



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

October 6, 2020

MEMORANDUM TO: Benjamin G. Beasley, Chief
Advanced Reactor Licensing Branch
Division of Advanced Reactors and Non-Power
Production and Utilization Facilities
Office of Nuclear Reactor Regulation

FROM: Mallecia A. Sutton, Senior Project Manager */RA/*
Advanced Reactor Licensing Branch
Division of Advanced Reactors and Non-Power
Production and Utilization Facilities
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF AUGUST 25, 2020, ADVANCED REACTOR
STAKEHOLDER PUBLIC MEETING

On August 25, 2020, the U.S. Nuclear Regulatory Commission (NRC) held a Category 2 public meeting with industry stakeholders, including the Nuclear Energy Institute (NEI), the U.S. Nuclear Industry Council (USNIC) and ClearPath, to discuss ongoing initiatives related to the development of the Generic Environmental Impact Statement (GEIS) for advanced reactors. The staff has posted the meeting notice in the NRC's Agencywide Documents Access and Management System (ADAMS) at Accession No. ML20237F559 and the presentation slides at Accession No. ML20237F430. This was a teleconference meeting, and an attempt was made to capture a list of the attendees as they called into the meeting. The Enclosure to this summary provides the attendees for the meeting as captured by the operator that helped to facilitate the meeting.

In a *Federal Register* Notice on April 30, 2020, the staff requested public comments on our plans to develop an advanced reactor GEIS. The NRC received several comments from the public, including comments from industry stakeholders. The meeting provided a venue for NEI, USNIC and ClearPath to provide clarification on their submitted comments.

During the meeting, the staff provided a status update on the GEIS development. The staff discussed next steps, which include the issuance of the compilation of scoping comments in September 2020 and issuance of the draft GEIS for comment in May 2021. The staff anticipates publishing the final GEIS in May 2022.

Enclosure:
List of Attendees

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The USNIC discussed that the GEIS should include advanced nuclear reactors (ANRs) regardless of technology. The USNIC recommends that the GEIS scope includes Generation III+ and Generation IV designs, including water-based Small Modular Reactors, Compact Fast Reactors, High Temperature Gas Reactors (HTGR), Molten Salt Reactors (MSR), Sodium Fast Reactors (SFR), and Lead-cooled Reactors (LFR). This is especially appropriate if SMRs "fit into" the "buckets" (Plant Parameter Envelope (PPE)) NRC chooses for Advanced Reactors in the GEIS. The USNIC encourages the NRC to expand the value for PPE. It was also suggested that the staff should take credit for significant work already done that can support the development of an advanced reactors GEIS, such as the license renewal GEIS and the recent Clinch River Early Site Permit (ESP) Environmental Impact statement (EIS)

The NEI proposed that the original scope (as discussed in the April 30, 2020, Notice of Intent) for the ANR GEIS is too narrow to achieve optimal benefit to the industry and the NRC. The NEI recommended that the scope of the GEIS should be as technology inclusive as possible. The GEIS should not be exclusive to very small power levels. The NEI also recommended that the structure of the GEIS should be performance-based, consequence-oriented parameters to include bounding assumptions based on previous agency National Environmental Policy Act (NEPA) analyses. It was also recommended that NRC follow its established use of GEISs and associated Part 51 rulemakings, particularly in the light water reactor (LWR) license renewal and spent fuel continued storage contexts, which underscore the viability and efficacy of the generic analysis method. The NRC staff should also fully leverage prior NRC environmental analyses. Using performance-based criteria, an ANR GEIS could generically address many common environmental impacts for a much broader range of technologies.

ClearPath stated that it is important for the NRC to incorporate performance-based requirements, based on decades of operating experience and other reviews, into the development of the GEIS. The GEIS should be technology inclusive, including not only non-LWRs, but at least LWR SMRs as well. It was also emphasized that staff should conduct future outreach activities before issuing the official draft GEIS by May 1, 2021.

During the comment portion of the meeting, other commenters stated generic opposition to the GEIS. Commenters stated that the advanced reactors don't exist and therefore a GEIS was premature.

The staff discussed the current GEIS schedule and next steps. The staff noted that they would consider these comments and all other comments as they develop the GEIS. Specifically, the staff noted that the comments were detailed and that they understood the comments. The staff also expressed appreciation for the amount of effort that the presenters and commenters had undertaken in order to prepare the comments and for their participation in the NEPA process.

The meeting ended with an open discussion. The NRC requested feedback about how these meetings can be more engaging and how to increase participation by prospective applicants. The next advanced reactors stakeholder meeting will be scheduled in October 2020.

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PUBLIC MEETING DATED: OCTOBER 6, 2020

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***via e-mail**

OFFICE	NRR/DANU/UARL/PM*	NRR/DANU/UARL/LA*	NRR/DANU/UARP/BC*	NRR/DANU/UARL/PM*
NAME	MSutton	SLent	BBeasley	MSutton
DATE	9/16/2020	9/17/2020	10/2/2020	10/6/2020

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PUBLIC MEETING
U.S. NUCLEAR REGULATORY COMMISSION
Wednesday, August 25, 2020
1:00 p.m. – 3:00 p.m.

