UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

May 12, 2020

Mr. Bradley J. Sawatzke
Chief Executive Officer
Energy Northwest
76 North Power Plant Loop
P.O. Box 968 (Mail Drop 1023)
Richland, WA 99352-0968

SUBJECT: COLUMBIA GENERATING STATION - ISSUANCE OF AMENDMENT NO. 258 RE: CHANGES TO TECHNICAL SPECIFICATION LIMITING CONDITIONS FOR OPERATION 3.8.4 AND 3.8.7 (**EXIGENT CIRCUMSTANCES**) (EPID L-2020-LLA-0080)

Dear Mr. Sawatzke:

The U.S. Nuclear Regulatory Commission (NRC, the Commission) has issued the enclosed Amendment No. 258 to Renewed Facility Operating License No. NPF-21 for the Columbia Generating Station (Columbia). The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated April 15, 2020, as supplemented by letter dated April 23, 2020.

The amendment revises Technical Specifications (TSs) 3.8.4, “DC (Direct Current) Sources – Operating”, and 3.8.7 “Distribution Systems – Operating” TS Required Actions 3.8.4.G.1, 3.8.7.A.1, and 3.8.7.B.1 completion times, on a one-time basis. Additionally, the change removes an existing one-time note to TS 3.8.7.A, which has expired. The license amendment is also associated with the ongoing COVID-19 pandemic and the resulting impacts on Columbia.

A copy of the related Safety Evaluation is also enclosed. The Safety Evaluation describes the exigent circumstances under which the amendment is being issued and provides a final no significant hazards consideration determination. The Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

/RA/

L. John Klos, Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-397

Enclosures:
1. Amendment No. 258 to NPF-21
2. Safety Evaluation

cc: Listserv

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

ENERGY NORTHWEST

DOCKET NO. 50-397

COLUMBIA GENERATING STATION

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 258
License No. NPF-21

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Energy Northwest (the licensee), dated April 15, 2020, as supplemented by letter dated April 23, 2020, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-21 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 258 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the renewed license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. The license amendment is effective as of its date of issuance and shall be implemented within 5 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Jennifer L. Dixon-Herrity

Digitally signed by Jennifer L. Dixon-Herrity
Date: 2020.05.12 11:43:38 -04'00'

Jennifer L. Dixon-Herrity, Chief
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Renewed Facility Operating License No. NPF-21 and Technical Specifications

Date of Issuance: May 12, 2020

ATTACHMENT TO LICENSE AMENDMENT NO. 258 TO

RENEWED FACILITY OPERATING LICENSE NO. NPF-21

COLUMBIA GENERATING STATION

DOCKET NO. 50-397

Replace the following pages of Renewed Facility Operating License No. NPF-21 and Appendix A, Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change.

Renewed Facility Operating License

REMOVE	INSERT
-4-	-4-

Technical Specification

REMOVE	INSERT
3.8.4-2	3.8.4-2
3.8.7-1	3.8.7-1
3.8.7-2	3.8.7-2
----	3.8.7-3

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 258 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the renewed license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

a. For Surveillance Requirements (SRs) not previously performed by existing SRs or other plant tests, the requirement will be considered met on the implementation date and the next required test will be at the interval specified in the Technical Specifications as revised in Amendment No. 149.

(3) Deleted.

(4) Deleted.

(5) Deleted.

(6) Deleted.

(7) Deleted.

(8) Deleted.

(9) Deleted.

(10) Deleted.

(11) Deleted.

(12) Deleted.

(13) Deleted.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. One required Division 1 250 V DC battery charger inoperable.	C.1 Restore battery terminal voltage to greater than or equal to the minimum established float voltage. AND C.2 Verify battery float current $\leq$ 2 amps. AND C.3 Restore required battery charger to OPERABLE status.	2 hours Once per 12 hours 72 hours
D. One required Division 1 or 2 125 V DC battery inoperable.	D.1 Restore battery to OPERABLE status.	2 hours
E. One required Division 3 125 V DC battery inoperable.	E.1 Restore battery to OPERABLE status.	2 hours
F. One required Division 1 250 V DC battery inoperable.	F.1 Restore battery to OPERABLE status.	2 hours
G. Division 1 or 2 125 V DC electrical power subsystem inoperable for reasons other than Condition A or D.	G.1 Restore Division 1 and 2 125 V DC electrical power subsystems to OPERABLE status.	----------NOTE---------- Until June 30, 2021, a Completion Time of 16 hours is applicable for replacement of WMA-42-8F1E or its failed starter coil. ---------- 2 Hours

