliance was, or will be, achieved is already adequately addressed on the docket in Inspection Report Nos. 05000387/2009004, 05000388/2009004, in the PPL letter received December 10, 2009, and in this NRC letter. Therefore, you are not required to respond to this letter unless the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to provide additional information, you should follow the instructions specified in the enclosed Notice.

In addition, in its December 10, 2009, response, PPL disputed the statement in the NRC inspection report that the finding related to these violations 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 [Inspection Manual Chapter 0305, Appendix A, "Components within the Cross-Cutting Areas," Item P.2(a)]. The NRC inspection report noted that PPL failed to evaluate NRC Information Notice (IN) 2004-20, "Recent Issues Associated with NRC Medical Requirements for Licensed Operators," in accordance with their operating experience review program, as evidenced by a 2008 SL IV non-cited violation (NRC Inspection Report Nos. 05000387/2008302, 05000388-2008302; ML081340746) for an initial licensed operator application submitted to the NRC with a disqualifying medical condition (and the two events described in the NRC inspection report and this letter). In support of its position, PPL stated that upon receipt of the IN, PPL had evaluated its operator medical information and found that no corrective actions were required. PPL further stated that none of the examples cited in the IN would have led to actions that, five years later, would have precluded the issues associated with the two events described in the NRC inspection report and in this letter. In addition, PPL stated that with respect to the first instance, involving the SRO who failed his vision examination, the Form 396 was submitted within the required 30 days; and that with respect to the second instance, involving the SRO who missed his biennial examination, no Form 396 was required; therefore, the IN examples were not comparable to these violations.

The NRC considered the position presented by PPL and the fact that these instances represent separate violations. Regarding the first instance, the NRC concluded that the cross-cutting aspect as described in NRC Inspection Report Nos 05000387/2009004 and 05000388/2009004 is correct, as stated. IN 2004-20 states, in part, "licensed operators should understand that they

are responsible for meeting all the conditions of their license and for promptly informing their employer if they develop any medical condition, such as needing to wear glasses ... that could affect their fitness to safely operate the facility.” The IN also states that the, “NRC depends on facility licensees to ensure that the personnel who perform and evaluate licensed operator medical examinations understand the regulatory requirements, the applicable medical standards, . . . , thereby ensuring that the examinations are performed correctly and any medical defects are accommodated.” As of August 2009, this operating experience had not been properly incorporated at Susquehanna. Specifically, regarding the SRO with vision problems, PPL did not have a requirement to ensure the examining physician, a PPL contractor, immediately informed PPL after the exam, that the SRO needed corrective lenses. As a result, PPL did not administratively limit the SRO’s licensed operator duties until the NRC had been informed and a license condition was processed to require corrective lenses. Consequently, the SRO stood watch three times after the exam without a license condition to require corrective lenses. Regarding the second instance, the NRC agreed with PPL’s position that actions to prevent the IN examples would not have precluded the missed biennial medical evaluation. Therefore, no cross-cutting aspect will be assigned to the violation involving the SRO who missed the biennial medical examination.

In accordance with 10 CFR 2.390 of the NRC’s “Rules of Practice,” a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the NRC’s document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response, if you choose to provide one, should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such information, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information). The NRC also includes significant enforcement actions on its Web site at www.nrc.gov; select **What We Do, Enforcement**, then **Significant Enforcement Actions**.

Sincerely,

/RA/

Samuel J. Collins
Regional Administrator

Docket No. 50-387; 50-388
License No. NPF-14; NPF-22

Enclosure: Notice of Violation

cc w/encl: Distribution via ListServ

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Sincerely,
/RA/
 Samuel J. Collins
 Regional Administrator

Docket No. 50-387; 50-388
 License No. NPF-14; NPF-22

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* See concurrence on previous page

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NOTICE OF VIOLATION

PPL Susquehanna, LLC (PPL)
Susquehanna Steam Electric Station

Docket No. 50-387; 50-388
License No. NPF-14; NPF-22
EA-09-248

During an NRC inspection, conducted during the third quarter of 2009, for which an exit meeting was held on October 9, 2009, violations of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violations are listed below:

10 CFR 55.21 requires, in part, that a reactor or senior reactor operator licensee shall have a medical examination by a physician every two years. The physician shall determine that the applicant or licensee meets the requirements of 10 CFR 55.33(a)(1). 10 CFR 55.33(a)(1) states, in part, the applicant's medical condition and general health will not adversely affect the performance of assigned job duties or cause operational errors endangering public health and safety. 10 CFR 55.33(b) states, in part, if an applicant's general medical condition does not meet the minimum standards under 10 CFR 55.33(a)(1), the Commission may approve the application and include conditions in the license to accommodate the medical defect.

10 CFR 55.3 requires, in part, that a person must be authorized by a license issued by the Commission to perform the function of an operator or a senior operator as defined in this part.

10 CFR 55.23 requires, in part, that a facility licensee shall certify the medical fitness of an applicant by completing and signing a Form 396, "Certification of Medical Examination by Facility Licensee." On its Form 396s, licensees must certify, in part, what guidance was used to determine the medical fitness of its applicants. PPL certified that it used the guidance in ANSI/ANS 3.4-1983, "Medical Certification and Monitoring of Personnel Requiring Operator Licenses for Nuclear Power Plants."

ANSI/ANS 3.4-1983 states, in part, that the primary responsibility for assuring that qualified personnel are on duty rests with the facility licensee. In addition, the health requirements set forth within the standard provide the minimum necessary to determine that the physical condition and general health of the operators are not such as might cause operational errors endangering public health and safety. The specific health requirements and disqualifying conditions are described in Section 5.3, "Disqualifying Conditions," and Section 5.4, "Specific Minimum Capacities Required for Medical Qualifications," of the ANSI standard.

1. Contrary to the above, in 2009, a PPL Senior Reactor Operator (SRO) did not meet a certain medical prerequisite for performing NRC-licensed operator activities, and the SRO continued to perform NRC-licensed activities without PPL first submitting a Form 396 to obtain NRC approval. Specifically, on three occasions between August 10, 2009, and August 18, 2009, the PPL SRO (although possessing an NRC license) performed SRO duties even though, on August 10, 2009, a change in his licensed condition existed as found by a medical examination. The examination identified that the SRO's vision did not meet the health requirements stated in ANSI/ANS 3.4-1983, Section 5.4.5, "Eyes," and PPL did not obtain NRC approval for the change in licensed activities

by requesting a conditional license indicating that corrective lenses be worn prior to performing licensed duties.

This is a Severity Level III violation (Supplement VII).

2. Contrary to the above, in 2009, a second PPL SRO did not meet a certain medical prerequisite for performing NRC-licensed operator activities, and the SRO continued to perform NRC-licensed activities without PPL first submitting a Form 396 to obtain NRC approval. Specifically, on 52 occasions between April 1, 2009, and July 22, 2009, the second PPL SRO (although possessing an NRC license) continued to perform NRC-licensed activities even though on April 1, 2009, a change in his licensed condition existed in that the SRO failed to have the required biennial medical examination by a physician, and PPL did not obtain prior NRC approval for the SRO to continue to perform NRC-licensed activities without meeting the biennial examination requirement of his license.

This is a Severity Level IV violation (Supplement VII).

The NRC has concluded that information regarding the reason for the violations, the corrective actions taken and planned to correct the violations and prevent recurrence and the date when full compliance was achieved is already adequately addressed on the docket in Inspection Report Nos. 05000387/2009004 and 05000388/2009004, in the PPL letter received December 10, 2009, and in the NRC letter transmitting this Notice of Violation (Notice). However, you are required to submit a written statement or explanation pursuant to 10 CFR 2.201 if the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to respond, clearly mark your response as a "Reply to a Notice of Violation; EA-09-248" and send it to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001 with a copy to the Regional Administrator, Region I, and a copy to the NRC Resident Inspector at Susquehanna Steam Electric Station, within 30 days of the date of the letter transmitting this Notice.

If you choose to respond, your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. Therefore, to the extent possible, the response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days.

Dated this 28th day of January 2010.