

OFFICE OF NUCLEAR REACTOR REGULATION
SAFETY EVALUATION SUPPORTING AMENDMENT NO. 19 TO
FACILITY LICENSE NO. R-52
UNIVERSITY OF ARIZONA RESEARCH REACTOR
DOCKET NO. 50-113

1.0 INTRODUCTION

By letter dated May 10, 2010, as supplemented on August 13, September 20, October 8, 2010, January 7, and January 25, 2011, the University of Arizona (the licensee) submitted a request to change the Facility License No. R-52 and the Technical Specifications (TSs) for the University of Arizona Research Reactor (UARR). The licensee requested to change the facility license from possess, use, and operate to a possession only license. The licensee also requested changes to the facility technical specifications to eliminate those specifications which are no longer applicable for a facility that is permanently shutdown.

2.0 EVALUATION

On May 18, 2010, the licensee permanently ceased reactor operation of the UARR. The licensee requested changes to the facility license as well as the facility technical specifications. Each of the changes requested is discussed and evaluated below:

(1) Facility License No. R-52:

(1.1) Paragraph 2.B.(1)

The licensee requested deletion of the words "use, and operate" from its current facility license. Facility License No. R-52, Paragraph 2.b.(1) would be revised to allow for possession only.

The licensee proposed to revise the Facility License No. R-52, Paragraph 2.B.(1) as follows:

"Pursuant to Section 104c of the Act and 10 CFR 50, "Domestic Licensing of Production and Utilization Facilities," to possess the facility at the designated location in Tucson, Arizona, in accordance with the procedures and limitations set forth in this license."

On May 18, 2010, the licensee permanently ceased reactor operation of the UARR. The NRC staff concludes that since the licensee permanently ceased operation of the UARR, deletion of the words "use and operate" for its facility license is acceptable. With this change, the licensee is allowed to possess only.

(1.2) Paragraph 2.B.(2) and Paragraph 2.B.(3):

The licensee requested deletion of the word "use" from its current facility license. Facility License No. R-52, Paragraph 2.B.(2) and Paragraph 2.B.(3) would be revised to allow for receipt and possession only.

The licensee proposed to revise the Facility License No. R-52, Paragraph 2.B.(2) as follows:

"Pursuant to the Act and 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material," to receive and possess up to 3.5 kilograms of uranium-235 contained in uranium enriched to less than 20% in the isotope uranium-235 in connection with the operation of the facility."

The licensee proposed to revise the Facility License No. R-52, Paragraph 2.B.(3) as follows:

"Pursuant to the Act and 10 CFR Part 30, "Rule of General Applicability to Domestic Licensing of Byproduct Material," to receive and possess a 5-curie sealed americium-241 beryllium neutron source in connection with operation of the facility."

On May 18, 2010, the licensee permanently ceased reactor operation of the UARR. The NRC staff concludes that since the licensee permanently ceased operation of the UARR, deletion of the word "use" for its facility license is acceptable. With this change, the licensee is allowed to possess only. Therefore Paragraph 2.B.(2) and Paragraph 2.B.(3) are revised to allow for possession only and to read as follow:

Paragraph 2.B.(2)

"Pursuant to the Act and 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material," to possess up to 3.5 kilograms of uranium-235 contained in uranium enriched to less than 20% in the isotope uranium-235."

Paragraph 2.B.(3)

"Pursuant to the Act and 10 CFR Part 30, "Rule of General Applicability to Domestic Licensing of Byproduct Material," to possess a 5-curie sealed americium-241 beryllium neutron source in connection with operation of the facility."

(1.3) Paragraph 2.C.(1)

The licensee requested the current paragraph under the heading "Maximum Power Level", be replaced with "The licensee is not authorized to operate the facility."

The licensee proposed to revise the Facility License No. R-52, Paragraph 2.C.(1) as follows:

"The licensee is not authorized to operate the facility."

On May 18, 2010, the licensee permanently ceased reactor operation of the UARR. The NRC staff concludes that since the licensee permanently ceased operation of the UARR, replacing the above paragraph is acceptable. With this change, the licensee is not allowed to operate the UARR.

(1.4) Paragraph 2.C.(2)

The licensee requested that the reference to Amendment No. 18 be replaced with "Amendment No. 19," which is this license amendment request.

