

October 23, 2025 GO2-25-125 David P. Brown
Columbia Generating Station
P.O. Box 968, PE23
Richland, WA 99352-0968
509.377.8385
dpbrown@energy-northwest.com

10 CFR 50.90

U.S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, DC 20555-0001

Subject: COLUMBIA GENERATING STATION, DOCKET NO. 50-397

LICENSE AMENDMENT REQUEST FOR CHANGE TO TECHNICAL SPECIFICATION TO CORRECT ERROR INTRODUCED DURING

**WORDPERFECT CONVERSION** 

Dear Sir or Madam:

Pursuant to 10 CFR 50.90, Energy Northwest hereby requests a license amendment to revise the Columbia Generating Station Technical Specification (TS) 3.1.3 Control Rod Operability. This amendment is requested to remove an addition of the word "partially" introduced in the conversion from WordPerfect to Microsoft Word in Surveillance Requirement 3.1.3.2.

The proposed change has been evaluated in accordance with 10 CFR 50.91(a)(1) using criteria in 10 CFR 50.92(c) and it has been determined that this change involves no significant hazards considerations. The bases for these determinations are included in the Enclosure of this submittal.

The proposed TS markup page is included as Attachment 1 to this submittal and the clean page of the proposed TS change is included as Attachment 2 of this submittal.

This letter, its enclosure, and attachments contain no regulatory commitments.

Approval of the proposed amendment is requested within one year of the date of the submittal. Once approved, the amendment shall be implemented within 30 days.

In accordance with 10 CFR 50.91, Energy Northwest is notifying the State of Washington of this amendment request by transmitting a copy of this letter and enclosures to the designated State Official.

Page 2 of 2

If there are any questions or if additional information is needed, please contact Ms. T. M. Collis, Licensing Supervisor, at 509-377-8395.

I declare under penalty of perjury that the foregoing is true and correct.

Executed this 23rd day of October , 2025.

Respectfully,

Docusigned by:

David P. Brown
D199DB13836043F...

David P. Brown Site Vice President

Enclosure: Evaluation of Proposed Change

Attachment 1: Proposed Columbia Technical Specification Change (Mark-Up)
Attachment 2: Revised Columbia Technical Specification Page (Clean Page)

cc: NRC RIV Regional Administrator NRC NRR Project Manager NRC Senior Resident Inspector JW Hayes – BPA CD Sonoda – BPA EFSEC@efsec.wa.gov – EFSEC J Martell – WDOH R Brice – WDOH L Albin – WDOH

Enclosure Page 1 of 7

**Evaluation of Proposed Technical Specification Change** 

#### 1.0 SUMMARY DESCRIPTION

This evaluation supports a License Amendment Request (LAR) to Columbia Generating Station (Columbia) Technical Specification (TS) 3.1.3, Control Rod Operability. This TS change will remove an addition of the word "partially" introduced in the conversion from WordPerfect to Microsoft Word in Surveillance Requirement (SR) 3.1.3.2.

Implementation of this LAR will result in no physical modification to the plant. This proposed change has no adverse effect on the plant or plant safety.

#### 2.0 DETAILED DESCRIPTION

## 2.1 System Design and Operation

Control rods are components of the Control Rod Drive (CRD) System, which is the primary reactivity control system for the reactor. In conjunction with the Reactor Protection System (RPS), the CRD System provides the means for the reliable control of reactivity changes to ensure under conditions of normal operation, including anticipated operational occurrences, that specified acceptable fuel design limits are not exceeded. In addition, the control rods provide the capability to hold the reactor core subcritical under all conditions and to limit the potential amount and rate of reactivity increase caused by a malfunction in the CRD System.

The CRD System consists of control rod drive mechanisms (CRDM) and a hydraulic control unit for each drive mechanism. The CRDM is a double acting, mechanically latched, hydraulic cylinder that positions control blades. This mechanism, by design, is extremely reliable for inserting a control rod to the full in position. Incorporated in its design is a collet piston mechanism that ensures the control rod will not inadvertently withdraw by engaging the collet fingers, mounted on the collet piston, in notches located at even positions on the index tube.

