



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION IV  
1600 EAST LAMAR BOULEVARD  
ARLINGTON, TEXAS 76011-4511

March 24, 2020

Mr. Brad Sawatzke  
Chief Executive Officer  
Energy Northwest  
MD 1023  
P.O. Box 968  
Richland, WA 99532

SUBJECT: COLUMBIA GENERATING STATION – NRC TEMPORARY  
INSTRUCTION 2515/193, IMPLEMENTATION OF RELIABLE HARDENED  
CONTAINMENT VENTS – NRC INSPECTION REPORT 05000397/2020010

Dear Mr. Sawatzke:

On March 12, 2020, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Columbia Generating Station and discussed the results of this inspection with Mr. H. G. Hettel, Chief Nuclear Officer, and other members of your staff. The results of this inspection are documented in the enclosed report.

No findings or violations of more than minor significance were identified during this inspection.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html> and at the NRC Public Document Room in accordance with Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

*/RA/*

Jeffrey E. Josey, Chief  
Reactor Projects Branch A  
Division of Reactor Projects

Docket No. 05000397  
License No. NPF-21

Enclosure:  
As stated

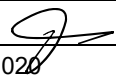
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COLUMBIA GENERATING STATION – NRC TEMPORARY INSTRUCTION 2515/193,  
 IMPLEMENTATION OF RELIABLE HARDENED CONTAINMENT VENTS – NRC INSPECTION  
 REPORT 05000397/2020010 – March 24, 2020

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**U.S. NUCLEAR REGULATORY COMMISSION  
Inspection Report**

Docket Number: 05000397

License Number: NPF-21

Report Number: 05000397/2020010

Enterprise Identifier: I-2020-010-0048

Licensee: Energy Northwest

Facility: Columbia Generating Station

Location: Richland, WA

Inspection Dates: March 9, 2020, to March 12, 2020

Inspectors: R. Alexander, Senior Emergency Preparedness Inspector  
G. Kolcum, Senior Resident Inspector

Approved By: Jeffrey E. Josey, Chief  
Reactor Projects Branch A  
Division of Reactor Projects

Enclosure

## **SUMMARY**

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting an NRC inspection at Columbia Generating Station, in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to <https://www.nrc.gov/reactors/operating/oversight.html> for more information.

### **List of Findings and Violations**

No findings or violations of more than minor significance were identified.

### **Additional Tracking Items**

None.

## **INSPECTION SCOPES**

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

## **OTHER ACTIVITIES – TEMPORARY INSTRUCTIONS, INFREQUENT AND ABNORMAL**

2515/193 - Inspection of the Implementation of EA-13-109: Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation under Severe Accident Conditions

Inspection of the Implementation of EA-13-109: Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation under Severe Accident Conditions (1 Sample)

- (1) The inspectors evaluated licensee implementation of the appropriate elements of the reliable hardened containment wetwell vent as described in the plant specific submittal (ADAMS Accession No. ML19232A448) and the associated NRC safety evaluation (ADAMS Accession No. ML19350B579). Specifically, the inspectors evaluated licensee implementation of hardened containment vent system (HCVS) functional requirements, design features, maintenance and testing, quality standards, and programmatic requirements as described in Appendix A of TI 2515/193.

Further, the inspectors evaluated licensee implementation of the appropriate elements of the reliable wetwell venting strategy as described in the plant specific submittal (ADAMS Accession No. ML19232A448) and the associated NRC safety evaluation (ADAMS Accession No. ML19350B579). Specifically, the inspectors evaluated licensee implementation of the severe accident water addition and management (SAWA/SAWM) functional requirements, installed instrumentation, maintenance and testing, and programmatic requirements as described in Appendix B of TI 2515/193.

## **INSPECTION RESULTS**

No findings were identified.

## **EXIT MEETINGS AND DEBRIEFS**

The inspectors verified no proprietary information was retained or documented in this report.

- On March 12, 2020, the inspectors presented the NRC inspection results to Mr. H. G. Hettel, Chief Nuclear Officer, and other members of the licensee staff.