Amendment No. 19 will be assigned, in sequential order, as part of the NRC license amendment process. Therefore, the request is acceptable. In addition, the NRC staff replaced the word "operate" to "maintain" to reflect the licensee's permanent ceased operation of the reactor.

(1.5) Paragraph 2.C.(3)

The licensee requested to change the reference to the Physical Security Plan to the current regulation and to update the date reference for the currently approved revision of the physical security plan.

The licensee proposed to revise the Facility License No. R-52, Paragraph 2.B.(2) as follows:

"The licensee shall maintain in effect and fully implemented provisions of the Commission approved physical security plan, including all amendments and revisions made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p), which are part of the license. This plan, which contains information withheld from public disclosure under 10 CFR 2.390 is entitled "Physical Security Plan for the University of Arizona Research Reactor," dated May 2009."

The NRC staff concludes that updating the references in the facility license with the current regulations and updating the facility license to denote the currently approved revision of the physical security plan are acceptable.

(1.6) Paragraph 2.D

The licensee requested to modify the last sentence of the current license which states, "This license is effective as of the date of issuance and shall expire twenty years from its date of issuance." The licensee stated that the period elapsed on May 22, 2010. The licensee requests the paragraph be modified to read: "The NRC will terminate this license when the decommissioning has been performed in accordance with the approved decommissioning plan and the terminal radiation survey and associated documentation demonstrate that the facility and site are suitable for release in accordance with the criteria for decommissioning in 10 CFR 20, Subpart E."

Even though the license elapsed as of May 22, 2010, pursuant to 10 CFR 50.82, the license is allowed to continue in effect beyond the expiration date to authorize ownership and possession of the facility, until the Commission notifies the licensee in writing that the license is terminated. On this basis, the NRC staff finds the proposed modification acceptable. For continuity purposes, the NRC staff will retain the first part of the sentence "This license is effective as of

the date of issuance” and will modify the second half of the sentence as proposed by the licensee.

(2) Technical Specifications

(2.1) TS Definitions

The licensee proposed to add two additional definitions that are related to decommissioning: Decommissioning Activities and Limiting Decommissioning Activities.

Decommissioning Activities - Decommissioning activities are the physical dismantlement or permanent removal from service of systems and components described in the SAR. Decommissioning activities, however, do not include the removal of fuel.

Limiting Decommissioning Conditions - Limiting Decommissioning Conditions (LDC) are administratively established constraints on equipment and operational characteristics which shall be adhered to during decommissioning activities.

The NRC staff reviewed the definitions provided by the licensee and determines that the definitions are acceptable. The NRC staff also concludes that the additional definitions are appropriate since the licensee permanently ceased reactor operation and is preparing the reactor for decommissioning.

(2.2) TS 2.2

The licensee proposed deletion of TS 2.2 Limiting Safety System Setting – Steady State Reactor Power Level. The licensee stated that this limiting safety system setting becomes inapplicable once reactor operations have permanently ceased.

TS 2.2 applies to the reactor power level safety system setting for steady state operation and specifies a setting for the power level scram. The purpose of the power level scram is to assure that the Safety Limit is not exceeded. Since the licensee permanently ceased operation of the UARR and has requested to change the facility license to a possession only license, the NRC staff concludes that the deletion of TS 2.2 from the UARR TS is acceptable.

(2.3) TS 2.3

The licensee proposed deletion of TS 2.3 Limiting Safety System Setting – Pulse Mode Reactor Power Level. The licensee stated that this limiting safety system setting becomes inapplicable once reactor operations have permanently ceased.

TS 2.3 applies to the reactor power level safety system setting for pulse mode operation and specifies a setting for the peak power level scram in pulse mode operation. The purpose of the power level scram in pulse mode operation is to assure that the Safety Limit is not exceeded. Since the licensee permanently ceased operation of the UARR and has requested to change the facility license to a possession only license, the staff concludes that the deletion of TS 2.3 from the UARR TS is acceptable.

(2.4) TS 3.0

The licensee proposed to add to the title of TS 3.0, "Limiting Decommissioning Conditions." The licensee proposed to revise the title of TS 3.0 to read as follows:

3.0 Limiting Conditions for Operation and Limiting Decommissioning Conditions

On May 18, 2010, the licensee permanently ceased reactor operation of the UARR and is preparing to decommission the facility. The NRC staff concludes that revising the UARR TS to denote the limiting decommissioning conditions is acceptable.

