



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION I  
2100 RENAISSANCE BLVD.  
KING OF PRUSSIA, PA 19406-2713

May 3, 2017

EA-16-251

Mr. Peter P. Sena, III  
President and Chief Nuclear Officer  
PSEG Nuclear LLC – N09  
P.O. Box 236  
Hancocks Bridge, NJ 08038

SUBJECT: HOPE CREEK GENERATING STATION – NOTICE OF VIOLATION  
NRC INVESTIGATION REPORT NO. 1-2016-003

Dear Mr. Sena:

This letter provides you the enforcement decision for an apparent violation (AV) identified during an investigation by the NRC Office of Investigations (OI) conducted between November 5, 2015, and October 26, 2016, at the PSEG Nuclear, LLC (PSEG) Hope Creek Generating Station (Hope Creek). The investigation was conducted to evaluate whether a (now-former) PSEG instrument and control (I&C) technician at Hope Creek had deliberately failed to follow site procedures, resulting in a reactor scram.

Based on the results of the OI investigation, the NRC determined that the technician deliberately failed to implement a procedure for a surveillance activity of safety-related equipment when the technician made an error while performing a surveillance test and deliberately attempted to correct the error rather than comply with the procedural guidance to stop and inform management. Specifically, the technician, who was performing a surveillance test on the Redundant Reactivity Control System (RRCS), inadvertently selected the wrong RRCS channel to test. Rather than immediately stopping and informing the job supervisor, as required by the procedure, the technician deliberately attempted to correct the error by selecting the proper channel. However, the technician had left test inputs still inserted in the other channel, which ultimately led to a dual recirculation pump trip, alternate rod insertion initiation, and a reactor scram. The NRC determined that the technician's actions resulted in an AV of Hope Creek's Technical Specifications, which require that written procedures shall be established, implemented, and maintained for surveillance and test activities of safety-related equipment.

The AV was described in an enclosure to the NRC letter sent to you on March 23, 2017 (ML17082A031<sup>1</sup>). In the letter, we informed you that we had sufficient information to make an enforcement decision regarding the AV. We also provided you the opportunity to address the AV by requesting a pre-decisional enforcement conference (PEC), requesting Alternative Dispute Resolution (ADR), or responding in writing. On March 28, 2017, PSEG staff provided a verbal response accepting the AV. Therefore, based on the information developed during the

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<sup>1</sup> Designation in parentheses refers to an Agency-wide Documents Access and Management System (ADAMS) accession number. Unless otherwise noted, documents referenced in this letter are publicly-available using the accession number in ADAMS.

investigation, the NRC has determined that the violation of NRC requirements occurred. The violation is cited in the enclosed Notice of Violation (Notice).

Because licensees are responsible for the actions of their employees, and because the technician's actions were willful, the violation was evaluated under the NRC's traditional enforcement process, as set forth in Section 2.2.4(c) of the NRC Enforcement Policy. After careful consideration, the NRC concluded that the violation is best categorized at Severity Level III (SL III). In reaching this determination, the NRC considered that the underlying technical concern would have been evaluated as having very low safety significance (i.e. green) under the Significance Determination Process of the Reactor Oversight Process. However, because it involved willfulness, the NRC increased the significance of the violation, in accordance with Section 2.2.1.d of the Enforcement Policy. Willful violations are of particular concern because the NRC's regulatory program is based, in part, on licensees and their employees acting truthfully and with integrity.

In accordance with Section 8 of the Enforcement Policy, a base civil penalty in the amount of \$140,000 is considered for a SL III violation involving a power reactor licensee. Because the violation was willful, the NRC considered whether credit was warranted for *Identification* and *Corrective Action* in accordance with the civil penalty assessment process in Section 2.3.4 of the Enforcement Policy. The NRC has concluded that credit is warranted for the licensee's identification of the violation. Specifically, while the violation was self-revealed due to the reactor trip, PSEG performed extensive troubleshooting and identified that the scram was caused by human error; pinpointing the exact actions taken by the I&C technician that led to the scram. The NRC has also concluded that credit is warranted for the licensee's corrective actions in response to the violation. Specifically, PSEG has taken appropriate actions against the technician and developed a corrective action plan that includes revising the RRCS procedures to add human performance requirements to prevent reoccurrence. Therefore, to encourage prompt identification and comprehensive correction of violations, I have been authorized, after consultation with the Director, Office of Enforcement, to not propose a civil penalty in this case. However, significant violations in the future could result in a civil penalty. Additionally, the region will plan and schedule a follow-up inspection under Inspection Procedure 92702, "Follow-up on Traditional Enforcement Actions Including Violations, Deviations, Confirmatory Action Letters, Confirmatory Orders, and Alternative Dispute Resolution Confirmatory Orders," to determine whether your planned corrective actions have been adequately implemented.