3.8 ELECTRICAL POWER SYSTEMS

3.8.7 Distribution Systems - Operating

LCO 3.8.7 The following AC and DC electrical power distribution subsystems shall be OPERABLE:

a. Division 1 and Division 2 AC electrical power distribution subsystems;

b. Division 1 and Division 2 125 V DC electrical power distribution subsystems;

c. Division 1 250 V DC electrical power distribution subsystem; and

d. Division 3 AC and DC electrical power distribution subsystems.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Division 1 or 2 AC electrical power distribution subsystem inoperable.	A.1 Restore Division 1 and 2 AC electrical power distribution subsystems to OPERABLE status.	----------NOTE---------- Until June 30, 2021, a Completion Time of 16 hours is applicable for replacement of WMA-42-8F1E or its failed starter coil. ---------- 8 hours <u>AND</u> 16 hours from discovery of failure to meet LCO 3.8.7.a or b

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. Division 1 or 2 125 V DC electrical power distribution subsystem inoperable.	B.1 Restore Division 1 and 2 125 V DC electrical power distribution subsystems to OPERABLE status.	----------NOTE---------- Until June 30, 2021, a Completion Time of 16 hours is applicable for replacement of WMA-42-8F1E or its failed starter coil. ---------- 2 hours AND 16 hours from discovery of failure to meet LCO 3.8.7.a or b
C. Required Action and associated Completion Time of Condition A or B not met.	C.1 ----------NOTE---------- LCO 3.0.4.a is not applicable when entering MODE 3. _____ Be in MODE 3.	 12 hours
D. Division 1 250 V DC electrical power distribution subsystem inoperable.	D.1 Declare associated supported feature(s) inoperable.	Immediately
E. One or more Division 3 AC or DC electrical power distribution subsystems inoperable.	E.1 Declare High Pressure Core Spray System inoperable.	Immediately
F. Two or more divisions with inoperable electrical power distribution subsystems that result in a loss of function.	F.1 Enter LCO 3.0.3.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.8.7.1	Verify correct breaker alignments and indicated power availability to required AC and DC electrical power distribution subsystems.	In accordance with the Surveillance Frequency Control Program

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 258 TO

RENEWED FACILITY OPERATING LICENSE NO. NPF-21

ENERGY NORTHWEST

COLUMBIA GENERATING STATION

DOCKET NO. 50-397

1.0 INTRODUCTION

By letter dated April 15, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20107G972), as supplemented by letter dated April 23, 2020 (ADAMS Accession No. ML20114E280), Energy Northwest (the licensee) requested a COVID-19, exigent license amendment request (LAR) for the Columbia Generating Station (Columbia).

The proposed amendment would revise Technical Specifications (TSs) 3.8.4, "DC (Direct Current) Sources – Operating," and 3.8.7, "Distribution Systems – Operating." This request adds a one-time extension for TS Required Actions 3.8.4.G.1, 3.8.7.A.1, and 3.8.7.B.1 Completion Times (CTs), specifically associated with Division 2, 4160 volts (V) alternating current (AC) and 125 V DC electrical power distribution inoperability. Additionally, the change removes an existing one-time note to TS 3.8.7.A, which has expired.

This LAR is a necessary contingency to support a potential emergent repair of a degraded cooling system supporting Division 2 electrical distribution subsystems. Repair work would involve replacing a starter coil or bucket, which houses a control power transformer (CPT) subject to a known Title 10 of the *Code of Federal Regulations* (10 CFR) Part 21 "Reporting of Defects and Noncompliance," issue. Failure of the starter coil would render essential cooling inoperable with a 2-hour action statement to restore the Division 2, 125 V DC distribution system to operable. The LAR was also submitted due to unforeseen circumstances associated with the ongoing COVID-19 pandemic and the resulting impact on Columbia.

As discussed in the application dated April 15, 2020, the licensee requested that the proposed amendment be processed by the U.S. Nuclear Regulatory Commission (NRC, the Commission) on an exigent basis in accordance with the provisions in 10 CFR 50.91(a)(6). The NRC staff's evaluation regarding the exigent circumstances is discussed in Section 4.0 of this safety evaluation (SE).

The supplemental letter dated April 23, 2020, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the NRC staff's original proposed no significant hazards consideration determination as published in the *Tri-City Herald*, Kennewick, Washington on May 5–7, 2020.

