



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
1600 E. LAMAR BLVD  
ARLINGTON TX 76011-4511

June 28, 2024

Robert Schuetz, Chief Executive Officer  
Energy Northwest  
MD 1023  
P.O. Box 968  
Richland, WA 99352

SUBJECT: COLUMBIA GENERATING STATION - NOTIFICATION OF AN NRC  
FIRE PROTECTION BASELINE INSPECTION (NRC INSPECTION REPORT  
05000397/2024010) AND REQUEST FOR INFORMATION

Dear Robert Schuetz:

The purpose of this letter is to notify you that the U.S. Nuclear Regulatory Commission (NRC), Region IV staff will conduct a triennial fire protection baseline inspection at the Columbia Generating Station in August 2024. The inspection team will be comprised of three reactor inspectors from the NRC Region IV office and a fire protection engineer from the NRC NRR office. The inspection will be conducted in accordance with Inspection Procedure 71111, Attachment 21N.05, "Fire Protection Team Inspection," the NRC's baseline fire protection inspection procedure.

The schedule for the inspection is as follows:

- Information gathering (remote meeting): July 31 – August 1, 2024
- Onsite inspection: August 12 - 16, 2024 and August 26 - 30, 2024

The purpose of the information gathering remote meeting is to obtain information and documentation needed to support the inspection and to become familiar with the fire protection program, fire protection features, post-fire safe shutdown capabilities and plant layout.

The team lead will participate in the information gathering remote meeting to select the scope of structures, systems, and components for evaluation, identify additional documents needed to support the inspection, obtain unescorted access, and meet with the key personnel who will support the inspection. The fire inspection sample selection will require a walkdown of fire areas in company with key personnel from your staff. The enclosure to this letter provides an initial list of the documents the team will need for their review. We request that your staff transmit copies of the documents listed in the enclosure to the NRC Region IV office for team use in preparation for the inspection. Please send this information so that it will arrive in the NRC Region IV office by the dates listed in the enclosure.

During the information gathering visit, the team leader will also discuss the following inspection support administrative details: (1) office space size and location; (2) specific documents requested to be made available to the team in their office spaces; (3) arrangements for reactor site access (including radiation protection training, security, safety, and fitness for duty requirements); and (4) the availability of knowledgeable plant staff and licensing organization personnel to serve as points of contact during the inspection.

We request that during the on-site inspection weeks you ensure that copies of analyses, evaluations, or documentation regarding the implementation and maintenance of the station fire protection program, including the success path necessary to achieve and maintain the nuclear safety performance criteria, be readily accessible to the team for their review. Of specific interest for the fire protection portion of the inspection are those documents which establish that your fire protection program satisfies NRC regulatory requirements and conforms to applicable NRC and industry fire protection guidance (i.e., fire protection compliance assessment documents). Also, personnel should be available at the site during the inspection who are knowledgeable regarding those plant systems required to achieve and maintain safe and stable plant conditions, including the electrical aspects of the nuclear safety capability assessment, reactor plant fire protection systems and features, and the station fire protection program and its implementation.

#### PAPERWORK REDUCTION ACT STATEMENT

This letter contains mandatory information collections that are subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). The Office of Management and Budget (OMB) approved these information collections (approval number 3150-0011). Send comments regarding this information collection to the Information Services Branch, Office of the Chief Information Officer, Mail Stop: T6 A10M, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to [Infocollects.Resource@nrc.gov](mailto:Infocollects.Resource@nrc.gov), and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0011) Office of Management and Budget, Washington, DC 20503.

#### Public Protection Notification

The NRC may not conduct nor sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid OMB control number.

This letter and its enclosure 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 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding." Your cooperation and support during this inspection will be appreciated.

If you have questions concerning this inspection or the inspection team's information or logistical needs, please contact me, the team lead inspector, in the Region IV office at (817) 200-1507 or [shiattin.makor@nrc.gov](mailto:shiattin.makor@nrc.gov).

