



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
WASHINGTON, D.C. 20555-0001

April 20, 2022

Mr. Robert Agasie, Reactor Director  
Nuclear Reactor Laboratory  
University of Wisconsin–Madison  
1513 University Avenue, Room 1215  
Madison, WI 53706-1687

**SUBJECT: THE UNIVERSITY OF WISCONSIN - ISSUANCE OF AMENDMENT NO. 18 TO  
FACILITY LICENSE NO. R-74 TO REVISE THE ORGANIZATIONAL  
STRUCTURE IN THE TECHNICAL SPECIFICATIONS FOR THE UNIVERSITY  
OF WISCONSIN NUCLEAR REACTOR (EPID NO. L-2020-NFA-0007)**

Dear Mr. Agasie:

The U.S. Nuclear Regulatory Commission (NRC) has issued the enclosed Amendment No. 18 to Facility License No. R-74 for the University of Wisconsin Nuclear Reactor. The amendment consists of changes to Technical Specifications 6.1.1, 6.1.2, 6.2.1, 6.2.3, 6.2.4, and 6.7.2 in response to the application dated July 1, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20192A111) as supplemented on April 1, 2022. Specifically, the amendment modifies the organizational structure and changes the names of several organizational units specified in the administrative controls in the technical specifications and corrects some typographical errors noted by NRC staff.

A copy of the related safety evaluation is also enclosed. If you have any questions, please contact me at (301) 415-5656, or by e-mail at [Paulette.Torres@nrc.gov](mailto:Paulette.Torres@nrc.gov).

Sincerely,

Paulette A. Torres, Project Manager  
Non-Power Production and Utilization Facility  
Licensing Branch  
Division of Advanced Reactors and Non-Power  
Production and Utilization Facilities  
Office of Nuclear Reactor Regulation

Docket No. 50-156  
License No. R-74

Enclosures:

1. Amendment No. 18 to Facility License No. R-74
2. Safety Evaluation

cc w/enclosures: See next page

University of Wisconsin

Docket No. 50-156

cc:

Mayor of Madison  
City Hall  
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Room 403  
Madison, WI 53703

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Commission of Wisconsin  
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Jason Timm, Assistant Director  
& Radiation Safety Officer  
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Madison, WI 53715

Test, Research and Training  
Reactor Newsletter  
Attention: Amber Johnson  
Dept of Materials Science and Engineering  
University of Maryland  
4418 Stadium Drive  
College Park, MD 20742-2115

SUBJECT: THE UNIVERSITY OF WISCONSIN - ISSUANCE OF AMENDMENT NO. 18 TO  
FACILITY LICENSE NO. R 74 TO REVISE THE ORGANIZATIONAL  
STRUCTURE IN THE TECHNICAL SPECIFICATIONS FOR THE UNIVERSITY  
OF WISCONSIN NUCLEAR REACTOR (EPID NO. L-2020-NFA-0007)  
DATED: APRIL 20, 2022

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**ADAMS Accession Number: ML22062A766****NRR-058**

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NAME	JBorromeo	PTorres	
DATE	04/19 /2022	04/19/2022	

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THE BOARD OF REGENTS OF THE UNIVERSITY OF WISCONSIN SYSTEM

DOCKET NO. 50-156

UNIVERSITY OF WISCONSIN NUCLEAR REACTOR

AMENDMENT TO FACILITY LICENSE

Amendment No. 18  
License No. R-74

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment to Facility License No. R-74, filed by the University of Wisconsin on July 1, 2020, as supplemented on April 1, 2022, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in Title 10 of the *Code of Federal Regulations* (10 CFR) Chapter I.
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission.
  - C. There is reasonable assurance that (i) the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) such activities will be conducted in compliance with the Commission's regulations.
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions," of the Commission's regulations and all applicable requirements have been satisfied.
  - F. Prior notice of this amendment was not required by 10 CFR 2.105, "Notice of proposed action," and publication of a notice of issuance for this amendment is not required by 10 CFR 2.106, "Notice of issuance."

