

Cornell University

Ward Center for Nuclear
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January 19, 2006

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Subject: Facility License R-89; Docket 50-97

Dear Commissioner:

Cornell University hereby requests a license amendment to withdraw NRC authorization to receive and possess special nuclear material. Also, following up on a discussion with Mr. Daniel Hughes regarding license amendment No 6 for the Cornell Zero Power Reactor dated April 28, 1999, changes to Section 6 of the corresponding Technical Specifications are submitted. The changes reflect the organizational structure discussed in the plan for decommissioning the Ward Center for Nuclear Sciences. These changes will also remove any differences and/or conflicts with Section 6 of the Technical Specifications for the TRIGA Reactor (Facility License No. R-80) that is being amended for the same reason.

If you have any questions or require additional information, please don't hesitate to contact me at (607) 255-3481.

By my signature below, I hereby affirm that I am authorized to represent Cornell University in this matter and that the above is true and correct to the best of my knowledge and belief.

Signature *HC Aderhold* Executed on 1/19/06
Howard C. Aderhold
Director, Ward Center for Nuclear Sciences
Cornell University

Attachment: Section 6 of the Cornell ZPR Technical Specifications with changes.

CC: Dr. Joseph A Burns, V.P. for Physical and Engineering, Cornell University
Mr. Charles R. Fay, V.P. for Research Administration, Cornell University
Mr. Daniel E. Hughes, Project Manager, USNRC

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6. Administrative Controls

6.1 Organization and Responsibilities of Personnel

a) The Zero Power Reactor, located in the J. Carlton Ward, Jr. Laboratory of Nuclear Engineering, shall be part of the Ward Center for Nuclear Sciences of Cornell University. The reactor organization shall be related to the University structure as shown in Chart I.

b) The Vice Provost for Research Administration shall be the Project Director for the Decommissioning and Decontamination of the Cornell Ward Center for Nuclear Sciences. He shall appoint responsible and competent persons as members of the Cornell Decommissioning and Decontamination Oversight Committee, the Director of the Ward Center for Nuclear Sciences, and the Cornell Project Manager.

c) The Ward Laboratory (including but not limited to the Zero Power Reactor) shall be under the supervision of the Center Director, who shall have the overall responsibility for safe, efficient, and competent use of its facilities in conformity with all applicable laws, regulations, terms of facility licenses, and provisions of the Cornell Decommissioning and Decontamination Oversight Committee. He or she shall have responsibility for maintenance and modification of Laboratory facilities. He or she shall have education and/or experience commensurate with the responsibilities of the position. He or she shall report to the Vice Provost for Research Administration.

d)

This specification was removed as part of the possession only amendment since operation has permanently ceased and all fuel has been transferred to the Department of Energy.

e)

This specification was removed as part of the possession only amendment since operation has permanently ceased and all fuel has been transferred to the Department of Energy.

f) The University Radiation Safety Officer (URSO), or his or her deputy, shall (in addition to other duties defined by the Director of Environmental Health and Safety) be responsible for overseeing the safety of Ward Center operations from the standpoint of radiation protection. He or she shall be appointed by the Director of Environmental Health and Safety with the approval of the University Radiation Safety Committee. He or she shall report to the Director of Environmental Health and Safety, whose organization is independent of the Ward Center organization, as shown on Chart I.

g) The Center Director, with the approval of the Cornell Decommissioning and Decontamination Oversight Committee, may designate an appropriately qualified member of the Center organization as Ward Center Radiation Safety Officer (WCSRO) with duties including those of an intra-Center Radiation Safety Officer. The University Radiation Safety Officer may at his or her discretion, and with the concurrence of the Center Director, authorize the WCSRO to perform specific duties of the URSO at Ward Center.

h) The Cornell Project Manager for the Decommissioning and Decontamination of the Ward Center for Nuclear Sciences shall be responsible for communicating with regulators, for overseeing the project, for ensuring that all activities comply with applicable regulations and are performed in accordance with license conditions. He or she shall oversee inspections and quality assurance activities related to the D&D process and report findings. He or she shall report to the Vice