2.0 REGULATORY EVALUATION

2.1 Applicable Regulatory Requirements

The NRC staff identified the following regulatory requirements as applicable to this LAR.

The NRC staff reviewed the LAR based on the following General Design Criteria (GDC) of 10 CFR Part 50, Appendix A, "General Design Criteria for Nuclear Power Plants."

- GDC 17, "Electric power systems," which states, in part, that:

  > An onsite electric power system and an offsite electric power system shall be provided to permit functioning of structures, systems, and components important to safety. The safety function for each system (assuming the other system is not functioning) shall be to provide sufficient capacity and capability to assure that (1) specified acceptable fuel design limits and design conditions of the reactor coolant pressure boundary are not exceeded as a result of anticipated operational occurrences, and (2) the core is cooled and containment integrity and other vital functions are maintained in the event of postulated accidents.

- GDC 18, "Inspection and testing of electric power systems," requires that electric power systems that are important to safety must be designed to permit appropriate periodic inspection and testing.

- The regulations in 10 CFR 50.36, "Technical specifications," require that TSs are to include items in the following five specific categories related to station operation: (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation (LCOs); (3) surveillance requirements; (4) design features; and (5) administrative controls. The proposed changes in this LAR relates to the LCO regulations in 10 CFR 50.36(c)(2).

- The regulation in 10 CFR 50.36(c)(2)(i) states, in part, that:

  > Limiting conditions for operation are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When a limiting condition for operation of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specifications until the condition can be met.

2.2 System Description

The LAR states that the Columbia onsite Class 1E AC electrical power distribution system is divided into three, independent AC electrical power distribution subsystems consisting of 4160, 480, 120/240, and 120/208 V buses. Each division is considered a "subsystem" of the Class 1E AC and DC electrical power distribution systems. Any two of the three divisions of the

distribution system are capable of providing the necessary electrical power to the associated engineered safety features (ESF) components. The defense-in-depth design of the AC power system ensures a single failure within any system or within the electrical power distribution subsystems does not prevent safe shutdown of the reactor.

The onsite Class 1E DC electrical power distribution system provides control power for the onsite AC emergency power system and motive and control power to selected safety-related equipment. The 125 V DC electrical power system consists of three independent Class 1E DC electrical power subsystems, Divisions 1, 2, and 3. A single 250 V DC battery provides Class 1E power to Division 1. The Division 2 safety-related DC power source consists of a 125 V battery bank and two full capacity chargers, one of which is normally in service and the other is normally electrically isolated from the distribution system. This DC power source provides the control power for its associated Class 1E AC power load group, 4.16 kilovolt (kV) switchgear, and 480 V load centers. Also, this DC power source provides DC power to the emergency lighting system, diesel generator (DG) auxiliaries, and the DC control power for the Division 2 DG.

Each Class 1E division provides power to the critical switchgear area heating ventilation and air conditioning system. The purpose of this system is to maintain temperatures between 55 and 104 degrees Fahrenheit during normal operations and less than maximum qualification limits for critical switchgear components during emergency cooling mode. The system also removes combustible fumes generated by emergency batteries. Divisions 1 and 2 critical switchgear rooms are served by separate cooling systems consisting of an air-handling unit, battery room exhaust fans, and associated ductwork and controls. Air supplied to the battery rooms is continuously exhausted only, and not recirculated.

2.3 Description of Proposed Changes

The LAR states that LCO 3.8.4, Divisions 1, 2, and 3 DC electrical power distribution subsystems are to be operable whenever Columbia is in operating Mode 1, 2 or 3. With either Division 1 or 2, 125 V DC subsystem inoperable for reasons other than a battery or battery charger issue, TS Condition 3.8.4.G requires restoration of the subsystem within 2 hours. If the required action of TS Condition 3.8.4.G cannot be met, the plant must be in Mode 3 within an additional 12 hours in accordance with TS Condition 3.8.4.J.

In the LAR, the licensee proposed to add a note to TS Required Actions 3.8.4.G.1, 3.8.7.A.1, and 3.8.7.B.1 to allow a one-time extension of a CT of 16 hours to restore inoperable electrical distribution subsystems to OPERABLE status. The licensee requests this one-time extension in order to resolve a 10 CFR Part 21 issue related to a defective CPT on the motor control center cubicle (bucket) for the Division 2 vital island cooling system (see ADAMS Accession No. ML19247C581). The defective CPT could cause a failure of its associated starter coil. The current CT for the TSs mentioned above do not provide sufficient time for the licensee to perform the replacement of the bucket or the starter coil. The licensee proposed a note to be added to TS Required Actions 3.8.4.G.1, 3.8.7.A.1, and 3.8.7.B.1 which states, “Until June 30, 2021, a Completion Time of 16 hours is applicable for replacement of WMA-42-8F1E or its failed starter coil.”

