

# **DRAFT NOTICE OF PROPOSED RULEMAKING**

## **CHAPTER 345 - DEPARTMENT OF ENERGY, ENERGY FACILITY SITING COUNCIL**

**FILING CAPTION:** Updates to rules for the Trojan Independent Spent Fuel Installation

**LAST DAY AND TIME TO OFFER COMMENT TO AGENCY:** 12/10/2021, 5:00 PM

### **HEARING(S):**

DATE: 11/18/2021

TIME: 5:30 PM - 6:00 PM

OFFICER: Christopher M. Clark

ADDRESS: Remote Hearing

Salem, OR 97301

### **NEED FOR THE RULE(S):**

The site certificate for the Trojan Nuclear Plant was executed by Governor McCall on July 20, 1971. Unlike the current site certificate which contains specific conditions of approval, the Trojan site certificate only requires that the certificate holder pay the necessary fees required under ORS 469.421 and abide by the rules of the Council. Under ORS 469.410(5), a site certificate executed by the governor prior to July 2, 1975, binds the Council to its terms and requires the certificate holder to abide by the Council's rules, including rules for monitoring the environmental and ecological effects of the operation and the decommissioning of the facility established under ORS 469.410(4) and 469.470(2).

The Council has adopted rules establishing monitoring and reporting requirements that apply specifically to the operation and decommissioning of the Trojan ISFSI under OAR 345-026-0300 to 345-026-0390. An additional rule specifying the requirements for reporting safety or security incidents at the Trojan ISFSI is provided under OAR 345-026-0170(2). These rules amended or replaced rules that governed the Council's monitoring and oversight of Nuclear Power Plants that were formerly also located in OAR chapter 345, division 026.

The rules were last amended in 2005, however most of the substantive requirements date back to 1999, before the ISFSI was constructed. The rules refer to a number of regulatory requirements and procedures, documents, and assumptions which have since been superseded or amended. While the terms and conditions of the renewed ISFSI license and its associated SAR do not appear to violate any provisions of the current rules, the rules may not be directly applicable to the new aging management programs and activities that will be implemented in the coming years.

This rulemaking is needed to ensure that the monitoring and reporting requirements found in the Council's rules adequately address the new aging management activities established in the revised SAR and are consistent with current federal safety requirements and guidelines for nuclear installations.

**DOCUMENTS RELIED UPON, AND WHERE THEY ARE AVAILABLE:**

Oregon Department of Energy. Staff Evaluation of the Trojan ISFSI License Renewal. October 2021.  
U.S. Nuclear Regulatory Commission. Safety Evaluation Report for the Trojan Independent Spent Fuel Installation. August 2019.  
U.S. Nuclear Regulatory Commission. Notice of License Renewal Issuance. 84 FR 42023. August 2019.  
10 CFR Part 72.  
Documents are available from the Oregon Department of Energy upon request.

**FISCAL AND ECONOMIC IMPACT:**

The rules under consideration apply specifically to the Trojan ISFSI and its certificate holder, Portland General Electric. The Department does not expect to establish any new monitoring or reporting requirements as part of this rulemaking other than those required by the NRC under the terms and conditions of the revised Safety Analysis Report. Because no new requirements are expected this rulemaking is not expected to result in any significant fiscal or economic impacts to the certificate holder. We note that the expenses incurred by the council during this rulemaking will be recovered from the certificate holder as provided under ORS 469.421(1)(f). Some of these costs may be offset by reducing the need for future review of archival information to interpret, apply, and enforce the rules.

**COST OF COMPLIANCE:**

(1) Identify any state agencies, units of local government, and members of the public likely to be economically affected by the rule(s). (2) Effect on Small Businesses: (a) Estimate the number and type of small businesses subject to the rule(s); (b) Describe the expected reporting, recordkeeping and administrative activities and cost required to comply with the rule(s); (c) Estimate the cost of professional services, equipment supplies, labor and increased administration required to comply with the rule(s).

Because these rules apply specifically to the Trojan ISFSI and its certificate holder, Portland General Electric, no economic impacts to state agencies, local governments, or other members of the public are expected. The affected certificate holder is not a small business, and the rule is not expected to impact any small businesses, result in additional reporting, recordkeeping and administrative activities or costs associated with professional services, equipment, supplies, labor or increased administration.

