#### REED COLLEGE

Portland, Oregon 97202

REACTOR FACILITY

March 22, 1996

To: Nuclear Regulatory Commission

Document Control Desk Washington DC 2055

Marvin Mendonca, Senior Project Manager, NRC

From: Stephen Frantz, Reed Reactor Facility, Docket 50-288

Re: Proposed Change to Emergency Plan

Enclosed is a proposed revision to the Reed Reactor Facility Emergency Plan and Emergency Implementing Procedure. This is in response to a change in our telephone system. This revision does not decrease the effectiveness of the plan. The revision has been approved by the Reed Reactor Radiation Safety Committee and Reed Reactor Operations Committee.

The Emergency Plan has been changed to 1) correct some minor errors, 2) change the definition of the Site Boundary to agree with the Technical Specifications, 3) reflect changes to the phone system, 4) change the name of the ODOE to the Office of Energy, and 5) reflect moving the gamma-spec to the counting rooms. The EIPs have been changed to reflect the new phone system and to make them more user-friendly. The appropriate paragraphs of the Emergency Plan are shown below:

## 1.4 Reed Reactor Facility Description

The RRF reactor is a General Atomics TRIGA Mark I reactor licensed to operate at a maximum power level of 25 kilowatt thermal (250 kW). The RRF reactor can be operated using either aluminum-clad or stainless-steel-clad standard TRIGA fuel elements enriched to a nominal concentration of 20% Uranium-235. The reactor core support structure is permanently mounted at the bottom of a 25-foot "swimming pool" tank. The pool structure is located below grade in the reactor bay. The RRF consists of the reactor bay, mechanical room, control room, ventilation loft, and exit corridor. The reactor building is attached to the southeast northeast corner of the Psychology Building. There is access to the radiochemistry laboratory and counting rooms from the exit corridor. Figure 3 is a floor plan of RRF.

[Comment: this was an error in the previous version]

# 2.6 EMERGENCY IMPLEMENTATION PROCEDURES

Emergency Implementation Procedures are documented instructions that detail the implementation actions and methods required to achieve the objectives of the emergency plan.

[Comment: this reflects what the procedures are called]

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#### 2.14 SITE BOUNDARY

The site boundary is that boundary, not necessarily having restrictive barriers, including the adjoining Psychology Building and extending 250 feet in every direction from the operations boundary center of the reactor. Within this area the Emergency Coordinator may directly initiate emergency activities. The area within the site boundary may be frequented by persons unacquainted with reactor operations.

[Comment: this matches the definition in Technical Specifications]

#### 3.1.8 Communications

Reed College maintains 24-hour telephone communications. RRF has a direct dial-in line through the college switchboard (503-777-7222), and a special phone separate from the college switchboard (503-777-8008). The special phone is which will work without the college's electronic switching system and therefore is operational any time the Pacific Northwest Bell system is operating and the lines are intact. The college's electronic switching system is 120 Vac, but has a with an automatic backup battery and an automatic backup generator. There is an extension of 503-777-7222 in the Director's Office which serves as the Emergency Support Center (ESC), in the counting room, and in Chem-415. There are pay phones in the Chemistry and Psychology buildings.

[Comment: this reflects an improvement in our phone system. It eliminates the need for the second phone number (777-8008)]

### 3.2.2 State of Oregon Office of Energy (ODOE)

ODOE Oregon Office of Energy shall be notified any time an Offsite Support Organization is activated for a radiological incident. Notification of an incident to the ODOE Oregon Office of Energy, Salem, Oregon, shall be in accordance with the regulations specified in Oregon Regulations for the Control of Radiation and other applicable State Regulations. Notification of the ODOE Oregon Office of Energy shall be an RRF management responsibility. If the Director is not available, an Emergency Coordinator who is also a member of the ENCL shall assume this responsibility and notify the Dean of the Faculty of this action.

[Comment: this reflects the new name of the ODOE]

#### 8.2 Assessment Facilities

The RRF has area radiation monitors and facility air monitors with readouts and alarm indications in the reactor control room. In addition, RRF maintains counting laboratories and portable survey instruments in the reactor and laboratory buildings, and if necessary, additional counting equipment and survey instruments are available from Offsite Support Organizations. There is also available in Room 415 of the Chemistry Building a gamma ray spectrometer for radioisotope identification. In addition, the following alarms and indicators provide non-radiological information in the event of an emergency:

[Comment: the gamma-spec was moved to the counting room by the reactor.]

#### 8.5 Communications Systems

RRF telephones and the facility intercom system located throughout the facility, may be utilized during emergency conditions. In addition, word of mouth communications will provide a backup

for internal communications to campus, and emergency radiotelephone communications. Also there is a semi-annual update and verification of the emergency notification call list.

[Comment: the inscreom was removed during recent renovations]

Sincerely,

Stephen G. Frantz Director, Reed Reactor Facility