

July 1, 2020

United States Nuclear Regulatory Commission Attn: Document Control Desk Washington, DC, 20555-0001

Subject:

Docket 50-156, License R-74

License Amendment Request Regarding Administrative Controls

Proposed Changes to Technical Specifications

The University of Wisconsin is proposing to revise Section 6 of the Technical Specifications for the University of Wisconsin Nuclear Reactor to address the Organizational Structure. Specifically, it is proposed to replace those responsibilities currently delegated to the Engineering Physics Department Chair to the Vice Chancellor for Finance and Administration (VCFA). This change brings the reactor's NRC license organizational structure in line with the University's radioactive materials license where the VCFA is the institutional official. Furthermore, administrative and budgetary authority is delegated to the Dean of the College of Engineering. The Department of Engineering Physics will no longer manage the facility.

As a result of previous administrative changes, the names of some of the following committees have changed, but their responsibilities remain the same. Specifically, the review and audit functions remain the responsibility of the Reactor Safety Committee, a standing subcommittee of the campus Executive Radiation Safety Committee. The Executive Radiation Safety Committee has direct access to upper-level campus management. The Office of Radiation Safety will continue to provide radiation protection oversight of the facility. The Office of Radiation Safety will communicate its finding to the Reactor Safety Committee so that the body responsible for the review and audit functions can report to Level 1 management. Both the Reactor Safety Committee and the Office of Radiation Safety have the authority to interdict or terminate activities to ensure safety.

The proposed changes are detailed in the attached enclosures along with marked-up copies of pages 52, 53, 55, 56 and 62 to the Technical Specifications.

ADZO NRR

Pursuant to the requirements of the proposed changes to technical specifications 6.7.2(2)(a), upon approval of this license amendment, the U.S. NRC is hereby notified that the Vice Chancellor for Finance and Administration is Laurent Heller.

Should you have questions regarding these proposed amended Technical Specifications please contact our Reactor Director, Robert J. Agasie, by phone at 608-262-3392 or email at ragasie@wisc.edu.

Pursuant to 10 CFR 50.30(b) I certify under penalty of perjury that the foregoing is true and correct.

Sincerely,

Rebecca Blank

Rebecca Blank

Chancellor

UW-Madison

Executed on: July 1, 2020

Attachment 1

Proposed Changes to Technical Specifications

1. Technical Specification 6.1.1, paragraph 1 currently states:

The reactor facility shall be an integral part of the Engineering Physics Department of the College of Engineering of the University of Wisconsin-Madison. The reactor shall be related to the University structure as shown in **Figure TS-1**.

It is proposed to change Technical Specification 6.1.1, paragraph 1 to add the name of the license holder, describe how ANSI/ANS 15.1 Level 1 responsibility is delegated to the Vice Chancellor for Finance and Administration of the University of Wisconsin – Madison campus and remove the reactor facility from the Department of Engineering Physics to the College of Engineering to read:

The license is held by the Board of Regents of the University of Wisconsin System. The Board of Regents delegates operations of the Madison campus to the Chancellor. The Chancellor delegates management of the reactor to the Vice Chancellor for Finance and Administration. The reactor facility shall be an integral part of the College of Engineering of the University of Wisconsin-Madison. The reactor shall be related to the University structure as shown in **Figure TS-1**.

Basis for Proposed Change:

NUREG-1537 part 1, appendix 14.1, section 6.1.1 requires the organizational structure to be clearly stated. While the organizational structure of the Board of Regents of the University of Wisconsin System as the license holder and the delegation of the operations of the Madison campus to the Chancellor are documented in figure TS-1 and have not changed, these statements of fact are now clearly stated in paragraph 1.

The Office of the Chancellor, as the organizational head of the University of Wisconsin — Madison campus and the ANSI/ANS 15.1 Level 1 individual previously delegated operational management of the reactor facility to the Chair of the Engineering Physics Department.

Therefore, the Chair of the Engineering Physics Department possessed certain ANSI/ANS 15.1 Level 1 responsibilities for the facility. However, this is not consistent with how the university delegates the management of the use of radioactive material and radiation generating devices under the State of Wisconsin's specific licenses of broad scope for radioactive material at the University of Wisconsin — Madison, license number 25-1323-01. Under Wisconsin state statute 254.365 and Chapter DHS 157 of the Wisconsin Administrative Code, the University of Wisconsin — Madison designates the Vice Chancellor for Finance and Administration as the institutional official responsible for license number 25-1323-01. Therefore, to make administration of the reactor license consistent with the administration of the University of Wisconsin — Madison's specific licenses of broad scope for radioactive material the Chancellor of the University of Wisconsin — Madison campus delegates the ANSI/ANS 15.1 Level 1 responsibilities for the reactor facility to the Vice Chancellor for Finance and Administration.