2. Accordingly, the license is amended as described in Attachment 1 to this license amendment and by changes to the Technical Specifications as indicated in Attachment 2. Paragraph 2.C.(2) of Facility License No. R-74 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised by Amendment No. 18, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 90 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Joshua Borromeo, Chief  
Non-Power Production and Utilization Facility  
Licensing Branch  
Division of Advanced Reactors and Non-Power  
Production and Utilization Facilities  
Office of Nuclear Reactor Regulation

Attachments:

1. Changes to Facility  
License No. R-74
2. Changes to Appendix A, "Technical  
Specifications"

Date of Issuance: April 20, 2022

ATTACHMENT TO LICENSE AMENDMENT NO. 18

FACILITY LICENSE NO. R-74

DOCKET NO. 50-156

Replace the following page of Facility License No. R-74 with the attached revised page. The revised page is identified by amendment number and contains a marginal line indicating the area of change.

Facility License No. R-74

Remove

3

Insert

3

- c. to receive, possess, and use, in connection with operation of the facility, up to 16 grams of contained plutonium in the form of plutonium-beryllium neutron source.
  - d. to receive, possess, use, but not separate, in connection with operation of the facility, such special nuclear material as may be produced by operation of the facility; and
  - e. to possess, but not use, up to 18.0 kilograms of contained uranium-235 at equal to or greater than 20 percent enrichment in the form of TRIGA fuel until the existing inventory of this fuel is removed from the facility.
3. Pursuant to the Act and 10 CFR Part 30, to receive, possess, and use, in connection with operation of the facility, such byproduct material as may be produced by operation of the reactor, which cannot be separated except for byproduct material produced in non-fueled experiments.
- C. This license shall be deemed to contain and is subject to the conditions specified in 10 CFR Parts 20, 30, 50, 51, 55, 70, and 73 of the Commission's regulations; is subject to all applicable provisions of the Act, and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

The licensee is authorized to operate the facility at steady state power levels not in excess of 1,000 kilowatts (thermal), and in pulse mode, with reactivity insertions not to exceed 1.4% $\Delta k/k$ .

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised by Amendment No. 18, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.



ATTACHMENT TO LICENSE AMENDMENT NO. 18

FACILITY LICENSE NO. R-74

DOCKET NO. 50-156

Replace the following pages of Appendix A, "Technical Specifications," with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Technical Specifications