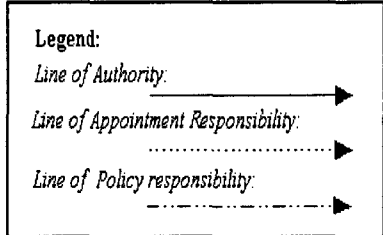
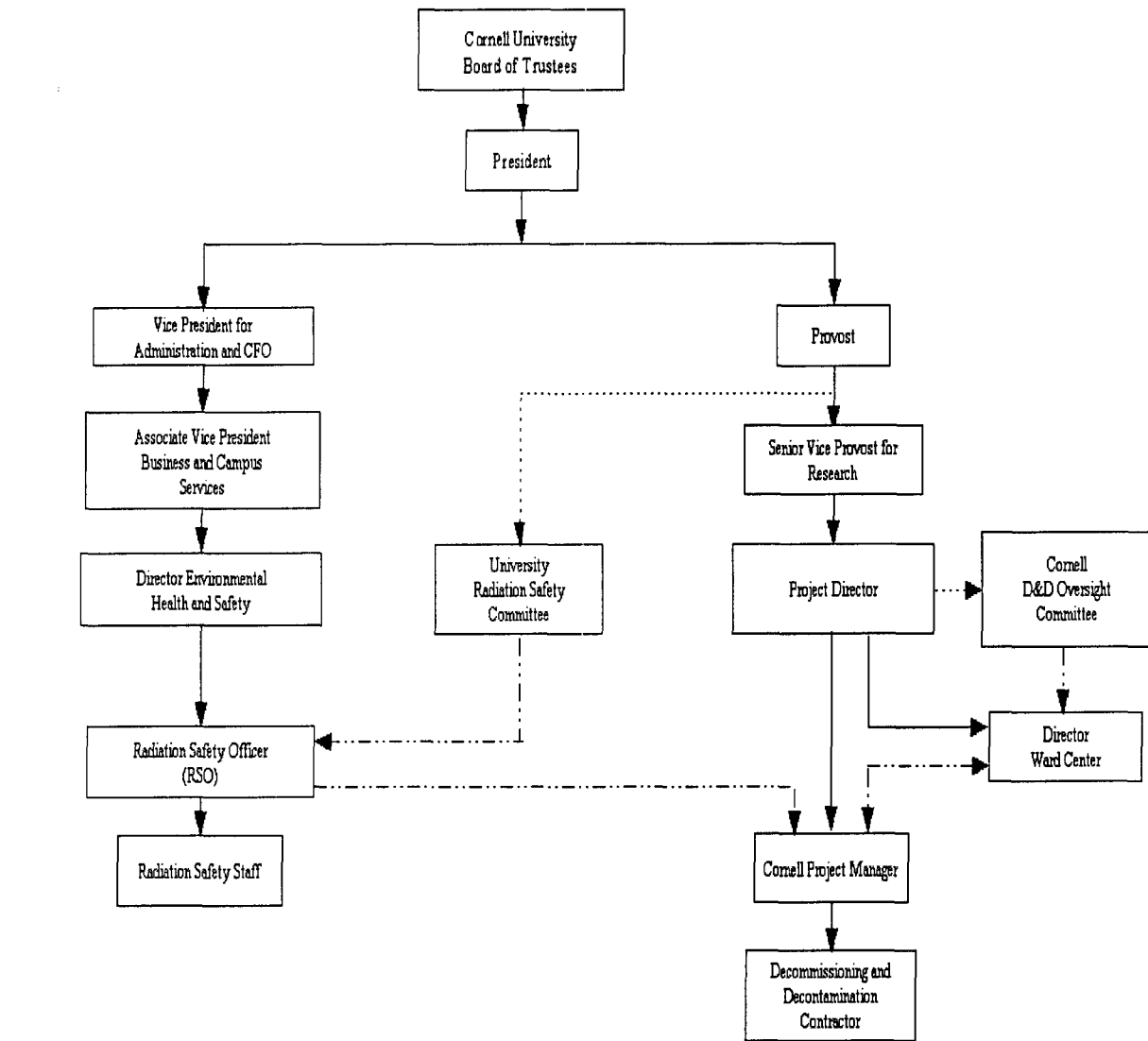