Sincerely,



Signed by Makor, Shiattin  
on 07/03/24

Shiattin Makor  
Senior Reactor Inspector  
Engineering Branch 2  
Division of Reactor Safety

Docket No. 05000397  
License No. NPF-21

Enclosures:

1. Fire Protection Team Inspection Document Request

cc w/ encl: Distribution via LISTSERV

COLUMBIA GENERATING STATION - NOTIFICATION OF AN NRC FIRE PROTECTION  
 BASELINE INSPECTION (NRC INSPECTION REPORT 05000397/2024011) AND REQUEST  
 FOR INFORMATION – DATED JUNE 28, 2024

**DISTIRBUTION:**

JMonninger, ORA  
 JLara, ORA  
 GMiller, DORS  
 MHay, DORS  
 MSimmons, RIV/OEDO  
 DCylkowski, RC  
 VDricks, ORA  
 LWilkins, OCA  
 MChawla, NRR  
 AMoreno, RIV/OCA  
 RAlexander, RSLO  
 PVossmar, DORS  
 RBywater, DORS  
 VLee, DORS  
 CHighley, DORS  
 JBrodlowicz, DORS  
 AElam, DORS  
 R4-DORS-IPAT

DOCUMENT NAME: COLUMBIA GENERATING STATION - NOTIFICATION OF AN NRC FIRE PROTECTION  
 BASELINE INSPECTION (NRC INSPECTION REPORT 05000397/2024010) AND REQUEST FOR INFORMATION  
 ADAMS ACCESSION NUMBER **ML24180A148**

SUNSI Review By: STM	ADAMS: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Sensitive <input checked="" type="checkbox"/> Non-Sensitive	<input type="checkbox"/> Non-Publicly Available <input checked="" type="checkbox"/> Publicly Available	Keyword NRC-002
OFFICE	SRI:RIV/DORS/EB2			
NAME	S. Makor			
SIGNATURE	/RA/			
DATE	06/28/24			

OFFICIAL RECORD COPY

## **Fire Protection Team Inspection Document Request**

The documents and information requested below should generally be made available to the inspection team prior to the inspection. Electronic format is the preferred format, except where specifically noted. If electronic files are made available via a secure document management service, then the remote document access must allow inspectors to download, save, and print the documents.

If a secure document management service is utilized, it is recommended that a separate folder be used corresponding to each item listed below. It is recommended that multiple documents within each folder be individually entered and combined into a ZIP file which is uploaded into the same folder. Documents should be identified by both document number and noun name. Electronic media on compact disc or paper records (hard copy) are also acceptable.

Where C-size paper drawings are requested, please prepare two copies. Retain one copy on site for the Team's use during the inspection weeks. Send one copy to the team leader at the NRC Region IV office.

To allow review before the on-site information gathering visit, the documents requested in items A.1 thru A.26 should be made available to the team no later than July 26, 2024.

Based on review of the documentation, the team leader will identify the scope for the inspection prior to the end of the on-site information gathering visit or in-office review of the information obtained.

This document request is based on typical documents that a generic plant might have. As such, this generic document request is not meant to imply that any specific plant is required to have all the listed documents. It is recognized that some documents listed below may not be available for your plant. In addition, the document titles listed below are based on typical industry document names; your plant-specific document titles may vary.

To allow review before the on-site inspection weeks, all requested documents should be made available to the team no later than August 2, 2024.

Enclosure

A. DESIGN/LICENSING AND PROGRAM BASIS DOCUMENTS

- A.1 The current version of the Fire Protection Program and Fire Hazards Analysis.
- A.2 Post-fire safe shutdown analysis and the supporting calculations that demonstrate acceptable plant response.
- A.3 The fire protection probabilistic risk assessment (PRA) or portions of the plant's individual plant examination for external events (IPEEE) report addressing fire events. Also, include the results of any post-IPEEE reviews and listings of actions taken/plant modifications conducted in response to IPEEE information that relate to fire risk.
- A.4 Licensing basis documents for fire protection (safety evaluation reports, pertinent sections of the final safety analysis report, exemptions, deviations, letters to/from the NRC regarding fire protection/fire safe shutdown, etc.).
- A.5 List of post-fire safe shutdown systems and components (i.e., safe shutdown equipment list).
- A.6 List of fire areas with automatic fire suppression systems.
- A.7 A list, with descriptions, of design change packages performed since the last fire protection team inspection associated with fire protection or post-fire safe shutdown systems.
- A.8 A list, with descriptions, of any fire protection program changes and evaluations (not limited to Generic Letter 86-10 evaluations) performed since the last fire protection team inspection.
- A.9 Facility Operating License.
- A.10 Technical Specifications (electronic format only).
- A.11 Updated Final Safety Analysis Report (electronic format only).
- A.12 A list of the ten most risk significant plant systems for core damage frequency from the fire protection probabilistic risk assessment (if available) or the internal events probabilistic risk assessment.
- A.13 A list of the ten most risk significant plant systems for large early release frequency from the fire protection probabilistic risk assessment (if available) or the internal events probabilistic risk assessment.
- A.14 Plant layout drawings which identify: (electronic format and C-size paper drawings)
  - Plant fire area boundaries
  - Combustible control zone drawings
  - Areas protected by automatic fire suppression and/or detection