Furthermore, the Academic Deans manage the departments within their respective schools or colleges and the Academic Deans report to the Office of the Chancellor. Thus, the Chancellor has decided to have the facility director report to the Dean of the College of Engineering to align the license structure with the campus organizational structure.

2. The second paragraph of Technical Specification 6.1.1 currently states:

The Radiation Safety office performs audit functions for both the Radiation Safety Committee and the Reactor Safety Committee and reports to both committees as well as to the Reactor Director.

It is proposed to change the second paragraph of Technical Specifications 6.1.1 to clearly identify the entity responsible for review and audit functions, rename the Radiation Safety Office to the Office of Radiation Safety (ORS) and the Radiation Safety Committee to the Executive Radiation Safety Committee and clearly identify reporting paths and communication paths. Finally, an explicit statement of authority to stop work to ensure safety is added to read:

Independent review and audit functions shall be provided by the Reactor Safety Committee. The Office of Radiation Safety (ORS) performs audit functions on behalf of both the Executive Radiation Safety Committee and the Reactor Safety Committee. ORS reports to the Vice Chancellor for Finance and Administration and communicates its findings to both the Dean of the College of Engineering as well as to the Reactor Director. The Reactor Safety Committee and ORS shall have authority to interdict or terminate activities to ensure safety.

Basis for Proposed Change:

Consistent with ANSI/ANS 15.1 the method for the independent review and audit of the safety aspects of reactor facility operations are established to advise management. The review and audit functions of the Reactor Safety Committee and the audit functions of the Office of Radiation Safety (formally the Radiation Safety Office) have not changed as stipulated in Technical Specifications 6.2. However as required ANSI/ANS 15.1 section 6.1.1 the structure of the review and audit groups as well as their reporting path are to be clearly identified including how these groups report to Level 1 management and communicate to Level 2 management.

As a result of a reorganization of the University of Wisconsin – Madison radiation protection program in 2016 under the State of Wisconsin Radioactive Materials License of broad scope, the Radiation Safety Office was re-titled the Office of Radiation Safety (ORS). The audit functions provided by the Radiation Safety Office stipulated in Technical Specifications 6.2.4 are provided by the Office of Radiation Safety. Similarly, the Radiation Safety Committee was re-titled the Executive Radiation Safety Committee. The functions of the Radiation Safety Committee, as detailed in section 12.1.2.1 of the University of Wisconsin Nuclear Reactor Safety Analysis Report, revision 3, are provided by the Executive Radiation Safety Committee.

Consistent with NUREG-1537 part 1, appendix 14.1, section 6.3, the authority to interdict or terminate safety-related activities should be stated. This authority is explicitly granted to both the Reactor Safety Committee and the Office of Radiation Safety.

3. The second paragraph of Technical Specification 6.1.2 currently states:

The reactor facility shall be under the direct control of a Reactor Supervisor designated by the Reactor Director. The Reactor Supervisor shall be responsible for assuring that all operations are conducted in a safe manner and within the limits prescribed by the facility license, procedures, and the requirements of the Radiation Safety Committee and the Reactor Safety Committee.

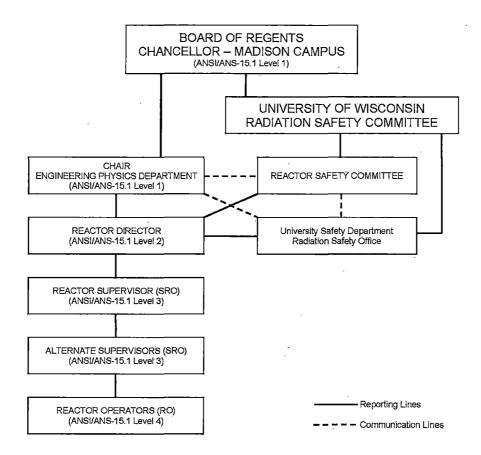
It is proposed to rename the Radiation Safety Committee to the Executive Radiation Safety Committee to read:

The reactor facility shall be under the direct control of a Reactor Supervisor designated by the Reactor Director. The Reactor Supervisor shall be responsible for assuring that all operations are conducted in a safe manner and within the limits prescribed by the facility license, procedures, and the requirements of the Executive Radiation Safety Committee and the Reactor Safety Committee.

