

October 20, 2016

MEMORANDUM TO: Samson Lee, Deputy Director  
Division of Risk Assessment  
Office of Nuclear Reactor Regulation

FROM: Matthew Humberstone, Reliability and Risk Analyst */RA/*  
PRA Operations and Human Factors Branch  
Division of Risk Assessment  
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF THE OCTOBER 13, 2016, PUBLIC MEETING  
BETWEEN U.S. NUCLEAR REGULATORY COMMISSION STAFF  
AND STAKEHOLDERS TO DISCUSS THE ACCIDENT SEQUENCE  
PRECURSOR (ASP) PROGRAM AND OPTIONS TO CHANGE THE  
PROGRAM

On October 13, 2016, a Category 3 public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) and stakeholders, at Two White Flint North, Room 02B03. The purpose of the meeting was to discuss the accident sequence precursor (ASP) program and options to change the program.

The NRC staff emphasized that individual staff views expressed at the meeting do not constitute formal NRC positions or comments and that no decisions would be made at the meeting.

The NRC began the public meeting with opening remarks from the Division Director of the Division of Risk Assessment (DRA) from the Office of Nuclear Reactor Regulation (NRR), who provided an overview of the topics that would be discussed. The emphasis of the meeting was to maximize discussions with the public to ensure that the public's issues and concerns were presented, understood, and considered by the NRC.

The NRC followed the opening remarks with two presentations. The first presentation was given by the Office of Nuclear Regulatory Research (RES) on the current status and use of the program (Agencywide Documents Access and Management System (ADAMS) under Accession Number ML16286A048). This was followed by a presentation by the Office of Nuclear Reactor Regulation (NRR) on the ASP evaluation project and possible options to change the program (ADAMS Accession Number ML16286A057).

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After the NRC's presentations, a member of the public, Dr. Murley, gave a presentation on his views of the ASP program (ADAMS Accession Number ML16287A719). He acknowledges that the presentation material entitled, "Core Damage Index," is not based on a mathematically correct risk analysis but feels that it is a good communication tool for the public. He stressed the responsibility of the NRC to keep the public informed and discussed how the ASP program managed by the Office of Nuclear Regulatory Research (RES) provides an important insight to the safety level of the fleet of U.S. nuclear plants. Dr. Murley, along with several other external stakeholders, discussed how they read and use the ASP results. They stressed that the ASP program communicates the risk significance of events to the public and is a good check on other program offices' work. Dr. Murley gave a few examples of how the ASP program had determined the significance of an event after the program offices had missed appropriately determining the significance. Dr. Murley also discussed how he thinks the timeliness of the results are not that important and how he believes looking at the trends are more important.

After Dr. Murley's presentation, there was a scheduled period for open discussion. During this time, several external stakeholders gave their opinion on the ASP program and the NRC's evaluation. Mr. Riccio, from Greenpeace, agreed with Dr. Murley's points. He also added that he believes the ASP results can be used to determine if the NRC is effective. Mr. Lochbaum, from the Union of Concerned Scientists (UCS), discussed his views on the ASP program. He discussed how he reads the ASP results and thinks they are very helpful. He said he uses the ASP results to look for trends and themes in significant events. He notes that the NRC is not using ASP results to adjust baseline inspections. He mentions that it is difficult to obtain individual results and recommends that NRC staff make improvements in this area. Mr. Lochbaum agreed with other external stakeholders that the timeliness of the ASP results is not the most important factor. He said he wouldn't be against getting them quicker, but does not think it is real important since the SDP does the 'work' of implementing corrective actions in a timely manner.

Overall, the external stakeholders were in agreement that the ASP program is an effective way for the NRC to keep the public informed. There were a few points on how the ASP results could be made better. A few stakeholders mentioned the need to make the reports easier to read. Dr. Murley also discussed how the ASP analysis should include risk from rare events that are extremely difficult to predict, called "Black Swan Events".

A list of meeting attendees is enclosed.

Please direct any inquiries to Matthew Humberstone, Reliability and Risk Analyst, at 301-415-1464, or [Matthew.Humberstone@nrc.gov](mailto:Matthew.Humberstone@nrc.gov).

Enclosure:  
List of Attendees

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Enclosure:  
List of Attendees

**DISTRIBUTION:**

PUBLIC

RidsNrrDra

MHumberstone

**EXTERNAL DISTRIBUTION:**

Dave Lochbaum - [dlochbaum@ucsusa.org](mailto:dlochbaum@ucsusa.org)

Tom Murley - [temurley@verizon.net](mailto:temurley@verizon.net)

Ed Jordan - [carrera001@comcast.net](mailto:carrera001@comcast.net)

Roy Linthicum - [roy.linthicum@exeloncorp.com](mailto:roy.linthicum@exeloncorp.com)

Jim Riccio - [jim.riccio@greenpeace.org](mailto:jim.riccio@greenpeace.org)

Edwin Lyman - [Elyman@ucsusa.org](mailto:Elyman@ucsusa.org)

Meeting Notice: ML16251A033

Meeting Slides: ML16286A048, ML16286A057, and ML16287A719

**ADAMS Accession No:** ML16294A299-memo

<b>OFFICE</b>	NRR/DRA	NRR/DRA		
<b>NAME</b>	MHumberstone	SLee		
<b>DATE</b>	10/ 20 /16	10/20/16		

**OFFICIAL RECORD COPY**

## **ATTENDANCE LIST**

### **PUBLIC MEETING BETWEEN STAKEHOLDERS AND THE U.S. NUCLEAR REGULATORY COMMISSION STAFF TO DISCUSS THE ACCIDENT SEQUENCE PRECURSOR (ASP) PROGRAM AND OPTIONS TO CHANGE THE PROGRAM (CATEGORY 3)**

**OCTOBER 13, 2016  
1:00 p.m. - 3:15 p.m.  
TWO WHITE FLINT NORTH, ROOM 02B03**

<b>NAME</b>	<b>ORGANIZATION</b>
Candace Spore	NRC/NRR/DRA
Christopher Hunter	NRC/RES/DRA
Dale Yeilding	NRC/RES/DRA
Dave Lochbaum	UCS
David Aird	NRC/RES/DRA
Ed Hackett	RES
Elijah Dickson	NRC/NRR/DRA
Ian Gifford	NRC/RES/DRA
Jim Riccio	Greenpeace
Joe Giitter	NRC/NRR/DRA
John Lane	NRC/RES/DRA
Keith Tetter	NRC/RES/DRA
Mark Thaggard	NRC/RES/DRA
Martin Sattison	INL
Marv Lewis	Member of Public
Matthew Humberstone	NRC/NRR/DRA
Michael Weber	RES
Robert Krsek	NRC/COM/JMB
Roy Linthicum	Exelon Nuclear
Samson Lee	NRC/NRR/DRA
Steven West	NSIR
Theresa Clark	OEDO
Tom Murley	Member of Public

ENCLOSURE