

Nuclear Reactor Laboratory  
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THE UNIVERSITY OF  
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TUCSON ARIZONA

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March 7, 2001

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

10CFR50.90  
10CFR50.4

Subject: Facility License No. R-52, Docket 50-113  
Application for Amendment of Technical Specifications

Application is hereby made for amendment of the Technical Specifications of the Operating License of the University of Arizona Research Reactor.

The changes are needed to identify the proper communication channels for the reporting requirements of section 6.7 and to update section 6.2 to ensure compliance with the October 29, 1999 revision of 10 CFR 50.59.

The changes to section 6.7 are due to the Non-Power Reactors and Decommissioning Project Directorate no longer being in the reporting loop (verbal confirmation with NRC Senior Project Manager, Marvin Mendonca). Section 6.7(a) will now read "a report within 24 hours by telephone and telegraph or telefax (FAX) to the responsible NRC facility inspector as listed in the Emergency Kit and posted as deemed necessary." In sections 6.7 (b), 6.7 (c), 6.7 (d) and 6.7 (e), reporting requirements specifying the Non-Power Reactors and Decommissioning Directorate will be replaced with "the responsible NRC facility inspector." This change will eliminate the facility's need to revise our Technical Specifications in the event that the NRC restructures reporting requirements in the future.

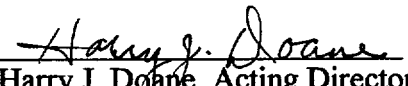
The change to section 6.2 is due to the recent implementation of the October 29, 1999 revision to 10 CFR 50.59. Section 6.2(b)(3) will now read "Determination of whether a proposed change, test, or experiment would constitute a license amendment pursuant to 10 CFR 50.59 (c)(2) as outlined in UARR 165."

The change pages to the document are supplied with copies as specified in 10 CFR 50.4, in two versions: one showing editorial marks (additions italicized, deletions struck through) and one clean version as revised.

The changes imposed do not endanger the health and safety of the public; continued compliance with applicable regulations will not be affected. The changes are expected to improve reporting effectiveness between the Nuclear Reactor Laboratory and the NRC.

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These documents respectfully submitted on behalf of the University of Arizona, by

  
Harry J. Doane, Acting Director  
Nuclear Reactor Laboratory

3/8/01  
Date

HJD/mg

Copies:

Document Control Desk, Nuclear Regulatory Commission:

- (1) signed original transmittal letter
- (1) Tech Spec Amendment 17 (w/ editorial marks)
- (1) Tech Spec Amendment 18 (clean copy)

Mr. Marvin Mendonca, Senior Project Manager, USNRC  
One copy of each document as listed above

Mr. Stephen Holmes, responsible facility NRC inspector, USNRC  
One copy of each document as listed above

Dr. John Williams, Director NRL  
One copy of each document as listed above

Dr. Richard Powell, Vice President for Research, University of Arizona  
One copy of each document as listed above

Dr. Michael Cusanovich, Director, Arizona Research Laboratories  
One copy of each document as listed above

## 6.2 Review

- a. There shall be a Reactor Committee which shall review reactor operations to assure that the facility is operated in a manner consistent with public safety and within the terms of the facility license.
- b. The responsibility of the Committee includes, but is not limited to, the following:
  1. Review and approval of experiments utilizing the reactor facilities;
  2. Review and approval of all proposed changes to the facility, procedures, and Technical Specifications;
  3. Determination of whether a proposed change, test, or experiment would constitute a license amendment pursuant to 10 CFR 50.59(c)(2) as outlined in UARR 165;
  4. Review of the operation and operational records of the facility;
  5. Review of abnormal performance of plant equipment and operating anomalies; and
  6. Review of unusual or abnormal occurrences and incidents which are reportable under 10 CFR 20 and 10 CFR 50.
  7. Review and audit of the retraining and requalification program for the operating staff.
  8. Biennial audit of the Emergency Plan.
- c. The Committee shall be composed of at least five members, and shall include a health physicist and members competent in the field of reactor operations, radiation science, or reactor engineering. The membership of the Committee shall be such as to maintain a high level degree of technical proficiency.
- d. The Committee shall establish a written charter defining such matters as the authority of the Committee, review and audit functions, and other such administrative provisions as are required for effective functioning of the Committee. Minutes of all meetings of the Committee shall be kept and submitted to committee members and to the Vice President for Research and Graduate Studies in a timely manner.
- e. A quorum of the Committee shall consist of not less than three members of the Committee and shall include the chairman or his designee.
- f. The Committee shall meet at least quarterly.