The licensee also proposed to remove an existing one-time note to TS 3.8.7.A, which has expired. Enclosure 2, “Proposed Columbia Technical Specification Changes (Mark-Up),” of the LAR provides markups of the TSs with the proposed note and the removal of the expired note.

2.4 Reason for Proposed Changes

In the LAR, the licensee stated that the current timeline for the replacement of the motor control center cubicle (bucket) containing a defective CPT for the Division 2 vital island cooling system as the 10 CFR Part 21 resolution is the spring 2021 refueling outage (R-25). In the event that the starter coil failed prior to the planned outage bucket replacement, the Division 2 vital island cooling would be lost.

The existing CT for restoration of the AC and DC electrical distribution systems does not support an online repair of the system. The total time required to replace the failed component and restore vital island cooling would exceed the TS allowed time to restore the inoperable electrical distribution subsystem. The reason for the proposed changes is to allow additional time to repair the CPT and restore the affected inoperable electrical subsystems without entering one or more shutdown action statements.

3.0 TECHNICAL EVALUATION

The NRC staff evaluated the licensee's application to determine if the proposed changes are consistent with the regulations and licensing basis information discussed in Section 2 of this SE. Specifically, the NRC staff reviewed the proposed changes to TSs 3.8.4 and 3.8.7 to allow a one-time CT extension to restore inoperable electrical distribution subsystems to OPERABLE status.

The NRC staff evaluated the licensee's application to verify that the proposed changes to TSs 3.8.4 and 3.8.7 will not adversely impact the availability of AC and DC electrical power for the systems required to shut down the reactor and maintain it in a safe condition. The NRC staff reviewed the justification for the duration of the extended CTs, and the adequacy of the compensatory measures the licensee proposed to ensure the equipment important to safety is not adversely impacted during the extended CT.

3.1 Evaluation of the Impact on AC and DC Electrical Distribution Systems

In Section 3.1, "Deterministic Evaluation," of Enclosure 1 to the LAR, the licensee states, in part:

> While WMA-FN-53B is out of service, the supported Division 2 electrical distribution subsystems are considered inoperable due to inability to maintain equipment in these areas below their upper qualification temperature in transient scenarios. Loss of WMA-FN-53B could challenge the ability for Division 2 electrical distribution subsystems to remain within their equipment qualification temperature however, they would remain available to provide service until the temperature in the rooms actually rises above the equipment qualification limit.

Section 2.1, "System Design and Operation," of Enclosure 1 to the LAR provides a table with the AC Class 1E electrical systems required to shut down the reactor and maintain it in a safe condition after an anticipated operational occurrence or a postulated design-basis accident. The licensee states that, "Any two of the three divisions of the distribution system are capable of providing the necessary electrical power to the associated ESF components."

The licensee's request is to allow a one-time extension of a CT of 16 hours to restore inoperable electrical distribution subsystems to OPERABLE status due to unavailability of WMA-FN-53B, which provides cooling to the Division 2, SM-8 4160 V Class 1E electrical bus. In order to

maintain operability of the Division 2 Class 1E electrical systems, the maximum temperature must be within qualification limits for critical switchgear components during emergency cooling mode.

The NRC staff evaluated the proposed compensatory measures to ensure that, while WMA-FN-53B is out of service during the extended CT, adequate cooling is provided to Division 2 critical switchgear loads to ensure they are maintained within temperature qualification limits. The proposed compensatory measures include providing alternate cooling to the affected Division 2 critical switchgear areas and protecting DG-3, the high-pressure core spray system, and the reactor core isolation cooling system. The licensee states in the LAR that, "alternate cooling consists of propping doors and installing temporary fans." In addition, the licensee will maintain safety compensatory measures to protect the other two divisions to ensure redundancy is maintained. Section 3.3 of this SE provides details of the evaluation of compensatory measures taken by the licensee. The NRC staff finds that the proposed compensatory measure that provides alternate cooling to the affected Division 2 critical switchgear area would provide a reasonable assurance that the availability of the AC systems will be maintained.