**DOCUMENTS REVIEWED**

Inspection Procedure	Type	Designation	Description or Title	Revision or Date	
2515/193	Calculations	ME-02-14-02, Appendix H	Suppression Pool Freeboard Available During Extended Loss of AC Power (ELAP)	003	
	Corrective Action Documents	Action Requests (ARs)	350650, 366752, 380025, 384464, 38210, 390256, 390257, 395869, 397967, 403046, 403048		
	Corrective Action Documents Resulting from Inspection	Action Requests (ARs)	404947, 404961, 404962, 405021		
	Miscellaneous		ER000260	Equipment Operator Requalification: Primary Containment (including HCVS)	09/12/2019
			ER000719	Equipment Operator Requalification: Hardened Containment Vent (HCV)	06/12/2017
			ER000759	Equipment Operator Requalification: Standards Updates (including SAWA/SAWM)	03/14/2019
			FLEX-01	FLEX Program Document	2 & 3
			IC000725	JITT/Maintenance: Hardened Containment Vent (HCV) System	12/22/2015
			LDCN-15-033	EC 13094, Addition of Wetwell Hardened Containment Vent (HCV) System	000
			LDCN-17-005	Revise LCS Table 1.6.1.3-1, Primary Containment Isolation Valves, to include new valves HCV-V-1 and HCV-V-2	000
			LDCN-18-027	New LCS RFO 1.11.1	000
			LR002303	LORQ: Cycle 16-1 Updates (including HCVS)	01/07/2016
			LR002374	LORQ: Hardened Containment Vent (HCV) System	05/23/2017
			LR002455	LORQ: Cycle 19-2 Updates (including SAWA/SAWM)	03/14/2019
	Procedures		ABN-FSG-002	Water Makeup Strategies for RPV, SFP, DW, WW During an Extended Loss of AC Power or other Beyond Design Basis Event	008, 009, 010, and 010.001
			PPM 1.5.18	Managing B.5.b and FLEX Equipment Unavailability	009
			PPM 5.1.1	RPV Control EOP	022
			PPM 5.1.8	Alternate Level/Pressure Control EOP	000
			PPM 5.2.1	Primary Containment Control EOP	028

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		PPM 5.5.14	Emergency Wetwell Venting	010
		PPM 5.6.1	SBO/ELAP	030.001
		PPM SAG1	RPV Control SAG	006
		PPM SAG1-TAB-B	Core Debris Has Breached the RPV	003
		SOP-FLEX-EQUIPMENT-REFUEL	FLEX Equipment Refueling	005
		SOP-HHGP-START-QC	High Head Godwin Pump Start – Quick Card	001
	Self-Assessments	XC-19007-N-R-001	Order EA-13-109 Compliance Assessment	01/09/2020
	Work Orders	WO 02082834-01	AOV Valve Testing, HCV-V-1	04/24/2017
		WO 02082834-02	AOV Valve Testing, HCV-V-2	04/24/2017
		WO 02082836-04	Valve Stroke Verification for HCV-V-1 and HCV-V-2	05/19/2017
		WO 02082836-12	Final Walkdown Fukushima EC 13094 (HCV)	06/03/2017
		WO 02083371-12	HCV - Calibrate/Test Radiation Detector	05/04/2017
		WO 02083371-12	HCV - Calibrate/Test Temperature Indicator	05/08/2017
		WO 02083371-24	Program and Test New Battery Charger E-C0-3	05/12/2017
		WO 02118301-01	TSP-HCV/X58-C801: LLRT of HCV-V-1 and HCV-V-2	05/29/2019
		WO 02128517-01	HCV-MV/I-1 Replacement	06/28/2018
		WO 02136310-01	FLEX-P-1, Flow and Pressure Verification Test OSP-FLEX-A101	05/02/2019
		WO 02141336-01	HCVS NITROGEN BOTTLES, Verify pressure in Nitrogen Bottles	12/23/2019
		WO 02148863-01	FUNCTION TEST-HCVRDMN: Function Test for HCV Rad Monitor	11/02/2019
		WR 29135683	Perform LLRT on HCV-V-1 and 2 (post installation)	06/07/2017
WR 29142524		HCV-RI-1 reading E1 (10) R/hr, midscale	05/15/2018	