## 6.7 Reporting Requirements

In addition to the requirements of applicable regulations, and in no way substituting therefor, reports shall be made to the NRC as follows:

- a. A report within 24 hours by telephone and telegraph or telefax (FAX) to the responsible NRC facility inspector as listed in the Emergency Kit and posted as deemed necessary, of:
  1. Any accidental off-site release of radioactivity above limits permitted by 10 CFR 20, whether or not the release resulted in property damage, personal injury, or exposure;
  2. Any violation of a Safety Limit; and
  3. Any reportable occurrences as defined in Section 1.0 (Reportable Occurrence) of these specifications in writing.
- b. A written report within ten days to the U. S. Nuclear Regulatory Commission, Attn: Document Control Desk, Washington D.C. 20555, with a copy to the responsible NRC facility inspector of:
  1. Any significant variation of measured values from a corresponding predicted value of previously measured value of safety-connected operating characteristics occurring during operation of the reactor;
  2. Incidents or conditions relating to operation of the facility which prevented or could have prevented the performance of engineered safety features as described in these specifications;
  3. Any reportable occurrences as defined in Section 1.0 of these specifications; and
  4. Any violation of a Safety Limit.
  5. Any accidental off-site release of radioactivity above limits permitted by 10 CFR 20, whether or not the release resulted in property damage, personal injury, or exposure.
- c. A written report within 30 days to the U.S. Nuclear Regulatory Commission, Attn: Document Control Desk, Washington D.C. 20555, with a copy to the responsible NRC facility inspector of:
  1. Any substantial variance from performance specifications contained in these specifications or in the Safety Analysis Report;

2. Any significant change in the transient or accident analysis as described in the Safety Analysis Report;
  3. Any changes in facility organization; and
  4. Any observed inadequacies in the implementation of administrative or procedural controls.
- d. A written report within 60 days after completion of startup testing of the reactor to the U. S. Nuclear Regulatory Commission, Attn: Document Control Desk, Washington D.C. 20555, with a copy to the responsible NRC facility inspector of:
1. An evaluation of facility performance to date in comparison with design predictions and specifications; and
  2. A reassessment of the safety analysis submitted with the license application in light of measured operating characteristics when such measurements indicate that there may be substantial variance from prior analysis.
- e. A written annual report within 60 days following the 30th of June each year to the U.S. Nuclear Regulatory Commission, Attn: Document Control Desk, Washington D. C. 20555, with a copy to the responsible NRC facility inspector of:
1. A brief narrative summary of (1) operating experience (including experiments performed), (2) changes in facility design, performance characteristics, and operating procedures related to reactor safety and occurring during the reporting period, and (3) results of surveillance tests and inspections;
  2. Tabulation of the energy output (in megawatt days) of the reactor, amount of pulse operation, hours reactor was critical, and the cumulative total energy output since initial criticality;
  3. The number of emergency shutdowns and inadvertent scrams, including reasons therefore;
  4. Discussion of the major maintenance operations performed during the period, including the effect, if any, on the safety of the operation of the reactor, and the reasons for any corrective maintenance required;
  5. A brief description including a summary of the safety evaluations of changes in the facility or in procedures and of tests and experiments carried out pursuant to Section 50.59 of 10 CFR Part 50;