## 2.2 Current Technical Specifications Requirements

To demonstrate all control rods not full in or disarmed are operable SR 3.1.3.2, Control Rod Operability, tests the rods on a monthly basis by inserting each partially or completely withdrawn control rod at least one notch.

## 2.3 Reason for the Proposed the Change

In 2009, Energy Northwest received approval to adopt TSTF-475, Control Rod Notch Testing Frequency and SRM Insert Control Rod Action (ML091550803). The

Enclosure Page 2 of 7

amendment revised the frequency for notch testing of fully withdrawn control rods, and combined the requirement with SR 3.1.3.3, which required testing of partially withdrawn control rods. The new, combined SR reads,

"Insert each withdrawn control rod at least one notch."

In 2012, Energy Northwest requested a change to Columbia's TS to utilize new word processing software (ML12023A026), which converted Columbia's TS from WordPerfect to Microsoft Word. The amended TS were approved by the NRC in 2013 (ML12269A254). In the amendment request, the word "partially" was inadvertently added to SR 3.1.3.2, and this error was carried through in the safety evaluation. Removal of the word "partially" would align Columbia's TS SR 3.1.3.2 to previously approved wording, as well as TS SR 3.1.3.2 of NUREG-1434, Revision 5, Standard Technical Specifications – General Electric BWR/6 Plants.

## 2.4 Description of the Proposed the Change

The requested change is to remove the word "partially" from SR 3.1.3.2. Following the note, the SR will read "Insert each withdrawn control rod at least one notch."

The proposed change to SR 3.1.3.2 is shown below.

SR 3.1.3.2	Not required to be performed until 31 days after the control rod is withdrawn and THERMAL POWER is greater than the LPSP of the RWM.		
	Insert each partially withdrawn control rod at least one notch.	In accordance with the Surveillance Frequency Control Program	

#### 3.0 TECHNICAL EVALUATION

As discussed in Section 2.1, control rods are components of the CRD System, which is the primary reactivity control system for the reactor. In conjunction with the RPS, the CRD System provides the means for the reliable control of reactivity changes to ensure under conditions of normal operation, including anticipated operational occurrences, that specified acceptable fuel design limits are not exceeded. In addition, the control rods provide the capability to hold the reactor core subcritical under all conditions and to limit the potential amount and rate of reactivity increase caused by a malfunction in the CRD System.

Enclosure Page 3 of 7

Control rod insertion capability is demonstrated by inserting each partially or fully withdrawn control rod at least one notch and observing that the control rod moves. The control rod may then be returned to its original position. This ensures the control rod is not stuck and is free to insert on a scram signal. This Surveillance is not required when thermal power is less than or equal to the actual low power setpoint (LPSP) of the rod worth minimizer (RWM) since the notch insertions may not be compatible with the requirements of the Banked Position Withdrawal Sequence specifications and the RWM specifications. At any time, if a control rod is immovable, a determination of that control rod's operability must be made and appropriate action taken. The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

This SR is modified by a Note that allows 31 days, after withdrawal of the control rod and increasing power to above the LPSP, to perform the Surveillance. This acknowledges that the control rod must be first withdrawn and thermal power must be increased to above the LPSP before performance of the Surveillance, and therefore the Note avoids potential conflicts with SR 3.0.3 and SR 3.0.4.

The current TS SR 3.1.3.2 is seen below.

SR 3.1.3.2	Not required to be performed until 31 days after the control rod is withdrawn and THERMAL POWER is greater than the LPSP of the RWM.	
	Insert each partially withdrawn control rod at least one notch.	In accordance with the Surveillance Frequency Control Program

The proposed change to TS SR 3.1.3.2 is seen below.