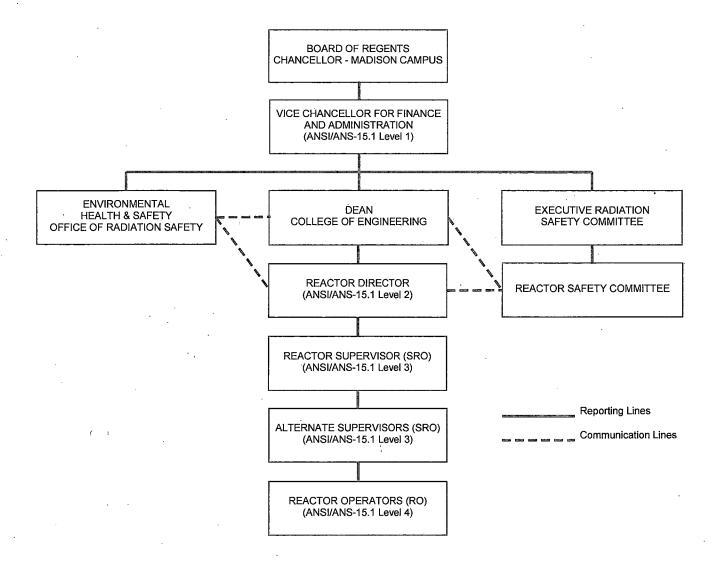
Basis for Proposed Change:

As a result of a reorganization of the University of Wisconsin – Madison radiation protection program in 2016 under the State of Wisconsin Radioactive Materials License of broad scope, the Radiation Safety Committee was re-titled the Executive Radiation Safety Committee as previously described in item 2 above.

4. Technical Specification Figure TS-1 is currently represents the Organization Chart as shown below:



It is proposed to replace the Chair of the Engineering Physics Department with the Vice Chancellor for Finance and Administration and insert the Dean of the College of Engineering as represented below:



Basis for Proposed Change:

The basis for the replacement of the Chair of the Engineering Physics Department with the Vice Chancellor for Finance and Administration has been previously addressed in item 1 above.

The basis for the addition of the Dean of the College of Engineering has been previously addressed in item 1 above.

As required ANSI/ANS 15.1 section 6.1.1 the structure of the review and audit groups (the Reactor Safety Committee and the Office of Radiation Safety) as well as their reporting path are to be clearly identified including how these groups report to Level 1 management and communicate to Level 2 management.

5. Technical Specification 6.2.1 currently states:

The Committee shall be composed of a least six members, one of whom shall be a Health Physicist from the University of Wisconsin Safety Department Radiation Safety Office. The Committee shall collectively possess expertise in the following disciplines:

- 1. Reactor Physics;
- 2. Heat transfer and fluid mechanics;
- 3. Metallurgy
- 4. Instruments and Control Systems;
- 5. Chemistry and Radio-chemistry;
- 6. Radiation Safety.

Reactor staff shall not be members of the committee. This does not preclude reactor staff from participating on subcommittees.

It is proposed to rename the Safety Department Radiation Safety Office to the Office of Radiation Safety to read:

The Committee shall be composed of a least six members, one of whom shall be a Health Physicist from the University of Wisconsin Office of Radiation Safety. The Committee shall collectively possess expertise in the following disciplines:

- 1. Reactor Physics;
- 2. Heat transfer and fluid mechanics;
- 3. Metallurgy
- 4. Instruments and Control Systems;
- 5. Chemistry and Radio-chemistry;
- 6. Radiation Safety.

Reactor staff shall not be members of the committee. This does not preclude reactor staff from participating on subcommittees.

Basis for Proposed Change:

As a result of a reorganization of the University of Wisconsin – Madison radiation protection program in 2016 under the State of Wisconsin Radioactive Materials License of broad scope, the Radiation Safety Office was re-titled the Office of Radiation Safety (ORS) a previously described in item 2 above.

6. Technical Specification 6.2.4 currently states:

A Health Physicist from the University of Wisconsin Safety Department Radiation Safety Office shall represent the University Radiation Safety Committee and shall conduct an inspection of the facility at least once every calendar month to assure compliance with the regulations of 10 CFR Part 20. The services and inspection function of the Health Physics Office shall also be available to the Reactor Safety Committee, and will extend the scope of the audit to cover license, technical specification, and procedure adherence.

The committee shall annually audit operation and operational records of the facility, correction of deficiencies, requalification program, security plan, and emergency plan and their implementing procedures. If the committee chooses to use the staff of the Health Physics organization for the audit function, the reports of audit results will be distributed to the committee and included as an agenda item for committee meetings.

It is proposed to rename the Safety Department Radiation Safety Office to the Office of Radiation Safety and the University Radiation Safety Committee to the Executive Radiation Safety Committee to read:

A Health Physicist from the University of Wisconsin Office of Radiation Safety shall represent the University Executive Radiation Safety Committee and shall conduct an inspection of the facility at least once every calendar month to assure compliance with the regulations of 10 CFR Part 20. The services and inspection function of the Office of Radiation Safety shall also be available to the Reactor Safety Committee, and will extend the scope of the audit to cover license, technical specification, and procedure adherence.