- A.15 For local manual operator actions, provide the following:
- Manual Action Feasibility Study
  - Operator Time Critical Action Program
  - Timelines for time-critical manual actions
  - Timeline validations
- A.16 Pre-fire plans for all fire areas.
- A.17 Fire protection system health reports for the two most recent quarters.
- A.18 Fire protection program health reports for the two most recent quarters.
- A.19 Fire Protection System(s) Design Basis Document.
- A.20 Fire protection program requirements (e.g., limiting conditions for operation, surveillance test requirements) covered by technical specifications, the technical requirements manual, the updated final safety analysis report, procedures, or similar documents.
- A.21 List of applicable National Fire Protection Association (NFPA) codes and standards and issuance dates (i.e., codes of record).
- A.22 A list or document identifying any deviations from the NFPA codes of record.
- A.23 Organization charts of site personnel down to the level of fire protection staff personnel.
- A.24 A contact list of key site personnel who will be supporting this inspection, giving the office location and phone number onsite.
- A.25 Self-assessments, peer assessments, and audits of fire protection activities for the last three years.
- A.26 Self-assessments, peer assessments, and audits of post-fire safe shutdown capability for the last three years.

**B. GENERAL PLANT DESIGN DOCUMENTS**

- B.1 Piping and instrumentation diagrams and legend list for components used to achieve and maintain post-fire safe shutdown for the sample systems or fire areas selected (electronic format and C-size paper drawings).
- B.2 Piping and instrumentation diagrams and legend list for fire protection systems, including the fire water supply; water suppression sprinklers; and deluge, gaseous suppression systems for the sample systems or fire areas selected (electronic format and C-size paper drawings).

- B.3 AC and DC electrical system single line diagrams, from off-site power down to the highest safety-related bus level (typically 4kV, EDG bus) (electronic format and C-size paper drawings).
- B.4 Single line diagrams for motor control centers that supply post-fire nuclear safety component loads for the sample systems or fire areas selected (electronic format and C-size paper drawings).
- B.5 Equipment location drawings which identify the physical plant locations of post-fire safety shutdown equipment for the sample systems or fire areas selected (electronic format and C-size paper drawings).

C. CLASSIC FIRE PROTECTION

- C.1 Copy of fire protection program implementing procedures (e.g., administrative controls, surveillance testing, and fire brigade).
- C.2 List, with descriptions, of calculations and engineering analyses, studies, or evaluations for the fire protection system, including the fire water system.
- C.3 Last two completed surveillances of fire protection features for the sample systems selected (detection, suppression, damper inspections, damper tests, penetration inspections, barrier inspections, etc.).
- C.4 List, with descriptions, of routine tests, surveillances, and preventive maintenance on fire pumps, including pump controllers and batteries.
- C.5 Last two completed annual fire pump pressure and flow tests with a complete copy of the test procedure.
- C.6 Last two completed monthly and/or quarterly fire pump tests with a complete copy of the test procedure.
- C.7 Last two completed fire water system flow tests and flushes with a complete copy of the test procedure.
- C.8 For Fire Brigade Drills, provide the following:
  - Last fire brigade drill critique
  - Last drill critique for a drill with off-site fire department support
  - Last unannounced drill critique
  - Last back-shift drill critique
  - Dates, shifts, and locations of unannounced drills for last three years
  - Summary of any unsatisfactory drill performance items for last three years
  - Last unannounced drill critique by a qualified individual independent of the licensee's staff