(2.5) TS 3.1

The licensee proposed to change TS 3.1, Reactivity Limits, specifications to the reactor shall not be operated and deleting the remainder conditions. The licensee proposed to revise TS 3.1 to read as follows:

3.1 Reactivity Limits

Applicability

These specifications apply to the reactivity condition of the reactor.

Objective

The objective is to assure that the reactor shall be shut down at all times and to assure that the safety limit will not be exceeded.

Specifications

The reactor shall not be operated.

Basis

The safety limit cannot be exceeded if the reactor is not operated.

The objective of TS 3.1 is to assure that the reactor can be shutdown at all times and to assure that the safety limits will not be exceeded. On May 18, 2010, the licensee permanently ceased reactor operation of the UARR and is preparing to decommission the facility. Since the licensee permanently ceased operation of the UARR and has requested to change the facility license to possess only and not use or operate, the NRC staff concludes that the proposed revision to TS 3.1 is acceptable.

(2.6) TS 3.2

The licensee proposed deletion of TS 3.2, High Power Operation. The licensee stated that TS 3.2 becomes inapplicable once reactor operations have permanently ceased.

The objective TS 3.2 is to prevent inadvertent pulse operation of the reactor while it is at a high power level. Since the licensee permanently ceased operation of the UARR and has requested to change the facility license to possess only and not use or operate, the NRC staff concludes that the deletion of TS 3.2 from the UARR TS is acceptable.

(2.7) TS 3.3

The licensee is proposing to delete TS 3.3, Pulse Operation. The licensee stated that TS 3.3 becomes inapplicable once reactor operations have permanently ceased.

The objective TS 3.3 is to prevent the fuel temperature safety limit from being exceeded during pulse mode operation. Since the licensee permanently ceased operation of the UARR and has requested to change the facility license to possession only and not to use or operate, the staff concludes that the deletion of TS 3.3 from the UARR TS is acceptable.

(2.8) TS 3.4

The licensee proposed revision to TS 3.4, Reactor Instrumentation for conditions after operations have permanently ceased and delete the channels that are no longer applicable. Specifically, TS 3.4 would be modified to specify channels that would be required to during fuel movement and during decommissioning activities and would become TS 3.2 with the deletion of the current TS 3.2. The licensee proposed the following:

Applicability

This specification applies to the information which must be available during fuel movement and during decommissioning activities.

Objective

The objective is to require that sufficient information is available to the operator to assure safe movement of fuel and decommissioning.

Specification

Reactor fuel shall not be moved and decommissioning activities shall not be conducted unless the measuring channels described in the following table are operable and the information is available in the control room:

MEASURING CHANNEL	MINIMUM NUMBER OPERABLE	ACTIVITY IN WHICH REQUIRED
wide-range log power level (startup count rate)	1	fuel movement
reactor period	1	fuel movement
area radiation monitors	2	fuel movement and decommissioning activities
particulate air radiation monitor	1	fuel movement and decommissioning activities
reactor water activity monitor	1	fuel movement

Bases

The wide range log power and reactor period channels assure that indications of subcritical reactor power level changes are available during fuel movement.

The radiation monitors provide information to operating personnel of radiation above a preset level so that there will be sufficient time to evacuate the facility or take action to prevent the release of radioactivity to the surroundings.

The reactor water activity monitor provides an early indication of possible dispersion of radioactivity into the water in case of fuel failure.

The objective of TS 3.4 is to require sufficient information be available to the operator to assure safe operation of the reactor. The proposed revision to the TS would require sufficient information thru instrumentation channels and radiation monitors be available to the operator during fuel movements and during decommissioning activities. Since the licensee permanently ceased operation of the UARR and has requested to change the facility license to possess only and not use or operate, and the NRC staff concludes that the proposed revision of TS 3.4 is appropriate and therefore is acceptable.

(2.9) TS 3.5

The licensee proposed deletion of TS 3.5, Reactor Safety System. The licensee stated that TS 3.5 becomes inapplicable once reactor operations have permanently ceased.