Remove

52  
53  
55  
56  
62

Insert

52  
53  
55  
56  
62

## **TS 6. ADMINISTRATIVE CONTROLS**

### **TS 6.1 Organization**

#### **TS 6.1.1 Structure**

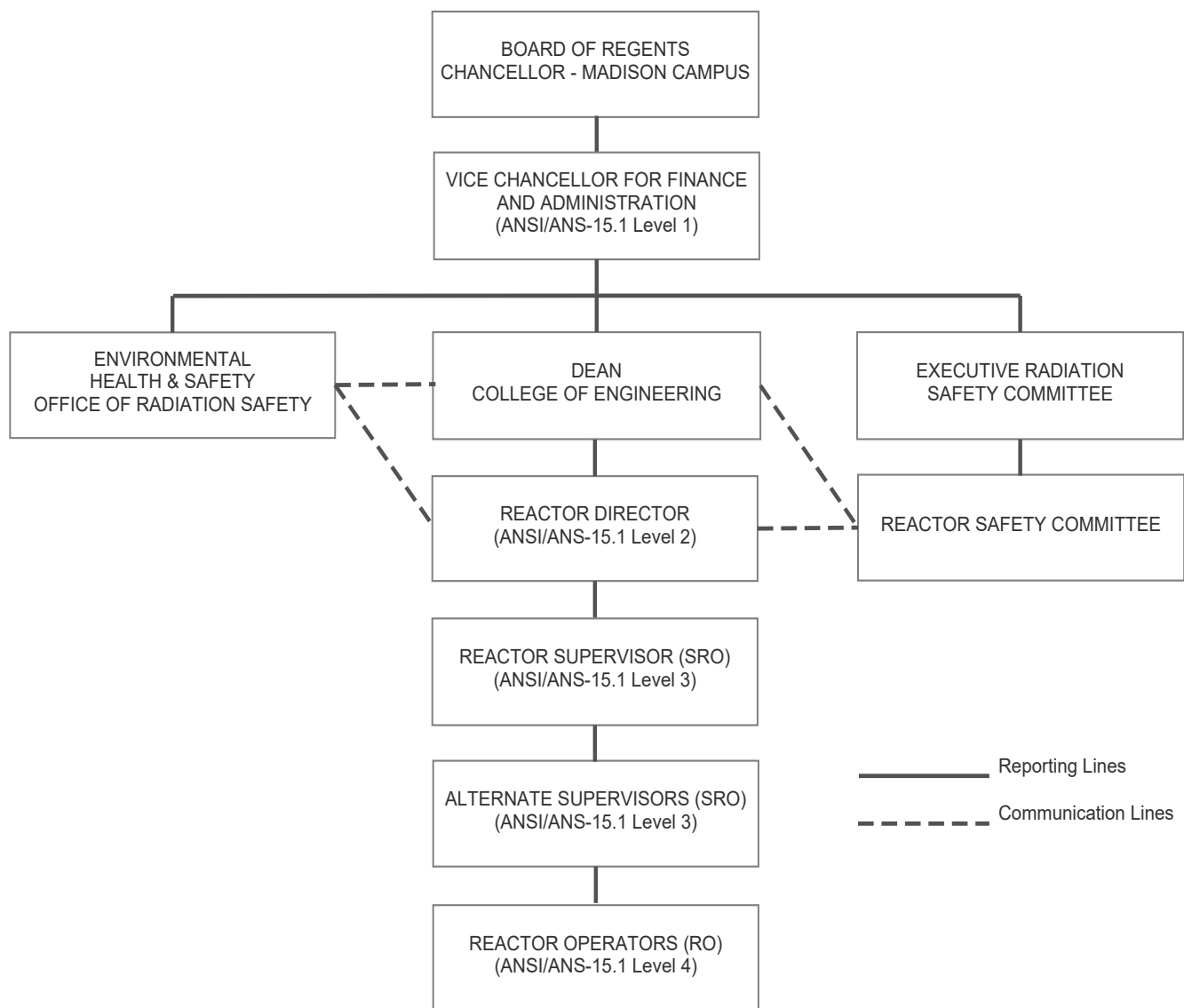
The license is held by the Board of Regents of the University of Wisconsin System. The Board of Regents delegates operations of the Madison campus to the Chancellor. The Chancellor delegates management of the reactor to the Vice Chancellor for Finance and Administration. The reactor facility shall be 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 at 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; and
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;
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; and
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.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 18

FACILITY LICENSE NO. R-74

UNIVERSITY OF WISCONSIN NUCLEAR REACTOR

DOCKET NO. 50-156

1.0 INTRODUCTION

By letter dated July 1, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20192A111), the University of Wisconsin (the licensee) applied for an amendment to Facility License No. R-74 for the University of Wisconsin Nuclear Reactor (UWNR, the facility). The license amendment request (LAR) proposed changes to Section 6, "Administrative Controls," of the technical specifications (TSs) in Appendix A of Facility License No. R-74. The proposed changes would (1) revise Figure TS-1, "Organization Chart," of TS 6.1.1, "Structure," and TS 6.7.2(2)(a) to align with the licensee's internal administrative and budgetary authority and add the "Vice Chancellor for Finance and Administration" to the organizational structure; (2) revise TS 6.1.1, TS 6.2.1, "Composition and Qualifications," and TS 6.2.4, "Audit Function," to reflect the change in the name of the "Radiation Safety Office" to the "Office of Radiation Safety" and the "Radiation Safety Committee" to the "Executive Radiation Safety Committee"; and (3) revise TS 6.1.1 to explicitly state that the Reactor Safety Committee and the Office of Radiation Safety have the authority to interdict or terminate activities at the UWNR to ensure safety.

During the NRC staff's review of the TSs, minor typographical changes were identified and discussed with UWNR staff via telephone conversation on March 24, 2022. The licensee confirmed the typographical edits and requested the implementation of the changes by electronic mail on April 1, 2022 (ADAMS Accession No. ML22095A119).