Chart I.- Organizational Structure

6.2 Review and Audit

- a) There will be a Cornell Decommissioning and Decontamination Oversight Committee which shall review the ZPR reactor status during the possession only phase, and through the decommissioning process, to assure that the reactor facility is used in a manner within the terms of the facility license and consistent with the safety of the public and of persons within the Laboratory.
- b) The responsibilities of the Committee include, but are not limited to, the following;
1. Review and approval of rules, procedures, and proposed Technical Specifications;
 2. Review and approval of all proposed changes in the facility that could have a significant effect on safety and of all proposed changes in rules, procedures, and Technical Specifications, in accordance with procedures in Section 6.3;
 3. Determination of whether a proposed change, test, or experiment would constitute an unreviewed safety question or change in the Technical Specifications (Ref. 10 CFR 50.59);
 4. Review of the operation and operations records of the facility;
 5. Review of unusual or abnormal occurrences and incidents which are reportable under 10CFR 20 and 10 CFR 50;
 6. Inspection of the facility, review of safety measures, and audit of operations at a frequency not less than once a year; and
 7. Approval of appointments of Responsible Persons.
- c) The Committee shall be composed of:
1. one or more persons proficient in nuclear physics, shielding and instrumentation
 2. one or more persons proficient in chemistry or chemical engineering,
 3. one person proficient in biological effects of radiation,
 4. the Center Director,
 5. the University Radiation Safety Officer or his or her deputy,
 6. one person proficient in geological sciences,
 7. one person proficient in civil and environmental engineering,
 8. one person from the University Office of Planning, Design and Construction or his or her deputy,
 9. one person from the University Office of Environmental Health and Safety or his or her deputy,
 10. one person from the Division of University Relations or his or her deputy,
 11. the Vice Provost for Physical Sciences and Engineering, or his or her deputy ,
 12. the Cornell Project Manager or his or her deputy, and,
 13. the Project Director or his or her deputy.

The same individual may serve under more than one category above, but the minimum membership shall be seven. At least four members shall be faculty members.

- d) The Committee shall have a written statement defining its authority and responsibilities, the subjects within its purview, and other such administrative provisions as are required for its effective functioning. Minutes of all meetings and records of all formal actions of the Committee shall be kept.

e) The chairman of the Committee shall be elected by the Committee from its members, except that the Center Director or Reactor Supervisor shall not serve as chairman. A quorum shall consist of not less than a majority of the full Committee and shall include the chairman or his or her designee.

f) The Committee shall meet a minimum of two times a year.

6.3 Procedures

a) Determination as to whether a proposed activity in categories 1 and 2 in Section 6.2b above does or does not have a significant safety effect and therefore does or does not require approved written procedures shall require the concurrence of:

1. the Center Director, and
2. at least one other member of the Cornell Decommissioning and Decontamination Oversight Committee, to be selected for relevant expertise by the Center Director. If the Director and Committee member disagree, or if in their judgment the case warrants it, the proposal shall be submitted to the full Committee, and
3. the University Radiation Safety Officer, or his or her deputy, who may withhold agreement until approval by the University Radiation Safety Committee is obtained.

Determinations that written procedures are not required shall be subsequently reviewed by the Cornell Decommissioning and Decontamination Oversight Committee. The time at which determinations are made, and the review and approval of written procedures, if required, are carried out, shall be a reasonable interval before the proposed activity is to be undertaken.

b) Determination that a proposed change in the facility does or does not have a significant safety effect and therefore does or does not require review and approval by the full Cornell Decommissioning and Decontamination Oversight Committee shall be made in the same manner as for proposed activities under (a) above.