The objective of TS 3.5 is to require the minimum number of reactor safety system channels and interlocks that must be operable in order to assure that the safety limits and the limiting conditions for operation are not exceeded. Since the licensee permanently ceased operation of the UARR and has requested to change the facility license to possess only and not use or operate, the NRC staff concludes that the deletion of TS 3.5 from the UARR TS is acceptable.

(2.10) TS 3.6

The licensee proposed revision to TS 3.6, Ventilation System for conditions after operations have permanently ceased and delete information that is no longer applicable. The proposed TS would be renumbered to TS 3.3. The licensee proposed the following:

Applicability

This specification applies to the operation of the reactor facility ventilation system.

Objective

The objective is to assure that the ventilation system is in operation to mitigate the consequences of the possible release of radioactive materials.

Specification

Fuel shall not be moved and decommissioning activities shall not be conducted unless the facility ventilation system is operable with a minimum air withdrawal rate of 500 cfm.

Basis

It is shown in The Safety Analysis Report that operation of the ventilation system reduces doses in the reactor facility in the event of a TRIGA fuel element failure.

The objective of TS 3.6 is to assure that the ventilation system is in operation to mitigate the consequences of the possible release of radioactive materials resulting from reactor operation. Since the licensee permanently ceased operation of the UARR and has requested to change the facility license to possess only and not use or operate; and the proposed revision of the TS would allow for fuel movement and decommissioning activities only when the ventilation system is operable with a minimum air withdrawal rate of 500 cubic feet per minute, the NRC staff concludes that the propose revision to TS 3.6 is acceptable.

(2.11) TS 3.7

The licensee proposed deletion of TS 3.7, Experiments. The licensee stated that TS 3.7 becomes inapplicable once reactor operations have permanently ceased.

The objective of TS 3.7 is to prevent damage to the reactor or excessive release of radioactive materials in the event of an experiment failure. Since the licensee permanently ceased operation of the UARR and has requested to change the facility license to possess only and not use or operate, the NRC staff concludes that deletion of TS 3.7 from the UARR TS is appropriate and therefore, is acceptable.

(2.12) TS 4.1

The licensee proposed revision to TS 4.1, Fuel. The licensee proposed to revise TS 4.1 to read as follows:

Applicability

This specification applies to the surveillance requirements for the fuel elements, prior to their permanent removal from the reactor pool.

Objective

The objective is to assure that the dimensions of the fuel elements remain within acceptable limits.

Specifications

- a. All fuel elements shall be removed from their storage locations in the pool and visually inspected for evidence of deterioration of cladding, (including at least corrosion, erosion, wear, cracking, and weld integrity) at least once every five years.
- b. A fuel element indicating an elongation greater than 1/4 inch over its original length or a lateral bending greater than 1/16 inch over its original bending shall be considered to be damaged and shall be recorded as such in the fuel inventory logs.

Basis

The above limits on the allowable distortion of a fuel element correspond to strains that are considerably lower than the strain expected to cause rupture of a fuel element.

The objective of TS 4.1 surveillance requirements is to assure that the dimensions of the fuel elements remain within acceptable limits. The purpose of the current Specification 4.1.b was for measuring fuel elements in relation to pulsing of the reactor and the purpose of the current Specification 4.1.d is for measuring fuel elements in the B-or C-rings. Since the licensee permanently ceased operation of the UARR and has requested to change the facility license to possess only and not use or operate, deleting Specification b and Specification d is appropriate since the licensee will not be pulsing or keeping the fuel elements in the B- or C- rings. Current Specification 4.1.c provided the limits on the allowable distortion of a fuel element. Since some fuel elements are remaining in the core, these fuel element are required to be measured at least once every five year, fuel elements consider to be damaged shall be recorded as such in the fuel inventory logs. On the basis of the discussion above, the NRC staff concludes deletion of current Specifications 4.1.b, 4.1.c and 4.1.d is appropriate and that the proposed revision to TS 4.1 is acceptable.

(2.13) TS 4.2

The licensee proposed revision to TS 4.2, Control Rods. The licensee proposed the deletion of specifications that are no longer valid and keep only the specification for the fuel-followed control rods. The licensee stated that the reactivity worth determination of the control rods cannot be accomplished once the reactor is permanently shutdown. Also, instead of verification of the operability of the fuel-followed control rods, only the integrity of the fuel-followed control rods will be verified. The licensee proposed to revise TS 4.2 to read as follows:

Applicability

This specification applies to the surveillance requirements for the control rods.

