



OREGON STATE UNIVERSITY

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January 15, 1996

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

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

Subject: 10 CFR 50.54(q) Report of Changes to the OSTR Emergency Response Plan Which Do Not
Decrease the Effectiveness of the Plan

Gentlemen:

As a result of our annual review of the OSTR Emergency Response Plan which was performed on December 6, 1996, certain changes to the plan were determined to be necessary. (See Attachment A.) This letter represents our formal report of the changes in accordance with 10 CFR 50.54(q). Based on our evaluation of the revisions, which was conducted under the provisions of 10 CFR 50.59, we have concluded that none of the changes reduce the plan's emergency response effectiveness. A copy of this evaluation is enclosed.

All of the changes to the plan, and the 10 CFR 50.59 evaluation supporting the changes have been reviewed and approved by the OSTR Reactor Operations Committee. In addition to the plan itself, a number of conforming changes were made to the Emergency Response Plan Implementing Procedures (ERIPs) in order to keep them up to date.

To make it easy to update your copy(s) of the plan, Attachment B includes all of the current replacement pages for the plan. If you have any concerns or questions about the reported changes to the OSTR Emergency Response Plan, please let me know.

Yours sincerely,

Brian Dodd
Director

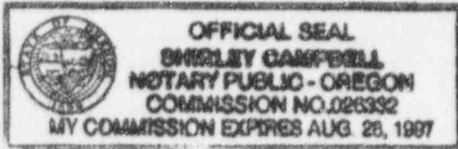
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cc: Mr. Al Adams, Senior Project Manager, U.S. Nuclear Regulatory Commission,
MS 011B20, Washington, D. C. 20555
Regional Administrator, USNRC, Region IV
Dr. Lawrence Cohen, U.S. Nuclear Regulatory Commission, Emergency Preparedness Branch,
Mailstop 9H15, Washington, D. C. 20555
Mr. David Stewart-Smith, Oregon Department of Energy, Salem, Oregon
Dr. S. E. Binney, Chairman, Reactor Operations Committee
Dr. J. F. Higginbotham, Reactor Administrator
Mr. D. S. Pratt, Senior Health Physicist

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STATE OF OREGON)
)) SS
COUNTY OF BENTON)

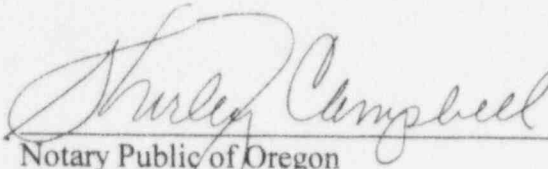
Brian Dodd, being first duly sworn on oath, deposes and says that he has affixed his signature to the letter above in his official capacity as Director, Oregon State University Radiation Center; that he has signed this letter supplying information as required by 10 CFR 50.4(b)(5)(ii); that in accordance with the provisions of 10 CFR 50.30(b), he is attaching this affidavit; that the facts set forth in the within letter are true to his best information and belief.





Brian Dodd
Director

Subscribed and sworn to before me, a Notary Public, in and for the County of Benton, State of Oregon this 17th day of January, A.D., 1997.



Notary Public of Oregon

8/28/97

My Commission Expires

OSU TRIGA Reactor (OSTR)

Changes, Tests and Experiments Evaluated Under the Provisions of 10 CFR 50.59

NUMBER: 96-4

DATE: December 13, 1996

TITLE: Revisions to the Radiation Center and OSTR Emergency Response Plan

DESCRIPTION

As a result of the annual review of the Radiation Center and OSTR Emergency Response Plan, a number of changes to the plan are needed. The details of these changes are given in Attachment A; however, the changes can be grouped into several areas: the renaming of the OSU Campus Police and Security to Oregon State Police and OSU Security Services, changes in staff position titles and the correction of typographical and grammatical errors.

SAFETY EVALUATION

First, the renaming of OSU Campus Police and Security to Oregon State Police and OSU Security Services simply reflects the official name change. There is no change in their responsibility to provide support for the Radiation Center's Emergency Response Plan, and hence, there is no decrease in the plan's effectiveness.

Second, the titles of some staff were changed; however, their responsibility to provide support for the Emergency Response Plan remains unchanged; hence, there is no decrease in the plan's effectiveness.

Third, all of the other changes are to correct typographical and grammatical errors. Since these changes make the plan easier to read, the plan's effectiveness actually improves.

The changes described above were reviewed and approved by the Reactor Operations Committee (ROC) prior to being implemented. ROC approval included a review of this evaluation and the Committee's conclusion that the changes did not require a change in the OSTR Technical Specifications and did not constitute an unreviewed safety question as defined in 10 CFR 50.59(a)(2). This evaluation also included a review of applicable radiation protection aspects and was found to be consistent with the Radiation Center's commitment to ALARA.

