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10 February 2025

From: Dr. Edward Goodell, Reactor Facility Director
University of Utah TRIGA Reactor Facility (Docket: 50-407)
110 Central Campus Drive, Room 2000, Salt Lake City, UT 84112

To: Document Control Desk
Tony Brown, Chief of Non-Power Production and Utilization Facility Oversight Branch
Jessica Lovett, Project Manager for University of Utah

Subj: Additional information for UUTR Exemption Request

Dear NRC Exemption Request Reviewers,

University of Utah TRIGA Reactor (UUTR) facility (Docket: 50-407, license R-126) provides the following information in response to the questions outlined in RAI letter with accession number: ML25031A394:

Question 1a: *NRC requests UUTR confirm RRR agrees to utilization of its facility and licensed operators to meet the special refresher training requirements.*

See the additional letter titled "2025-019 Invitation to UUTR Staff to Conduct Training at RRR.pdf" from the RRR facility confirming the agreement to utilize RRR and its licensed operators to meet the special refresher training requirements.

Question 1b: *NRC requests UUTR confirm operating power levels at the selected facility will be at or as near as possible to 100 kW (full licensed reactor power at UUTR) and that reactivity manipulations at selected facility will be IAW 10 CFR 55.59(c)(3)(i). NRC requests facility provide information on number of power manipulations to be performed.*

UUTR has confirmed that operating power levels at the selected facility will be at or as near as possible to the full licensed power of 100kW. The reactivity manipulations performed at RRR will be IAW 10 CFR 55.59(c)(3)(i). Both Andrew Allison and Edward Goodell will make 4 power manipulations: (1) from reactor shutdown, perform reactor startup to 100 kW; (2) perform a down power manipulation to 30 kW; (3) perform an up-power manipulation to 90kW; and (4) shutdown the reactor.

Question 2: *NRC requests UUTR provide evidence for Oregon State University as a comparable facility to UUTR.*

At this moment, UUTR staff do not believe it is necessary to plan for Oregon State University as an alternative to RRR. RRR is expected to be operational by early June. Considering the length of

time it will take to analyze and implement a repair solution for the UUTR tank, the earliest UUTR plans to move fuel is April 2025. In accordance with our exemption request described in supplemental information dated December 13th, 2024 (ML24349A003), this special refresher training is necessary prior to operating UUTR. UUTR anticipates a minimum of 2 months to transfer and inspect the fuel elements prior to operating the reactor. Therefore, UUTR requests the Commission issuance of an exemption by March 31st, 2025, for UUTR to commence irradiated fuel movements in April, 2025. UUTR will then coordinate with RRR to establish a date in June/July for the special refresher training prior to operating UUTR for control rod calibration and thermal power calibration. In the event RRR is unable to support our special refresher training, UUTR will supplement this exemption request with the appropriate comparison of an alternative facility.

Question 3: *It is the staff's understanding that RRR will be used for special refresher training and the annual operating exams will be completed after maintenance and restart of UUTR reactor. NRC requests confirmation that RRR will only be used for special refresher training and the annual operating exams will be performed at UUTR.*

UUTR facility confirms that RRR will only be used for special refresher training. Following completion of the special refresher training at RRR, Edward Goodell and Andrew Allison will operate UUTR in order to perform a control rod calibration and thermal power calibration. Following the successful completion of a thermal power calibration at 90 kW with appropriate power channel adjustments as necessary, UUTR will be considered fully operational and ready for experiments/training. UUTR's next run will then be dedicated to Andrew Allison and Edward Goodell performing their annual operating examinations to satisfy the requirements of UUTR's requalification plan.

UUTR staff appreciate the timely responses from NRC staff for this exemption request. I declare under penalty of perjury that the foregoing is true and correct. UUTR requests the Commission issuance of an exemption no later than March 31st, 2025 in the event successful repairs are implemented in March/April of 2025.

Sincerely,

Dr. Edward Goodell
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