**DESCRIBE HOW SMALL BUSINESSES WERE INVOLVED IN THE DEVELOPMENT OF THESE RULE(S):**

Small businesses were not specifically consulted in the development of the proposed rule.

**WAS AN ADMINISTRATIVE RULE ADVISORY COMMITTEE CONSULTED? NO**

**IF NOT, WHY NOT?** The Department consulted with the certificate holder that is likely to be affected by the proposed rules. Because no other interests or communities are likely to be affected by the rule changes, consultation with a Rulemaking Advisory Committee was not considered to be appropriate.

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DRAFT

**AMEND:** 345-026-0170

**RULE TITLE:** Notification of Incidents

**RULE SUMMARY:** The revised rule removes the requirements for the Trojan ISFSI to notify the Department of accidents and incidents. These requirements have been added to the revised OAR 345-026-0390. Additional changes are made for clarity and consistency of rules.

**RULE TEXT:**

The certificate holder must notify the Department of Energy within 72 hours of any occurrence involving the facility if:

- (1) There is an attempt by anyone to interfere with its safe operation.
- (2) There is a significant natural event such as a fire, earthquake, flood, tsunami or tornado, or human-caused event such as a fire or explosion.
- (3) There is any fatal injury at the facility.

Statutory/Other Authority: ORS 469.470

Statutes/Other Implemented: ORS 469.310, 469.410, 469.430, 469.507 & 469.530

**AMEND:** 345-026-0300

**RULE TITLE:** Regulations Applicable to ~~Nuclear Installations~~ the Trojan Independent Spent Fuel Installation

**RULE SUMMARY:** The revised rule clarifies the applicability of OAR 345-026-0300 to 345-026-0390 to the Trojan Independent Spent Fuel Installation. The rule clarifies that these rules do not apply to “nuclear installations.” Additional changes are made for clarity and consistency of rules.

**RULE TEXT:**

(1) The requirements of OAR 345-026-0300 through 345-026-0390 apply exclusively to the Trojan Independent Spent Fuel Installation (ISFSI).

(2) The purpose of these rules is to cooperate with the federal government in accordance with Oregon's siting policy in ORS 469.310 to ensure the safety of interim on-site storage and to ensure spent nuclear fuel and related radioactive materials and waste will not be an undue financial burden to utilities or people of Oregon.

(3) References to the Code of Federal Regulations in these rules refer to regulations in place as of August 9, 2019.

Statutory/Other Authority: ORS 469.470

Statutes/Other Implemented: ORS 469.501

**REPEAL:** 345-026-0330

**RULE TITLE:** Radiological Environmental Monitoring

**RULE SUMMARY:** The rule is repealed. Rules for environmental monitoring are moved to the revised OAR 345-026-0390.

**RULE TEXT:**

DRAFT

**AMEND:** 345-026-0340

**RULE TITLE:** Security Plans for Nuclear Installations

**RULE SUMMARY:** The revised rule clarifies its applicability of the rule to the Trojan Independent Spent Fuel Installation, and provides revised criteria for when notification of changes must be provided to the Council and Director, based on current federal regulations in 10 CFR PART 73. Additional changes are made for clarity and consistency of rules.

**RULE TEXT:**

- (1) The certificate holder must establish and maintain a security plan that complies with 10 CFR 72.44(e).
- (2) The certificate holder must make the security plan, and any revisions, available for inspection by authorized representatives of the Council and Director upon request. The certificate holder, Department, and Council must protect information in the plan that falls within the definitions of "security program" or "safeguards information" in OAR 345-070-0015 from unauthorized disclosure in accordance with 10 CFR 73.21, 73.22 and OAR chapter 345, division 070.
- (3) The certificate holder may not make changes to the security plan that involve a reduction in the the effectiveness of the plan without prior written approval from the Council and Director, as required by ORS 469.530. .
- (4) The certificate holder may make changes to the security plan that do not reduce the effectiveness of the plan without prior approval from the Council and Director. The certificate holder must notify the Department of any changes made under this section within 60 days after the implementation date of the changes. The Department must promptly notify the Council of the changes at a scheduled Council meeting, subject to the provisions of OAR chapter 345, division 070.

