

September 18, 2015

MEMORANDUM TO: Terry Jackson, Branch Chief  
Instrumentation, Controls, and Electronics Engineering Branch 2  
Division of Engineering  
Office of New Reactors

FROM: Michael S. Jones, Project Manager */RA/*  
Advanced Reactor Policy Branch  
Division of Advanced Reactors & Rulemaking  
Office of New Reactors

SUBJECT: SUMMARY OF AUGUST 18, 2015, CATEGORY 2 OPEN PUBLIC  
MEETING WITH THE U.S. NUCLEAR REGULATORY  
COMMISSION STAFF, INDUSTRY, AND THE GENERAL  
PUBLIC TO DISCUSS I&C CYBER-SECURITY-BY-DESIGN AND  
ASSOCIATED REGULATORY IMPACTS

On August 18, 2015, a Category 2 open public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) staff, industry, and the general public at the NRC Offices at One White Flint North, 11555 Rockville Pike, Rockville, MD 20852, Rooms 1F16 and 1G16.

The purpose of this open meeting was to discuss NRC current thinking on this subject and to obtain industry stakeholder feedback and inputs for staff consideration. A previous public meeting on this subject was held by the NRC on April 9, 2015.

The meeting began with a presentation of slides on the subject by the staff. The slide presentation was followed by a question and answer period in which members of the NRC staff, industry, and the public discussed particular aspects of the subject matter.

Meeting participants provided feedback on three possible licensing review and inspection of cyber security design controls scenarios developed by the staff. These possible scenarios included reviews of one-way data flows controlled using hardware mechanisms, reviews of the means to protect time stamps in cyber security defensive architecture, and reviews of test plans to verify safety and important-to-safety systems are free from known, testable vulnerabilities and malicious code. The staff emphasized that the ongoing efforts in cyber security-by-design are meant to enhance the licensing process by reviewing related aspects of cyber security designs earlier in the licensing process. The effort is not being developed because of any identified weaknesses in the current design review and inspection processes. Finally, the staff

CONTACT: Mike Jones, NRO/DARR  
301-415-0189

emphasized that this current effort is being undertaken to obtain further policy direction from the Commission.

Industry feedback indicated that there was a shared goal with the NRC of getting early involvement in the cyber security design and implementation processes to avoid future problems that could impact operations and safe operations of the plants.

A written transcript of the meeting discussion including key questions and comments from the industry, the public, and staff is publicly available at ADAMS ML15252A042. Stakeholders indicated a desire to continue coordinating with the NRC throughout the SECY development process. The meeting concluded at approximately 2:45 p.m.

The meeting notice and agenda are included in Enclosure 1. The list of meeting attendees is included in Enclosure 2. The accession number for the meeting notice and agenda is ML15215A400 located in the NRC Agencywide Documents Access and Management System (ADAMS). The ADAMS accession number for the presentation slides is ML15229A057.

ADAMS is the system that provides text and image files of NRC's public documents.

Documents are available electronically at the NRC's Electronic Reading Room at

<http://www.nrc.gov/reading-rm/adams.html>.

If you do not have access to ADAMS or have problems accessing the documents located in ADAMS, contact the NRC Public Document Room staff at 1-800-397-4209, 301-415-4737, or [pdr@nrc.gov](mailto:pdr@nrc.gov).

Members of the public were in attendance in-person and on the telephone bridge line. Public meeting feedback forms were made available in the meeting room and online, but no completed forms have been received.

Please direct any inquiries to Mike Jones at 301-415-0189, or email [Michael.jones2@nrc.gov](mailto:Michael.jones2@nrc.gov).

Enclosures:

1. Meeting Notice and Agenda
2. List of Attendees

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**DISTRIBUTION:**

PUBLIC

TJackson, NRO

DRahn, NRR

DZhang, NRO

RFelts, NSIR

**ADAMS ACCESSION No.: ML15261A695**

**NRC-001**

<b>OFFICE</b>	PM:NRO/DARR/ARPB	SME:NRO/DE/ICE2	BC: NRO/ICE2
<b>NAME</b>	MJones	DZhang	TJackson (D. Zhang for)
<b>DATE</b>	09/18/2015	09/18/2015	09/18/2015

**OFFICIAL RECORD COPY**

August 3, 2015

MEMORANDUM TO: Terry Jackson, Branch Chief  
Instrumentation, Controls, and Electronics Engineering Branch (ICE)  
Division of Engineering  
Office of New Reactors

FROM: Michael S. Jones, Project Manager /RA/  
Advanced Reactors Policy Branch  
Division of Advanced Reactors and Rulemaking  
Office of New Reactors

SUBJECT: PUBLIC WORKSHOP TO DISCUSS INSTRUMENTATION AND  
CONTROLS (I&C) CYBER SECURITY-BY-DESIGN AND ASSOCIATED  
POTENTIAL REGULATORY IMPACTS

DATE & TIME: Tuesday, August 18, 2015  
1:00 p.m. – 4:30 p.m.