Objective

The objective is to assure the integrity of the fuel-followed control rods.

Specification

- a. The fuel-followed control rods shall be visually inspected for deterioration biennially.

Basis

The visual inspection of the fuel-followed control rods is made to determine whether the control rods are preserving the integrity of fuel.

The objective of TS 4.2 is to assure the operability of the control rods. Since the licensee permanently ceased operation of the UARR and has requested to change the facility license to possess only and not use or operate, the operability of the controls rod worth cannot be determined, the NRC staff concludes that proposed revision to TS 4.2 is appropriate and therefore, is acceptable

(2.14) TS 4.3

The licensee proposed to delete TS 4.3, Reactor Safety System. The licensee stated that the surveillance associated with TS 4.3 cannot be accomplished once reactor operations ceased.

The purpose of TS 4.3 is to assure that the safety system will remain operable and will prevent the fuel temperature safety limit from being exceeded. Since the licensee permanently ceased operation of the UARR and has requested to change the facility license to possess only and not use or operate, the NRC staff concludes that the deletion of TS 4.3 from the UARR TS is acceptable.

(2.15) TS 4.4

The licensee proposed revision to TS 4.4, Radiation Monitoring Equipment. The licensee proposed to revise the title of Radiation Monitoring Equipment to Measuring Channels. The licensee stated that this section is revised to apply to all measuring channels required during fuel movement and decommissioning activities, after reactor operations have ceased. The licensee proposed to revise TS 4.4 to become TS 4.3 and to read as follows:

Applicability

This specification applies to the measuring channels required by Section 3.2 of these specifications.

Objective

The objective is to assure that the wide-range log power channel and the radiation monitoring equipment is operating and to verify the appropriate alarm settings.

Specification

- a. The alarm set points for the radiation monitoring instrumentation shall be verified prior to fuel movement or conduct of decommissioning activities, on each day when those are performed.
- b. The alarm set points for the reactor period shall be verified prior to fuel movement, on each day when fuel is moved.
- c. A channel test of the wide range log power channel shall be performed prior to fuel movement, on each day when fuel is moved.
- d. A channel check of the wide range log power channel shall be performed daily whenever fuel is moved.
- e. The radiation monitoring equipment shall be calibrated annually.

Basis

Verification of the alarm set points of radiation monitoring instrumentation will assure that sufficient information to provide protection against radiation exposure is available. Annual calibration of the radiation monitoring equipment permits any long term drifts to be corrected.

A channel test and a channel check of the wide range log power channel, including verification of the period alarm will assure that sufficient information is available to provide warning of unexpected neutron power changes. Calibration of the wide range power channel is not possible without operating the reactor, but a channel check includes comparison of the channel output with previous reading when such calibration was performed.

The objective of proposed TS 4.3 is to assure that the radiation monitoring equipment is operating and to verify the appropriate alarm settings. Since the licensee permanently ceased operation of the UARR and has requested to change the facility license to possess only and not use or operate, the NRC staff concludes that the proposed revision to TS 4.4 to apply to all measuring channels required during fuel movement and decommissioning activities is acceptable.

(2.16) TS 4.6

The licensee proposed revision to TS 4.6, Pool Water Conductivity. The licensee proposed to revise the title of Pool Water Conductivity to Pool Water. The licensee also proposed to add surveillance requirements for pool water until the fuel is removed since the requirement during operation has been deleted. The licensee proposed to revise TS 4.6 to become TS 4.5 and to read as follows:

Applicability

This section applies to surveillance of pool water level and conductivity. It shall apply until all reactor fuel is permanently removed.

Objective

The objective is to assure that the depth of the pool water is maintained at an acceptable level and that its mineral content is maintained at an acceptable level, so long as reactor fuel remains in the pool.

Specifications

1. The height of the bulk coolant water above the core structure shall be measured at least monthly and verified to be not less than 14 feet.
2. A device able to report a drop in pool water level to a point not less than 14 ft above the reactor core shall be continuously operable when the reactor is unattended.
3. The conductivity of the coolant water, averaged over 30 days, shall not exceed 5 micromhos/cm. The conductivity of bulk coolant water shall be verified at least monthly

Bases

The measurement of water height at monthly intervals provides acceptable surveillance of loss by evaporation to assure that an accelerated loss rate due to leakage would be detected.