CONFORMING PROCEDURAL CHANGES

The above emergency plan revisions require several changes to the ERIPs. These changes were approved by the Reactor Operations Committee and are included in Attachment A. ERIP changes do not require a formal 10 CFR 50.59 safety analysis.

Extracted from 10 CFR 50.59 (a) (2)

A proposed change, test, or experiment shall be deemed to involve an unreviewed safety question:

- (i) if the probability of occurrence or the consequence of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report may be increased; or
- (ii) if a possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report may be created; or
- (iii) if the margin of safety as defined in the basis for any technical specification is reduced.

APPROVALS

The change described above was reviewed and approved by the Reactor Operations Committee (ROC) prior to being implemented. ROC approval included a review of this evaluation and the Committee's conclusion that the change does not require a change in the OSTR Technical Specifications and does not constitute an unreviewed safety question as defined in 10 CFR 50.59(a)(2). This evaluation also included a review of applicable radiation protection aspects and was found to be consistent with the Radiation Center's commitment to ALARA.

The following signatures indicate review and approval by the Reactor Operations Committee and review by licensed operators. If any ROC member does not completely concur with or understand the proposed change then that member should hold this form unsigned and notify the ROC Chairman. The matter will then be discussed at the next meeting of the Committee. If any individual ROC member is unable to sign the sheet due to absence or illness this will be so noted.

S. E. Binney†



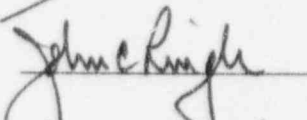
D. S. Pratt*



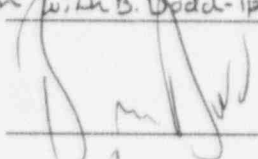
D. L. Amort*

Verbal approval via
telecom with B. Dodd - 1/21/97

J. C. Ringle*



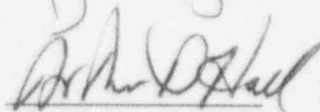
B. Dodd*+



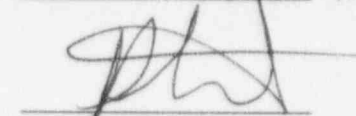
W. J. Richards*

Verbal approval via
telecom with B. Dodd - 1/21/97

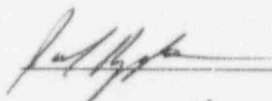
A. D. Hall*+



S. P. Smith+



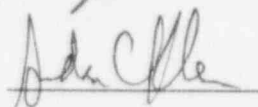
J. F. Higginbotham*+



W. H. Warnes*

Verbal approval via
telecom with B. Dodd - 1/21/97

A. C. Klein*



S. A. Crail+

†Chairman, Reactor Operations Committee (Signs Last)

*Member, Reactor Operations Committee

+Licensed Operator

Attachment A: Revisions to the OSU Radiation Center and TRIGA Reactor Emergency Response Plan -December 13, 1996

Cover Page

Change the last revision date to "December 1996."

All Changed Pages

Add or change the revision date to "12/96."

Page 1-1, Section 1.0, 2nd paragraph

Change the second sentence from "... laboratories, X-ray and cobalt-60 irradiation facilities..." to "...laboratories and cobalt-60 irradiation facility..."

This reflects the recent changes in Radiation Center facilities.

Page 1-2, Continued paragraph

In the sentence beginning, "Public service..." change the word "enforcements" to "enforcement."

Page 1-2, 2nd paragraph

In the last sentence, change "40 MWD" to "45 MWD."

Page 3-3, Section 3.1.4, 3rd paragraph

In the second and the last sentences, change "OSU Campus Police and Security" to "Oregon State Police and OSU Security Services."

Page 3-9, Listing of Personnel

Change the position titles as follows and alphabetize the entire list.

"Geochemist" changed to "Project Manager"

"Neutron Activation Analysis Specialist" changed to "Analytical Support Manager"

"Reactor Operator" changed to "Reactor Operator(s)"

"Scientific Instrument Technician" changed to "Scientific Instrument Technician(s)"

Page 3-10, Public Information Officer, Line of Succession

Delete the "(1)" from the Chairman of the Reactor Operations Committee box.

Page 3-11, Historian, Line of Succession

Change "Radiation Center Office Spec. 2" to "Radiation Center Office Manager"

Page 3-14, Figure 3.2, Campus Section

Change "OSU Campus Police and Security" to "Oregon State Police and OSU Security Services"

Change "Campus Radiation Safety Comm. Staff" to "OSU Radiation Safety Office Staff"

Page 5-2, Table 5.1, item f

Change "...monitor or the unknown..." to "...monitor or unknown..."