The NRC staff also reviewed the impacts on the ability of removal of combustible gases generated by emergency batteries while having WMA-FN-53B out of service. In Section 3.1 of Enclosure 1 to the LAR, the licensee states, in part:

> Ventilation of the battery room is provided by a separate exhaust fan (WEA-FN-53B) which is not susceptible to the Part 21 issue. Airflow through the battery room would be through open fire dampers via the suction provided by the exhaust fan to maintain normal design flow of approximately 700 cfm [cubic feet per minute] through the battery rooms, which has been established as sufficient to prevent accumulation of combustible gasses. No compensatory measures are required to maintain the function of removing combustible gasses.

The NRC staff finds that proposed one-time CT extension will not impact the ability of combustible gases removal from the battery rooms because the removal of the combustible gasses is conducted by a separate fan. Therefore, the NRC staff finds that Class 1E DC divisions are not affected by the proposed CT extension.

3.2 Evaluation of the One-Time CT Extension

The NRC staff reviewed the licensee's justification of the 16-hour one-time CT extension. Currently TS Required Actions 3.8.4.G.1 and 3.8.7.B.1 require the licensee to restore Divisions 1 and 2 125 V DC electrical power subsystems to OPERABLE status within 2 hours. TS Required Action 3.8.7.A.1 requires the licensee to restore Divisions 1 and 2 AC electrical power distribution subsystems to OPERABLE status within 8 hours.

Section 2.4.1, "Bases for Extension to 16 Hours," of Enclosure 1 to the LAR provides the basis for the 16-hour CT to perform the replacement of the buckets or the starter coils. In this section, the licensee states, in part, that, "A bucket replacement bounds a starter coil replacement which is expected to take 2 hours of field work." The licensee further stated that a bucket could be changed in approximately 12 hours. The NRC staff requested the licensee to provide clarification on the discrepancies in time for the required time to complete the replacement of the bucket or the starter coils. In response to this request by supplemental letter dated April 23, 2020, the licensee stated that, "The last sentence of the first paragraph in Section 2.4.1 of the

LAR was meant to explain that the bucket replacement of approximately 12 hours bounds the 2-hour starter coil (WMA-42-8F1E) replacement activity."

The licensee stated that the replacement times for the bucket and the starter coil are based on operating experience from other plant replacements. The licensee provides a breakdown of the required time to perform the replacement of the bucket, which includes 2 hours to verify job conditions and establish clearance order control, 6 hours for the actual electrical work, 2 hours of job closeout and removal of clearances, and 2 hours of post-modification testing. The licensee stated that the CT includes an additional 4 hours of margin to account for discovery and staff mobilization.

The licensee also states in the LAR that, "The selection of a 16-hour total completion time for this change aligns with the existing secondary completion time used in TS Required Actions 3.8.7.A.1 and 3.8.7.B.1. The existing 16-hour time in required actions 3.8.7.A.1 and 3.8.7.B.1 begins at the time the LCO was initially not met instead of when the particular condition was entered. It functions to limit the overall time which may be spent in LCO 3.8.7 Condition A, Condition B or any combination thereof for a single contiguous occurrence. The bases for required actions A.1 and B.1 of LCO 3.8.7 states that 16 hours is an acceptable limitation on the potential to fail to meet the LCO."

Based on the information provided by the licensee, the NRC staff finds that the proposed 16-hour CT extension is acceptable because the 16-hour CT, which is based on the licensee operating experience of the bucket replacement, is reasonable.

3.3 Evaluation of the Compensatory Measures

The NRC staff reviewed the proposed compensatory measures to ensure the equipment important to safety is not adversely impacted during the extended completion time. Section 3.3, "Compensatory Measures," of Enclosure 1 to the LAR provides the compensatory measures that include providing alternate cooling by propping doors and installing temporary fans to the critical switchgear affected by the unavailability of WMA-FN-53B or its failed starter coil, the protection of Division 3 components (i.e., high-pressure core spray, the Division 3 DG, and reactor core isolation cooling), and protection of the redundant division.

In Section 3.1 of Enclosure 1 to the LAR, the licensee states that the Division 2 AC distribution system would exceed its equipment qualification limit at approximately 24 hours without adding alternate cooling. Compensatory actions to establish alternate cooling extend the time to over 62 hours before the temperature limit would be reached. The licensee further states that, "Establishment of alternate cooling consists of propping doors and installing temporary fans. These actions are already proceduralized and understood by equipment operators. Equipment to implement the compensatory measure is located in the vicinity of the critical switchgear rooms and it is estimated that alternate cooling can be established within less than 2 hours from discovery of loss of cooling." Adding this alternate cooling should ensure critical switchgear components are maintained within temperature qualification limits. The NRC staff notes that the compensatory measure of adding alternate room cooling is a conservative measure to prevent the Division 2 AC distribution system equipment temperature from exceeding its limit during the 16-hour CT.