The continuous monitoring of a minimum level gives warning and ensures that the reactor fuel is always adequately shielded.

Based on experience, in which pool water conductivity changes slowly with time, observation of conductivity at monthly intervals provides acceptable surveillance of conductivity to assure that accelerated fuel clad corrosion does not occur.

The objective of the current TS 4.6 is to assure that pool mineral content is maintained at an acceptable level to assure that accelerated fuel clad corrosion does not occur. Since the licensee permanently ceased operation of the UARR and has requested to change the facility license to possess only and not use or operate, the NRC staff concludes that the proposed revision to TS 4.6 to assure that the depth of the pool water is maintained at an acceptable level and that its mineral content is maintained at an acceptable level, so long as reactor fuel remains in the pool, is acceptable.

(2.17) TS 5.1

The licensee proposed revision to TS 5.1, Reactor Fuel for conditions after operations have permanently ceased and delete information that is no longer applicable. The licensee proposed to revise TS 5.1 to read as follows:

Applicability

This specification applies to the fuel elements stored in the reactor pool.

Objective

The objective is to assure that the fuel elements are of such a design and fabricated in such a manner as to permit their use with a high degree of reliability with respect to their mechanical integrity.

Specifications

- a. Standard Fuel Element: The standard fuel element shall be of the TRIGA type and shall contain uranium-zirconium hydride, clad in 0.020 inch of 304 stainless steel. It shall contain a maximum of 9.0 weight percent uranium which has a maximum enrichment less than 20 percent. There shall be 1.55 to 1.80 hydrogen atoms to 1.0 zirconium atom.
- b. Loading: With the exception of one fuel-followed control element (the "regulating rod") no fuel elements shall be placed within the B- or C- rings of the core.

Basis

This type of fuel element has a long history of successful use in TRIGA reactors. Specification b ensures that the fuel stored within the core structure cannot attain a value of k_{eff} greater than 0.9

The objective of TS 5.1 is to assure that the fuel elements are of such a design and fabricated in such a manner as to permit their use with a high degree of reliability with respect to their mechanical integrity. Since the licensee permanently ceased operation of the UARR and has requested to change the facility license to possess only and not use or operate, the NRC staff

concludes that the proposed deleting of information that is no longer applicable and the proposed revision of TS 5.1 is acceptable.

(2.18) TS 5.2

The licensee proposed revision to TS 5.2, Reactor Building to include the site to which the Decommissioning Plan applies. The licensee proposed to revise TS 5.2 to read as follows:

Applicability

This specification applies to the facility which houses the reactor and the residual facility and site to which the Decommissioning Plan applies.

Objective

The objective is to assure that provisions are made to restrict the radioactivity released into the environment.

Specifications

- a. The reactor shall be housed in a closed room of a facility designed to restrict leakage.
- b. The free volume of the reactor room shall be at least 6,000 cubic feet.
- c. All air or other gases exhausted from the reactor room during decommissioning activities shall be released at a minimum of 12 feet above ground level.
- d. The reactor facility shall be equipped with a ventilation system capable of exhausting air or other gases from the reactor room from a stack at a minimum of 50 feet above ground level under emergency conditions.
- e. During decommissioning activities within the reactor room, openings to the room other than those designed for exhaust air and gases shall be closed except for required access and when materials prepared for shipment are being removed.
- f. During decommissioning activities outside the reactor room, components that are to be removed shall be enclosed in a manner designed to restrict leakage and to restrict access, before being dismantled.

Basis

In order that the movement of air can be controlled, the facility contains no windows that can be opened. Under emergency conditions the room air is exhausted through a filter and discharged through a stack at a minimum of 50 feet above ground to provide dilution.

Specification f applies only to equipment described in the SAR which is outside the reactor room: parts of the water purification system and the cooling system. All other decommissioning activities will be confined to the footprint described in SAR section IVa, designated as a controlled access area.

The objective of TS 5.2 is to assure that provisions are made to restrict the radioactivity released into the environment. The licensee proposed to modify the specifications to include the site to which the decommissioning plan applies. Since the licensee permanently ceased operation of the UARR and has requested to change the facility license to possess only and not use or operate, the NRC staff concludes that the proposed addition to denote the site area to which the approved Decommissioning Plan would apply is acceptable.