2.0 REGULATORY EVALUATION

The U.S. Nuclear Regulatory Commission (NRC, the Commission) staff reviewed the LAR and evaluated the proposed changes to the TSs based on the following regulations and guidance:

- Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities," Section 50.36, "Technical specifications," which

provides the requirements for TSs to be included in facility operating licenses, including for a research reactor. Section 50.36(c)(5), "Administrative controls," of 10 CFR requires that TSs include provisions relating to organization and management, procedures, recordkeeping, review and audit, and reporting necessary to assure operation of the facility in a safe manner.

- NUREG-1537, Part 1, "Guidelines for Preparing and Reviewing Applications for the Licensing of Non-Power Reactors: Format and Content," Appendix 14.1, "Format and Content of Technical Specifications for Non-Power Reactors" (ADAMS Accession No. ML042430055), which provides guidance to applicants and licensees on preparing research reactor license applications and TSs.
- NUREG-1537, Part 2, "Guidelines for Preparing and Reviewing Applications for the Licensing of Non-Power Reactors: Standard Review Plan and Acceptance Criteria," Chapter 14, "Technical Specifications" (ADAMS Accession No. ML042430048), which provides guidance to the NRC staff on reviewing research reactor LARs.
- American National Standards Institute/American Nuclear Society (ANSI/ANS) 15.1-2007, "The Development of Technical Specifications for Research Reactors" (ANSI/ANS 15.1), Section 6.1, "Organization," Section 6.2, "Review and audit," Section 6.3, "Radiation safety," and Section 6.7, "Reports," which provide guidance used by the NRC staff, applicants, and licensees on the administrative controls that should be included in the TSs. The 2007 version is a revision of ANSI/ANS 15.1-1990, which is cited in NUREG-1537, Parts 1 and 2, but provisions in Sections 6.1 and 6.1.1 of the 2007 version of the standard do not substantively differ from those in the 1990 version cited in NUREG-1537.

### 3.0 TECHNICAL EVALUATION

The UWNR is a TRIGA (training, research, isotopes, General Atomics) reactor located within the city of Madison on the University of Wisconsin's Madison Campus in the Mechanical Engineering Building. The building also contains classrooms, laboratories, workshops, and staff offices for the departments of mechanical engineering, industrial engineering, and engineering physics. Facility License No. R-74 authorizes UWNR to operate at steady-state power levels up to 1.0 megawatt (thermal) with pulsing capability using reactivity insertions up to 1.4 percent  $\Delta k/k$ . The reactor is a heterogeneous pool-type nuclear reactor currently fueled with TRIGA 30/20 fuel (30 percent uranium (U), enriched to 19.75 percent U-235) in four-element fuel assemblies. The coolant is light water, which circulates through the core by natural convection. The core uses water and graphite as neutron reflectors.

#### 3.1 Technical Specification 6.1, "Organization"

##### 3.1.1 Technical Specification 6.1.1, "Structure"

The licensee proposed to revise TS 6.1.1 to add the name of the license holder, describe how the ANSI/ANS 15.1-2007 Level 1 responsibility is delegated to the Vice Chancellor for Finance and Administration of the University of Wisconsin-Madison, and remove the reactor facility from the Department of Engineering Physics to the College of Engineering. The licensee indicated that the proposed changes to TS 6.1.1 will remove some of the Level 1 responsibilities currently delegated to the Engineering Physics Department Chair and place them with the Vice Chancellor for Finance and Administration. This change would bring the organizational structure described in the license in line with requirements 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, specifying the Vice Chancellor for Finance and Administration as the institutional official.