Based on the information provided in the LAR and its supplement, the NRC staff finds that the proposed compensatory measures are acceptable because they provide reasonable assurance that the availability of systems and components, required to shut down the reactor and maintain it in a safe condition, is maintained during the implementation of the one-time extended CT.

3.4 Evaluation of the Note Removal

In the LAR, the licensee proposed to remove the one-time note from TS 3.8.7.A, which states:

> The CT for Required Action A.1 may be extended up to 16 hours to support restoration of E-PP-7AF following work to repair/replace its transformer E-TR-7A/2. Upon successful restoration of E-PP-7AF following the repair of E-TR-7A/2, this footnote is no longer applicable and will expire at 0800 PST [Pacific Standard Time] on September 14, 2019.

The NRC staff finds that the note is expired, and the removal of this note will not impact the operability of the AC and DC electrical power distribution subsystems. Therefore, the proposed removal of the note is acceptable.

3.5 Electrical Review Technical Conclusion

The NRC staff reviewed the proposed changes to Columbia TSs 3.8.4 and 3.8.7. The proposed change would add a note to TS Required Actions 3.8.4.G.1, 3.8.7.A.1, and 3.8.7.B.1 to allow a one-time CT extension of 16 hours to restore inoperable electrical distribution subsystems to OPERABLE status. Based on the above evaluations, the NRC staff finds that the proposed TS changes would not adversely impact the availability of AC and DC electrical power for the systems required to shut down the reactor and maintain it in a safe condition, the capability of providing cooling to certain Division 2 critical switchgear components during emergency cooling mode, and the capability of removing combustible fumes generated by emergency batteries. The NRC staff also finds that the licensee is providing appropriate compensatory measures to ensure the necessary quality of the electrical equipment is maintained and the associated LCOs will be met. The NRC staff concludes that there is reasonable assurance that the requirements of 10 CFR 50.36(c)(2), 10 CFR 50.36(c)(2)(i) and the intent of 10 CFR Part 50, Appendix A, GDC 17 and 18 will continue to be met. In conclusion, the NRC staff finds the proposed changes acceptable.

3.6 Risk-Insights

In the application dated April 15, 2020, the licensee submitted an LAR that was a one-time exigent request based on a deterministic evaluation that was further supported with risk insights. The licensee stated that the request is based on the need to replace the motor control center bucket or its associated starter coil that provides power to cool Division 2 electrical power distribution subsystems and the time required to replace the components, which exceeds the allowed CTs described in TS 3.8.4 Condition G and TS 3.8.7 Conditions A and B. The subject LAR is not a risk-informed request ,and a risk evaluation was not required for making a regulatory decision.

The NRC staff determined that “special circumstances,” as discussed in NUREG-0800, “Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR [Light-Water Reactor] Edition,” Section 19.2, “Review of Risk Information Used to Support Permanent Plant-Specific Changes to the Licensing Basis: General Guidance,” dated

June 2007 (ADAMS Accession No. ML071700658), did not exist. The licensee provided risk insights related to the proposed change in Section 3.2, "Probabilistic Risk Assessment (PRA) Evaluation," of Enclosure 1 to the LAR.

The risk insights provided by the licensee included numerical results. However, the NRC staff considered the licensee-provided qualitative risk insights to aid in the deterministic review of the proposed change and reviewed NRC's Standardized Plant Analysis Risk (SPAR) model for Columbia to determine the adequacy of the compensatory actions and dominant contributors. The NRC staff's review confirmed the licensee-provided qualitative risk insights and supported the traditional engineering conclusions associated with the proposed change, as well as the licensee's proposed compensatory actions. The NRC staff concludes that the available risk insights do not challenge the engineering conclusions.

The PRA models used by the licensee to derive risk insights were not reviewed by the NRC staff to determine their technical acceptability to support this LAR because this is not a risk-informed LAR. As a result, the NRC staff did not rely on the numerical results provided by the licensee. For the same reason, the NRC staff did not consider the guidance in Regulatory Guide (RG) 1.174, Revision 3, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis"; RG 1.177, Revision 1, "An Approach for Plant-Specific, Risk-Informed Decisionmaking: Technical Specifications"; and RG 1.200, Revision 2, "An Approach for Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk-Informed Activities" (ADAMS Accession Nos. ML17317A256, ML100910008, and ML090410014, respectively), which were cited by the licensee in Section 4.2, "Applicable Regulatory Guidance," of Enclosure 1 to the LAR.