(2.19) TS 6.1

The licensee proposed revision to TS 6.1, Organization. The licensee proposed to revise TS 6.1(a) to delete the word "operated" and replace it with the word "maintained." The licensee proposed to revise TS 6.1(a) to read as follows:

- a. The reactor facility shall be maintained by the Nuclear Reactor Laboratory (NRL) at the University of Arizona. The Nuclear Reactor Laboratory Director shall report to the Vice President for Research and Graduate Studies at the University of Arizona as shown in the organization charts below.

The licensee also provided a proposed organization chart which will replace the current organizational chart when decommissioning activities commences.

Since the licensee permanently ceased operation of the UARR and has requested to change the facility license to possess only and not use or operate, the NRC staff concludes that the changes to TS 6.1(a) are acceptable.

The licensee provided an additional organizational chart as part of the proposed TS revision. The licensee stated that this organizational chart would be used during decommissioning activities and that this organizational chart came from its decommissioning plan. The NRC staff determines that in preparation for decommissioning the facility, adding the organizational chart from the decommissioning plan with a caveat that it would not be used until decommissioning activities commence is acceptable.

(2.20) TS 6.2

The licensee proposed revision to TS 6.2, Review for conditions after operations have permanently ceased and delete information that is no longer applicable. The licensee stated that the proposed revision will be applicable to decommissioning activities once operations have ceased. The licensee also proposed deletion of references applicable to new experiments since experiments are no longer permitted.

Since the licensee permanently ceased operation of the UARR and has requested to change the facility license to possess only and not use or operate, the NRC staff concludes that the proposed revision to TS 6.2 is appropriate and therefore, is acceptable.

(2.21) TS 6.3

The licensee proposed revision to TS 6.3, Operations for conditions after operations have permanently ceased and delete information that is no longer applicable. The licensee is

proposing to modify TS 6.3 to exclude startup and operation of the reactor, and to add decommissioning activities.

Since the licensee permanently ceased operation of the UARR and has requested to change the facility license to possess only and not use or operate, the NRC staff concludes that the proposed revision to TS 6.3 is appropriate and therefore, is acceptable.

(2.22) TS 6.6

The licensee proposed revision to TS 6.6, Plant Operating Records to include decommissioning activities.

Since the licensee permanently ceased operation of the UARR and has requested to change the facility license to possess only and not use or operate, the NRC staff concludes that the proposed revision to TS 6.6 is appropriate and therefore, is acceptable.

(2.23) TS 6.8

The licensee proposed deletion of TS 6.8, Review of Experiments.

Since the licensee permanently ceased operation of the UARR and has requested to change the facility license to possess only and not use or operate, the NRC staff concludes that the proposed deletion of TS 6.8 is acceptable since experiment is no longer allowed.

(2.24) TS 7.0

The licensee proposed the addition of a new TS Section 7.0 Decommissioning Plan.

The NRC staff reviewed the licensee's proposed new TS Section 7.0. The NRC staff determined that the proposed TSs are license conditions and generally would be issued together with the approval of a decommissioning plan. The NRC staff discussed with the licensee that the language of the proposed TSs will be reviewed as part of the approval of the licensee's decommissioning plan. On this basis, the NRC staff concludes that the proposed TS Section 7.0 and its references will not be added to the TS with this license amendment and will be reviewed separately as part of the review of the decommissioning plan.

(2.25) TS Editorial changes

The licensee made various grammatical and format changes, including the renumbering, which resulted in the need to reissue the TS in its entirety. The licensee indicated these changes did not affect the meaning of the requirements. The NRC staff concludes that reissue the UARR TS in its entirety is acceptable due to substantive amount of proposed addition and revision to the UARR TS in support of the possession only license amendment request.

3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves changes in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 or changes in inspection and surveillance requirements. The staff has determined that this amendment involves no

significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and no significant increase in individual or cumulative occupational radiation exposure. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9).

This amendment also involves changes in recordkeeping, reporting, or administrative procedures or requirements. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10).

Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

4.0 CONCLUSION

The NRC staff concludes, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously evaluated, or create the possibility of a new or different kind of accident from any accident previously evaluated, and does not involve a significant reduction in a margin of safety, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by the proposed activities, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or the health and safety of the public.

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