The licensee also proposed to revise TS 6.1.1 to clearly identify the entity responsible for the review and audit functions, rename the Radiation Safety Office to the Office of Radiation Safety (ORS), and rename the Radiation Safety Committee to the Executive Radiation Safety Committee. The licensee indicated that the review and audit functions of the Reactor Safety Committee and the audit functions of the ORS (formally the Radiation Safety Office) have not changed as stipulated in TSs 6.2. However, as indicated in the guidance in ANSI/ANS 15.1-2007, Section 6.1.1, the structure of the review and audit groups as well as their reporting path should be clearly identified including the Level 1 and Level 2 reporting and communication. Additionally, the licensee indicated that as a result of a reorganization of the University of Wisconsin-Madison radiation protection program in 2016 under the State of Wisconsin Radioactive Material License of broad scope, the Radiation Safety Committee was renamed the Executive Radiation Safety Committee. The licensee also stated that these changes are needed to clearly identify the entity responsible for review and audit functions. According to the licensee, these changes are needed to increase the clarity of TS 6.1.1 and to make the administration of the license consistent with the administration of the University of Wisconsin-Madison's specific licenses of broad scope for radioactive material.

Finally, the licensee provided a statement indicating that the authority to interdict or terminate safety-related activities was explicitly granted to both the Reactor Safety Committee and the ORS, consistent with the guidance provided in NUREG-1537, Part 1, Appendix 14.1, Section 6.3.

(**BOLD** indicates added text; ~~strikeout~~ indicates deleted text)

The current TS 6.1.1 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.

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.

The proposed TS 6.1.1 states:

**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.**

The NRC staff reviewed the proposed changes using the guidance in NUREG-1537, Part 1, Chapter 14 and ANSI/ANS 15.1-2007. The NRC staff finds that the proposed changes are consistent with guidance described in ANSI/ANS 15.1-2007, Section 6.1, which states, in part, that functions, assignments, and responsibilities shall be specified where applicable, and in Section 6.1.1, which states, in part, that the review and audit group shall report to the Level 1. The NRC staff finds that proposed TS 6.1.1 provides additional information and clarification as compared to the current TS 6.1.1, and clearly specifies the functions, assignments, and responsibilities of the Board of Regents of the University of Wisconsin System, the Chancellor, the Vice Chancellor for Finance and Administration, the College of Engineering of the University of Wisconsin-Madison, and the Reactor Safety Committee, which are consistent with the ANSI/ANS 15.1-2007, Levels 1 and 2 descriptions.

The NRC staff also finds that the review and audit functions of the Reactor Safety Committee and the audit functions of the ORS have not changed as stipulated in TS 6.2 and are consistent with ANSI/ANS 15.1-2007, Section 6, in that the method for the independent review and audit of the safety aspects of reactor facility operations is established to advise management. The NRC staff also finds that the addition of the description of the Reactor Safety Committee and the ORS as having authority to interdict or terminate activities to ensure safety is consistent with the guidance in NUREG-1537, Part 1, Appendix 14.1, Section 6.3, which states that the authority of the radiation safety staff to interdict or terminate safety-related activities should be stated. Based on the information described above, the NRC staff finds the proposed changes to TS 6.1.1 acceptable.

### 3.1.2 Technical Specification 6.1.2, "Responsibility"

The licensee proposed to revise TS 6.1.2, second paragraph, to rename the Radiation Safety Committee to the Executive Radiation Safety Committee, consistent with the organizational changes described above.

The current TS 6.1.2 states, in part:

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.

The proposed TS 6.1.2 states, in part:

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

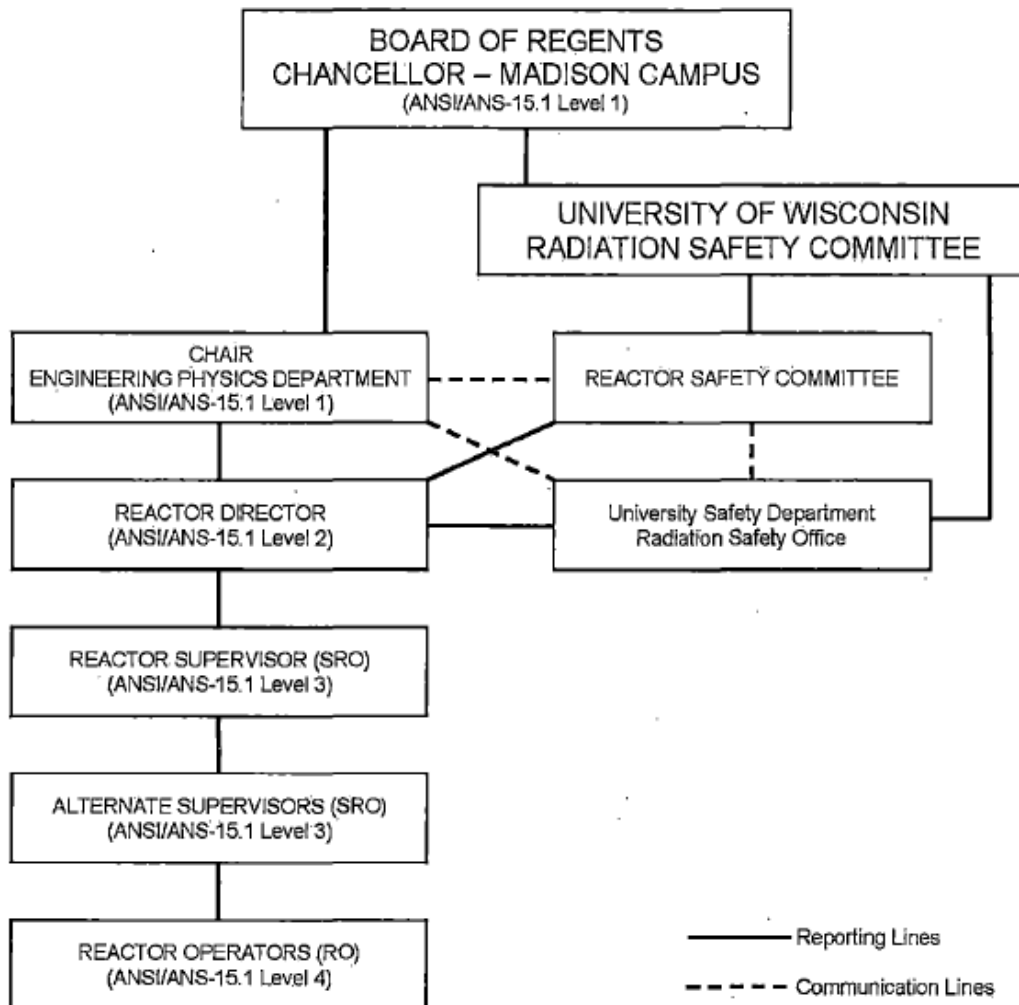
requirements of the **Executive** Radiation Safety Committee and the Reactor Safety Committee.

The NRC staff reviewed the proposed TS 6.1.2 and finds that the proposed change helps to ensure consistency with proposed TS 6.1.1, is consistent with the information described in Section 3.1.1 of this safety evaluation, and is acceptable.

