



Jeremy S. Hauger  
Vice President, Engineering  
P.O. Box 968, PE30  
Richland, WA 99352-0968  
509.377.8727  
jshauger@energy-northwest.com

November 28, 2022

GO2-22-122

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  
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION  
RELATED TO LICENSE AMENDMENT REQUEST TO ADOPT TSTF-  
505, REVISION 2, "PROVIDE RISK-INFORMED EXTENDED  
COMPLETION TIMES – RITSTF INITIATIVE 4b"**

Reference: 1. Letter from J. K. Dittmer (Energy Northwest) to U.S. Nuclear Regulatory Commission, "License Amendment Request to Adopt TSTF-505, Revision 2, 'Provide Risk-Informed Extended Completion Times – RITSTF Initiative 4b'," dated February 3, 2022 (ADAMS Accession No. ML22034A992)

2. Email from M. Chawla, NRC, to Richard M. Garcia (Energy Northwest), "Final – Request for Additional Information – Columbia Generating Station – License Amendment Request to Adopt TSTF-505 – EPID L-2022-LLA-0023" dated October 28, 2022

Dear Sir or Madam:

In Reference 1, Energy Northwest requested an amendment to the Columbia Generating Station (Columbia) Technical Specifications (TS). The proposed amendment would modify Columbia's TS requirements to permit the use of Risk-Informed Completion Times in accordance with TSTF-505, Revision 2, "Provide Risk-Informed Extended Completion Times – RITSTF Initiative 4b". In Reference 2, the Nuclear Regulatory Commission (NRC) requested additional information to support the Energy Northwest submittal. The enclosure to this letter contains the requested information.

GO2-22-122

Page 2 of 2

The information contained in the enclosure does not affect the Technical Analysis or No Significant Hazards Consideration conclusions contained in the license amendment request. Additionally, the information provided in the enclosure does not affect the bases for concluding that neither an environmental impact statement nor an environmental assessment needs to be prepared in connection with the proposed amendment.

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

This letter and its enclosure contain no new commitments.

If there are any questions or if additional information is needed, please contact Mr. R.M. Garcia, Licensing Supervisor, at 509-377-8463.

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

Executed this 28th day of November, 2022.

Respectfully,

DocuSigned by:  
  
B3D71514C4434A3...

Jeremy S. Hauger  
Vice President, Engineering

Enclosure: Response to Request for Additional Information

cc: NRC RIV Regional Administrator  
NRC NRR Project Manager  
NRC Senior Resident Inspector/988C  
CD Sonoda – BPA/1399  
EFSECutc.wa.gov – EFSEC  
E Fordham – WDOH  
R Brice – WDOH  
L Albin – WDOH

GO2-22-122

Enclosure

Page 1 of 2

**RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION**

By letter dated February 3, 2022 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22034A992), Energy Northwest (the licensee) submitted a license amendment request (LAR) to amend Renewed Facility Operating License No. NPF-21 for Columbia Generating Station (Columbia). The proposed amendment would modify the Columbia Technical Specification (TS) requirements to permit the use of risk-informed completion times (RICTs) in accordance with Technical Specifications Task Force (TSTF) Traveler TSTF-505, "Provide Risk-Informed Extended Completion Times – RITSTF [Risk-Informed TSTF] Initiative 4b," Revision 2 (ML18183A493). These RICTs would apply to certain actions required when limiting conditions for operation are not met. A regulatory audit was conducted from August 1, 2022, through August 4, 2022, during which the licensee addressed the audit questions and concerns submitted by the U.S. Nuclear Regulatory Commission (NRC) staff on July 6, 2022 (ML22165A296). During the audit, there were a number of questions addressed by the licensee and closed out. For the remainder of the questions, the licensee provided the response in a supplement dated October 4, 2022 (ML22277A603). During further review, the NRC staff has identified the following information, which needs to be addressed, to complete the review of the subject application.