The committee shall annually audit operation and operational records of the facility, correction of deficiencies, requalification program, security plan, and emergency plan and their implementing procedures. If the committee chooses to use the staff of the Office of Radiation Safety for the audit function, the reports of audit results will be distributed to the committee and included as an agenda item for committee meetings.

Basis for Proposed Change:

As a result of a reorganization of the University of Wisconsin – Madison radiation protection program in 2016 under the State of Wisconsin Radioactive Materials License of broad scope, the Radiation Safety Office was re-titled the Office of Radiation Safety (ORS) and the campus Radiation Safety Committee was re-titled the Executive Radiation Safety Committee as previously described in item 2 above.

- 7. Technical Specification 6.7.2(2)(a) currently states:
 - a. Permanent changes in facility organization at Reactor Director or Department Chair level.

It is proposed to replace the Department Chair with Vice Chancellor for Finance and Administration to read:

a. Permanent changes in facility organization at Reactor Director or Vice Chancellor for Finance and Administration level.

Basis for Proposed Change:

Consistent with ANSI/ANS 15.1 section 6.7.2(2)(a) a written report shall be provided to the licensing authority (the U.S. Nuclear Regulatory Commission) of any permanent change in the facility organization involving level 1 or 2 personnel. With the replacement of the Engineering Physics Chair by the Vice Chancellor for Finance and Administration, this change must be reflected in Technical Specification 6.7.2(2)(a).

Attachment 2

Original Copies of Technical Specifications Pages 52, 53, 55, 56 & 62

TS 6. ADMINISTRATIVE CONTROLS

TS 6.1 Organization

TS 6.1.1 Structure

The reactor facility shall be an integral part of the Engineering Physics Department of the College of Engineering of the University of Wisconsin-Madison. The reactor shall be related to the University structure as shown in Figure TS-1.

The Radiation Safety office performs audit functions for both the Radiation Safety Committee and the Reactor Safety Committee and reports to both committees as well as to the Reactor Director.

TS 6.1.2 Responsibility

The Reactor Director is responsible for all activities at the facility, including licensing, security, emergency preparedness, and maintaining radiation exposures as low as reasonably achievable.

The reactor facility shall be under the direct control of a Reactor Supervisor designated by the Reactor Director. The Reactor Supervisor shall be responsible for assuring that all operations are conducted in a safe manner and within the limits prescribed by the facility license, procedures, and the requirements of the Radiation Safety Committee and the Reactor Safety Committee.

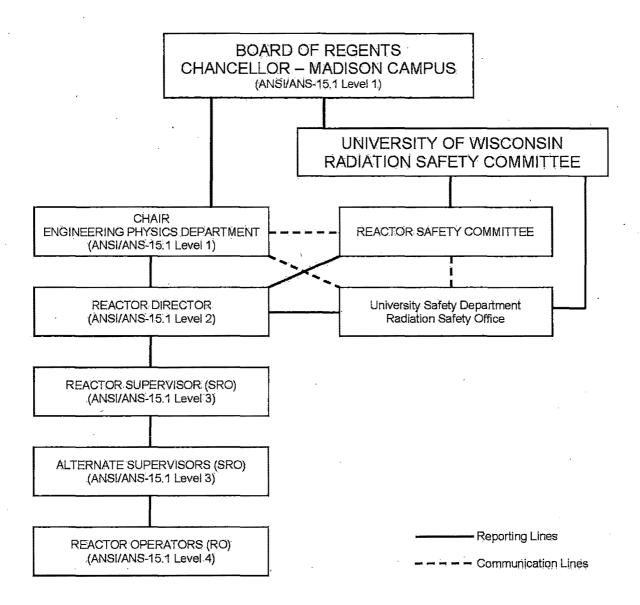


Figure TS-1, Organization Chart

TS 6.2 Review and Audit

There shall be a Reactor Safety Committee which shall review and audit reactor operations to assure that the facility is operated in a manner consistent with public safety and within the conditions of the facility license.

TS 6.2.1 Composition and Qualifications

The Committee shall be composed of a least six members, one of whom shall be a Health Physicist from the University of Wisconsin Safety Department Radiation Safety Office. The Committee shall collectively possess expertise in the following disciplines:

- 1. Reactor Physics;
- 2. Heat transfer and fluid mechanics;
- 3. Metallurgy
- 4. Instruments and Control Systems;
- 5. Chemistry and Radio-chemistry;
- 6. Radiation Safety.

Reactor staff shall not be members of the committee. This does not preclude reactor staff from participating on subcommittees.

