



UNITED STATES  
**NUCLEAR REGULATORY COMMISSION**  
REGION IV  
1600 EAST LAMAR BLVD  
ARLINGTON, TEXAS 76011-4511

October 24, 2012

EA-12-092

Mr. Mark E. Reddemann  
Chief Executive Officer  
Energy Northwest  
P.O. Box 968 (Mail Drop 1023)  
Richland, WA 99352-0968

**SUBJECT: COLUMBIA GENERATING STATION – FINAL SIGNIFICANCE DETERMINATION  
OF WHITE FINDINGS AND NOTICE OF VIOLATION, NRC INSPECTION  
REPORT 05000397/2012502**

Dear Mr. Reddemann:

This letter provides you the final significance determination of the preliminary White findings discussed in our previous communication dated July 26, 2012, which included the subject inspection report (ADAMS Accession ML12208A379). The report documents the February 6-9, 2012, baseline inspection activities at Columbia Generating Station. In part, the inspectors reviewed changes made between September 2000 and January 2012 to the site dose assessment methods and emergency action levels.

These findings are associated with a violation of the requirement to maintain a standard emergency action level scheme in accordance with 10 CFR 50.47(b)(4) and a violation of the requirement to maintain adequate methods for assessing the potential consequences of a radiological emergency condition in accordance with 10 CFR 50.47(b)(9). Planning standards 50.47(b)(4) and 50.47(b)(9) are considered risk significant in the Emergency Preparedness Significance Determination Process.

The July 26, 2012, letter also included offers for Energy Northwest to attend a Regulatory Conference, to request a Pre-decisional Enforcement Conference, or to reply in writing to provide its position on the facts and assumptions the NRC used to arrive at the apparent violations, findings and associated safety significance.

At Energy Northwest's request, a joint Regulatory and Pre-decisional Enforcement Conference was held on September 20, 2012, at the NRC's Region IV office in Arlington, Texas. During the Regulatory Conference, Energy Northwest presented its observations and perspectives on the findings, the results of its root-cause assessment, and corrective actions being taken to prevent recurrence. During the conference, Energy Northwest agreed with the NRC's description of the

circumstances associated with each violation, as described in the subject inspection report, and with the NRC's preliminary characterization of each finding's significance.

After considering the information developed during the inspection and the information you provided at the joint Regulatory and Pre-decisional Enforcement Conference, the NRC has concluded that the findings are appropriately characterized as White, findings of low to moderate safety significance that may require additional NRC inspection.

The NRC has also determined that your failure to report to the NRC a major loss of emergency assessment capability is a violation of 10 CFR 50.72(b)(3)(xiii). Since this violation was associated with a performance deficiency determined to have low-to-moderate safety significance and had a potential for impacting the NRC's ability to perform its regulatory function, this violation has been categorized at Severity Level III in accordance with the NRC Enforcement Policy. These violations are cited in the enclosed Notice of Violation and the circumstances surrounding them are described in the subject inspection report. Further, in accordance with the NRC Enforcement Policy, the Notice of Violation is considered escalated enforcement action because it is associated with White findings and a Severity Level III violation.

In accordance with the Enforcement Policy, a base civil penalty of \$70,000 is considered for a Severity Level III violation. Because Columbia Generating Station has not been the subject of escalated enforcement actions within the last 2 years, the NRC considered whether credit was warranted for *Corrective Action* in accordance with the civil penalty assessment process in Section 2.3.4 of the Enforcement Policy.

The NRC has determined that credit was warranted for *Corrective Action* for the violation based on prompt and comprehensive corrective actions. Your corrective actions included immediate briefings for Operations, Emergency Preparedness, and Licensing staff on enhanced reporting criteria for significant losses of emergency preparedness planning standard functions, changes to procedure RPI-10, "Conduct of Regulatory Affairs," and submission of a Frequently Asked Question document to the NRC seeking clarifying information on reporting losses of emergency preparedness functions to support future revisions of procedure RPI-10. Therefore, to encourage the prompt and comprehensive correction of violations, I have been authorized, after consultation with the Director, Office of Enforcement, not to propose a civil penalty for the failure to report a major loss of emergency assessment capability. However, significant violations in the future could result in a civil penalty.

You have 30 calendar days from the date of this letter to appeal the staff's determination of significance for the identified White findings. Such appeals will be considered to have merit only if they meet the criteria given in the IMC 0609, Attachment 2. An appeal must be sent in writing to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, 1600 East Lamar Blvd., Arlington, Texas, 76011-4511.

The NRC has concluded that the information regarding the reasons for the violations, the corrective actions taken and planned to correct the violations and prevent recurrence, and the dates when full compliance was achieved are adequately addressed on the docket in NRC Inspection Report 05000397/2012502 and your presentation of September 20, 2012 (ADAMS Accession ML12292A221). Therefore, you are not required to respond to this letter unless the description therein does not accurately reflect your corrective actions or your position.

Energy Northwest requested that the NRC consider the overall degradation of safety as representative of Reactor Oversight Program Action Matrix Column II rather than Column III. Your position is that the issues, taken together, represented a minimal degradation in safety performance, which was consistent with the intent of Column II. In support of your position, you stated: (1) the findings shared causal factors and affected a single function within emergency preparedness, (2) your emergency action level scheme has redundant action levels making it unlikely that classifications would have been significantly delayed, and (3) your default protective action scheme adequately assures public health and safety, and the findings are not indicative of current performance.

