

February 13, 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 D. Reckley, Senior Project Manager */RA/*
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SUBJECT: SUMMARY OF FEBRUARY 1, 2018, PUBLIC MEETING
TO DISCUSS REGULATORY IMPROVEMENTS FOR
ADVANCED REACTORS

On February 1, 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 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18024A695). Enclosure, contains a list of meeting attendees and participants who joined via webinar. The slides and meeting handouts are available in (ADAMS Accession No. ML18036A897).

The staff provided a summary of Commission paper SECY-18-0011, "Advanced Reactor Program Status" (ADAMS Accession No. ML17334B217). The completed and ongoing activities were described in the context of the NRC's Vision and Strategy document "Safely Achieving Effective and Efficient Non-LWR Mission Readiness" (ADAMS Accession No. ML16356A670) and the related Implementation Action Plans (ADAMS Accession No. ML17165A069).

The staff provided a presentation and supported discussions related to NRC's process for performing environmental reviews. The staff emphasized the usefulness of pre-application interactions and potential differences in environmental reviews for advanced reactor designs in comparison to large light water reactors. Stakeholders were encouraged to review guidance documents such as Draft Regulatory Guide DG-4026, "Preparation of Environmental Reports for Nuclear Power Stations" (ADAMS Accession No. ML16116A068), Interim Staff Guidance (ISG)

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COL/ESP-ISG-026, "Environmental Issues Associated with New Reactors" (ADAMS Accession No. ML13347A915) and COL/ESP-ISG-027, "Specific Environmental Guidance for Light Water Small Modular Reactor Reviews" (ADAMS Accession No. ML14100A153). The staff summarized and supported a discussion related to comments and questions (ADAMS Accession No. ML18024A595) on the Licensing Modernization Project (LMP) draft white paper "Risk-Informed and Performance-Based Evaluation of Defense-in-Depth Adequacy" (ADAMS Accession No. ML17354B174). No major issues were identified during the discussions.

Mr. Mike Tschiltz, representing NEI, provided a presentation and supported a discussion on the letter and enclosure submitted by NEI, Nuclear Innovation Alliance, and Nuclear Infrastructure Council to the Chairman regarding a streamlined and predictable licensing pathway (ADAMS Accession No. ML18024A742). Key areas identified in the letter include adjusting the level of detail in licensing applications commensurate with safety; risk informing advanced reactor requirements (e.g., emergency planning and security regulations); clearly defining options for staged applications and approvals; and simplifying processes for changes made during construction. Some of these topics are addressed by activities within the non-LWR implementation action plans and will be discussed during future stakeholder meetings. Some of the topics are being addressed primarily within ongoing NRC-industry interactions related to large LWRs or LWR small modular reactors (SMRs). The staff and industry organizations agreed to coordinate activities between the various working groups.

The staff summarized a revised draft white paper on functional containment performance criteria (ADAMS Accession No. ML18031A721). The white paper was prepared to solicit feedback from stakeholders and support the staff's efforts to prepare a Commission paper in early 2018. The staff's discussion of next steps included upcoming meetings with the Advisory Committee on Reactor Safeguards and support from technology working groups in preparing examples of how the proposed approach might work for non-LWR designs such as a modular high-temperature gas-cooled reactor and a molten salt reactor.

A slide within the presentation provided by the LMP was used to support the discussion of the path forward for using the previously provided white papers as a starting point for preparing a consolidated guidance document. This topic will be the subject of a public meeting scheduled for February 14, 2018 (see meeting notice - ADAMS Accession No. ML18029A110).

The meeting ended with a discussion of other topics and future meetings. The staff supported a short discussion of the non-LWR policy table and noted several minor updates and corrections. The date of the next meeting (tentatively scheduled for March 22, 2018) was discussed and the staff subsequently decided to cancel that meeting such that the next stakeholder meeting is scheduled for May 3, 2018.

Enclosure:
List of attendees

SUMMARY OF FEBRUARY 1, 2018, PUBLIC MEETING TO DISCUSS TO DISCUSS REGULATORY IMPROVEMENTS FOR ADVANCED REACTORS Date February 13. 2018.

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ADAMS Accession No.: ML18044A046 (pkg.)

