



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

September 20, 2023

Mr. Corey Hines, Director  
Washington State University  
Nuclear Radiation Center  
50 Roundtop Drive  
Pullman, WA 99164 1300

SUBJECT: WASHINGTON STATE UNIVERSITY – REQUEST FOR ADDITIONAL INFORMATION RE: LICENSE AMENDMENT REQUEST FOR SECTION 5 OF THE TECHNICAL SPECIFICATIONS FOR THE WASHINGTON STATE UNIVERSITY MODIFIED TRIGA NUCLEAR REACTOR AND FACILITY LICENSE R-76 (EPID L-2023-NFA-0007)

Dear Mr. Hines:

By letter dated August 8, 2023 (Agencywide Documents Access and Management System Accession No. ML23220A385), Washington State University applied for an amendment to Facility Operating License No. R-76 for the Washington State University Modified TRIGA Nuclear Reactor. The requested licensing action would amend the facility operating license to change section 5 of the technical specifications.

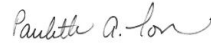
The U.S. Nuclear Regulatory Commission (NRC) staff identified additional information needed to continue its review of the amendment, as described in the enclosed request for additional information (RAI). As discussed by TEAMS meeting on September 14, 2023, provide a response to the RAI or a written request for additional time to respond, including the proposed response date and a brief explanation of the reason, by December 1, 2023. Following receipt of the complete response to the RAI, the NRC staff will continue its review of the amendment.

The response to the RAI must be submitted in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 50.4, "Written communications," and pursuant to 10 CFR 50.30(b), "Oath or affirmation," be executed in a signed original document under oath or affirmation. Information included in the response that you consider sensitive or proprietary, and seek to have withheld from public disclosure, must be marked in accordance with 10 CFR 2.390, "Public inspections, exemptions, requests for withholding." Any information related to safeguards should be submitted in accordance with 10 CFR 73.21, "Protection of Safeguards Information: Performance Requirements."

Based on the response date provided above, the NRC staff expects to complete its review and make a final determination on the license amendment request by February 8, 2024. This date could change due to several factors including a need for further RAIs, unanticipated changes to the scope of the review, unsolicited supplements to the application for amendment, and others. If the forecasted date changes, the NRC staff will notify you in writing of the new date and an explanation of the reason for the change. In the case that the NRC staff requires additional information beyond that provided in the response to this RAI, the NRC staff will request that information by separate correspondence.

If you have any questions regarding the NRC staff's review or if you intend to request additional time to respond, please contact me at (301) 415-5656 or by email at [Paulette.Torres@nrc.gov](mailto:Paulette.Torres@nrc.gov).

Sincerely,



Signed by Torres, Paulette  
on 09/20/23

Paulette 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. 50-027  
License No. R-76

Enclosure:  
As stated

cc: GovDelivery Subscribers

SUBJECT: WASHINGTON STATE UNIVERSITY – REQUEST FOR ADDITIONAL INFORMATION RE: LICENSE AMENDMENT REQUEST FOR SECTION 5 OF THE TECHNICAL SPECIFICATIONS FOR THE WASHINGTON STATE UNIVERSITY MODIFIED TRIGA NUCLEAR REACTOR AND FACILITY LICENSE R-76 (EPID L-2023-NFA-0007) DATED: SEPTEMBER 20, 2023

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**NRR-088**

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<b>DATE</b>	09/18/2023	9/18/2023	09/19/2023	09/20/2023

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OFFICE OF NUCLEAR REACTOR REGULATION  
REQUEST FOR ADDITIONAL INFORMATION  
REGARDING LICENSE AMENDMENT REQUEST TO  
CHANGE SECTION 5 OF THE TECHNICAL SPECIFICATIONS  
FACILITY OPERATING LICENSE NO. R-76  
WASHINGTON STATE UNIVERSITY  
WASHINGTON STATE UNIVERSITY MODIFIED TRIGA NUCLEAR REACTOR  
DOCKET NO. 50-027

The U.S. Nuclear Regulatory Commission (NRC) staff reviewed the license amendment request (LAR) for compliance with the appropriate regulations in Title 10 of the *Code of Federal Regulations* (10 CFR) using the following guidance and standard(s):

- NUREG-1537 Part 1, "Guidelines for Preparing and Reviewing Applications for the Licensing of Non-Power Reactors, Format and Content," issued February 1996 (Agencywide Documents Access and Management System Accession No. ML042430055)
- NUREG-1537 Part 2, "Guidelines for Preparing and Reviewing Applications for the Licensing of Non-Power Reactors, Standard Review Plan and Acceptance Criteria," issued February 1996 (ML042430048)
- American National Standards Institute/American Nuclear Society-15.1-2007 (R2013), "The Development of Technical Specifications for Research Reactors"

Based on its review, the NRC staff requires the following additional information to continue its review of the LAR.

1. In letter dated August 8, 2023 (ML23220A385), Washington State University requested a change to technical specification (TS) 5.1(3) by replacing "facility" with "licensed area."

TS 5.1(3), states that:

The facility shall be the following:

- a) the room in which the WSU research reactor is located, also known as Room 201, the reactor control room which is within Room 201, the pump room, primary coolant water purification room, primary coolant and makeup water valve manifold room;
- b) the research reactor beam room, also known as Room 2."

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WSU proposed change to TS 5.1(3), states that:

The licensed area shall be the following:

- a) the room in which the WSU research reactor is located, also known as Room 201, the reactor control room which is within Room 201, the pump room, primary coolant water purification room, primary coolant and makeup water valve manifold room;
- b) the research reactor beam room, also known as Room 2.

The TS definition for Licensed Area in section 1 DEFINITIONS state:

Licensed Area: The licensed area is the part of the Dodgen Research Facility building which is subject to the requirements of the WSU license R-76. This area includes:

- 1) the reactor pool room (also known as Room 201) and adjacent rooms that allow direct unrestricted access to the pool room
- 2) the beam room (also known as Room 2) and adjacent rooms that allow direct unrestricted access to the beam room.

The TSs definition for Licensed Area in section 1 DEFINITIONS is not identical to how it is redefined in proposed TSs section 5.1(3) and has the potential to cause confusion. Submit a proposed change to TSs 5.1(3) reconciling the License Area definition differences (e.g., a single definition for Licensed Area) or provide a justification why reconciling the License Area definition difference are not needed.

2. In letter dated August 8, 2023 (ML23220A385), WSU requested a change to TS 5.1(4) to include language about the meaning of “the facility.”

TS 5.1(4), states that: “The facility shall be a restricted area.”

WSU proposed change to TS 5.1(4), states that: “The facility shall be the interior of the Dodgen Research Facility building and shall be a restricted area.

“The facility” is defined in the Facility Operating License, section 1.B and 2.A as “Washington State University Modified TRIGA Nuclear Reactor.”

TSs definition for Research Reactor Facility in section 1 DEFINITIONS state: “Research Reactor Facility: The research reactor facility includes all areas within which the owner or operator directs authorized activities associated with the reactor.”

“The facility” in TSs section 5.1(4) was not defined in TSs section 1 DEFINITIONS.

- a) Clarify if the term “The facility” in TS 5.1(4) and the term “Research Reactor Facility” in TS section 1 DEFINITIONS are the same.
- b) If the terms are not the same, explain why two different definitions are needed and provide a definition for “The facility” to avoid confusion from “Research Reactor Facility” or provide a justification why a definition for “The facility” is not needed.