



March 4, 2025

Docket No. 50-610

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

Subject: Abilene Christian University Molten Salt Research Reactor
Withdrawal of Fuel Qualification Methodology Topical Report

Reference: Abilene Christian University Letter, Abilene Christian University Molten Salt
Research Reactor Fuel Qualification Methodology Topical Report, Revision 0,
January 15, 2024 (ADAMS Accession No. ML25016A114)

In the Reference, Abilene Christian University submitted a Molten Salt Research Reactor (MSRR) Fuel Qualification Methodology Topical Report for Nuclear Regulatory Commission review. The topical report describes methods for assessing the thermophysical properties for a range of fuel salt compositions that are representative of the MSRR's planned operational fuel salt. The report discusses the fuel design rationale, performance requirements, qualification methods, fuel preparation, content adjustment techniques, and the proposed laboratory testing program.

After discussions with the NRC staff, ACU hereby withdraws the referenced topical report. ACU intends to submit information on the MSRR fuel qualification methodology to the NRC for feedback as a white paper.

If you have questions or need additional information, please contact Brazos Fitch at brazos@naturaresources.com or Lester Towell at Lester.Towell@acu.edu.

Respectfully,

A handwritten signature in cursive script that reads "Rusty Towell".

Rusty Towell, PhD
Director of NEXT Lab

Cc: John Segala, Chief, NRR Advanced Reactor Licensing Branch 2
Jorge Hernandez, Project Manager, NRR Advanced Reactor Licensing Branch 2
Edward Helvenston, Project Manager, NRR Non-Power Production and Utilization
Facility Licensing Branch
Brian Bettes, Project Manager, NRR Advanced Reactor Licensing Branch 2