LOCATION: NRC Headquarters  
One White Flint North, Room 1F16/1G16  
(Commissioner's Hearing Room)  
11555 Rockville Pike  
Rockville, MD 20852-2738

PURPOSE: The purpose of the workshop is to discuss current NRC thinking on this  
subject and obtain industry stakeholder feedback and inputs for staff  
consideration.

CATEGORY 2\*: This is a Category 2 Meeting. The public is invited to participate in this  
meeting by discussing regulatory issues with the NRC at designated  
points identified on the agenda.

CONTACT: Mike Jones, NRO/DARR/ARPB  
301-415-0189  
[Michael.jones2@nrc.gov](mailto:Michael.jones2@nrc.gov)

Enclosure 1

\* See Commission's Policy Statement on "Enhancing Public Participation in NRC Meetings" at 67 Federal Register 36920, May 28, 2002. The policy statement may be found on the NRC website at: <http://www.nrc.gov/reading-rm/doc-collections/commission/policy/67fr36920.html>

T. Jackson

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PARTICIPANTS: NRC  
D. Zhang, Office of New Reactors  
M. Jones, Office of New Reactors  
K. Lawson-Jenkins, Office of Nuclear Security and Incident Response  
R. Stattel, Office of Nuclear Reactor Regulation

CONFERENCING: Interested members of the public can participate in this meeting via a toll-free audio teleconference. For details, please email the NRC meeting contact.

Enclosure:  
Meeting Agenda

**DISTRIBUTION:**

PUBLIC  
MJones, NRO/DARR  
DRahn, NRO/DE  
JPezeshki, NSIR/CSD  
BWestreich, NSIR/CSD  
RSydnor, RES/DE  
TJackson, NRO/DE  
DZhang, NRO/DE  
GSingh, NRR/DE  
RStattel, NRR/DE  
RFelts, NSIR/CSD  
SArndt, NRR/DE

**ADAMS Accession No.: ML15215A400**

**NRC-001**

OFFICE	PM:NRO/DARR/ARPB	BC:NRO/DE/ICE
NAME	MJones	TJackson
DATE	08/03/2015	08/03/2015

**OFFICIAL RECORD COPY**

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**MEETING AGENDA**  
**Public Workshop to Discuss I&C Cyber Security-By-Design and**  
**Associated Potential Regulatory Impacts**

August 18, 2015, 1:00 PM to 4:30 PM

NRC Headquarters  
One White Flint North, Rooms 1F16/1G16 (Commissioners' Hearing Room)  
11555 Rockville Pike  
Rockville, MD 20852

<b>Time</b>	<b>Topic</b>	<b>Lead</b>
1:00 p.m. – 1:05 p.m.	Welcome and Meeting Logistics	NRC
1:05 p.m. – 1:10. p.m.	Introduction of Participants	NRC
1:10 p.m. – 2:10 p.m.	NRC Staff Topical Presentation	NRC
2:10 p.m. – 2:25 p.m.	Break	ALL
2:25 p.m. – 3:10 p.m.	Industry Topical Presentations	INDUSTRY
3:10 p.m. – 4:10 p.m.	Facilitated Open Discussion	NRC/INDUSTRY
4:10 p.m. – 4:25 p.m.	Opportunity for Public Comment	NRC/PUBLIC
4:25 p.m. – 4:30 p.m.	Closing Remarks/Adjourn	NRC

The time of the meeting is local to the jurisdiction where the meeting is being held.

The NRC provides reasonable accommodation to individuals with disabilities where appropriate. If reasonable accommodation is needed to participate in this meeting, or if a meeting notice, transcript, or other information from this meeting is needed in another format (e.g., Braille, large print), please notify the NRC meeting contact. Determinations on requests for reasonable accommodation will be made on a case-by-case basis.

## ATTENDANCE LIST

Category 2 Public Meeting  
One White Flint 1F16/1G16  
Public Workshop to Discuss I&C Cyber Security-By-Design and  
Associated Potential Regulatory Impacts

Tuesday, August 18, 2015  
1:00 p.m. – 4:30 p.m.

NAME	AFFILIATION		NAME	AFFILIATION
C. Allen	NRC/NSIR		J. Amin	Luminant
S. Arndt	NRC/NRR		G. Clifton	NEI
S. Birla	NRC/RES		A. Cully	Curtiss Wright
B. Dittman	NRC/RES		B. Freebairn	Platts
T. Jackson	NRC/NRO		S. Geier	NEI
K. Lawson-Jenkins	NRC/NSIR		D. Neff *	Excelon
E. Martinez	NRC/NRO			
J. Mazza	NRC/NRO			
D. McIntyre	NRC/OPA			
J. Pezeshki *	NRC/NSIR			
D. Rahn	NRC/NRR			
L. Rakovan	NRC/EDO			
P. Rebstock	NRO/RE			
J. Rycyna	NRC/NSIR			
R. Stattel	NRC/NRR			
R. Sydnor	NRC/RES			
T. Truong	NRC/NRO			
B. Westreich	NRC/NSIR			
D. Zhang	NRC/NRO			

\* Indicates participation by telephone