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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 14 TO

AMENDED FACILITY OPERATING LICENSE NO. R-106

OREGON STATE UNIVERSITY

DOCKET NO. 50-243

1.0 INTRODUCTION

By letter dated July 7, 1993, as supplemented on March 21, 1994, Oregon State University (OSU or licensee) submitted a request for amendment to Appendix A of Amended Facility Operating License No. R-106, Technical Specifications and Bases for the Oregon State University TRIGA Reactor (OSTR). The requested changes would correct several spelling/grammar errors in the technical specifications (TS), change the surveillance requirement for performing test pulses and update the organizational TS to reflect changes in the administration of OSU.

2.0 EVALUATION

2.1 Correction of Spelling and Grammar

In the objective section of TS 3.6.1 the word "operator" is spelled "opertor." The licensee has requested that this spelling be corrected.

In the sixteenth line of TS 6.5 the word "approval" is spelled "approvel." The licensee has requested that this spelling be corrected.

In TS 6.6 c. the licensee has requested that the word "these" is changed to "those" to correct the grammar of the TS.

The staff finds that these changes are acceptable because they correct errors of spelling or grammar in the TS. The meaning of the TS are not changed by these corrections.

2.2 Test Pulse Surveillance

The licensee has proposed a change to TS 4.3.1.e concerning the performance of test pulsing. TS 4.3.1.e currently reads:

> The reactor shall be pulsed semi-annually (interval not to exceed seven and one-half months) to compare fuel temperature measurements and peak power levels with those of previous pulses of the same reactivity value.

The licensee has proposed changing this to:

> The reactor shall be pulsed semi-annually (interval not to exceed seven and one-half months) to compare fuel temperature measurements and peak power levels with those of previous pulses of the same reactivity value. If the reactor has not been pulsed since the last test pulse, the semi-annual test pulse surveillance may be postponed; however, a test pulse must be performed prior to any further pulsing.

OSU has also proposed changing the bases of this TS from

> The reactor is pulsed at suitable intervals and a comparison made with previous similar pulses to determine if changes in fuel or core characteristics are taking place.

to

> The test pulse is performed prior to resumption of operational pulsing to provide assurance that pulsing characteristics of the reactor have not significantly changed.

OSU states that the OSTR has not been pulsed frequently in recent years. The change in wording for this TS will allow OSU to postpone test pulses if the reactor will not be routinely pulsed. The NRC staff has approved other TRIGA reactor TS that allow this postponement (e.g., University of Texas at Austin, Docket No. 50-602, License No. R-129). Test pulsing the reactor does not provide useful information about steady state operating characteristics of the reactor. There are a number of TRIGA reactors that are licensed by NRC without pulsing capability. If OSU decides to reinstate a pulsing program and more than seven and one-half months has passed since the last test pulse, the proposed TS insures that test pulsing will occur before routine pulsing is reinstated. If OSU returns to an active pulsing program, the TS still requires that test pulses be performed semi-annually (interval not to exceed seven and one-half months).

The staff finds the proposed change acceptable because it will postpone the performance of a surveillance that has an inconsequential impact on safety if the reactor is not routinely pulsed. The TS will still require the licensee to perform test pulsing before regular pulsing is reinstated and during periods of routine pulsing.

2.3 Organizational Changes

The licensee has proposed changes to TS 6.1.a and the facility organizational chart found in TS 6.1.b. The position of Vice President for Finance and Administration has been renamed the Chief Business Officer. The OSU Radiation Safety Committee continues to report to this position in the organization structure. The Director of the Radiation Center reports in the new organization to the Vice Provost for Research and International Programs instead of the Vice President for Finance and Administration. Other similar centers in the university report to the Vice Provost for Research and International Programs. The licensee has proposed amending TS 6.1.a to reflect this change in reporting for the Director of the Radiation Center. In addition, the Provost, who will also serve as the Executive Vice President of the university, has taken over some of the duties of the President of OSU. The President and Provost and Executive Vice President are shown as one organizational box at the top of the new organizational chart. Although the positions in the organizational structure that the Director of the Radiation Center and the OSU Radiation Safety Committee report to have changed in the proposed TS, the organization level within the university structure has not changed.

These organizational changes are acceptable to the staff because the Director of the Radiation Center and the OSU Radiation Safety Committee continue to report to upper level university management one level below the President of the university.

3.0 ENVIRONMENTAL CONSIDERATION

Sections 2.1 and 2.3 of this amendment involves changes in recordkeeping, reporting, or administrative procedures or requirements. Accordingly, these sections of the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of these sections of the amendment.

Section 2.2 of this amendment involves changes in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 or changes in inspection and surveillance requirements. The staff has determined that this amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and there is no significant increase in individual or

cumulative occupational radiation exposure. Accordingly, this section of 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 this section of the amendment.

4.0 CONCLUSION

The staff has concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously evaluated, or create the possibility of a new or different kind of accident from any accident previously evaluated, and does not involve a significant reduction in a margin of safety, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by the proposed activities, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or the health and safety of the public.

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Date: May 5, 1994