

**NUCLEAR REGULATORY COMMISSION**

**Docket No. 50-407**

**University of Utah TRIGA Reactor**

**Exemption Request**

**I. Background.**

The University of Utah TRIGA Reactor (UUTR, the licensee) holds the U.S. Nuclear Regulatory Commission (NRC, the Commission) Renewed Facility Operating License No. R-126 for the UUTR Training, Research, Isotopes, General Atomics (TRIGA) reactor (the facility), which is a research reactor located in Salt Lake City, Utah. Under this license, the licensee is authorized to operate the facility up to a steady-state power level of 100 kilowatts thermal power. The license is subject to the rules, regulations, and orders of the NRC.

The University of Utah TRIGA Reactor (UUTR) is currently in a shutdown/secured state pending necessary repairs to the reactor tank, and it is not expected to return to operation until Spring, 2025. As such, UUTR facility is unable to perform annual operating exams required in accordance with 10 CFR 55.59(a) to maintain qualification status. UUTR requests an exemption to the annual operating exam requirement as outlined below to maintain sufficient operators in a qualified status for supporting licensed activities necessary to restore UUTR back to operational status.

August 2024: establish repair contract with suitable engineering firm

September 2024: Inspect tank

October-January 2024: Repair tank based on inspection results

February – April 2025: Reconstruct reactor inside repaired tank

May 2025: Perform reactor maintenance

June 2025: Additional time to account for potential delays

**II. Request/Action.**

- 1) UUTR requests an exemption to the annual operating examination requirement of 10 CFR 55.59(a) for Andrew Allison (SOP-504549), Edward Goodell (SOP-505176), and Jesse Snow (RO-505180) from March 1<sup>st</sup> 2024 until June 30<sup>th</sup>, 2025.**

Andrew Allison satisfactorily completed his requalification program on September 14<sup>th</sup>, 2023. The annual operating examination for Andrew Allison due on September 15, 2024 will be annotated as exempted per this request. Edward Goodell and Jesse Snow were licensed March 27<sup>th</sup>, 2023. Their annual operating examination for March 27<sup>th</sup>, 2024 and March 27<sup>th</sup>, 2025 will be annotated as exempted per this request.

- 2) UUTR requests an exemption from the 10 CFR 55.53(e) requirement that a licensee shall actively perform the functions of an operator or senior operator for a minimum of four hours per calendar quarter from the date this license is issued from April 1<sup>st</sup>, 2024 until June 30<sup>th</sup>, 2025.**

Once the reactor tank is emptied, the licensed duties performed for a shutdown reactor such as pre-start checks and a stationed console operator will be purposeless until the applicable detectors/equipment is restored to the tank in preparation for reloading the reactor core. Andrew Allison, Edward Goodell, Jesse Snow, and will have extensive experience with these shutdown reactor licensed duties from the transfer of the fuel to the storage pits during the Summer of 2024. A special refresher training will be conducted with

the aforementioned operators to further enhance proficiency with licensed duties for reloading the reactor core and reactor operations for restoration maintenance.

### III. Justification

In the exemption issuance document, Docket Nos. 52-025 and 52-026; NRC-2008-0252, the Commission stated that:

“Exemptions are authorized by law where they are not expressly prohibited by statute or regulation. A proposed exemption is implicitly “authorized by law” if all of the conditions listed therein are met (i.e., will not endanger life or property and is otherwise in the public interest) and no other provision prohibits, or otherwise restricts, its application. As discussed in this section of the evaluation, no provisions in law restrict or prohibit an exemption to the requirements concerning control manipulations; the “endanger” and “public interest” factors are addressed later in this evaluation.”

In accordance with 10 CFR Part 55.59(b), additional training, “If the requirements of paragraphs (a) (1) and (2) of this section are not met, the Commission may require the licensee to complete additional training and to submit evidence to the Commission of successful completion of this training before returning to licensed duties.” Hence a proposed exemption should be lawful if the applicant can demonstrate receiving additional training and submit evidence of this training to the commission prior to returning to licensed duties. UUTR facility will document all training received by its licensed operators for NRC review.

**This exemption will not endanger life or property** because the purpose of this exemption is to enable facility operators to continue performing licensed duties with a shutdown nuclear reactor, which they already have extensive experience performing as mentioned previously.

**Public Interest:** UUTR is the only research reactor in the state of Utah and only one of a handful of university research reactors in the United States. Having UUTR in operational status benefits the public through its use in research and nuclear operator training. Furthermore, the reactor fuel currently stored in the UUTR needs to be expeditiously transferred out of the tank since the tank is currently prone to leaks, which increases the risk of removing the water shielding for the fuel.

I declare under penalty of perjury that the foregoing is true and correct. UUTR requests the Commission issuance of exemption no later than 15 SEP 2024 for UUTR to continue with restoration of the reactor tank.

*Andrew Allison*

Andrew Allison, UUTR Interim Director

June 17<sup>th</sup>, 2024

Date