Statutory/Other Authority: ORS 469.470

Statutes/Other Implemented: ORS 469.501 & 469.530

**AMEND:** 345-026-0350

**RULE TITLE:** Emergency Planning for Nuclear Installations

**SUMMARY:** The revised rule clarifies its applicability of the rule to the Trojan Independent Spent Fuel Installation, and provides revised criteria for when notification of changes must be provided to the Council and Director. Additional changes are made for clarity and consistency of rules.

**RULE TEXT:**

- (1) The certificate holder must follow and maintain an emergency plan that is approved by the Council.
- (2) The certificate holder may not make changes to the emergency plan that would decrease the effectiveness of the plan or the plan's requirements for notification of off-site agencies without the Council's prior approval.
- (3) The certificate holder may make changes to the plan that would not reduce its effectiveness without the Council's prior approval. The certificate holder must notify the Department of any changes made under this section within 30 days after the implementation date of the changes. The Department must promptly notify the Council of the changes at a scheduled Council meeting.

Statutory/Other Authority: ORS 469.470

Statutes/Other Implemented: ORS 469.501, 469.530 & 469.533



**AMEND:** 345-026-0370

**RULE TITLE:** ~~Standards for Council Approval of~~ ISFSI Decommissioning Plan

**RULE SUMMARY:** The revised rule amends submission requirements for the Decommissioning Plan for the Trojan Independent Spent Fuel Installation. Additional changes are made for clarity and consistency of rules.

**RULE TEXT:**

(1) The certificate holder must submit a final plan for decommissioning the ISFSI to the Department for Council approval. The plan must be submitted to the Council in a form and in a schedule consistent with that required by the U.S. Nuclear Regulatory Commission. When the Department receives a decommissioning plan, the Department must:

(a) Issue notice to the Council's mailing list that the decommissioning plan has been submitted. The notice must include:

- (A) The time and place of at least one informational hearing;
- (B) The locations where copies of the proposed plan may be reviewed by the public; and
- (C) A contact name for further information.

(b) Perform a technical review, and produce a staff report containing the Department's technical conclusions and recommendations on specific issues raised in the proposed plan;

(c) To the extent practicable, coordinate its technical review with that of the U.S. Nuclear Regulatory Commission;

(d) Issue notice of availability of the Department report to the Council mailing list. The notice must include:

- (A) A summary of the Department's recommendations;
- (B) Time and place of a hearing on the staff report;
- (C) Places where the Department's staff report may be reviewed by the public; and
- (D) A contact for additional information and copies of the staff report.

(2) The Council must review the proposed decommissioning plan to verify that the proposed activities will not adversely affect the health and safety of the public or the environment. The Council will ensure the following when evaluating acceptability of a proposed decommissioning plan:

(a) The plan contains the radiological criteria for unrestricted release and use of the site as set forth in 10 CFR 20.1402.

(b) The plan contains provisions that require removal from the site of all radioactive waste as defined in ORS 469.300 on a schedule acceptable to the Council.

(c) The plan contains a program for radiological monitoring to ensure the environment is not being adversely affected. This program may be incorporated by reference if it has previously been approved by the Department.

(d) The plan contains provisions for removal or control of hazardous waste that are consistent with applicable federal and state regulations.

(3) The certificate holder must include in the plan an estimate of funding necessary for implementation. The Council must determine whether provisions for funding are adequate to implement the plan.

(4) The certificate holder must not implement significant revisions to the decommissioning plan unless the Council has reviewed and approved the revisions. A revision is significant if it involves one of the following items:

(a) The potential to prevent the release of the site for unrestricted use;

(b) A change in the criteria for site release;

(c) A departure in the methodology for determining background radiation levels to a method not generally accepted by the industry;

(d) A change in the provisions made for hazardous or radioactive waste material removal;

(e) A significant change in the types or significant increase in the amounts of any effluents that may be released offsite; or

(f) A significant increase in radiological or hazardous material exposure to site workers or to members of the public, including exposure due to transport of radioactive or hazardous material.

