### NOTICE OF PROPOSED RULEMAKING

CHAPTER 345

DEPARTMENT OF ENERGY, ENERGY FACILITY SITING COUNCIL

FILING CAPTION: Updating Reporting Requirements to More Closely Align with Federal Requirements

LAST DAY AND TIME TO OFFER COMMENT TO AGENCY: 08/21/2024 5:00 PM

### NEED FOR THE RULE(S):

Oregon State University and Reed College both operate Training, Research, Isotopes and General Atomic (TRIGA) Class nuclear research reactors. Like other nuclear installations, the research reactors operate under licenses issued by the Nuclear Regulatory Commission, and the Council provides state level monitoring and oversight of the facilities as provided by their site certificates and the administrative rules in OAR chapter 345, division 030. This rulemaking is needed to increase consistency with federal reporting and notification requirements.

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

Staff Report and Supporting Materials for Agenda Item E for the July 19, 2024 Energy Facility Siting Council Meeting, available from:

|https://www.oregon.gov/energy/facilities-safety/facilities/Pages/Council-Meetings.aspx

# STATEMENT IDENTIFYING HOW ADOPTION OF RULE(S) WILL AFFECT RACIAL EQUITY IN THIS STATE:

The adoption and amendment of the rules herein are intended to more closely align reporting requirements for the (currently two) research reactors in the state of Oregon. It is not clear that this rulemaking would have a direct impact on racial equity in this state, given the narrow focus and applicability of these rules.

### FISCAL AND ECONOMIC IMPACT:

By more closely aligning Council reporting requirements with federal reporting requirements, it is hoped that there will be an increase in efficiency for operators of research reactors in Oregon. That being said, the overall impact will be relatively modest, given the low frequency of the reporting in question.

### **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).
- (1) and (2) (a)

Given that these rules only apply to operators of research reactors, of which there presently two in the state of Oregon, and that these reactors are located at institutions of higher learning, which are not small businesses, the impact on small businesses is anticipated to be zero.

2 (b) and 2(c)

For these research facilities, the hope is that these rules will reduce the reporting, recordkeeping, and administrative cost required to comply with the rules. This means the expected cost of compliance is zero, or, more accurately, a potential savings.

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

Small businesses are not expected to be affected by the proposed rules and were not specifically consulted in their development.

WAS AN ADMINISTRATIVE RULE ADVISORY COMMITTEE CONSULTED? NO IF NOT, WHY NOT? Given the narrow scope of affected entities and the limited nature of this rulemaking, only the operators of the research reactors and relevant state agencies were consulted in the creation of these rules.

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AMEND: 345-030-0010

**RULE TITLE: Reports Required** 

RULE SUMMARY: Modifying the reporting requirements for research reactor operators to more closely align with both the U.S. Nuclear Regulatory Commission and technical specification requirements of existing research reactors in the state of Oregon.

**RULE TEXT:** 

- (1) Annual Reports of Environmental Effects. By October 1 of each calendar year, the operator of any reactor described in OAR 345-030-0005 shall submit a report to the Council that contains the following information on reactor operation during the previous calendar year:
- (a) The total amounts (measured or calculated) of radioactivity released to the environment in gaseous, liquid or solid effluents.
- (b) The radionuclides present in these effluents and the quantities of principal radionuclides.
- (c) The location and magnitude of the maximum measured or calculated direct radiation level in unrestricted areas from:

- (A) Direct radiation from the facility;
- (B) Direct radiation from facility effluents.
- (d) A description of the general methods and the results of environmental monitoring.
- (2) Notification of Incidents
- (a) The operator of any reactor described in OAR 345-030-0005 shall promptly notify the Council by telephone of the occurrence of any incident or condition relating to the operation of the reactor that could have prevented a nuclear system from performing its safety functions as described in the Technical Specifications, as set forth at 10 CFR 50.36 in effect January 2006, or in the Safety Analysis Report, as required by 10 CFR 50.34, in effect January 2006. In addition, the operator shall submit a written report within 14 days after the occurrence.
- (b) The operator of any reactor described in OAR 345-030-0005 shall notify the Council in writing within 30 days after the occurrence of any substantial variance from performance specifications contained in the Technical Specifications or Safety Analysis Report.
- (3) Reports of Overexposures (from the reactor and its effluents) and Excessive Levels or Concentrations
- (a) The operator of any reactor described in OAR 345-030-0005 shall promptly notify the Council by telephone if any of the following events occur:
- (A) Exposure (from the reactor or its effluents) of the whole body of any individual to 25 rems or more of radiation; exposure of the skin of the whole body of any individual of 150 rems or more; or exposure of the feet, ankles, hands, or forearms of any individual to 375 rems or more of radiation.
- (B) The release of radioactive material in concentrations that, if averaged over a period of 24 hours, would exceed 5,000 times the applicable limits specified for such material in the Technical Specifications for effluents under 10 CFR 50.36a or personnel exposure regulations under 10 CFR 20.
- (b) The operator of any reactor described in OAR 345-030-0005 shall notify the Council by telephone within 24 hours if any of the following events occur:
- (A) Exposure (from the reactor or its effluents) of the whole body of any individual to 5 rems or more of radiation; exposure of the skin of the whole body of any individual to 30 rems or more or radiation; or exposure of the feet, ankles, hand, or forearms to 75 rems or more of radiation.
- (B) The release of radioactive material in concentrations that, if averaged over a period of 24 hours, would exceed 500 times the applicable limits specified for such materials in the Technical Specifications for effluents under 10 CFR 50.36a or personnel exposure regulations under 10 CFR 20.
- (c) The operator of any reactor described in OAR 345-030-0005 shall notify the Council in writing within 30 days after occurrence of the events described in subsections (A) and (B) below. Each report

required shall describe the extent of exposure of persons to radiation or to radioactive material, including estimates of each individual's exposure; the levels of radiation and concentrations of radioactive material involved; the cause of the exposure, levels or concentrations; and the corrective steps taken or planned to ensure against a recurrence.

- (A) Exposure (from the reactor or its effluents) of an individual to radiation or concentrations of radioactive material in excess of any applicable limits specified in U.S. Nuclear Regulatory Commission regulations or in the reactor operating license required under 10 CFR 50.10.
- (B) Levels of radiation or concentrations of radioactive material (not involving excessive exposure of any individual) in an unrestricted area in excess of ten times any applicable limit specified in U.S. Nuclear Regulatory Commission regulations or in the operating license for the reactor.
- (4) Correspondence with Other State or Federal Agencies. The operator of any reactor described in OAR 345-030-0005 shall provide to the Council a copy of each report related to reactor operations that the operator submits to a state or federal agency, except for material withheld from public disclosure under 10 CFR, Part 2, Section 790.

STATUTORY/OTHER AUTHORITY: ORS 469 STATUTES/OTHER IMPLEMENTED: ORS 469.470