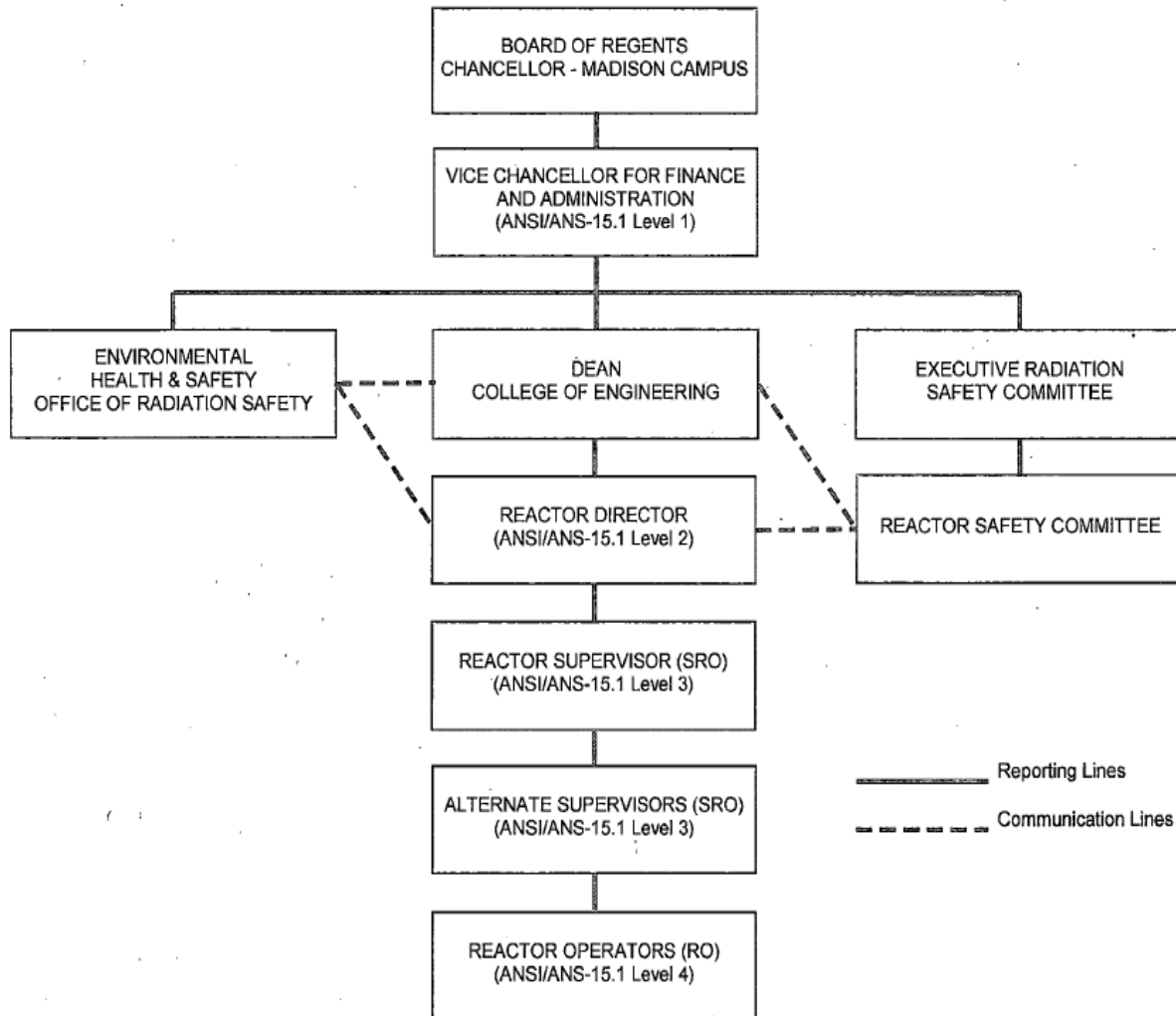
### 3.1.3 Technical Specification Figure TS-1, "Organization Chart"

The licensee proposed to update TS Figure TS-1 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. Further, the licensee indicated that the proposed updated TS Figure TS-1 clearly identifies the structure of the review and audit groups (the Reactor Safety Committee and the ORS), as well as their reporting lines to Level 1 management and communication lines to Level 2 management, consistent with the guidance provided in ANSI/ANS 15.1-2007, Section 6.1.1.

The current TS Figure TS-1 is:



The proposed TS Figure TS-1 (which would replace the current TS Figure TS-1 in its entirety) is:



The NRC staff reviewed the proposed TS Figure TS-1 and finds that it is consistent with the guidance in ANSI/ANS 15.1-2007, Section 6.1.1, as it provides the structure of the review and audit groups, as well as their reporting and communication lines to Levels 1 and 2. The NRC staff finds that the proposed changes are also consistent with the proposed TS changes described in Section 3.1.1 of this safety evaluation, and that the proposed TS Figure TS-1 is acceptable.

#### 3.1.4 Technical Specification 6.2.1, "Composition and Qualifications"

The licensee proposed changes to TS 6.2.1 to rename the Radiation Safety Office to the Office of Radiation Safety, consistent with the proposed changes described in proposed TS 6.1.1. Furthermore, during its review, the NRC staff identified the following typographical items to TS 6.2.1, which the licensee, by electronic mail dated April 1, 2022, agreed to correct. The NRC corrections include:

- In the first line of section 6.2.1, it appears that the word “a” should be “at”. The revision would state “...shall be composed of at least...”
- Specification 3., appears to be missing a semicolon. The revision will add a semicolon following “Metallurgy;”
- Specification 5., appears to be missing the word “and”. The revision will add “and” after the semicolon following “...Radio-chemistry; and...”