- C.9 For fire brigade equipment provide the following:
- Procedure for inventory and inspection
  - Most recent inspection and inventory results
- C.10 Fire Brigade Qualifications, including self-contained breathing apparatus, and training lesson plans.
- C.11 Copy of the evaluation or analysis of the effects of fire suppression activities on the ability to achieve the safe shutdown for the sample systems selected demonstrating:
- The automatic or manual actuation of a suppression system, due to a fire in a single location, will not indirectly cause damage to the success path.
  - The inadvertent actuation or rupture of a suppression system will not indirectly cause damage to the success path.
  - Adequate drainage for areas protected by water suppression systems.
  - The hydrostatic rating of any floor penetration seals installed within the fire areas that are credited with keeping water from leaking into fire areas below.
- C.12 Impairment Log (at start of inspection) for fire protection features that are out of service.
- C.13 List of penetration seal work, re-work, or installation activities, in the last three years.
- C.14 List of fire wrap work, re-work, or installation activities, in the last three years.
- C.15 Licensee evaluations of industry operating experience concerning fire protection issues completed in the last three years.
- C.16 List of fire event analysis reports for the last three years.
- C.17 The team would like to observe a day-shift unannounced fire brigade drill in the plant, if possible, during the week of August 12, 2024. Please put us in contact with the appropriate personnel for planning fire brigade drills during the onsite information gathering trip.
- C.18 The team would like to perform a walkdown of the sample fire protection systems and/or fire areas with fire protection personnel in the plant during the week of August 12, 2024. Please put us in contact with the appropriate personnel for planning the walkdowns during the onsite information gathering trip.

D. ELECTRICAL

- D.1 Electrical system health reports for the two most recent quarters.
- D.2 Surveillance procedures and last surveillance demonstrating operability of components required for alternative shutdown.

E. OPERATIONS

- E.1 The team would like to perform a walkthrough of a sample of post-fire safe shutdown procedures with qualified operators in the plant during the week of August 12, 2024. Please put us in contact with the appropriate personnel for planning the walkthroughs during the onsite information gathering trip.
- E.2 List, with descriptions, of licensed operator Job Performance Measures (JPMs) for operator actions required to achieve and maintain post-fire safe shutdown.
- E.3 List, with descriptions, of non-licensed operator training associated with non-licensed operator actions to achieve and maintain post-fire nuclear safe shutdown (including JPMs, in-field training walkdowns, simulations, or initial qualification).
- E.4 Lesson plans for post-fire safe shutdown training for licensed and non-licensed operators.
- E.5 Thermal hydraulic calculation or analysis that determines the time requirements for time-critical manual operator actions.
- E.6 Operating procedures to achieve and maintain post-fire safe shutdown from the control room and requiring a control room evacuation.
- E.7 For safe shutdown equipment and tools, provide the following:
  - Procedure for inventory and inspection.
  - Most recent inspection and inventory results.
- E.8 List, with descriptions, of procedures that implement cold shutdown repairs (if required).

F. FIRE PROTECTION PROGRAM ADMINISTRATIVE CONTROLS

- F.1 Copies of procedures that control the configuration of the fire protection program, features, and post-fire safe shutdown methodology and system design. Also, copies of procedures that govern the implementation of plant modifications, maintenance, and special operations and their impact on fire protection.
- F.2 List, with descriptions, of open and closed condition reports for the fire protection systems for the last three years.
- F.3 List, with descriptions, of open and closed condition reports associated with the post-fire safe shutdown analysis for the last three years.
- F.4 List, with descriptions, of open and closed condition reports associated with operator actions to achieve and maintain post-fire safe shutdown for the last three years.
- F.5 List, with descriptions, of open and closed condition reports associated with the fire protection program including plant change evaluations, post-fire operating procedures and/or training, timeline evaluations for operator actions, and supporting engineering evaluations, analysis, or calculations for the last three years.
- F.6 List, with descriptions, of open and closed condition reports for emergency lighting units for the last three years.
- F.7 Provide administrative procedures that control temporary modifications, permanent plant changes, design changes, procedure changes, ageing management changes, equivalency evaluations, suitability analyses, calculations, commercial grade dedication, safety-security interface, and repairs.
- F.8 Provide procedures that control the following: combustible controls, hot work, monitoring, compensatory measures, and work-around.
- F.9 Last five hot work permits (at power).
- F.10 Last five transient combustible permits (at power).

G. AGING MANAGEMENT PROGRAM

G.1 Copies of the aging management programs applicable to fire protection including but not limited to the following:

- Fire Protection
- Fire Water System
- Aboveground Metallic Tanks
- Buried and Underground Piping and Tanks

G.2 Copies of procedures, work orders, preventive maintenance tasks, or other documents which implement the commitments made as part of the license extension related to fire protection.

G.3 List of aging management activities related to fire protection performed to date.