TS 6.2.2 Charter and Rules

The Committee shall meet at least annually.

The Committee shall formulate written standards regarding the activities of the full committee; minutes, quorum, telephone polls for approvals not requiring a formal meeting, and subcommittees.

A quorum shall be at least half of the members.

TS 6.2.3 Review Function

The responsibilities of the Reactor Safety Committee shall include, but are 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, license, and technical specifications;
- 3. Determinations that proposed changes in equipment, systems, tests, experiments, or procedures are allowed in accordance with 10 CFR 50.59 without prior authorization by the NRC;
- 4. Review of abnormal performance of plant equipment and operating anomalies having safety significance; and
- 5. Review of unusual or reportable occurrences and incidents which are reportable under 10 CFR Part 20 and 10 CFR Part 50.
- 6. Review of audit reports.
- 7. Review of violations of technical specifications, license, or procedures and orders having safety significance.

TS 6.2.4 Audit Function

A Health Physicist from the University of Wisconsin Safety Department Radiation Safety Office shall represent the University Radiation Safety Committee and shall conduct an inspection of the facility at least once every calendar month to assure compliance with the regulations of 10 CFR Part 20. The services and inspection function of the Health Physics Office shall also be available to the Reactor Safety Committee, and will extend the scope of the audit to cover license, technical specification, and procedure adherence.

The committee shall annually audit operation and operational records of the facility, correction of deficiencies, requalification program, security plan, and emergency plan and their implementing procedures. If the committee chooses to use the staff of the Health Physics organization for the audit function, the reports of audit results will be distributed to the committee and included as an agenda item for committee meetings.

- 2. A report within 60 days after completion of startup testing of the reactor (in writing to the U.S. Nuclear Regulatory Commission, Attn: Document Control Desk, Washington, D.C. 20555) upon receipt of a new facility license or an amendment to the license authorizing an increase in reactor power level describing the measured values of the operating conditions or characteristics of the reactor under the new conditions including:
 - a. An evaluation of facility performance to date in comparison with design predictions and specifications, and
 - b. 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.

TS 6.7.2 Special Reports

- 1. There shall be a report of any of the following not later than the following day by telephone or similar conveyance to the NRC Headquarters Operation Center, and followed by a written report describing the circumstances of the event and sent within 14 days to U.S. Nuclear Regulatory Commission, Attn: Document Control Desk, Washington, D.C. 20555:
 - a. Any accidental release of radioactivity above permissible limits in unrestricted areas whether or not the release resulted in property damage, personal injury, or exposure;
 - b. Any violation of a safety limit;
 - c. Any reportable occurrences as defined in TS 1.3 of these specifications.
- 2. A written report within 30 days in writing to the U.S. Nuclear Regulatory Commission, Attn: Document Control Desk, Washington, D.C. 20555 of:
 - a. Permanent changes in facility organization at Reactor Director or Department Chair level.
 - b. Any significant change in the transient or accident analysis as described in the Safety Analysis Report;

Attachment 3

Marked Up Copies of Technical Specifications
Pages
52, 53, 55, 56 & 62

TS 6. ADMINISTRATIVE CONTROLS

TS 6.1 Organization

TS 6.1.1 Structure

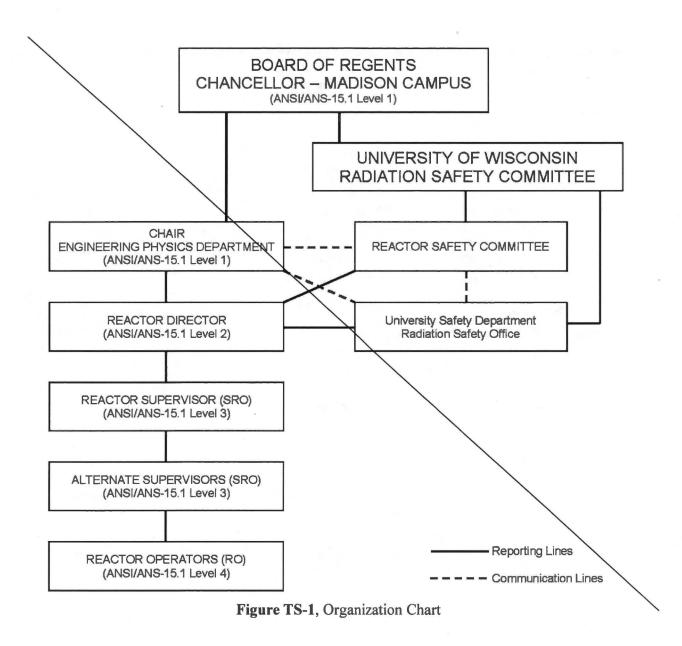
The license is held by the Board of Regents of the University of Wisconsin System. The Board of Regents delegates operations of the Madison campus to the Chancellor. The Chancellor delegates management of the reactor to the Vice Chancellor for Finance and Administration. The reactor facility shall be an integral part of the Engineering Physics Department of the College of Engineering of the University of Wisconsin-Madison. The reactor shall be related to the University structure as shown in Figure TS-1.