3.7 Technical Deterministic Review with Risk-Insights Conclusion

The NRC staff's review of the Columbia SPAR model and the licensee-provided qualitative risk insights supported the traditional engineering conclusions associated with the proposed change and the licensee's proposed compensatory actions. The NRC staff concludes that the available risk insights do not challenge the engineering conclusions.

4.0 EXIGENT CIRCUMSTANCES

4.1 Background

The NRC's regulations contain provisions for issuance of amendments when the usual 30-day public comment period cannot be met. These provisions are applicable under exigent circumstances. Consistent with the requirements in 10 CFR 50.91(a)(6), exigent circumstances exist when: (1) a licensee and the NRC must act quickly; (2) time does not permit the NRC to publish a *Federal Register* notice allowing 30 days for prior public comment; and (3) the NRC determines that the amendment involves no significant hazards consideration. As discussed in the licensee's application dated April 15, 2020, the licensee requested that the proposed amendment be processed by the NRC on an exigent basis.

Under the provisions in 10 CFR 50.91(a)(6), the NRC notifies the public in one of two ways: (1) by issuing a *Federal Register* notice providing an opportunity for hearing and allowing at least 2 weeks from the date of the notice for prior public comments; or (2) by using local media to provide reasonable notice to the public in the area surrounding the licensee's facility. In this case, the NRC published a public notice in the *Tri-City Herald,* located in Kennewick,

Washington 99336 (https://www.tri-cityherald.com), a newspaper local to the licensee's facility, from May 5–7, 2020.

4.2 Licensee's Basis for Exigency

The licensee provided the following information to support its need for this exigent LAR. The licensee stated that a national emergency was declared on March 13, 2020, by the Federal Government due to a pandemic related to COVID-19. Additionally, a "Stay Home – Stay Healthy" proclamation was made by the State of Washington on March 23, 2020, due to the COVID-19 pandemic. Additionally, the licensee also stated that retaining Columbia in operation during the pandemic will help support the public need for reliable electricity supply to cope with the pandemic, and will help maintain full power operations of the plant for the remainder of the current operating cycle and the unknown duration of the National Emergency and State pandemic response.

Columbia's operational continuity also supports the Appendix to Proclamation 20-25, where nuclear power facilities are recognized as part of the critical Energy Sector profile, and as such continuity of operations is to be maintained to protect the health and well-being of all Washingtonians.

4.3 NRC Staff Conclusion

Based on the above circumstances, the NRC staff finds that the licensee made a timely application for the proposed amendment following identification of the issue. In addition, the NRC staff finds that exigent circumstances exist in that the licensee and the NRC must act quickly and that time does not permit the NRC staff to publish a *Federal Register* notice allowing 30 days for prior public comment. Further, the NRC staff finds that the licensee could not avoid the exigency because of the operational demands related to the support necessary for the unforeseen circumstances associated with the ongoing COVID-19 pandemic. Based on these findings, and the determination that the amendment involves no significant hazards consideration, as discussed below in Section 6.0, the NRC staff has determined that a valid need exists for issuance of the license amendment using the exigent provisions of 10 CFR 50.91(a)(6).

5.0 PUBLIC COMMENTS

Under the provisions in 10 CFR 50.91(a){6), the NRC used local media and published a public notice in the *Tri-City Herald* located in Kennewick, Washington 99336 (https://www.tri-cityherald.com); a newspaper local to the licensee's facility, on May 5–7, 2020. The notice included the NRC staff's proposed no significant hazards consideration determination. The notice also provided an opportunity for public comment until May 8, 2020, regarding the NRC staff's proposed no significant hazards consideration determination. No public comments were received regarding the proposed amendment.

6.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The NRC's regulation in 10 CFR 50.92(c) states that the NRC may make a final determination, under the procedures in 10 CFR 50.91, that a license amendment involves no significant hazards consideration if operation of the facility, in accordance with the amendment, would not: (1) involve a significant increase in the probability or consequences of an accident previously

evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

As required by 10 CFR 50.91(a), in its application dated April 15, 2020, the licensee provided its analysis of the issue of no significant hazards consideration, which is presented below:

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

Response: No.

