

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

June 12, 2024

Dr. Rusty Towell
Director of NEXT Lab
Abilene Christian University
ACU Box 27963
Abilene, TX 79699

SUBJECT: ABILENE CHRISTIAN UNIVERSITY – MOLTEN SALT RESEARCH REACTOR

CONSTRUCTION PERMIT APPLICATION REVISED REVIEW SCHEDULE

(EPID: L-2022-NFW-0002)

Dear Dr. Towell:

The purpose of this letter is to inform Abilene Christian University (ACU) of the U.S. Nuclear Regulatory Commission (NRC) staff's revised schedule for the review of the construction permit application for ACU's proposed Molten Salt Research Reactor (MSRR) (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22227A201), as supplemented. By letter dated December 16, 2022 (ML22341A615), the NRC staff previously communicated that it planned to complete its review of the construction permit application by May 2024. During regulatory audit meetings with ACU, it was identified that ACU needed additional time to further consider and refine certain design aspects of its MSRR. Therefore, the NRC staff determined that additional information was needed for the NRC staff to complete its review of the ACU application, and on December 21, 2023 (ML23348A196), the NRC staff issued a letter containing requests for additional information (RAIs). In that letter, the NRC staff also notified ACU that it would issue a revised schedule once ACU responded to the RAIs transmitted in that letter. ACU responded by letters dated March 28, 2024, (ML24094A332) and April 30, 2024 (ML24121A272).

Based on the status of the review and ACU's plan to provide the remaining information identified during the technical audits, the NRC staff's revised estimate for completing its review of the construction permit application is provided in the table below:

Milestone Group - Safety Review	Estimated Completion
Draft Safety Evaluation	06/28/2024
Advanced Safety Evaluation	08/16/2024
Final Safety Evaluation and Construction Permit Issuance	09/30/2024

The revised schedule is based on historical review timelines, and the NRC staff's judgement regarding the estimated level of effort necessary to complete the technical review and develop the safety evaluation. Additionally, the revised schedule accounts for the work that was done by

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both the NRC staff and ACU to resolve additional technical issues in other areas while working in parallel to respond to the RAIs. The revised schedule could change due to several factors, including the timeframe for the resolution of the remaining technical issues, unanticipated changes to the scope of the review, unsolicited supplements to the application, design changes, and other factors. Finally, based on its assessment of the remaining scope of work, the NRC staff believes that the original estimate of 15,000 NRC staff hours to complete the review of the construction permit application remains valid.

If you have any questions, please contact Richard Rivera at (301) 415-7190 or via email at Richard.Rivera@nrc.gov or Edward Helvenston at (301) 415-4067 or via email at Edward.Helvenston@nrc.gov.

Sincerely,

Signed by Rivera, Richard on 06/12/24

Richard Rivera, Project Manager
Advanced Reactor Licensing Branch 2
Division of Advanced Reactors and Non-Power
Production and Utilization Facilities
Office of Nuclear Reactor Regulation

Docket No. 50-610

cc: Abilene Christian University MSRR via GovDelivery Subscribers

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(EPID: L-2022-NFW-0002) DATED: JUNE 12, 2024

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