



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

February 28, 2024

MEMORANDUM TO: Michelle W. Hayes, Chief
Licensing and Infrastructure Branch
Division of New and Renewed Licenses
Office of Nuclear Reactor Regulation

FROM: William (Billy) Gleaves, Senior Project Manager /RA/
Licensing and Infrastructure Branch
Division of New and Renewed Licenses
Office of Nuclear Reactor Regulation

SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION SUMMARY OF
FEBRUARY 21, 2024, DUKE ENERGY BELEWS CREEK EARLY
SITE PERMIT PRE-APPLICATION MEETING

On February 21, 2024, at 3:00 p.m. Eastern Time (ET), the U.S. Nuclear Regulatory Commission (NRC) held a hybrid public meeting with Duke Energy (Duke). The purpose of the meeting was to hear Duke's description of their proposed new nuclear plant to be located at the Duke Belews Creek site. The public presentation slides for this meeting may be found under Agencywide Documents and Access Management System (ADAMS) Accession No. ML24051A023.

Duke staff made initial comments and presented details of their plans for an early site permit (ESP) for the Belews Creek site as well as plans for the distant future. Duke's contractor, WSP then shared details regarding subsurface exploration and characterization.

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 decisions or commitments were made during the preapplication meeting.

A list of attendees at the public session is enclosed. There were approximately 80 participants all remotely joining the meeting including NRC staff, Duke staff and contactors, and 34 members of the public.

The following questions were asked by the NRC staff:

- 1) The NRC staff asked about the three areas characterized and pictured in the presentation (slide 8). Duke responded that all three areas at Belews Creek are not sites to be chosen from, but represent where three reactor plants may be located.

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- 2) The staff asked if tests would include fractured rock. Duke responded that although it is challenging to test fractured rock, they will attempt to do so.
- 3) The staff asked whether Duke would be testing the shear strength of fractured rock or solid rock. Duke responded that they would be testing both types of rock.
- 4) The NRC staff asked about subsurface characterization of hydrologic properties of the aquifer, the regional trends and seasonality of the aquifer, and surface water hydrologic activity, including flooding. Duke responded that this kickoff was focused on subsurface presentations and that the field work has not been done and should be the subject of a future meeting.
- 5) The staff asked about the senior seismic hazard analysis committee, level 2, effort and what is involved (slide 12). Duke responded the seismic motion and site response analysis will be done in two phases. They also added that the seismic evaluation has not been started and is expected to start sometime next month.
- 6) The NRC asked about when the NRC should expect Duke to request a reengagement on the site. Duke responded that it is reviewing its plans and will coordinate and align on future activities.

When the public attendees were solicited for questions of the NRC staff, no questions were proffered. The public meeting ended at 4:15 p.m. ET.

Docket No. 999-02121

Enclosure:
List of Attendees

cc w/encl: GovDelivery.com list
for Duke Energy Belews Creek ESP

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PRE-APPLICATION MEETING
DATED: FEBRUARY 28, 2024

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SUMMARY OF FEBRUARY 21, 2024, PUBLIC PRE-APPLICATION MEETING WITH
DUKE ENERGY BELEWS CREEK EARLY SITE PERMIT PRE-APPLICATION MEETING

LIST OF ATTENDEES

Name	Organization
Billy Gleaves Jordan Glisan Michelle Hayes Sam Lee Amitava Ghosh Tony Ponko Barbara Hayes Daniel Barnhurst Dave Gasperson George Khouri Ian Tseng Jenise Thompson John Moses Kevin Quinlan Laura Willingham Laurel Bauer Mallecia Sutton Mary Richmond Nebiyu Tiruneh Nicole Coover Phil O'Bryan Robert Mathis Sarah Tabatabai Scott Burnell Sean Gallagher Weidong Wang	U.S Nuclear Regulatory Commission
Lee Grzeck, Duke Chris Nolan, Duke Rounette Nader, Duke Art Zaremba, Duke Norman Kunkel, Duke Valentina Montaldo Falero, WSP Jeff Smith, WSP Angela Burkhart, Duke Heather Danenhower, Duke Michael Flanagan, S&L Michael Hasek, WSP William Grimes, WSP Karl Hopfensperger, S&L	Duke Energy (Duke) and Contractors

Name	Organization
Shannon Langley, Duke CM Launi, S&L John Mason, WSP Brandt Modlin, WSP Adamson Mwembeshi, WSP David Nielson, S&L Joseph Zmuda, S&L	
April Rice Jana Bergman, Curtiss Wright Cesar Georgescu, RoPower Chris Courtenay, Terrapower Clark Shurtleff Core Solutions Timothy Enfinger, GE Vernova Leigh Lloveras, Breakthrough Institute Nick Kellenberger Patrick White Rani Franovich, Nuclear ROSE Consulting George Wadkins GE Vernova Addison Hall Andrew Brenner Daniel Barker Joshua Bickett Francis Byrne Scott Davies Emma Redfoot Paul Lynn Finch Michael Geers Mark Hunt Jan Mazza Arun Kapur Sukjoon Kim Marsha Kinley Pierce Roland Lawrence Kristle Lee Tracey LeRoy Martin O'Neill, NEI Raymond Burski John Richards Eric Thornsby Tim Polich	Members of the Public