Page 7-3, CAM or Stack Monitor, item a

Change "...set points..." to "...set point..." in the last sentence.

Page 7-10, Section 7.2.4, item b

Change "...any full-time member of the reactor operations staff." to "...any member of the staff."

Page 7-18, Section 7.6, item b.ii

Change "Xβγ film badge." to "Xβγ film or TLD badge."

Page 7-18, Section 7.6, item c

Change "...Xβγ film badges,..." to "...Xβγ film or TLD badges,..."

Page 7-18, Section 7.6, item e

Change "pocket ion chamber" to "self reading dosimeter."

Page 8-9, item b

Change "OSU Police & Security" to "Oregon State Police and OSU Security Services."

Page 9-1, Section 9.0, item c

Delete the second sentence, beginning "The Reactor Operations Committee..."

Page 10-1, Section 10.1, item b.v

Change "OSU Police & Security personnel." to "Oregon State Police and OSU Security Services personnel."

Page 10-3, Section 10.4.1, item d

Change "Pocket ion chambers" to "Self reading dosimeters"

Appendix A, Figure A.3, page A-4

Insert new Radiation Center Complex Floor Plan, revision date December 1996.

Appendix B, page B-3, item B, number 16

Change amount from 15 to 12.

Appendix B, page B-10, item A

Change item 1 title from "A100 Cabinet" to "B134 Large Cabinet"
Change item b. from "...large decon kit..." to "...large decon kit #1..."
Add item "c. Check large decon kit #2 (see item C. on next page)."
Delete entire item 2, "B126B Cabinet," including items a and b.
Renumber remaining items 3 and 4 to be items 2 and 3

Appendix B, page B-10, item B

Delete the column for "C122" from the table.

**Revisions to the OSU Radiation Center and TRIGA Reactor Emergency Response Plan
Implementing Procedures (ERIPs) - September 1995**

Cover Page

Change the last revision date to "December 1996."

All Changed Pages

Add or change the revision date to "12/96."

ERIP Cover Pages

Change the individual cover page of each changed ERIP to increase the revision number by one and change the latest revision date to 12/96.

ERIP 0, page E-0-2

Under *Personnel Emergency, Radiological, Consider Activating or Notifying*, change "Ore...." to "OR"
Under *Operational Emergency, Radiological, Consider Activating or Notifying*,
change "OSU Police & Security" to "Oregon State Police and OSU Security Services"
change "Ore...." to "OR..."

ERIP 0, page EC-0-6, number 3, a

Change "OSU Police & Security" to "Oregon State Police and OSU Security Services"

ERIP 1, page E-1-2

Under *Physical Security, Activate*, change "OSU Police & Security" to "Oregon State Police and OSU Security Services."

Under *Natural Phenomenon, Consider Notifying*, change "Ore...." to "OR..."

Under *Explosion or Fire, Activate*, change "OSU Police & Security" to "Oregon State Police and OSU Security Services."

Under *Radiological, Notify*, change "OSU Police & Security" to "Oregon State Police and OSU Security Services."

Under *Radiological, Consider Notifying*, change "Ore...." to "OR..."

Page EC-1-4, number 1, a

Change "OSU Police & Security" to "Oregon State Police and OSU Security Services."

Page EC-1-6, number 1, c

Change "OSU Police & Security" to "Oregon State Police and OSU Security Services."

Page EC-1-7, number 3, f

Change "OSU Police & Security" to "Oregon State Police and OSU Security Services."

Page SHP-1-10, number 5, b

Delete item 3, "Reading pocket..."

Page SHP-1-12, number 4, b

Delete item 3, "Reading pocket..."

ERIP 2, page E-2-2

Under *Activate*, change "Campus Security" to "Oregon State Police and OSU Security Services."

Page EC-2-4, number 2, a

Change "Campus Security" to "Oregon State Police and OSU Security Services."

Page SHP-2-6, number 4, b

Delete item 3, "Reading pocket..."

ERIP 3

Add a cover page with the title, "Reactor Emergency Operating Procedures (See OSTROP 1)" and remove the previous pages from the ERIP. This change is to reduce the unnecessary duplication of information which is readily available in its primary source.

ERIP 4

Change the cover page title to read "... (See RCHPP 3)" from "... (RCHPP 3)" and delete the current page.

ERIP 5, page E-5-1, item 1

Change sentence from "An evacuation may be initiated by any full-time member of the reactor operations staff, health physics staff, APEX operations staff, or Radiation Center management." to read "An evacuation may be initiated by any member of the staff."

Page E-5-6, Appendix B

Under the *Monitor* column, for B corridor, change "S. P. Smith" to "K. M. Brock" and for C corridor, change "D. A. Leon" to "M. R. Conrady."