Because plant performance for the Reactor Oversight Program issues discussed in this letter has been determined to be beyond the licensee's response column, we will use the NRC's Action Matrix to determine the most appropriate NRC response for this event. We will notify you of that determination by separate correspondence.

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 or from the NRC's Agencywide Documents Access Management System (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response 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 website at (<http://www.nrc.gov/reading-rm/doc-collections/enforcement/actions/>).

Mark E. Reddemann

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Should you have any questions concerning this matter, contact Mr. Mark Haire at 817-200-1527.

Sincerely,

*/RA/*

Elmo E. Collins  
Regional Administrator

Docket No. 50-397  
License No. NPF-21

Enclosure: Notice of Violation

cc w/enclosure:  
Electronic Distribution for  
Columbia Generating Station

**Distribution**

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<a href="mailto:Cayetano.Santos@nrc.gov">Cayetano.Santos@nrc.gov</a> ;	<a href="mailto:NRREnforcement.Resource@nrc.gov">NRREnforcement.Resource@nrc.gov</a> ;	

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 Classification issue\Final Action\EA-12-092 CGS EP Final White\_R1.docx \_ML12298A489

ADAMS		<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> SUNSI Review Complete	Reviewer Initials: RSB
<input checked="" type="checkbox"/> Publicly Available		<input type="checkbox"/> Non-publicly Available		<input type="checkbox"/> Sensitive	<input checked="" type="checkbox"/> Non-sensitive
<b>Category:</b>		<b>KEYWORD:</b> SUNSI Review Complete			
RIV:PSB1	BC:PSB1	ACES	RC	ACES:BC	
PJElkmann	MSHaire	RSBrowder	KSFuller	HJGepford	
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10/13/2012	10/13/2012	10/13/2012	10/13/2012	10/13/2012	
DD:DRS	DRA	OE		RA	
TBBlount	ATHowell	GGulla	MThaggard	EECollins	
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10/17/2012	10/19/12	10/19/2012	10/19/2012	10/24/2012	

## NOTICE OF VIOLATION

Energy Northwest  
Columbia Generating Station

Docket No. 50-397  
License NPF-21  
EA-12-092

During an NRC inspection conducted February 6-9, 2012, violations of NRC requirements were identified. In accordance with the NRC Enforcement Policy, the violations are listed below:

- A. 10 CFR 50.54(q)(2), requires, in part, that a holder of a license under Part 50 shall follow and maintain the effectiveness of an emergency plan that meets the requirements in Appendix E to Part 50 and, for nuclear power reactor licensees, the planning standards of 50.47(b).
  1. 10 CFR 50.47(b)(4), requires, in part, that the onsite and offsite emergency response plans for nuclear power reactors must have a standard emergency classification and action level scheme in use, the bases of which include facility system and effluent parameters.

Contrary to the above, between September 2000 and January 2012, Columbia Generating Station failed to maintain the effectiveness of an emergency plan that met the planning standards of 50.47(b), which includes the requirement to have onsite and offsite emergency response plans that have a standard emergency classification and action level scheme in use, the bases of which include facility system and effluent parameters.

Specifically, the licensee did not maintain a standard emergency action level scheme because inaccurate effluent radiation monitor thresholds were incorporated into emergency action level Table 3, "Effluent Monitor Classification Thresholds." In September 2000 and November 2010 inaccurate calculation of Site Area Emergency and General Emergency effluent thresholds were incorporated into Table 3. These errors adversely affected the licensee's ability to properly classify an emergency event involving a radiological release. In addition, one General Emergency threshold could not be measured on its associated radiation monitor.

This violation is associated with a White Significance Determination Process finding.

2. 10 CFR 50.47(b)(9) requires, in part, that nuclear power reactors have adequate methods for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition in use.

Contrary to the above, between April 2000 and December 2011, Columbia Generating Station failed to maintain the effectiveness of an emergency plan that met the planning standards of 50.47(b), which includes the requirement to maintain adequate methods for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition.

Specifically, changes to parameters used in offsite dose calculations for the reactor building effluent monitor resulted in inaccurate offsite dose calculations. This resulted in overestimating offsite dose between April 2000 and December 2007 and underestimating dose between December 2007 and December 2011. These errors adversely affected the licensee's ability to assess the consequences of a radiological release, affected the classification of emergencies using dose assessment results, and had the potential to impact protective action recommendations to protect public health and safety.

This violation is associated with a White Significance Determination Process finding.

- B. 10 CFR 50.72(b)(3)(xiii), requires, in part, with exceptions not applicable here, that a licensee shall notify the NRC as soon as practical and in all cases within eight hours of any event that results in a major loss of emergency assessment capability.

Contrary to the above, on October 18, 2011, Columbia Generating Station failed to notify the NRC as soon as practical and within 8 hours of any event that results in a major loss of emergency assessment capability. Specifically, the licensee identified longstanding inaccuracies in the Quick Emergency Dose Projection System but failed to recognize those inaccuracies as a major loss of emergency assessment capability, and did not report these deficiencies in radiological assessment methods to the NRC until June 7, 2012.

This is a Severity Level III violation (Section 6.6).

The NRC has concluded that information regarding the reasons for the violations, the corrective actions taken and planned to be taken 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 05000397/2012502 and your presentation of September 20, 2012 (ML12292A221). 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-12-092," 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 IV, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice of Violation, within 30 days of the date of the letter transmitting this Notice of Violation.

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 Agencywide Documents Management Access System (ADAMS), accessible from the NRC website 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.

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.

In accordance with 10 CFR 19.11, you may be required to post this Notice within 2 working days of receipt.

Dated this 24<sup>th</sup> day of October 2012