NRC Accepts Application for Abilene Christian University Construction Permit

The Nuclear Regulatory Commission has accepted for review a construction permit application from Abilene Christian University, which requests permission to build its Molten Salt Research Reactor facility on the university’s campus in Abilene, Texas. The university submitted the application on Aug. 15 and provided additional information on instrumentation and controls on Oct. 14.

The one-megawatt, non-power MSRR would use molten salt coolant with fuel dissolved in the salt. The facility would provide a platform to research molten-salt technology, as well as educational opportunities in nuclear science and engineering. If the NRC issues the construction permit and the facility is built, ACU will have to submit a separate application for an operating license in the future.

Accepting the application for review, or “docketing” the application, does not indicate whether the Commission will approve or reject the request. More information about new reactor licensing is available on the NRC website.

Beginning in March 2020, ACU’s pre-application activities with the NRC staff addressed several aspects of the MSRR design. Because of this constructive engagement, the agency was able to establish a review schedule of 18 months. Barring unforeseen delays, the staff expects to complete its environmental and safety reviews by May 2024.

The NRC will soon publish in the Federal Register a notice of acceptance and docketing. A future Federal Register notice will provide an opportunity to intervene in an adjudicatory hearing. More information on the hearing process is available on the NRC website.