Independent review and audit functions shall be provided by the Reactor Safety Committee. The Office of Radiation Safety (ORS) office performs audit functions on behalf of for both the Executive Radiation Safety Committee and the Reactor Safety Committee. ORS and reports to the Vice Chancellor for Finance and Administration and communicates its findings to both the Dean of the College of Engineering committees as well as to the Reactor Director. The Reactor Safety Committee and ORS shall have authority to interdict or terminate activities to ensure safety.

TS 6.1.2 Responsibility

The Reactor Director is responsible for all activities at the facility, including licensing, security, emergency preparedness, and maintaining radiation exposures as low as reasonably achievable.

The reactor facility shall be under the direct control of a Reactor Supervisor designated by the Reactor Director. The Reactor Supervisor shall be responsible for assuring that all operations are conducted in a safe manner and within the limits prescribed by the facility license, procedures, and the requirements of the Executive Radiation Safety Committee and the Reactor Safety Committee.



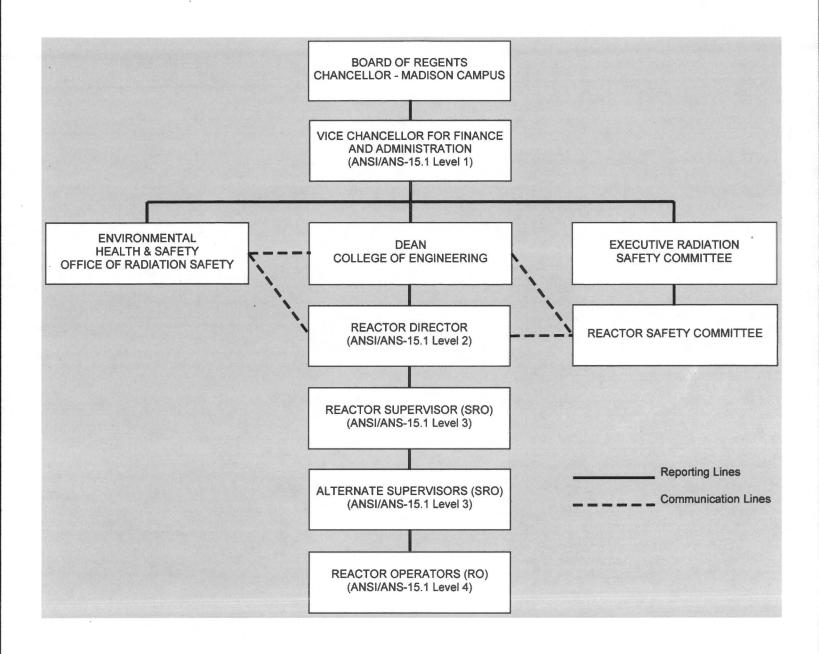


Figure TS-1, Organization Chart

TS 6.2 Review and Audit

There shall be a Reactor Safety Committee which shall review and audit reactor operations to assure that the facility is operated in a manner consistent with public safety and within the conditions of the facility license.

TS 6.2.1 Composition and Qualifications

The Committee shall be composed of a least six members, one of whom shall be a Health Physicist from the University of Wisconsin Safety Department Office of Radiation Safety Office. The Committee shall collectively possess expertise in the following disciplines:

- 1. Reactor Physics;
- 2. Heat transfer and fluid mechanics:
- 3. Metallurgy
- 4. Instruments and Control Systems;
- 5. Chemistry and Radio-chemistry;
- 6. Radiation Safety.

Reactor staff shall not be members of the committee. This does not preclude reactor staff from participating on subcommittees.

TS 6.2.2 Charter and Rules

The Committee shall meet at least annually.

The Committee shall formulate written standards regarding the activities of the full committee; minutes, quorum, telephone polls for approvals not requiring a formal meeting, and subcommittees.

A quorum shall be at least half of the members.

TS 6.2.3 Review Function

The responsibilities of the Reactor Safety Committee shall include, but are 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, license, and technical specifications;
- 3. Determinations that proposed changes in equipment, systems, tests, experiments, or procedures are allowed in accordance with 10 CFR 50.59 without prior authorization by the NRC;
- 4. Review of abnormal performance of plant equipment and operating anomalies having safety significance; and
- 5. Review of unusual or reportable occurrences and incidents which are reportable under 10 CFR Part 20 and 10 CFR Part 50.
- 6. Review of audit reports.
- 7. Review of violations of technical specifications, license, or procedures and orders having safety significance.