If you disagree with this enforcement sanction, you may deny the violation, as described in the Notice, or you may request ADR with the NRC in an attempt to resolve this issue. ADR is a general term encompassing various techniques for resolving conflicts using a neutral third party. The technique that the NRC has decided to employ is mediation. Mediation is a voluntary, informal process in which a trained neutral third-party (the "mediator") works with parties to help them reach resolution. If the parties agree to use ADR, they select a mutually agreeable neutral mediator who has no stake in the outcome and no power to make decisions. Mediation gives parties an opportunity to discuss issues, clear up misunderstandings, be creative, find areas of agreement, and reach a final resolution of the issues. Additional information concerning the NRC's ADR program can be found at <http://www.nrc.gov/about-nrc/regulatory/enforcement/adr.html>.

The Institute on Conflict Resolution (ICR) at Cornell University has agreed to facilitate the NRC's program as a neutral third party. If you are interested in pursuing this issue through the ADR program, please contact: (1) the ICR at (877) 733-9415; and (2) Fred Bower at 610-337-5200

within 10 days of the date of this letter. You may also contact both the ICR and Mr. Bower for additional information.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response, if you choose to provide one, will be made available electronically for public inspection in the NRC Public Document Room and in the NRC's Agency-wide Documents Access and Management 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).

Please note that final NRC investigation documents, such as the OI report described above, may be made available to the public under the Freedom of Information Act (FOIA) subject to redaction of information appropriate under the FOIA. Requests under the FOIA should be made in accordance with 10 CFR 9.23, Requests for Records. Additional information is available on the NRC website at <http://www.nrc.gov/reading-rm/foia/foia-privacy.html>.

The enforcement action will be administratively tracked under Inspection Report No. 05000354/2017010. If you have any questions related to this matter, please contact Mr. Bower of my staff at (610) 337-5200.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Dorman", with a small "for" written to the right of the signature.

Daniel H. Dorman  
Regional Administrator

Enclosures: Notice of Violation

Docket No. 50-354  
License No. NPF-57

**cc:** Distribution via ListServ

## NOTICE OF VIOLATION

PSEG Nuclear, LLC  
Hope Creek Generating Station

Docket No. 50-354  
License No. NPF-57  
EA-16-251

Hope Creek Generating Station Technical Specification 6.8.1.d, "Procedures and Programs," requires that written procedures shall be established, implemented, and maintained for surveillance and test activities of safety-related equipment.

Hope Creek procedure HC.IC-FT.SA-0003, "Redundant Reactivity Control System – Division 1 Channel B, C-22-N-403E, N402E ATWS Recirculation Pump Trip," describes surveillance and test activities for the safety-related Redundant Reactivity Control System (RRCS). Section 5.1, Test Setup, includes a caution that "Careless keyboard manipulation can cause a reactor scram. IF any doubt or questions arise, THEN contact Job Supervisor immediately."

Contrary to the above, on September 28, 2015, PSEG did not properly implement a procedure for a surveillance activity of safety-related equipment when the individual performing an RRCS surveillance test made an error and rather than immediately stopping and informing the job supervisor, attempted to correct the error. Specifically, when manipulating the keyboard, the individual selected the wrong channel to test. Rather than contacting the job supervisor, the individual attempted to correct the error by selecting the proper channel with test inputs still inserted in the other channel, which ultimately led to a dual recirculation pump trip, alternate rod insertion (ARI) initiation, and a reactor scram.

This is a Severity Level III violation (Enforcement Policy Example Section 6.11).

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence, and the date when full compliance will be achieved is already adequately addressed on the docket in the NRC letter dated March 23, 2017, and in this letter. 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-16-251)," 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, U.S., Nuclear Regulatory Commission, Region I, 2100 Renaissance Boulevard, Suite 100, King of Prussia, PA 19406, and a copy to the Resident Inspector at Hope Creek Generating Station, within 30 days of the date of the letter transmitting this Notice of Violation (Notice).

If you contest this enforcement action, you should also provide a copy of your response, with the basis for your denial, to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001. 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.

Dated this 3<sup>rd</sup> day of May 2017