

July 12, 2000

Dr. Stephen Binney, Director
Oregon State University
Radiation Center, A100
Corvallis, OR 97331-5903

SUBJECT: EMERGENCY RESPONSE PLAN FOR THE OREGON STATE UNIVERSITY
TRIGA REACTOR (TAC NOS. MA8495 AND MA8543)

Dear Dr. Binney:

This letter acknowledges receipt of your two letters dated March 14, 2000, which transmitted changes to the Oregon State University TRIGA Reactor (OSTR) Emergency Response Plan, submitted under the provisions of 10 CFR 50.54(q). Your first letter submitted changes that you determined do not decrease the effectiveness of your emergency response plan.

Based on your determination that the changes do not decrease the effectiveness of your emergency response plan NRC approval is not required. Our initial review of these changes indicates them to be in accordance with 10 CFR 50.54(q). Implementation of these changes will be subject to inspection to confirm that they did not decrease the effectiveness of your emergency plan.

Your second letter submitted five changes that you believed decreased the effectiveness of your plan, therefore, they were submitted for NRC review and approval. The staff's review, which is enclosed with this letter, was performed using NUREG-0849, "Standard Review Plan for the Review and Evaluation of Emergency Plans for Research and Test Reactors." The staff concludes that the proposed changes do not decrease the effectiveness of the OSTR Emergency Response Plan and the plan, as changed, continues to meet the requirements of Appendix E to 10 CFR Part 50.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/NRC/ADAMS/index.html> (the Public Electronic Reading Room). If you have any questions, please contact me at (301) 415-1127.

Sincerely,
/RA/

Alexander Adams, Jr., Senior Project Manager
Events Assessment, Generic Communications and
Non-Power Reactors Branch
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Docket No. 50-243

Enclosure: As stated
cc: w/enclosure
Please see next page

Oregon State University

Docket No. 50-243

cc:

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Reactor Newsletter
University of Florida
202 Nuclear Sciences Center
Gainesville, FL 32611

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**REVIEW OF THE OREGON STATE UNIVERSITY TRIGA REACTOR (OSTR)
EMERGENCY RESPONSE PLAN
BY THE OFFICE OF NUCLEAR REACTOR REGULATION**

BACKGROUND

As the result of the OSTR Emergency Response Plan (the Plan) annual review, the licensee submitted proposed changes to the Plan. The licensee stated that these changes were submitted under 10 CFR 50.54(q) and that most of the changes do not decrease the effectiveness of the Plan. However, the licensee identified five proposed changes that appear to decrease the effectiveness of the Plan which would require prior NRC approval before implementation. The five changes are listed below:

1. Removal of radiological equipment from the Corvallis Fire Department HAZMAT vehicle
2. Change of calibration frequencies for the emergency survey instrument
3. Removal of the CAM gas channel from the Plan
4. Remove reference to emergency equipment used by NE/RHP 484, Applied Radiation Safety
5. Remove reference to three emergency showers within the Radiation Center Complex

DISCUSSION

1. **Removal of radiological equipment from the Corvallis Fire Department HAZMAT vehicle.**

The HAZMAT vehicle is equipped with radiological survey instrumentation from the State of Oregon and the Radiation Center. The Radiation Center's equipment was provided to the fire department as part of the emergency response program. However, the licensee indicates the equipment needs to be returned to the Radiation Center. Although the HAZMAT vehicle will be losing some equipment, the licensee indicates the vehicle would still be fully functional. Some of the proposed equipment to be returned is redundant and the licensee stated the loss would not decrease the ability of the fire department to support a response.

2. **Change of calibration frequencies for the emergency survey instrument.**

The licensee proposes to decrease the calibration frequency for emergency response survey instruments from twice a year to annually. With this change of frequency, all the Radiation Center's survey equipment will be on the same annual cycle. Modern radiation survey equipment has shown to be very stable and most equipment manufacturers now recommend annual calibrations; therefore, more frequent calibrations are unnecessary. However, since this equipment is used infrequently, the licensee would periodically check the equipment to make sure the batteries are charged and the units are still functional under the maintenance portion of its emergency program.

Enclosure

3. **Removal of the CAM gas channel from the Plan.**

The Plan currently refers to the reactor top CAM gas channel. However, the licensee indicates that it is not used for emergency response purposes in the Plan. Consequently, the licensee wants to delete it from the Plan but intends to calibrate and maintain it for use in an emergency. In that the licensee indicated this capability is not used for emergency management decision making in the Plan, this change would not affect the licensee's emergency response capability. However, the licensee should develop contingency procedures for its use if it is deemed necessary for emergency response purposes.

4. **Remove reference to emergency equipment used by NE/RHP 484, Applied Radiation Safety.**

The Plan references emergency equipment owned by the Department of Nuclear Engineering and includes equipment for respiratory protection. In that the licensee indicated the OSTR does not intend to use this equipment in its emergency Plan, it is not necessary to include a reference to it in the Plan.

5. **Remove reference to three emergency showers within the Radiation Center Complex.**

The Plan refers to three showers for decontamination within the Radiation Center Complex. However, only one shower has a drain that is connected to a holding tank. The licensee wants to correct the Plan to reflect actual conditions. Since the licensee would still maintain a decontamination capability, there is no decrease in effectiveness.

CONCLUSION

The staff concludes that the proposed changes, as discussed above, do not decrease the effectiveness of the Plan and the Plan, as changed, continues to meet the requirements of Appendix E to 10 CFR Part 50.