TS 6.2.4 Audit Function

A Health Physicist from the University of Wisconsin Safety Department Office of Radiation Safety Office shall represent the University Executive Radiation Safety Committee and shall conduct an inspection of the facility at least once every calendar month to assure compliance with the regulations of 10 CFR Part 20. The services and inspection function of the Health Physics Office of Radiation Safety shall also be available to the Reactor Safety Committee, and will extend the scope of the audit to cover license, technical specification, and procedure adherence.

The committee shall annually audit operation and operational records of the facility, correction of deficiencies, requalification program, security plan, and emergency plan and their implementing procedures. If the committee chooses to use the staff of the Office of Radiation Safety Health Physics organization for the audit function, the reports of audit results will be distributed to the committee and included as an agenda item for committee meetings.

- 2. A report within 60 days after completion of startup testing of the reactor (in writing to the U.S. Nuclear Regulatory Commission, Attn: Document Control Desk, Washington, D.C. 20555) upon receipt of a new facility license or an amendment to the license authorizing an increase in reactor power level describing the measured values of the operating conditions or characteristics of the reactor under the new conditions including:
 - a. An evaluation of facility performance to date in comparison with design predictions and specifications, and
 - b. 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.

TS 6.7.2 Special Reports

- 1. There shall be a report of any of the following not later than the following day by telephone or similar conveyance to the NRC Headquarters Operation Center, and followed by a written report describing the circumstances of the event and sent within 14 days to U.S. Nuclear Regulatory Commission, Attn: Document Control Desk, Washington, D.C. 20555:
 - a. Any accidental release of radioactivity above permissible limits in unrestricted areas whether or not the release resulted in property damage, personal injury, or exposure;
 - b. Any violation of a safety limit;
 - c. Any reportable occurrences as defined in TS 1.3 of these specifications.
- 2. A written report within 30 days in writing to the U.S. Nuclear Regulatory Commission, Attn: Document Control Desk, Washington, D.C. 20555 of:
 - Permanent changes in facility organization at Reactor Director or Department Chair Vice Chancellor for Finance and Administration level.
 - b. Any significant change in the transient or accident analysis as described in the Safety Analysis Report;

Attachment 4

Final Copies of Technical Specifications Pages 52, 53, 55, 56 & 62

TS 6. ADMINISTRATIVE CONTROLS

TS 6.1 Organization

TS 6.1.1 Structure

The license is held by the Board of Regents of the University of Wisconsin System. The Board of Regents delegates operations of the Madison campus to the Chancellor. The Chancellor delegates management of the reactor to the Vice Chancellor for Finance and Administration. The reactor facility shall be an integral part of the College of Engineering of the University of Wisconsin-Madison. The reactor shall be related to the University structure as shown in **Figure TS-1**.

Independent review and audit functions shall be provided by the Reactor Safety Committee. The Office of Radiation Safety (ORS) performs audit functions on behalf of both the Executive Radiation Safety Committee and the Reactor Safety Committee. ORS reports to the Vice Chancellor for Finance and Administration and communicates its findings to both the Dean of the College of Engineering as well as to the Reactor Director. The Reactor Safety Committee and ORS shall have authority to interdict or terminate activities to ensure safety.

TS 6.1.2 Responsibility

The Reactor Director is responsible for all activities at the facility, including licensing, security, emergency preparedness, and maintaining radiation exposures as low as reasonably achievable.

The reactor facility shall be under the direct control of a Reactor Supervisor designated by the Reactor Director. The Reactor Supervisor shall be responsible for assuring that all operations are conducted in a safe manner and within the limits prescribed by the facility license, procedures, and the requirements of the Executive Radiation Safety Committee and the Reactor Safety Committee.