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- b. The responsibility of the Committee includes, but is not limited to, the following:
  1. Review and approval of experiments utilizing the reactor facilities;
  2. Review and approval of all proposed changes to the facility, procedures, and Technical Specifications;
  3. Determination of whether a proposed change, test, or experiment would constitute *a license amendment pursuant to 10 CFR 50.59 (c)(2) as outlined in UARR 165*; ~~an unreviewed safety question or a change in the Technical Specifications as required by 10 CFR 50.59, and review and approval of required safety analyses;~~
  4. Review of the operation and operational records of the facility;
  5. Review of abnormal performance of plant equipment and operating anomalies; and
  6. Review of unusual or abnormal occurrences and incidents which are reportable under 10 CFR 20 and 10 CFR 50.
  7. Review and audit of the retraining and requalification program for the operating staff.
  8. Biennial audit of the Emergency Plan.
- c. The Committee shall be composed of at least five members, and shall include a health physicist and members competent in the field of reactor operations, radiation science, or reactor engineering. The membership of the Committee shall be such as to maintain a high level degree of technical proficiency.
- d. The Committee shall establish a written charter defining such matters as the authority of the Committee, review and audit functions, and other such administrative provisions as are required for effective functioning of the Committee. Minutes of all meetings of the Committee shall be kept and submitted to committee members and to the Vice President for Research and Graduate Studies in a timely manner.
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In addition to the requirements of applicable regulations, and in no way substituting therefor, reports shall be made to the NRC as follows:

- a. A report within 24 hours by telephone and telegraph or telefax (FAX) to the *responsible NRC facility inspector as listed in the Emergency Kit and posted as deemed necessary*~~Non-Power Reactors and Decommissioning Project Directorate~~, of:
  1. Any accidental off-site release of radioactivity above limits permitted by 10 CFR 20, whether or not the release resulted in property damage, personal injury, or exposure;
  2. Any violation of a Safety Limit; and
  3. Any reportable occurrences as defined in Section 1.0 (Reportable Occurrence) of these specifications in writing.
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  1. Any significant variation of measured values from a corresponding predicted value of previously measured value of safety-connected operating characteristics occurring during operation of the reactor;
  2. Incidents or conditions relating to operation of the facility which prevented or could have prevented the performance of engineered safety features as described in these specifications;
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  1. Any substantial variance from performance specifications contained in these specifications or in the Safety Analysis Report;

2. Any significant change in the transient or accident analysis as described in the Safety Analysis Report;
  3. Any changes in facility organization; and
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- d. A written report within 60 days after completion of startup testing of the reactor to the U. S. Nuclear Regulatory Commission, Attn: Document Control Desk, Washington D.C. 20555, *with a copy to the responsible NRC facility inspector with a copy to the Non-Power Reactors and Decommissioning Project Directorate*, of:
1. An evaluation of facility performance to date in comparison with design predictions and specifications; and
  2. A reassessment of the safety analysis submitted with the license application in light of measured operating characteristics when such measurements indicate that there may be substantial variance from prior analysis.
- e. A written annual report within 60 days following the 30th of June each year to the U.S. Nuclear Regulatory Commission, Attn: Document Control Desk, Washington D. C. 20555, *with a copy to the responsible NRC facility inspector with a copy to the Non-Power Reactors and Decommissioning Project Directorate*, of:
1. A brief narrative summary of (1) operating experience (including experiments performed), (2) changes in facility design, performance characteristics, and operating procedures related to reactor safety and occurring during the reporting period, and (3) results of surveillance tests and inspections;
  2. Tabulation of the energy output (in megawatt days) of the reactor, amount of pulse operation, hours reactor was critical, and the cumulative total energy output since initial criticality;
  3. The number of emergency shutdowns and inadvertent scrams, including reasons therefore;
  4. Discussion of the major maintenance operations performed during the period, including the effect, if any, on the safety of the operation of the reactor, and the reasons for any corrective maintenance required;
  5. A brief description including a summary of the safety evaluations of changes in the facility or in procedures and of tests and experiments carried out pursuant to Section 50.59 of 10 CFR Part 50;