



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 9 TO

FACILITY OPERATING LICENSE NO. R-106

OREGON STATE UNIVERSITY

DOCKET NO. 50-243

1.0 INTRODUCTION

By letters dated July 19, 1983 and October 12, 1987, Oregon State University (OSU) requested changes in the Technical Specifications of Facility Operating License No. R-106 for the Oregon State University TRIGA Reactor (OSTR). The first of the requested changes would modify the organization structure of the OSTR by changing two titles in the organization and eliminating one position. The other requested change would update the surveillance requirements time intervals to bring them into agreement with current practice.

In addition, to make the license condition more complete, Paragraph 2.C.(1) was amended to add the maximum reactivity insertion allowed in the pulse mode. This limit has always existed but was not stated explicitly in Paragraph 2.C.(1). Also, changes to Technical Specification 3.1 and 3.5.3 were made to eliminate an inconsistency between the license condition for the maximum power level at which the reactor may operate and the Technical Specification for the maximum operating power level.

2.0 EVALUATION

2.1 Changes in the OSTR Organization Structure

OSU has proposed changing the titles of Assistant Reactor Administrator to Reactor Administrator and Vice President for Administration to Vice President for Finance and Administration. These are changes in formal title only, the duties and responsibilities with respect to licensed activities will not change. OSU also proposed eliminating the position of Assistant Director for Radiation Protection and Regulatory Affairs. The functions of the Assistant Director for Radiation Protection and Regulatory Affairs will be assumed by the Radiation Center Director, the Senior Health Physicist and the Radiation Center Health Physics Staff. This change will not impact radiation safety at the Center and will improve efficiency of the radiation safety program by streamlining management at the Center.

2.2 Changes in the Surveillance Requirements Time Intervals

OSU has proposed changes in Section 4 of the Technical Specifications, "Surveillance Requirements", to bring the surveillance requirements maximum time intervals into conformance with American National Standard ANSI/ANS-15.1-1982, "The Development of Technical Specifications for Research Reactors" (ANS-15.1) which is used by the NRC in the evaluation of non-power reactor Technical Specifications. ANS-15.1 specifies both the frequency of surveillance and maximum interval (used to provide operational flexibility as long as required frequencies are maintained over the long term) that can pass between surveillances. The requested changes would only affect the maximum interval between surveillances, the required frequencies would remain the same as before. The largest increase in maximum surveillance would be one month (from 14 to 15), for those items with a one year frequency requirement. Because in the long term, no changes to surveillance frequencies will occur, there is no safety impact involved in the granting of this request.

2.3 Addition of the Maximum Reactivity Insertion Limit to the Operating License

The purpose of this change is to bring the Facility Operating License into conformity with current practice by stating in the body of the license the maximum thermal power level and the maximum reactivity insertion permitted in pulse mode. The maximum reactivity insertion limit was previously stated only in the Technical Specifications. This change is editorial in nature and does not modify any actual license conditions.

2.4 Inconsistency in Maximum Thermal Power Level Between the Facility Operating License and the Technical Specifications, Appendix A

Technical Specification 3.1 and 3.5.3 previously permitted steady-state thermal power to reach a maximum of 1.2 megawatts for purposes of testing the full power scram safety circuits. This was inconsistent with the license condition that limited power to 1.0 megawatt. Testing of these safety circuits can be accomplished by other methods. OSU will test these safety circuits by the introduction of an electrical signal. To achieve consistency, the maximum operating power level under any conditions will be restated in the Technical Specifications to be 1.0 megawatt. This does not constitute a change in the authorized licensed power limit.

3.0 ENVIRONMENTAL CONSIDERATION

3.1 Changes in the OSTR Organizational Structure, Addition of the Maximum Reactivity Insertion Limit to the Operating License, and Inconsistency in Maximum Thermal Power Level Between the Facility Operating License and the Technical Specifications, Appendix A.

We have determined that these changes are in the category of record-keeping, reporting, and administrative procedures and requirements. Accordingly, this portion 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 this portion of the amendment.

3.2 Changes in the Surveillance Requirements Time Intervals

This portion of the amendment involves changes in the installation or use of facility components located within the restricted area as defined in 10 CFR Part 20 and changes in inspection and surveillance requirements. The staff has determined that this portion of 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 there is no significant increase in individual or cumulative occupational radiation exposure. Accordingly, this portion 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 portion 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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Dated: February 11, 1988