SR 3.1.3.2	Not required to be performed until 31 days after the control rod is withdrawn and THERMAL POWER is greater than the LPSP of the RWM.	
	Insert each partially withdrawn control rod at least one notch.	In accordance with the Surveillance Frequency Control Program

Enclosure Page 4 of 7

There will be no changes to the Final Safety Analysis Report (FSAR) due to no physical changes or design function changes. The change will align the current TS SR to that previously approved and implemented prior to the inadvertent change. Additionally, there will be no effects to the level of safety, technical details in support of safety arguments, or impacts to General Design Criteria (GDC).

Not withstanding the error introduced with the 2013 LAR, Energy Northwest continued to test all withdrawn control rods, partially and fully, to validate control rod insertion capability.

## 3.1 Impact on Submittals under Review by NRC

The U.S. Nuclear Regulatory Commission is presently reviewing the following amendment requests from Energy Northwest:

- LAR to adopt TSTF-599, Eliminate Periodic Surveillance Test of Simultaneous Start of Redundant Diesel Generators (ML25245A260)
- LAR to revise TS 3.3.2.1, Control Rod Block Instrumentation (ML25083A158)

#### 4.0 REGULATORY EVALUATION

The Columbia FSAR Chapter 3 provides detailed discussion of Columbia's compliance with the applicable regulatory requirements and guidance.

The proposed TS amendment:

- Does not result in any change in the qualifications of any component.
- Does not result in the reclassification of any component's status in the areas of shared, safety-related, independent, redundant, and physically or electrically separated.

## 4.1 Applicable Regulatory Requirements

## 4.1.1 10 CFR 50 Appendix A General Design Criteria (GDC)

The relevant GDCs are discussed below.

The CRD system consists of the control rods and the related mechanical components which provide the means for mechanical movement. GDCs 26, Reactivity Control System Redundancy and Capability, and 28, Reactivity Limits, require that the CRD system provides one of the independent reactivity control systems. The rods and the drive mechanism shall be capable of reliably controlling reactivity changes either under conditions of anticipated operational occurrences, or under postulated accident conditions. A positive means for inserting the rods shall always be maintained to ensure appropriate margin for malfunction, such as stuck rods. Since the CRD system is a

Enclosure Page 5 of 7

system important to safety and portions of the CRD system are a part of the reactor coolant pressure boundary, it is required that the system be designed, fabricated, and tested to quality standards commensurate with the safety functions to be performed. This is to assure an extremely high probability of accomplishing the safety functions either in the event of anticipated operational occurrences or in withstanding the effects of postulated accidents and natural phenomena such as earthquakes.

This change does not affect either the design or operation of the CRD system. Revising the SR to align with the previously approved wording does not affect the ability of the CRD system or CRDMs to satisfy all applicable regulatory requirements and criteria.

## 4.2 Applicable Regulatory Guidance

Although the proposed change will not result in any physical modifications to the plant, acceptance criteria and system considerations presented in NUREG-0800, Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition, was reviewed as part of developing Section 3.0, Technical Evaluation. Specifically, Standard Review Plan 16.0, Technical Specifications (Reference 1), was assessed to ensure the applicable regulatory guidance continues to be met.

## 5.0 PRECEDENT

Although there is no precedent for converting a TS SR to a previously approved version, the change is considered administrative in nature due to the previous approval of the TS. The NRC has approved the following LARs to correct administrative errors:

- Wolf Creek received approval for an amendment to correct an administrative error of the word "absorber" to "adsorber" in TS 5.5.11, Ventilation Filter Testing Program. The LAR was found acceptable by the Nuclear Regulatory Commission in 2024 (ML24199A171).
- Limerick received approval to replace the word "the" with "a". This was an administrative change accepted by the Nuclear Regulatory Commission in 2023 (ML22348A176).

#### 6.0 NO SIGNIFICANT HAZARDS CONSIDERATION

Energy Northwest has evaluated whether or not a significant hazards consideration is involved with the proposed amendment by focusing on the three standards set forth in 10 CFR 50.92, Issuance of amendment, as discussed below.

1) Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Enclosure Page 6 of 7

Response: No.

