

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

May 7, 2025

MEMORANDUM TO: Michelle W. Hayes, Chief

Licensing and Infrastructure Branch Division of New and Renewed Licenses Office of Nuclear Reactor Regulation

FROM: Sean P. Gallagher, Project Manager

Licensing and Infrastructure Branch Division of New and Renewed Licenses Office of Nuclear Reactor Regulation

SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION SUMMARY OF

APRIL 9, 2025, LAST ENERGY HASKELL, TEXAS SITE

Slau July Signed by Gallagher, Sear on 05/07/25

PREAPPLICATION PUBLIC MEETING

On April 9, 2025, at 2:00 p.m. Eastern Time the U.S. Nuclear Regulatory Commission (NRC) held a hybrid public meeting with Last Energy. The purpose of the meeting was to hear Last Energy's progress on their environmental report for a new nuclear plant to be located at Last Energy's Haskell, Texas site. The public meeting notice may be found under Agencywide Documents and Access Management System (ADAMS) Accession No. ML25079A122. Last Energy's public presentation slides for this meeting may be found under ML25098A018.

NRC staff from the Office of Nuclear Material Safety and Safeguards' Environmental Center of Expertise (ECOE) opened the meeting with a presentation on ECOE recent activity which can be found under ML25127A028.

Last Energy then gave an overview of its PWR-20 Design and presented on its current efforts and analysis regarding various topics for the environmental report for a future application.

Preapplication engagements, including this meeting, provide an opportunity for the NRC staff to engage in early discussions with a prospective applicant to offer licensing guidance and to identify potential licensing issues early in the licensing process. No regulatory decisions or commitments were made during the preapplication meeting.

A list of attendees at the public session is enclosed (Enclosure 2). There were approximately 47 total participants including NRC staff, Last Energy staff, and members of the public.

CONTACT: Sean Gallagher, NRR/DNRL

301-415-1135

M. Hayes 2

During the meeting, a member of the public joined using an AI transcription tool called *Fireflies.AI Notetaker*. The NRC does not recognize transcripts generated by this tool as an official meeting summary or record. This document serves as the NRC's official summary of the meeting. Additionally, the meeting was not recorded, and the NRC did not produce a transcript.

Project No. 99902140

Enclosures:

- 1. Meeting Notes
- 2. List of Meeting Participants

M. Hayes 3

SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION SUMMARY OF APRIL

9, 2025, LAST ENERGY HASKELL, TEXAS SITE PREAPPLICATION

PUBLIC MEETING DATED: MAY 07, 2025

DISTRIBUTION:

Public
NLIB R/F
MHayes, NRR
MSampson, NRR
SLee, NRR
SGreen, NRR
SGallagher, NRR
WGleaves, NRR
RidsNrrDnrl Resource
RidsNrrDnrlNLIB Resource
GovDelivery

ADAMS Accession No.: ML25108A002 via* eConcurrence NRR-106

OFFICE	NRR/DNRL/NLIB PM	NRR/DNRL/NLIB LA	NMSS/NMSS/REFS/EPMB3
NAME	SGallagher*	SGreen*	MRichmond*
DATE	4/18/2025	4/21/2025	5/07/2025
OFFICE	NRR/DNRL/NLIB BC	NRR/DNRL/NLIB PM	
NAME	MHayes*	SGallagher*	
DATE	5/07/2025	5/7/25	

OFFICIAL RECORD COPY

Meeting Notes

The meeting notes below summarize the main points from presentations delivered by NRC's Environmental Center of Expertise (ECOE) and Last Energy. They also highlight specific feedback provided by NRC staff, particularly regarding recommendations for environmental reviews and project planning. Additionally, the notes capture questions posed by members of the public and the corresponding responses from NRC staff and Last Energy representatives.

NRC's ECOE Presentation

During the NRC's Environmental Center of Expertise (ECOE) presentation, several key topics were discussed, including the NRC's mission and the ECOE's specific role in environmental reviews. The presentation outlined the environmental review process under 10 CFR 51.20, clarifying the distinctions between Environmental Assessments (EA) with Findings of No Significant Impact (FONSI), Environmental Impact Statements (EIS), and Categorical Exclusions (Cat X). It was noted that certain applications, such as new reactor licenses, require an EIS, with timing requirements of 24 months for an EIS and 12 months for an EA under the "Dead Seaman Act." The Kairos Hermes 2 project was mentioned as an example where a full EIS was not necessary because the NRC could leverage the previously completed EIS for the first Kairos Hermes project. The NRC highlighted streamlining environmental reviews as a critical focus, particularly in alignment with the Fiscal Responsibility Act and ADVANCE Act, stressing the importance of effective preapplication discussions and setting a goal to streamline reviews for "nth of a kind" microreactor applications.

