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7 June 2021

From: Dr. Glenn E. Sjoden, Director
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50-407

Subj: Reply to a Notice of Violation

To: U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

This memo constitutes a Reply to a "Notice of Violation" pertaining to IR 05000407/2020201, Accession Number ML20304A216, received May 25, 2021. Note: Because USNRC experienced issues with their ADAMS document system, we received the IR considerably later than usual. Per follow-up email to USNRC on 25 May 2021, we received guidance from Craig Bassett that "you will have 30 days from the date you received the inspection report to respond. Your response will be due on June 24, 2021." The notice documents a violation of UUTR Technical Specification, Section 6.1.3.3, pertaining to events requiring the direction of the Reactor Supervisor, as noted, during September and October 2020.

Background: Mathew Lund, SRO and UUTR Reactor Supervisor during the period of the "notice of violation", moved to a part-time Reactor Supervisor status in the period September 2020 – January 2021, as he began a transition to new employment, retaining the position of Reactor Supervisor (RS) as a part time employee through January 2021. M. Lund notified the university, and subsequently arranged his schedule to retain his position, on a part time employment basis, as Reactor Supervisor, until his direct assistant, SRO Steven Pappas, was to take over as the full time RS to fully meet the qualifications as outlined in ANS/ANSI 15.4 – 1988; R1999 for the position of Level 3, RS in January of 2021. In the time between September 2020 and January 2021, M. Lund specified that RS duties could be shared by both he and SRO Pappas in a Reactor Supervisor/Assistant Reactor Supervisor detail, where he had appointed S. Pappas as an "Assistant Reactor Supervisor". According to M. Lund, this mode of operation would be in full compliance with all Technical Specifications and NRC requirements (hereafter referred to as the "RS Supervision Detail"). About that same time period, I was directed to a new role as the new Level II for the facility, having been appointed by the Level I, Dr. Andrew Weyrich. Vice President of Research.

Immediately upon learning of M. Lund's plan for the "RS Supervision Detail", I questioned Dr. Lund regarding the regulatory compliance of this action; M. Lund specified that based on "prior operations precedence," he could appoint SRO Pappas to serve as an "Assistant Reactor Supervisor," under his direct supervision, that would fully satisfy UUTR TS 6.1.3.3, and that this action was, based on prior operations, previously found to be satisfactory to USNRC. I then asked M. Lund if he could produce documented evidence of the "prior operations precedence" required to satisfy this "RS Supervision Detail," as noted, and Dr. Lund indicated the affirmative, and that this evidence existed in UUTR Operations Logs at various times over the past 10 years of reactor operations. Because this scenario occurred during COVID lockdown measures, and because I did not

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yet have facility security access to the facility, having been just appointed (awaiting FBI background checks, etc, with security access paperwork pending), and knowing that M. Lund had several years of experience in the RS position, as well as familiarity with UUTR Operations Logs and TS requirements, I accepted M. Lund's affirmation that all was in compliance under this proposed plan. M. Lund thereby implemented this procedure with S. Pappas for approximately 1 month. In October, Craig Bassett (USNRC) arrived for an annual USNRC inspection, and he noted that in his evaluation, the "RS Supervision Detail" being followed by M. Lund was *not* in compliance with Technical Specifications. Craig Bassett subsequently asked M. Lund to produce the operations logs that documented USNRC concurrence on the "RS Supervision Detail" as noted; after reviewing operations logs, M. Lund could not produce the required documentation to support this action. As a result, all reactor activities were immediately ceased, based on C. Bassett's assessment, and I directed M. Lund to cease all operations immediately, and provide Mr. Bassett with whatever documentation he needs to complete his assessment of the situation. Plans were also made to immediately defuel and stand down the reactor until the staffing issue with the RS could be remedied as soon as possible.

Response:
To address USNRC required responses:
(1) We acknowledge the violation as noted; *the reason the violation occurred* was due to reliance upon the assurances of the existing, experienced RS regarding prior documented operational precedence that ensured compliance with stated Technical Specifications (per UUTR TS 6.1.3.3 for reactor startup and approach to power) for the "RS Supervision Detail," as described, noted by the Reactor Supervisor in charge of the facility at the time (Mathew Lund). The RS repeatedly assured the reporting chain and management that documentation/evidence existed in operational logs to support the "RS Supervision Detail" mode of operation he had established; when demanded, that documentation could not be produced. The violation was further exacerbated by the timing of newly assigned Level II staff, awaiting facility access approvals, and under COVID restrictions, with heavy reliance on existing RS staff experience and interpretation of Technical Specifications; these issues also contributed to the noted violation. We acknowledge and fully regret this violation, and as soon as it was noted, corrective action was immediately taken to remedy the circumstances, to the fullest extent possible, with complete transparency to USNRC.

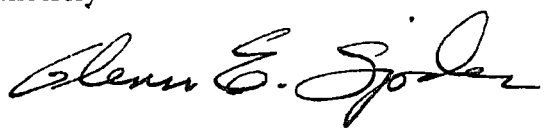
(2) *The corrective steps that have been taken and the results achieved were as follows:* Upon discovery of the violation, all reactor operations were immediately ceased, unless the duly appointed RS was physically available, and no assignment of an "Assistant Reactor Supervisor", regardless of licensure, was permitted. It was also noted that SROs could never function as a substitute or "Assistant" Reactor Supervisor unless they were designated as a fully functional, vetted Reactor Supervisor with an official, ANSI certified designation as a compliant "Reactor Supervisor", regardless of reactor plant/SRO licensure. In addition, full transparency and compliance was performed immediately to meet any and all requests for information by NRC (C. Bassett). Furthermore, all management entities within the reporting chain and RSC were specifically made aware of the issues as noted, and corrective actions taken.

(3) *The corrective steps that will be taken:* These include never allowing licensed SROs to assume duties of an "Assistant" Reactor Supervisor as noted above; moreover, a designated Reactor Supervisor meeting all ANSI requirements must always be present. In addition, we are continuing to work to establish redundancy in Reactor Supervisors among eligible SROs that also fully meet or exceed ANS/ANSI 15.4 – 1988; R1999 compliance as a Reactor Supervisor to create "defense in depth", and ensure more complete staffing to better meet facility demands, as well as always remain in full TS and regulatory compliance. Finally, any designation of service in the capacity of a Reactor Supervisor for the UUTR will be vetted by the UUTR Reactor Safety Committee, and documented in a letter of appointment as such by the NRC Level II.

(4) *The date when full compliance will be achieved:* We are in full compliance; the current Reactor Supervisor is Amanda Foley, who also fully meets ANS/ANSI 15.4 specifications. In addition, as of this writing, we are also in a hiring search for a new, fully qualified long-term Reactor Supervisor who will fully meet/exceed ANS/ANSI 15.4 specifications. We also have a training program in progress to train new SROs that, with verified requisite experience, can be designated as a "Reactor Supervisor" to fulfill the "defense in depth" necessary to maintain reactor personnel staffing, expanding the bench of RS capable personnel. Note: SRO training is pending in coordination with NRC with the new reactor control system; we have completed all 10 CFR 50.59 actions, and required documentation to restart the reactor. The UUTR Reactor Safety Committee has fully coordinated on these actions, as of this writing. Documents were also transmitted to USNRC (per the noted directive) for review and comment earlier this year (via email, with NRC acknowledgement, March 2, 2021).

Safety, security, and regulatory compliance are our top priorities. We shall continue to make every effort to ensure the violation noted here is never repeated. Please let me know if you require additional information. My contact email is glenn.sjoden@utah.edu, and cell number is 352-870-5080.

Sincerely



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