This change does not affect either the design or operation of the CRDMs. The affected Surveillance and Required Action will not be impacted. Revising the SR will not affect the ability of the control rods to shutdown the reactor if required. The overall intent of the notch testing surveillances, which is to detect either random stuck control rods or identify generic concerns affecting control rod operability, is not affected by the proposed change.

Therefore, the proposed change does not involve an increase in the probability or consequences of an accident previously evaluated.

2) Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously analyzed?

Response: No.

Revising the SR does not involve physical modification to the plant and does not introduce a new mode of operation.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3) Does the proposed amendment involve a significant reduction in a margin of safety?

Response: No.

Removing "partially" from the SR does not impact the Surveillance or involve a physical plant modification. There will not be an impact to the likelihood of detecting a stuck control rod.

Therefore, the proposed change does not involve a significant reduction in the margin of safety.

Based on the above, Energy Northwest concludes that the proposed amendment does not involve a significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

#### 7.0 CONCLUSIONS

Based on the considerations discussed above: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the applicable

Enclosure Page 7 of 7

regulations as identified herein, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

## 8.0 ENVIRONMENTAL CONSIDERATION

Energy Northwest has determined that the proposed amendment would not change requirements with respect to installation or use of a facility component located within Columbia's restricted area, as defined in 10 CFR 20, or would not change an inspection or SR. Energy Northwest has evaluated the proposed change and has determined that the change does not involve, (i) a significant hazards consideration, (ii) a significant change in the types or a significant increase in the amounts of any effluents that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed change meets the eligibility criteria for categorical exclusion in accordance with 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

## 9.0 REFERENCES

- 1. NUREG-0800, Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition, Section 4.3, Nuclear Design, Revision 3, March 2007 (ADAMS Accession Number ML100351425)
- 2. NUREG-1434, General Electric Plants, BWR/6 Specifications, Revision 5, September 30, 2021 (ADAMS Accession Number ML21271A582)

## Attachment 1

Proposed Columbia Technical Specification Changes (Mark-Up) (1 page follow)

## SURVEILLANCE REQUIREMENTS

	SURVEILLANCE	FREQUENCY
SR 3.1.3.1	Determine the position of each control rod.	In accordance with the Surveillance Frequency Control Program
SR 3.1.3.2	Not required to be performed until 31 days after the control rod is withdrawn and THERMAL POWER is greater than the LPSP of the RWM.	
	Insert each <del>partially</del> withdrawn control rod at least one notch.	In accordance with the Surveillance Frequency Control Program
SR 3.1.3.3	Verify each control rod scram time from fully withdrawn to notch position 5 is $\leq$ 7 seconds.	In accordance with SR 3.1.4.1, SR 3.1.4.2, SR 3.1.4.3, and SR 3.1.4.4
SR 3.1.3.4	Verify each control rod does not go to the withdrawn overtravel position.	Each time the control rod is withdrawn to "full out" position  AND
		Prior to declaring control rod OPERABLE after work on control rod or CRD System that could affect coupling

# Attachment 2

Revised Columbia Technical Specification Pages (Clean Page) (1 page follow)

## SURVEILLANCE REQUIREMENTS

	SURVEILLANCE	FREQUENCY
SR 3.1.3.1	Determine the position of each control rod.	In accordance with the Surveillance Frequency Control Program
SR 3.1.3.2	Not required to be performed until 31 days after the control rod is withdrawn and THERMAL POWER is greater than the LPSP of the RWM.	
	Insert each withdrawn control rod at least one notch.	In accordance with the Surveillance Frequency Control Program
SR 3.1.3.3	Verify each control rod scram time from fully withdrawn to notch position 5 is $\leq$ 7 seconds.	In accordance with SR 3.1.4.1, SR 3.1.4.2, SR 3.1.4.3, and SR 3.1.4.4
SR 3.1.3.4	Verify each control rod does not go to the withdrawn overtravel position.	Each time the control rod is withdrawn to "full out" position  AND  Prior to declaring control rod OPERABLE after work on control rod or CRD System that could affect coupling