The proposed amendment does not increase the probability of an accident because neither the onsite Class 1E alternating current (AC) nor direct current (DC) electrical power distribution subsystem can initiate an accident. The onsite Class 1E AC and DC electrical power distribution subsystems ensure the availability of electrical power for the systems required to shut down the reactor and maintain it in a safe condition after an anticipated operational occurrence or a postulated design basis accident.

The proposed one-time extension to allow a total 16-hour completion time (CT) does not alter the conditions, operating configurations, or minimum amount of operating equipment assumed in the safety analysis for accident mitigation. No changes are proposed in the manner in which the electrical power distribution provides plant protection or which create new modes of plant operation. In addition, a probabilistic risk assessment (PRA) evaluation concluded that the risk contribution of the increased CT is a very small increase in risk. The proposed change in CT will not affect the probability of any event initiators. There will be no degradation in the performance of, or an increase in the number of challenges imposed on, safety related equipment assumed to function during an accident situation. There will be no change to normal plant operating parameters or accident mitigation performance.

Therefore, there is no significant 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.

The proposed amendment will not create the possibility of a new or different kind of accident because inoperability of Division 2 AC and DC electrical power distribution subsystem are not accident precursors. There are no hardware changes nor are there any changes in the method by which any plant system performs a safety function. This request does not affect the normal method of plant operation. The proposed amendment does not introduce new equipment, or new way of operation of the system, which could create a new or different kind of accident. No new external threats, release pathways, or equipment failure modes are

created. No new accident scenarios, transient precursors, failure mechanisms, or limiting single failures are introduced as a result of this request.

Therefore, the implementation of the proposed amendment will not create a possibility for an accident of a new or different type than those previously evaluated.

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

Response: No.

Columbia's AC and DC electrical power distribution subsystems are designed with sufficient redundancy such that any one division may be removed from service for maintenance or testing and the remaining subsystems are capable of providing electrical loads to satisfy the final safety analysis report requirements for accident mitigation or plant shutdown. A PRA evaluation concluded that the risk contribution of the CT extension is within allowable limits. There will be no change to the manner in which safety limits or limiting safety system settings are determined nor will there be any change to those plant systems necessary to assure the accomplishment of protection functions. For these reasons, the proposed amendment does not involve a significant reduction in a margin of safety.

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

The NRC staff reviewed the licensee's no significant hazards consideration analysis. Based on the review and on the NRC staff's evaluation of the underlying LAR as discussed above, the NRC staff concludes that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff has made a final determination that no significant hazards consideration is involved for the proposed amendment and that the amendment should be issued as allowed by the criteria contained in 10 CFR 50.91.

7.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Washington State official was notified of the proposed issuance of the amendment on May 2, 2020. The State official had no comments.

8.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has made a final determination that no significant hazards consideration is involved for the proposed amendment as discussed above in Section 6.0 of this SE. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9).

Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

9.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) there is reasonable assurance that such activities will be conducted in compliance with the Commission's regulations, 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.

Principal Contributors: J. Cintron, NRR
C. Moulton, NRR

Date: May 12, 2020

SUBJECT: COLUMBIA GENERATING STATION - ISSUANCE OF AMENDMENT NO. 258 RE: CHANGES TO TECHNICAL SPECIFICATION LIMITING CONDITIONS FOR OPERATION 3.8.4 AND 3.8.7 (**EXIGENT CIRCUMSTANCES**) (EPID L-2020-LLA-0080) DATED MAY 12, 2020

DISTRIBUTION:

PUBLIC	RidsNrrDssStsb Resource	JCintron-Rivera, NRR
PM File Copy	RidsNrrLAPBlechman Resource	CMoulton, NRR
RidsACRS_MailCTR Resource	RidsNrrPMColumbia Resource	
RidsNrrDorlLpl4 Resource	RidsRgn4MailCenter Resource	

ADAMS Accession No.: ML20125A080 ***by e-mail**

OFFICE	NRR/DORL/LPL4/PM*	NRR/DORL/LPL4/LA*	NRR/DEX/EEOB/BC*	NRR/DRA/APLB/BC*
NAME	JKlos	PBlechman	BTitus	JWhitman
DATE	05/01/2020	05/05/2020	04/28/2020	04/21/2020
OFFICE	NRR/DSS/STSB/BC*	OGC* NLO	NRR/DORL/LPL4/BC*	NRR/DORL/LPL4/PM*
NAME	VCusumano	STurk	JDixon-Herrity	JKlos
DATE	05/06/2020	05/11/2020	05/11/2020	05/12/2020

OFFICIAL RECORD COPY