6.4 Emergency Plan and Procedures

An emergency plan shall be established and followed in accordance with NRC regulations. The plan shall be reviewed and approved by the Cornell Decommissioning and Decontamination Oversight Committee prior to its submission to the NRC. In addition, emergency procedures that have been reviewed and approved by the Cornell Decommissioning and Decontamination Oversight Committee shall be established to cover all foreseeable emergency conditions potentially hazardous to persons within the Laboratory or to the public, including, but not limited to, those involving an uncontrolled reactor excursion or an uncontrolled release of radioactivity.

6.5 Physical Security Plan

A physical security plan for protection of the reactor plant shall be established and followed in accordance with NRC regulations.

6.6 Action to be Taken in the Event of a Reportable Occurrence

In the event of a reportable occurrence, as defined in Section 1.1 of the specifications, the following actions shall be taken:

- a) a report shall be made to include an analysis of the cause of the occurrence, efficacy of corrective action, and recommendations for measures to prevent or reduce the probability of recurrence. This report shall be submitted to the Cornell Decommissioning and Decontamination Oversight Committee for review.
- b) A report shall be submitted to the NRC in accordance with Section 6.8 of these specifications.

6.7 Plant Operating Records

a) In addition to the requirements of applicable regulations, in 10 CFR 20 and 50, records and logs shall be prepared and retained for a period of at least 5 years for the following items as a minimum:

1. normal plant operation, including power levels;
2. principal maintenance activities;
3. reportable occurrences;
4. equipment and component surveillance activities;
5. experiments performed with the reactor;
6. all emergency reactor scrams, including reasons for emergency shutdowns.

b) The following records shall be maintained for the life of the facility:

1. gaseous and liquid radioactive effluents released to the environs;
2. offsite environmental monitoring surveys;
3. fuel inventories and transfers;
4. facility radiation and contamination surveys;
5. radiation exposures for all personnel;
6. updated, corrected, and as-built drawings of the facility.

6.8 Reporting Requirements

All written reports shall be sent within the prescribed interval to the United States Nuclear Regulatory Commission, Washington, D.C., 20555, Attn: Document Control Desk, with a copy to the Regional Administrator, Region I.

In addition to the requirements of applicable regulations, and in no way substituting therefor, reports shall be made to the U.S. Nuclear Regulatory Commission (NRC) as follows:

a) A report within 24 hours by telephone and telegraph to the NRC Operation Center and Region I, of

1. any accidental release of radioactivity above permissible limits in unrestricted areas, whether or not the release resulted in property damage, personal injury, or exposure;
2. any reportable occurrences as defined in Section 1.1 of these specifications.

b) A report within 10 days in writing to the NRC Operation Center and Region I;

1. any accidental release of radioactivity above permissible limits in unrestricted areas, whether or not the release resulted in property damage, personal injury or exposure; the written report (and, to the extent possible, the preliminary telephone and telegraph report) shall describe, analyze, and evaluate safety implications, and outline the corrective measures taken or planned to prevent recurrence of the event;
 2. any reportable occurrence as defined in Section 1.1 of these specifications.
- c) A routine report in writing to the U.S. Nuclear Regulatory Commission, Document Control Desk, Washington, DC 20555 and Region I, within 60 days after completion of the first calendar year of operating and at intervals not to exceed 12 months, thereafter, providing the following information:
1. a brief narrative summary of (1) changes in facility design related to reactor safety occurring during the reporting period, and (2) results of surveillance tests and inspections;
 2. a summary of each change to the facility or procedures, tests, and experiments carried out under the conditions of Section 50.59 of 10CFR Part 50;
 3. a summary of the nature and amount of radioactive effluents released or discharged to the environs beyond the effective control of the licensee as measured at or prior to the point of such release or discharge;
 4. a description of any environmental surveys performed outside the facility;
 5. a summary of radiation exposures received by facility personnel and visitors, including the dates and time of significant exposure, and a brief summary of the results of radiation and contamination surveys performed within the facility.