(5) The certificate holder must evaluate revisions to the decommissioning plan by the criteria listed in section (4) of this rule. The certificate holder must maintain records of all changes and associated evaluations for audit by the Department. The certificate holder must notify the Department of revisions to the plan that are not significant within 30 days after implementation of the revision. The Department must promptly notify the Council of such revisions at a regularly scheduled meeting.

(6) Changes to the decommissioning plan that are mandated by the federal government may be implemented without prior Council approval.

Statutory/Other Authority: ORS 469.470

Statutes/Other Implemented: ORS 469.410 & 469.501

**AMEND:** 345-026-0390

**RULE TITLE:** Spent Nuclear Fuel Storage

**RULE SUMMARY:** The revised rule provides updates standards and reporting requirements applicable to the Trojan Independent Spent Fuel Installation. Additional requirements related to notification of incidents and environmental monitoring previously located in OAR 345-026-0170 and 345-026-0330 are incorporated into the rule. Additional changes are made for clarity and consistency of rules.

**RULE TEXT:**

(1) The certificate holder may store a maximum of 791 complete and partial fuel assemblies and storage of containers with nuclear fuel materials at an Independent Spent Fuel Storage Installation (ISFSI) at the site of the former Trojan Nuclear Plant, subject to the requirements of OAR 345-026-0300 through 345-026-0390.

(a) The ISFSI must be designed to maintain discharges within the limits specified in applicable licenses authorized under the Atomic Energy Act of 1954, as amended, and any applicable permits issued under the National Pollutant Discharge Elimination System;

(b) The ISFSI must be designed such that in case of accidents the projected dose to an individual outside of the Controlled Area Boundary will not exceed 1 rem over four days .

(c) The ISFSI may not be used to store any spent nuclear fuel or radioactive materials and wastes other than that generated or used in the operation of the former Trojan Nuclear Plant.

(2) Except as required for accident mitigation as described in the Safety Analysis Report, the certificate holder may not remove or transfer a multipurpose canister from its storage cask without the Council's prior approval.

(3) The certificate holder must notify the Department of incidents and accidents in accordance with the Emergency Plan required under OAR 345-026-0340, the Security Plan required under OAR 345-026-0350, and other agreements as established, and must:

(a) Notify the Oregon Emergency Response System immediately upon declaration of an emergency under the approved Emergency Plan for the facility;

(b) Notify the Department of non-emergency incidents or accidents as described in 10 CFR 72.75.

(4) The certificate holder must operate the ISFSI consistent with a Safety Analysis Report submitted in compliance with 10 CFR 72.70 and the following requirements:

(a) The Safety Analysis Report must provide for the following programs:

(A) A Temperature Monitoring and Air Vent Inspection Program. The program must include daily readings of Concrete Cask air outlet and ambient temperatures. The program must include provisions for more frequent measurements if temperatures approach Technical Specification limits. The program must also include a requirement to check air inlet and outlet vents for

blockage weekly. The certificate holder may extend individual surveillance intervals by up to 25 percent to accommodate minor variations in work scheduling.

(B) A Radiation Protection Program that complies with 10 CFR 20.1101 and ensures exposures to ISFSI personnel and the public are As Low As Reasonably Achievable as that term is defined in 10 CFR 20.1003.

(C) A Radiological Environmental Monitoring Program that ensures the ISFSI complies with section (2) of this rule.

(D) An Aging Management Program for management of issues associated with aging that could adversely affect ISFSI components that are important to safety.(E) A program for maintaining equipment onsite and having equipment available within a reasonable time period to respond to credible accident scenarios and a plan for construction of new concrete casks.

(b) The certificate holder may not make changes to the ISFSI, or Safety Analysis Report that would require prior approval from the U.S. Nuclear Regulatory Commission (NRC) under 10 CFR 72.48 without requesting the Council's prior approval, unless the proposed change is required for compliance with the regulations or orders of the NRC or is necessary to protect the health and safety of the public when there is insufficient time to obtain prior approval.