Under the *Alternate* column, for B corridor, change "M. R. Conrady" to "S. R. Smith," for C corridor,, change "K. M. Lyons" to "A. C. Klein," and for D corridor, change "D. S. Pratt" to "S. A. Crail."

Page E-5-10

Delete items 1 and 2, and renumber items 3 and 4 to be items 1 and 2.

Page E-5-11

Change "(K. M. Lyons)" to "(K. M. Brock)"

Change item 1, "...of "C" corridor." to "...of "B" corridor."

Change item 2, "...the "C" corridor is clear." to "...the "B" corridor is clear."

Page E-5-13

Change "(Jung Soo Bae)" to "(S. A. Crail)"

Insert new items 8 and 9 as follows and renumber the previous item 8 to be item 10.

"8. Check the evacuation of "D" corridor en route to the assembly point.

9. At the assembly point, report to the Emergency Coordinator that "D" corridor is clear."

Page E-5-14

Delete items 1 and 2.

Renumber item 3 to be item 1.

Add the following as item 2.

"2. Collect survey meters (at least one ion chamber and one thin window GM), and other emergency equipment during evacuation."

Page E-5-15

Change the title from "...Neutron Activation Analysis Specialist" to "...Analytical Support Manager"

Change item 1 from "...of "B" corridor,..." to "...of "C" corridor,..."

Delete the text of item 2 and insert the following text in its place.

2. "Report to the Senior Health Physicist as a member of the Radiological Assessment Team."

Page E-5-16

Change "(D. A. Leon)" to "(S. R. Smith)"

Change item 1 from "...of "B" corridor,..." to "...of "C" corridor,..."

Change item 2 from "...that "C" corridor is clear." to "...that "B" corridor is clear."

Insert new item 3 as follows.

"3. Collect survey meters (at least one ion chamber and one thin window GM) and other emergency equipment during evacuation."

Renumber previous item 3 to become item 4.

Delete the previous item 4.

Page E-5-17

Change "(C. L. Phillips)" to "(C. L. Hall)"

NEW Page E-5-18

Insert new Page E-5-18 with the following text.
Renumber previous page E-5-18 to become E-5-19.

**CHECKLIST FOR THE INITIAL EMERGENCY RESPONSE ACTION
OF THE BUILDING CHECKERS**

NAME	CORRIDOR
A. C. Klein	C
K. A. Higley	E
E. G. Torne	A
R. H. Farmer	A

1. Check the evacuation of the designated corridor en route to the assembly point.
2. Report to the Emergency Coordinator that the designated corridor is clear.

ERIP 6, page E-6-1, Procedure, item 1

In the last line, change "OSU Police and Security" to "Oregon State Police and OSU Security Services"

ERIP 7, page E-7-4

Insert new version of Radiation Center Directory.

Page E-7-6

For *Emergency Coordinator, 3rd Choice*, change "S. P. Smith" to "B. Dodd"

For *Senior Health Physicist, 2nd Choice*, change "K. M. Lyons" to "K. M. Brock"

For *Radiological Assessment Team*, delete "S. E. Binney" and "D. A. Leon," and add "K. M. Brock" and "S. R. Smith," in alphabetical order by last name.

For *Historian, 1st Choice*, change "C. L. Phillips" to "C. L. Hall"

For *Chairman of Reactor Operations Committee, 3rd Choice*, change "A. H. Robinson" to "A. C. Klein (or any other ROC member)"

For *First Aid Responders*, delete "D. A. Leon" and change "K. M. Lyons" to "K. M. Brock"

Page E-7-7

For *Call Back Number*, change area code from "(503)" to "(541)" and add "Cellular Phone: (541) 740-6615."

Page E-8-2, Step Number One

Delete the single) following the word "engineering" in each of the three professional descriptions for the people filling the roles of Director, Chairman of the ROC, and Reactor Administrator.

Delete the last sentence of the page, beginning "Tell whomever..." which is a duplicate of the first sentence on the following page.

Page E-8-3

In the first sentence on the page, change "...the Administrative Services Building command post..." to "...the Disaster Operations Center..."

Page E-8-5

Delete the section entitled, "Phone number and staff of OSU Radiation Center:"

Move the remaining text on the page onto the bottom of the previous page, E-8-4. (This means that this page E-8-5 will no longer exist.)

Page E-8-6

Renumber this page to become page E-8-5.

In the last line of the first paragraph, change "spectrometers, cobalt-60 irradiators, X-ray machines and other equipment." to read as "spectrometers, a cobalt-60 irradiator, and other equipment."

Attachment B

OSTR Emergency Response Plan

Replacement Pages