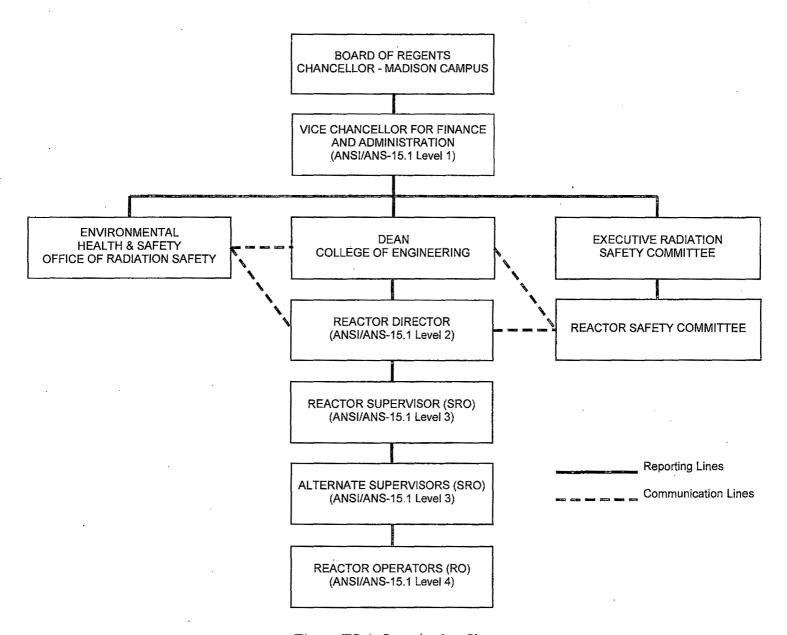


Figure TS-1, Organization Chart

TS 6.2 Review and Audit

There shall be a Reactor Safety Committee which shall review and audit reactor operations to assure that the facility is operated in a manner consistent with public safety and within the conditions of the facility license.

TS 6.2.1 Composition and Qualifications

The Committee shall be composed of a least six members, one of whom shall be a Health Physicist from the University of Wisconsin Office of Radiation Safety. The Committee shall collectively possess expertise in the following disciplines:

- 1. Reactor Physics;
- 2. Heat transfer and fluid mechanics;
- 3. Metallurgy
- 4. Instruments and Control Systems;
- 5. Chemistry and Radio-chemistry;
- 6. Radiation Safety.

Reactor staff shall not be members of the committee. This does not preclude reactor staff from participating on subcommittees.

TS 6.2.2 Charter and Rules

The Committee shall meet at least annually.

The Committee shall formulate written standards regarding the activities of the full committee; minutes, quorum, telephone polls for approvals not requiring a formal meeting, and subcommittees.

A quorum shall be at least half of the members.

TS 6.2.3 Review Function

The responsibilities of the Reactor Safety Committee shall include, but are 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, license, and technical specifications;
- 3. Determinations that proposed changes in equipment, systems, tests, experiments, or procedures are allowed in accordance with 10 CFR 50.59 without prior authorization by the NRC;
- 4. Review of abnormal performance of plant equipment and operating anomalies having safety significance; and
- 5. Review of unusual or reportable occurrences and incidents which are reportable under 10 CFR Part 20 and 10 CFR Part 50.
- 6. Review of audit reports.
- 7. Review of violations of technical specifications, license, or procedures and orders having safety significance.

TS 6.2.4 Audit Function

A Health Physicist from the University of Wisconsin Office of Radiation Safety shall represent the University Executive Radiation Safety Committee and shall conduct an inspection of the facility at least once every calendar month to assure compliance with the regulations of 10 CFR Part 20. The services and inspection function of the Office of Radiation Safety shall also be available to the Reactor Safety Committee, and will extend the scope of the audit to cover license, technical specification, and procedure adherence.

The committee shall annually audit operation and operational records of the facility, correction of deficiencies, requalification program, security plan, and emergency plan and their implementing procedures. If the committee chooses to use the staff of the Office of Radiation Safety for the audit function, the reports of audit results will be distributed to the committee and included as an agenda item for committee meetings.

- 2. A report within 60 days after completion of startup testing of the reactor (in writing to the U.S. Nuclear Regulatory Commission, Attn: Document Control Desk, Washington, D.C. 20555) upon receipt of a new facility license or an amendment to the license authorizing an increase in reactor power level describing the measured values of the operating conditions or characteristics of the reactor under the new conditions including:
 - a. An evaluation of facility performance to date in comparison with design predictions and specifications, and
 - b. 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.

TS 6.7.2 Special Reports

- 1. There shall be a report of any of the following not later than the following day by telephone or similar conveyance to the NRC Headquarters Operation Center, and followed by a written report describing the circumstances of the event and sent within 14 days to U.S. Nuclear Regulatory Commission, Attn: Document Control Desk, Washington, D.C. 20555:
 - a. Any accidental release of radioactivity above permissible limits in unrestricted areas whether or not the release resulted in property damage, personal injury, or exposure;
 - b. Any violation of a safety limit;
 - c. Any reportable occurrences as defined in TS 1.3 of these specifications.
- 2. A written report within 30 days in writing to the U.S. Nuclear Regulatory Commission, Attn: Document Control Desk, Washington, D.C. 20555 of:
 - a. Permanent changes in facility organization at Reactor Director or Vice Chancellor for Finance and Administration level.
 - b. Any significant change in the transient or accident analysis as described in the Safety Analysis Report;