



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

October 09, 2018

MEMORANDUM TO: John P. Segala, Chief
Advanced Reactor and Policy Branch
Division of Safety Systems, Risk Assessment and Advanced
Reactors
Office of New Reactors

FROM: William Reckley, Senior Project Manager **/RA/**
Advanced Reactor and Policy Branch
Division of Safety Systems, Risk Assessment and Advanced
Reactors
Office of New Reactors

SUBJECT: SUMMARY OF SEPTEMBER 13, 2018, PUBLIC MEETING TO
DISCUSS REGULATORY IMPROVEMENTS FOR ADVANCED
REACTORS

On September 13, 2018, the U.S. Nuclear Regulatory Commission (NRC) held a Category 2 public meeting with stakeholders, Department of Energy (DOE), national laboratories, and Nuclear Energy Institute (NEI), to discuss ongoing initiatives within the industry and NRC related to the development and licensing of non-light water reactors (non-LWRs) (Agencywide Documents Access and Management System [ADAMS] Accession No. ML18249A337). Enclosure 1 contains a list of meeting attendees and participants who joined via webinar. The slides and meeting handouts are available in ADAMS Accession No. ML18264A122.

Updates on activities at the NRC, NEI, and DOE were provided by the staff, Kati Austgen of NEI, and Craig Welling of DOE.

Dr. Michael Corradini of the University of Wisconsin provided a presentation on the "The Future of Nuclear Energy in a Carbon-Constrained World." The subject report is part of the Massachusetts Institute of Technology (MIT) Energy Initiative's "Future of" series and is available at "<https://energy.mit.edu/wp-content/uploads/2018/09/The-Future-of-Nuclear-Energy-in-a-Carbon-Constrained-World.pdf>." The study included sections on nuclear reactor safety regulation, licensing and technical initiatives, such as advanced manufacturing, that could need to be addressed as policy or key technical issues for future reviews of non-light-water reactors (non-LWR). Insights from the study could be useful for the NRC staff and various stakeholders trying to prioritize policy and key technical issues.

CONTACT: William Reckley, NRO/DSRA
301-415-7490

The staff provided an update on activities related to the NRC review and possible endorsement of American Society of Mechanical Engineers (ASME) Code Section III Division 5, which addresses rules for high temperature reactors. The staff anticipates publishing a draft regulatory guide for public comment in August 2020.

The morning part of the meeting ended with a presentation from Caroline Cochran, Oklo, regarding a paper prepared by the Fast Reactor Working Group (FRWG) (ADAMS Accession No. ML18165A249). The paper and presentation provide information on the experience with metallic fuel and availability of data from past research and development programs (e.g., Experimental Breeder Reactor II tests in the 1980s). The staff provided an update on the NRC's interactions with DOE and Argonne National Laboratory (ANL) on the qualification of legacy data. The topic of legacy data related to metallic fuel and the activities the related DOE/ANL activities were discussed at the stakeholder meeting on June 14, 2018 (ADAMS Accession No. ML18193B041).

The afternoon portion of the meeting discussed the Licensing Modernization Project's (LMP) guidance on risk-informed and performance-based licensing basis development for non-LWR, and the related drafting by the NRC staff of a draft regulatory guide and Commission paper. The draft documents are being prepared to support a meeting with the Future Plants Subcommittee of the Advisory Committee on Reactor Safeguards, which is tentatively scheduled for October 30, 2018. The working drafts of the documents are available in ADAMS as follows:

- Working Draft of Commission Paper ML18270A334
- Working Draft of Draft Regulatory Guide (DG) 1353 ML18271A172
- Working Draft of LMP Guidance (NEI 18-04) ML18271A164

Enclosure:

1. List of attendees

SUMMARY OF JUNE 14, 2018, PUBLIC MEETING TO DISCUSS TO DISCUSS
REGULATORY IMPROVEMENTS FOR ADVANCED REACTORS – DATED October 09, 2019

DISTRIBUTION:

PUBLIC

WReckley

RidsAcrsAcnw_MailCTR Resource

RidsNroDsra Resource

RidsNroDsraArpb Resource

ADAMS Accession No.: ML18275A367

NRO-002

OFFICE	NRO/DSRA	NRO/DSRA
NAME	WReckley	JSegala
DATE	10/09/2018	10/09/2018

OFFICIAL RECORD COPY

Attendance List – Attended at least part of meeting in person		
Name		Organization
James	Hammelman	NRC/NMSS
Kevin	Coyne	NRC/NRO
Amy	Cubbage	NRC/NRO
Michelle	Hart	NRC/NRO
Michelle	Hayes	NRC/NRO
Ian	Jung	NRC/NRO
Olivia	Lareynie	NRC/NRO
Nicholas	McMurray	NRC/NRO
John	Monninger	NRC/NRO
Hanh	Phan	NRC/NRO
Paul	Prescott	NRC/NRO
Bill	Reckley	NRC/NRO
Nicholas	Savvoir	NRC/NRO
John	Segala	NRC/NRO
Martin	Stutzke	NRC/NRO
George	Tartal	NRC/NRO
Boyce	Travis	NRC/NRO
Andrew	Yeshnik	NRC/NRO
Mike	Case	NRC/RES
Hossein	Esmali	NRC/RES
Michelle	Gonzalez	NRC/RES
Jinsuo	Nie	NRC/RES
Jose	Pires	NRC/RES
Jeffery	Wood	NRC/RES
Tammy	Way	AdSTM
Prasad	Kadambi	Consultant
Jana	Bergman	Curtiss-Wright
Craig	Welling	DOE/NE
Farshid	Shahrokhi	Framatome
Kati	Austgen	NEI
Anne	Cottingham	NEI

Caroline	Cochran	Oklo
Brandon	Waites	Southern Co.
Thomas	Hicks	Southern Nuclear
Jason	Redd	Southern Nuclear
Nathan	Hall	SRI
Robin	Rickman	Terrestrial Energy USA
Jim	Gresham	Westinghouse

Attendance List – Webinar Attendees		
	Name	Organization
Amir	Afzali	Southern Co.
John	Bolin	GA
Thomas	Boyce	NRC/RES
Scott	Bussey	NRC/OCHCO
Shawn	Campbell	NRC/RES
Marcia	Carpentier	NRC/OGC
Michael	Corradini	Univ. of Wisconsin
James	Corson	NRC/RES
William	Corwin	Self
Arlon	Costa	NRC/NRO
Dayna	Dority	NRC/NRO
Ashley	Finan	NIA
George	Flanagan	ORNL
Karl	Fleming	Southern Co.
Stanley	Gardocki	NRC/RES
Matthew	Gordon	NRC/RES
Peter	Hastings	Kairos Power
Mark	Holbrook	INL
Lane	Howard	SWRI
Rui	Hu	ANL
Nathanael	Hudson	NRC/RES
AJ	Jaigobind	NRC/
Mike	Keller	Hybrid Power
Jim	Kinsey	INL
Pete	Lee	NRC/NSIR

Edwin	Lyman	UCS
Sara	Lyons	NRC/RES
Jan	Mazza	NRC/NRO
Kevin	McCormick	NRC
Wayne	Moe	INL

Cha	Mori	Self
Chantal	Morin	CNSC
Carol	Moyer	NRC/RES
Mike	Muhlheim	ORNL
Vasily	Pitsul	Self
Mike	Poore	ORNL
Paul	Rades	NRC
Ruth	Reyes	NRC/RES
Nicholas	Savvoir	NRC/NRO
Roger	Scott	TVA
Sam	Sham	ANL
Laura	Smith	NRC/RIII
Daniel	Speaker	SWRI
Leslie	Terry	NRC/NRO
Michael	Tschiltz	NEI
Nanette	Valliere	NRC/OCMSB
Lucieann	Vechioli	NRC/NRO
Ed	Wallace	GNBC Assoc/Southern Co.
Staci	Wheeler	Alpha Tech
Patrick	White	MIT