Last Energy Presentation

During Last Energy's presentation, the reactor concept introduced was the PWR-20, a Gen III+, 20 MWe microreactor. The design is modular and ensures inherent safety, requiring no operator action during accident scenarios. Additionally, the reactor employs air cooling via radiators, eliminating any need for external water resources.

The proposed site, located approximately 50 miles north of Abilene, Texas, within the Energy Corridor, is initially intended for a single unit but sized to eventually accommodate up to 30 PWR-20 microreactors. To streamline the environmental review process and minimize future procedural and legal challenges, the NRC staff recommended including all 30 potential units in the initial environmental report rather than incrementally applying for additional units.

Environmental assessments revealed the site is free from state or federal lands, endangered species, wetlands, or navigable waters, and planned security includes two fences around the facility. Historical and cultural impacts are minimal, although two cemeteries are nearby; importantly, no Native American or significant historical sites were identified within a 10-mile radius.

Regarding demographics and public health, the rural setting ensures that radiation exposure will remain well below public safety thresholds, producing no distinguishable impact on the local population. The NRC staff advised explicitly addressing construction impacts and associated road improvements in the report.

Meteorological and hydrological risks are minimal, especially given that the radiator-based cooling system prevents impacts on water sources. Geologically, the site lacks existing pipelines or wells, though verification of nearby injection wells is recommended by NRC staff. Groundwater is situated approximately 30–40 feet below grade, near the containment vessel depth. The area's seismic history is mild, with the most significant event recorded—a magnitude 6.0 earthquake—occurring near El Paso in 1931.

Finally, the NRC staff provided additional comments not specific to any particular section of the presentation. They emphasized the importance of clearly referencing all numerical data included in the environmental review to the corresponding application. Additionally, staff suggested that Last Energy explore whether a NEPA Environmental Report already exists for a nearby solar project, as this report could potentially be leveraged to support Last Energy's own environmental report.

Public Questions and Responses

During the public questions and responses segment, Jason Callahan from Texas Radiation Control inquired about an abandoned house located on the site, which Last Energy confirmed is under their ownership. He also questioned potential soil activation risks; the NRC staff responded that they will verify during their review that the reactor's containment design adequately prevents neutron activation of soil.

Blake Vinyard, representing Senator Ted Cruz's office, asked about the project's anticipated timeline. The NRC staff clarified that currently there is no committed timeline or confirmed date for submitting an application.

Donna Christianson from INPO asked whether Last Energy owns the mineral rights for the site. Last Energy explained that they currently hold a site option agreement and plan to ultimately control both surface and mineral rights.

List of Meeting Participants

Name	Affiliation
Sean Gallagher	NRC
Scott Burnell	NRC
Dave Gasperson	NRC
Daniel Barnhurst	NRC
William Burris	NRC
Ryan Alexander	NRC
Jared Nadel	NRC
Eric Palmer	NRC
Andrea Johnson	NRC
Weidong Wang	NRC
Peter Lom	NRC
Angel Moreno	NRC
Donald Palmrose	NRC
Mary Richmond	NRC
Peyton Doub	NRC
Madelyn Nagel	NRC
Susan Vrahoretis	NRC
John Moses	NRC
Matt Fossen	Last Energy
Peter Clark	Last Energy
Jacob Jimenez	Last Energy
Matthew Malia	Last Energy
Phoebe Lind	Last Energy
David Holler	Last Energy
Adam Lenarz	Last Energy
Francesco Tassi	Last Energy
Benjamin Leopardo	Last Energy
Dr. Deb Luchsinger	Public
Rae Walker	Public
Lisa Bruedigan	Public
Ingrid Nordby	Public
Donna Christiansen	Public
Lashley, Phil	Public
Jason Callahan	Public
Bruce Hammond	Public
Lisa Matis	Public
Joann Harthcock	Public
Deric Tilson	Public
Mary Miller	Public
Edwin Lyman	Public
Rani Franovich	Public

Ouellette, Paul	Public
Clint Taylor	Public
Blake Vineyard	Public
John Pavlica	Public
Brian Vamvakias	Public
Bobbi Hanson	Public