The current TS 6.2.1 states, in part:

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.

3. Metallurgy

5. Chemistry and Radio-chemistry;

The proposed TS 6.2.1 states, in part:

The Committee shall be composed of ~~a~~ **at** least six members, one of whom shall be a Health Physicist from the University of Wisconsin ~~Safety Department~~ **Office of** Radiation Safety ~~Office~~.

3. Metallurgy;

5. Chemistry and Radio-chemistry; **and**

The NRC staff reviewed the proposed TS 6.2.1 and finds that these corrections help to clarify and give consistency to the UNWR TSs and do not change the meaning of any of the proposed TSs. The NRC staff also finds that the proposed changes help to ensure consistency with proposed TS 6.1.1, as described in Section 3.1.1 of this safety evaluation, and are acceptable.

### 3.1.5 Technical Specification 6.2.3, “Review Function”

The NRC staff identified the following typographical items to TS 6.2.3, which the licensee, by electronic mail dated April 1, 2022, agreed to correct. The NRC corrections include:

- Specification 4. Remove the word “and” after the semicolon.
- Specification 5. Replace the period at the end of the statement with a semicolon “;”.
- Specification 6. Replace the period at the end of the statement with a semicolon “;”. Add the word “and” after the added semicolon following “...reports; and”.

The current TS 6.2.3 states, in part:

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.

The proposed TS 6.2.3 states, in part:

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; **and**

The NRC staff reviewed the proposed TS 6.2.3 and finds that these corrections help to clarify and give consistency to the UNWR TSs and do not change the meaning of any of the proposed TSs.

### 3.1.6 Technical Specification 6.2.4, "Audit Function"

The licensee proposed to revise TS 6.2.4 to change the name of the Radiation Safety Office to the Office of Radiation Safety and to change the name of the Radiation Safety Committee to the Executive Radiation Safety Committee, in order to ensure consistency with the changes in proposed TS 6.1.1 and proposed TS Figure TS-1.

The current TS 6.2.4 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.

The proposed TS 6.2.4 states:

A Health Physicist from the University of Wisconsin ~~Safety Department~~ **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 ~~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.

The NRC staff reviewed the proposed TS 6.2.4 and finds that the proposed changes help to ensure consistency with proposed TS 6.1.1, as described in Section 3.1.1 of this safety evaluation, and are acceptable.

### 3.1.7 Technical Specification 6.7.2, "Special Reports"

The licensee proposed to revise TS 6.7.2 (2)(a) to reflect changes in the facility organization involving level 1 personnel. Furthermore, during its review, the NRC staff identified the following typographical items to TS 6.7.2 (1)(a), (1)(b) and (2)(b), which the licensee, by electronic mail dated April 1, 2022, agreed to correct. The NRC corrections include:

- Specifications 1.a. and 1.b. Replace the semicolons with periods "." at the end of the statement.
- Specification 2.b. Replace the semicolon with a period "." at the end of the statement.

The current TS 6.7.2 (1)(a) and (1)(b) states:

- 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;

The proposed TS 6.7.2 (1)(a) and (1)(b) states:

- 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;

The current TS 6.7.2 (2)(a) and (2)(b) states:

- 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;

The proposed TS 6.7.2 (2)(a) and (2)(b) states:

- a. 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;

The NRC staff reviewed the proposed TS 6.7.2 (1)(a), (1)(b) and (2)(b) and finds that these corrections help to clarify and give consistency to the UNWR TSs and do not change the meaning of any of the proposed TSs. The NRC staff also finds that the proposed changes to TS 6.7.2 (2)(a) help to ensure consistency with proposed TS 6.1.1, as described in Section 3.1.1 of this safety evaluation, and are acceptable.

#### 4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes recordkeeping, reporting, or administrative procedures or requirements; changes the name, position, or title of an officer of the licensee; or changes the format of the license or otherwise makes editorial, corrective, or other minor revisions. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10)(ii), (iv), or (v). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

#### 5.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) there is reasonable assurance that such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

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