List of Attendees (on phone)	
Name	Organization
Amy Cabbage	U.S. Nuclear Regulatory Commission (NRC)
John Segala	NRC
Jordan Hoellman	NRC
Hanh Phan	NRC
Jo Jacobs	NRC
Christy Galster	NRC
Bill Reckley	NRC
Donna Williams	NRC
Eric Oesterle	NRC
Ben Beasley	NRC
Martin Stutzke	NRC
Juan Uribe	NRC
Victoria Anderson	NRC
Michelle Gonzalez	NRC
Tim Lupold	NRC
Adrian Muniz	NRC
Kati Austgen	Nuclear Energy Institute (NEI)
Alex Renner	Oklo, Inc. (Oklo)
Alice Caponiti	US Department of Energy (DOE)
Alyssa Beasley	NRC
Amir Afzali	Southern Nuclear
Anders Gilbertson	NRC
Andrea Gennetta	F&P Global Platts
Andrew Barto	NRC
Anthony Rossi	NRC
Antonio Barrett	NRC
Bob Fitzpatrick	NRC
Brandon Chisholm	Southern Company
Brandon Waits	Southern Company
Brian Glowacki	NRC
Brian Henderson	Boeing Company
Brian Smith	NRC

Brian Thomas	NRC
Bruce McDowell	Pacific Northwest National Laboratory
Carol Moyer	NRC
Charles Mahon	Project Management Institute
Chris Van Wert	NRC
Christine Galster	NRC
Cyril Draffin	US Nuclear Industry Council
Dan Barss	NRC
Daniel Carls	Terrestrial Energy US
Daniel Miller	Public Citizen
Darrell Gardner	Kairos Power
Dave Goodwin	TNNO
Dave Grabaskas	Argonne National Lab
David Desaulniers	NRC
David Holcomb	Oak Ridge National Laboratory
Deb Ludhinger	NuScale Power
Derek Widmayer	NRC
Don Helton	NASA
Donald Palmrose	NRC
Drew Peebles	Kairos Power
Edward File	Elithium Industry USA
Edwin Lyman	Union of Concerned Scientists
Farshid Shahrokhi	Framatome
Frank Schaaf	ASME Code Member
George Flanagan	Oak Ridge National Laboratory
Grace Kim	NRC
Arlon Costa	NRC
Ian Jung	NRC
Ismael Garcia	NRC
Jack Cushing	NRC
Jacob Zimmerman	NRC
James Rubenstone	NRC
James Saldarini	Advanced Reactor Concepts
James Tompkins	Kairos Power
Jan Mazza	NRC
Jana Bergman	Curtiss Wright
Jason Read	Southern Nuclear
Jason Shay	NRC
Jean Wall	Jon Wnj
Jeff Gabor	Jensen Hughes

Jennifer Meservy	Senator Crapos Staff Assistant
Jim Hammelman	NRC
Jim Kinsey	Idaho National Laboratory
Joe Giacinto	NRC
John Kutsch	Thorium Energy Alliance
John Monninger	NRC
Jonathan Marcano	NRC
Jordan Hagaman	Kairos Power
Joseph Anderson	NRC
Julia Gregorian	Hogan Lovelos
Jun Wang	Jun Wang
Keith Consani	Member of the Public
Ken Erwin	NRC
Kenneth Armstrong	NRC
Kim Webber	NRC
Kurt Harris	Flibe Energy Inc
Lars Jorgensen	Thorcon US
Laura Schwartz	ITTA
Laura Willingham	NRC
Leanne Galanek	NEI
Lee Grzeck	Duke Energy
Louise Lund	NRC
Madaline Feltus	DOE
Marilyn Kray	Exelon
Marilyn Sears	NRC
Mark Nichol	NEI
Meraj Rahimi	NRC
Michelle Albert	NRC
Michelle Catts	GE-Hitachi
Michelle Hart	NRC
Mike Poore	ORNL
Mehdi Reisi-Fard	NRC
Nan Vallierie	NRC
Nicholas McMurray	ClearPath
Patrick White	MIT
Paul Keutelian	Radiant
Peter Hastings	Kairos Power
Ranaad Samanka	Brookhaven National Laboratory
Richard Chang	NRC
Rick Paese	Westinghouse
Rob Taylor	NRC
Robert Roche-Rivera	NRC
Robert Schaaf	NRC

Russ Felts	NRC
Scott Duffey	NRC
Shelby Wales	Southern Company
Stephen Burdick	Idaho National Laboratory
Steven Vitto	NRC
Stu Magruder	NRC
Tammy Morin	Holtec International
Tom Cuadrado	NRC
Travis Chapman	X-Energy
Wendy Reid	NRC
William Horak	Acadia National Laboratory
Yen Phung	State University of Energy
Joe Sebrosky	NRC
Ben Carmichael	Southern Company
Bill Horath	Brookhaven National Laboratory
Brad Kresek	NRC Office of Commissioner Barron
Brandon Marlow	Southern Nuclear
Bruce Weir	CUBOSE
Caroline Cochran	Oklo
Casper Sun	NRC
Clint Medlock	Southern Company
Cynthia Roman	NRC
Dale Fulton	Southern Nuclear
Daniel Mussatti	NRC
Darrell Gardner	Kairos Power
Peyton Doub	NRC
Ellis Brenner	Oklo
Mallecia Sutton	NRC
Faye Goodman	EMML
Hayden Brundaje	NRC
Henry Marchlewski	NRC
Kelvin Montague	EVA
Lisa Matis	TETRA TECH
Louis Caponi	NRC
Margaret Ellenson	Kairos Power
Martin O'Neil	NEI
Maryam Khan	NRC
Megan Wright	NRC
Michael Rose	NRC
Mitchell Maricque	None
Nadim Khan	NRC
Natalie Hotaylan	ClearPath
Ryan Henderson	Southern Company

Sarshid Shahrokhi	Framatome
Scott Clausen	Morgan Lewis
Shakura Wall	NRC
Shawn Campbell	NRC
Sid Neis	CBS
Stacy Wheeler	Alphatech
Steve Ruffin	NRC
Steve Schilthell	BWXT
Steven Dolly	SNP Global Platte
Wayne Moe	ANL
William Moore	Commission of Cook Leaders