NRO-002

OFFICE	NRO/DSRA/ARPB:PM	NRO/DSRA/ARPB:BC
NAME	WReckley	JSegala
DATE	02/13/2018	02/13/2018

OFFICIAL RECORD COPY

Attendance List – Attended at least part of meeting in person		
	Name	Organization
Robert	Krsek	NRC/COM/JMB
Richard	Chang	NRC/NMSS
James	Hammelman	NRC/NMSS
Kevin	Coyne	NRC/NRO
Amy	Cubbage	NRC/NRO
Jack	Cushing	NRC/NRO
Barb	Hayes	NRC/NRO
Imtiaz	Madni	NRC/NRO
Jan	Mazza	NRC/NRO
Nicholas	McMurray	NRC/NRO
John	Monninger	NRC/NRO
Vonna	Ordaz	NRC/NRO
Bill	Reckley	NRC/NRO
John	Segala	NRC/NRO
George	Tartal	NRC/NRO
Chris	Van Wert	NRC/NRO
Lucieann	Vechioli	NRC/NRO
Joe	Williams	NRC/NRO
Marcia	Carptentier	NRC/OGC
Erik	Slobe	NRC/OGC
Robert	Weisman	NRC/OGC
Stanley	Gardocki	NRC/RES
John	Nakoski	NRC/RES
Steve	Bajorek	NRC/RES
Szymon	Suchcicki	NRC/RES (PAA)
Eryk	Turski	NRC/RES (PAA)
Laura	Kozak	NRC/RIII
Nathan	Hall	CNWRA
Prasad	Kadambi	Consultant
Jana	Bergman	Curtiss-Wright
Trevor	Cook	DOE/NE

Andrew	Sowder	EPRI
Tom	Loomis	Exelon
Farshid	Shahrokhi	Framatome
Peter	Hastings	Hastings Group
Jim	Kinsey	INL
Hiroki	Watanabe	JNRA
Stephen	Burdick	Morgan Lewis
Kati	Austgen	NEI
Mike	Tschiltz	NEI
Jeff	Merrifield	Pillsbury/USNIC
James	Saulsbury	PNNL
Amir	Afzali	Southern Co.
Karl	Fleming	Southern Co.
Jason	Redd	Southern Co.
Robin	Rickman	Terrestiral Energy USA
David	Blee	USNIC
Alex	Huning	X-energy
Martin	van Staden	X-energy

Attendance List – Webinar Attendees		
Name		Organization
Michael	Arcaro	GE
Robert	Budnitz	LBL
Uriel	Bachrach	Westinghouse
Randy	Belles	ORNL
John	Bolin	GA
Scott	Bussey	NRC/OCHCO
Timothy	Crook	Transatomic
Matt	Dennis	SNL
Suzanne	Dennis	NRC/RES
Julie	Ezell	NRC/OGC
Ashley	Finan	NIA
George	Flanagan	ORNL
Stanley	Gardocki	NRC/RES

Joe	Gillespie	NRC/OGC
Kathy	Halvey Gibson	NRC/RES
Nicholas	Hansing	NRC/NRO
Mark	Holbrook	INL
Lane	Howard	SWRI
Oklo		Oklo
Diane	Jackson	NRC/NRO
Andrea	Kock	NRC/NMSS
Nicole	LaHaye	PNNL
Jun	Liao	Westinghouse
Chris	Lui	NRC/ACRS
Edwin	Lyman	UCS
Bruce	McDowell	PNNL
Olivia	Mikula	NRC/OGC
Wayne	Moe	INL
Glenn	Neises	Burns & McDonnell
JongSeuk	PARK	KINS
Alex	Pavlak	
Mike	Poore	ONRL
Alex	Popova	Oklo
Greg	Richardson	EPM Inc
Mo	Shams	NRC/NRR
Erik	Slobe	NRC/OGC
Edward	Wallace	GNBC Assoc
William	Whitescaver	
Derek	Widmayer	NRC/ACRS
Dale	Wuokko	Global Energy
Andrew	Yeshnik	NRC/NRO
Thomas	Zachariah	NEI
Staci	Wheeler	ARTC
Madeline	Feltus	DOE/NE
Jerald	Head	GE
Patrick	White	MIT