



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

June 22, 2021

MEMORANDUM TO: Dennis C. Morey, Chief  
Licensing Processes Branch  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

FROM: Leslie C. Fields, Senior Project Manager */RA/*  
Licensing Processes Branch  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF THE MAY 11, 2021, PUBLIC MEETING  
BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION  
AND INDUSTRY REPRESENTATIVES ON RECENT  
DEVELOPMENTS ASSOCIATED WITH TREATMENT AND  
MODELING OF COMMON-CAUSE FAILURES IN THE  
SIGNIFICANCE DETERMINATION PROCESS

On May 11, 2021, the U.S. Nuclear Regulatory Commission (NRC) staff held a public meeting with industry representatives to discuss the latest developments on treatment and modeling of common-cause failures (CCFs) in the Significance Determination Process (SDP). Publicly available information related to this meeting, including the meeting notice and presentation slides can be found in the Agencywide Documents Access and Management System (ADAMS) under Package Accession No. ML21162A391. A list of meeting attendees is enclosed.

After the opening remarks, the NRC staff provided a high-level introduction of the previous public interactions with external stakeholders on this topic. Subsequently, the NRC staff from the Office of Nuclear Regulatory Research (RES) shared research results on the Causal Alpha Factor Method (CAFM) documented in a RES report (ADAMS Accession No. ML21055A027) which includes the following areas: 1) preliminary causal alpha factors calculations for components and failure modes included in the Standardized Plant Analysis Risk models; 2) the process of incorporating causal alpha factors in event and condition assessments, and 3) key considerations including the use of CAFM can increase or decrease the CCF impact depending on the evaluation.

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During the meeting, the NRC staff indicated that the recurring data update performed by Idaho National Laboratory is expected to adopt a 10- or 15-year rolling window date range for most parameters including CCFs, such that the CCF parameters will continue to reflect industry performance. Additionally, during the meeting, the NRC staff solicited stakeholders' feedback, which may inform the future work in this area including potential enhancements to the treatment of CCFs in the guidance and potential changes to Volume 1 of the Risk Assessment of Operational Events Handbook. The NRC staff indicated that any future update to its guidance will follow the existing update and communication process for internal and external stakeholders.

Industry representatives provided comments and discussed concerns related to the NRC's approach to assessing CCFs related to performance deficiencies (PDs) in the SDP. Specifically, adjusting the common-cause factor for equipment not directly impacted by the PD and licensees' measures to reduce CCF, which have been a long-standing concern for industry. The NRC staff referenced a previous public meeting (ADAMS Accession No. ML19011A139) in which industry representatives had stated similar concerns and had indicated CCF "defense strategies" would be provided to support the NRC adjusting its CCF approach. While such information has not been provided, the NRC staff reiterated in the meeting that they are open to consider additional information and to continue discussion related to this topic.

No public comments were received during this meeting.

Enclosure: List of Meeting Attendees

Docket No. 99902038

**MAY 11, 2021, NRC PUBLIC MEETING  
TREATMENT AND MODELING OF COMMON-CAUSE FAILURES  
IN THE SIGNIFICANCE DETERMINATION PROCESS  
ATTENDANCE LIST**

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Enclosure

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**ADAMS Accession Nos.:**

**Package: ML21162A391**

**Notice: ML21110A709**

**Summary: ML21167A313**

**concurrence by email\***

OFFICE	NRR/DORL/LLPB/PM	NRR/DORL/LLPB/LA	NRR/DRA/PRA/BC	NRR/DORL/LLPB/BC
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DATE	06/22/2021	06/21/2021	06/22/2021	06/22/2021

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