

RADIATION CENTER



OREGON STATE UNIVERSITY

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October 31, 1990

U.S. Nuclear Regulatory Commission
ATTENTION: Document Control Desk
Washington, D. C. 20555

Gentlemen:

Reference: Oregon State University TRIGA Reactor (OSTR), Docket No. 50-243,
License No. R-106

In accordance with section 6.7.e of the OSTR Technical Specifications, we are hereby submitting the Annual Report of the Oregon State University Radiation Center and TRIGA Reactor for the period July 1, 1989 through June 30, 1990. Please note that we are also using this letter of transmittal to send copies of the current report to Mr. Al Adams, Project Manager, USNRC, Washington, D.C.; to Mr. Don Carlson, Division of Reactor Inspection & Safeguards, USNRC, Washington, D.C.; and to the USNRC's Region V office.

This year's annual report continues to include significantly more information about the entire Radiation Center rather than concentrating primarily on the reactor. Because the report addresses a number of different interests, it is rather lengthy, but we have incorporated a short executive summary which highlights the Center's activities and accomplishments over the past year. I hope you will find this summary helpful.

The 1989-90 reporting period was very successful for the Radiation Center. While I do not wish to restate information presented in the executive summary, I would like to point out that during the past year Radiation Center facilities experienced a high level of use. For example, the reactor continued to be in use 90% of the available 45-hour work week, which is about the maximum possible use for a one-shift operation. Additionally, for the second consecutive year the reactor showed a 13% increase in operating time when more than one user was being accommodated. The Center also continued to provide support for a large variety of undergraduate and graduate classes as well as for student projects, and by year's end showed over a 100% increase in the number of students involved in such projects. The Center also finished the year with a 26% increase in the number of research and service projects performed, and a 15% increase in the number of universities using our facilities.

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Especially noteworthy this year, was the addition of a new 7000 curie cobalt-60 irradiator. We are very pleased to have this greatly enhanced gamma irradiation capability and feel confident that the new irradiator will see a great deal of use. We would also like to highlight the fact that the existing cobalt-60 irradiator showed a 36% increase in the number of irradiations performed during the 1989-90 reporting interval.

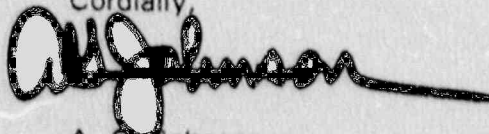
Scholarly publications involving a major contribution by the Radiation Center also increased approximately 5% during the 1989-90 period. Considering publications currently in print, plus those we believe will be published, there was a total of 118 refereed articles involving a significant contribution by the Radiation Center which will ultimately appear in the technical literature. There were also 34 presentations at professional meetings where the Center supported the development of the research data reported.

As a final statistic, the Radiation Center continued to be a popular place to visit. This year the number of visitors increased slightly to a total of nearly 900 individuals.

In summing up the past year's accomplishments, we are gratified and particularly pleased with the direction our program has taken because it continues to reflect the Radiation Center's ability to make a positive contribution to many of OSU's goals. Along with this, we view our growing assistance to other universities within (and outside) the Oregon State System of Higher Education, and to a number of state and federal agencies, as an indication of the university's international reputation for scholarly and technical excellence.

We hope you will find this more detailed report to be of interest. Should there be any questions, please let me know.

Cordially,



A. G. Johnson
Director

AGJ:jrs-a:usnrc

Enclosure

cc w/enclosure:

Non-Power Reactor, Decommissioning, and Environmental Projects
Directorate, USNRC, Washington, D.C., ATTN: Mr. Al Adams (1 copy)
Division of Reactor Inspection & Safeguards, USNRC, Washington, D.C.,
ATTN: Mr. Donald Carlson (1 copy)
Regional Administrator, USNRC, Region V, Walnut Creek, CA (1 copy)
USNRC, Region V, Walnut Creek, CA, ATTN: Mr. Phil Qualls (1 copy)

cc w/out enclosure:

D. Stewart-Smith, Oregon Department of Energy
T. V. Anderson, OSTR Reactor Supervisor, OSU
S. E. Binney, Chairman, OSTR Reactor Operations Committee
B. Dodd, OSTR Reactor Administrator, OSU
J. F. Higginbotham, Senior Health Physicist, OSU
D. S. Pratt, Health Physicist, OSU