**NRC Request for Additional Information (RAI)**

A Risk-Managed Technical Specifications (RMTS) program permits continued plant operation beyond the existing completion times (CTs) for certain TS Limiting Conditions for Operation (LCOs), provided risk is assessed and managed using the approach in Nuclear Energy Institute (NEI) Topical Report (TR) 06-09-A, "Risk-Informed Technical Specifications Initiative 4b: Risk-Managed Technical Specifications (RMTS) Guidelines" (ML122860402), approved by the NRC on May 17, 2007 (ML071200238). Limitation and Condition #2 delineated in NEI 06-09-A states,

"The LAR will provide identification of the TS LCOs and action requirements to which the RMTS will apply, with a comparison of the TS functions to the PRA [probabilistic risk assessment] modeled functions of the SSCs [structures, systems, and components] subject to those LCO actions ... The comparison should justify that the scope of the PRA model ... are consistent [with the] licensing basis assumptions ... for each of the TS requirements, or an appropriate disposition or programmatic restriction will be provided."

Based on Table E1-1, "In-Scope TS/LCO Conditions to Corresponding PRA Functions," (Notes 1 and 6) of the Columbia TSTF-505 LAR dated February 3, 2022, it is NRC staff's understanding that the implementation items in LAR Attachment 5, "Columbia Generating Station RICT Program PRA Implementation Items," need to be completed to sufficiently calculate the risk-informed completion times (RICTs) for selected LCO conditions (e.g., those associated with LCO Conditions 3.3.1.1.A, 3.3.1.1.B, 3.3.5.1.F, and 3.3.5.1.G in LAR Table E1-1). However, the LAR does not provide a mechanism that will ensure the implementation items are completed prior to RICT program implementation. The staff requests the licensee to provide the following information.

GO2-22-122

Enclosure

Page 2 of 2

- (a) Clarify whether the implementation items in LAR Attachment 5 have been completed for the current base PRA model (e.g., PRA model of record) or the "configuration risk monitor" (CRM) model.
- (b) If the implementation items in LAR Attachment 5 have been completed for the base PRA model and/or CRM model, then no additional information is needed. Otherwise, the licensee should address one of the following:

- (i) Provide a mechanism (e.g., add a license condition or specify in TS Section 5.5.16) that will ensure the implementation items in LAR Attachment 5 are completed prior to RICT program implementation or appropriate RICT programmatic restrictions are taken until the implementation items are completed

**-OR-**

- (ii) For those LCO Conditions in LAR Table E1-1 whose RICTs could be impacted by the implementation items in LAR Attachment 5, explain and justify how the associated RICTs will be appropriately (e.g., conservatively) calculated until the implementation items are completed,

**-OR-**

- (iii) Remove the applicable LCO Conditions from the scope of RICT.

### **Energy Northwest Response To RAI**

- (a) The implementation items in LAR Attachment 5 have not been completed for the current base PRA model or the CRM model.
- (b.ii) Until the implementation items in LAR Attachment 5 related to the Reactor Protection System (RPS) have been completed for the base PRA model, LCO Conditions 3.3.1.1.A and 3.3.1.1.B will be calculated using the basic event CE (electrical failure of scram system) as a surrogate. The basic event CE represents the electrical failure of the RPS, which is conservative as the event fails the electrical scram logic. The RICT estimate is 0.36 days.

Until the implementation items in LAR Attachment 5 related to the Automatic Depressurization System (ADS) have been completed for the base PRA model, LCO Conditions 3.3.5.1.F and 3.3.5.1.G will be calculated using surrogate events. The basic event MS-SRV-5OF7-CCLL (five of seven ADS valves fail to open due to a common cause failure) represents failure of the ADS. The basic event L2-PHE-ADS-F-RPV (ADS fails to adequately depressurize the reactor pressure vessel) ensures automatic depressurization is failed for large early release frequency calculations. These surrogate events are conservative as the events fail ADS actuation. The RICT estimate is 7.35 days.