(5) In lieu of the requirements of OAR 345-026-0080 the certificate holder must provide a written report to the Council on the status of the ISFSI biennially. The report must include, at a minimum:

(a) A summary of changes to the ISFSI or Safety Analysis Report since the last report that did not require prior approval from the Council or NRC under section (4)(b) of this rule;

(b) The results of radiation monitoring programs;

(c) A summary of personnel exposure related to ISFSI storage operations;

(d) A statement of expenses related to ISFSI storage operations;

(e) A statement of the estimated costs of continuing ISFSI storage operations through decommissioning and the estimated costs of decommissioning, including a discussion of the methods and assumptions used to estimate operations and decommissioning costs;

(e) An estimate of funds available for continuing ISFSI storage operations through decommissioning and funds available for ISFSI decommissioning; and

(f) A statement of any significant developments regarding the opening of a Federally licensed High Level Waste facility.

(6) Contractors: The certificate holder must require contractors who perform portions of the ISFSI storage or transporting operations to adhere to all applicable provisions of this rule.

Statutory/Other Authority: ORS 469.470

Statutes/Other Implemented: ORS 469.410 & 469.501

**AMEND:** 345-070-0005

**RULE TITLE:** Purpose

**RULE SUMMARY:** Changes are made to clarify that security program information must be reviewed by the Council and Director under ORS 469.530.

**RULE TEXT:**

**345-070-0005 - Purpose**

The purpose of these rules is to protect the confidentiality of information submitted to the Council and the Director regarding security programs for nuclear power plants, nuclear installations, and the transportation of radioactive materials to and from such facilities.

Statutory/Other Authority: ORS 469.530

Statutes/Other Implemented: ORS 469.530

DRAFT

**AMEND:** 345-070-0015

**RULE TITLE:** Definitions

**RULE SUMMARY:** Revised rule clarifies the Trojan Independent Spent Fuel Installation's legal status as part of the Trojan Nuclear Power Plant, and revises the definition of "Safeguards Information" to align with federal regulations.

**RULE TEXT:**

**345-070-0015 - Definitions**

- (1) "Nuclear installation" is defined in ORS 469.300.
- (2) "Nuclear power plant" includes the Trojan Independent Spent Fuel Installation.
- (3) "Security program" means any plan or procedure the primary function of which is to protect nuclear power plants, nuclear installations, transportation and storage of new or irradiated nuclear fuel elements or transportation and storage of fissile material against any deliberate act that could directly endanger the public health and safety including exposure to radiation, including, but not limited to, plans or procedures for:
  - (a) Controlling entry to the site or portions of the site of fixed installations;
  - (b) Deterring or discouraging penetrations of sites or carriers by unauthorized persons;
  - (c) Detecting such penetrations in the event they occur;
  - (d) Apprehending in a timely manner unauthorized persons or authorized persons acting in a manner constituting a threat of sabotage or theft;
  - (e) Providing for appropriate authorities to take custody of violators.
- (4) "Fissile material" means fissile plutonium, uranium-233, and uranium-235 in any combination sufficient to cause  $(\text{gm Pu}/200 \text{ gm}) + (\text{gm U-233}/200 \text{ gm}) + (\text{gm U-235 contained in uranium enriched to more than 20 percent in U-235})/350\text{gm}$  to be greater than unity.
- (5) "Safeguards information (SI)" as defined in 10 CFR 72.2.

Statutory/Other Authority: ORS 469.470

Statutes/Other Implemented: ORS 469.530

**AMEND:** 345-070-0020

**RULE TITLE:** Confidential Treatment Required

**RULE SUMMARY:** Clarifies that the Council and Director must take all reasonable precautions to limit the number of persons having access to safeguards information, regardless of whether those persons are employees of the Oregon Department of Energy.

**RULE TEXT:**

**345-070-0020 - Confidential Treatment Required**

The Council and the Director shall receive, and maintain as confidential, information submitted by any person pursuant to ORS 469.530 for review and approval to the extent the information falls within the definitions of "security program" or "safeguards information" in OAR 345-070-0015. The Council and Director shall take all reasonable precautions to:

- (1) Limit the number of persons having access to such information; and
- (2) Physically safeguard such information.

Statutory/Other Authority: ORS 469.530

Statutes/Other Implemented: ORS 469.530, 192.533

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