

## UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

June 13, 2019

MEMORANDUM TO: Dennis C. Morey, Chief

Licensing Processes Branch Division of Licensing Projects

Office of Nuclear Reactor Regulation

FROM: Leslie Perkins, Project Manager /RA/

Licensing Processes Branch Division of Licensing Projects

Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF MAY 7, 2019, PUBLIC MEETING BETWEEN

THE U.S. NUCLEAR REGULATORY COMMISSION AND NUCLEAR ENERGY INSTITUTE AND INDUSTRY REPRESENTATIVES TO

DISCUSS INDUSTRY'S PROPOSED CHANGES TO THE OPEN PHASE

CONDITION VOLUNTARY INDUSTRY INITIATIVE (NRC BULLETIN

2012-01)

On May 7, 2019, a Category 2 public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) and representatives of the Nuclear Energy Institute (NEI) and the nuclear power plant industry. The purpose of the meeting was for NEI and NRC staff to discuss proposed changes to the Open Phase Condition (OPC) Voluntary Industry Initiative (VII) that will provide an option for licensees to use a risk evaluation in support of not engaging the OPC automatic trip function. NEI provided their plans going forward which included: presenting the revised OPC Initiative to Nuclear Strategic Issues Advisory Committee for approval by May 17, 2019, issuing Revision 3 of the VII and NEI-19-02 "Guidance for Assessing Open Phase Condition Implementation Using Risk Insights" by the end of May 2019, and identifying at least two plants using the alternative approach for initial inspections. NEI estimated that licensees will make decisions on whether to implement the risk option by August 2019 and NEI will provide that information to the NRC for NEI-affiliated licensees. A question was asked whether the NRC could close out the bulletin earlier for plants that choose to operate with the automatic function enabled. The staff committed to consider this question and to provide its plans for closing out the bulletin for individual plants.

The staff questioned the events referenced for OPC frequency calculations included in NEI 19-02. Specifically, the staff questioned why the following events were not included in NEI 19-02: Monticello (LER 87-014); Nine Mile Unit 1 (LER -90-0023); Comanche Peak Unit 1 (LER 92-016-00); and Wolf Creek (2019 -identified in licensee's corrective action document).

As a result of the discussion at the public meeting, the industry team evaluated the above events and provided additional information by email dated May 30, 2019. The team agreed with the staff that the first three events should be included in the list of events reviewed by plants when developing plant-specific OPC event frequencies as described in NEI 19-02. In regards to the Wolf Creek event, follow-up with the utility indicated this to be a degraded (partially broken)

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insulator on a transformer that had not failed, nor has it caused an OPC or loss of offsite power. This type of degraded condition is not typically counted as a full failure in PRA frequency analyses because it did not cause a loss of function or a plant trip and thus was not included in the NEI 19-02 list of events.

NEI included the first 3 events and the additional reactor years (2750 compared to 929.2) associated with plant operation during those years. This change resulted in a frequency calculation that is lower than the conservative OPC frequency used in the pilot results calculations. Thus, the pilot results remain bounded with the inclusion of the additional operating experience. NEI 19-02 Section 3.2 was revised to include a table of events containing three of the additional events discussed during the public meeting. Notations were also provided to indicate the events used in the NRC risk study OPC frequency calculation in ML17234A631 - Preliminary Estimate on the Impact of Open Phase Condition, May 2017.

NRC staff will have additional discussions internally to determine the schedule and path forward for the closure of Bulletin 2012-01. The industry's slide presentation, NEI draft technical report, and the draft OPC Initiative, Revision 3 can be found in ADAMS at Accession Nos. ML19127A355, ML19122A321, and ML19122A333 respectively.

Enclosures: As stated

Meeting Participants
NEI Slide Presentation
NEI Draft Technical Report
Draft Open Phase Condition Initiative, Revision 3
Meeting Notice

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SUBJECT: SUMMARY OF MAY 7, 2019, PUBLIC MEETING BETWEEN THE U.S. NUCLEAR

REGULATORY COMMISSION AND NUCLEAR ENERGY INSTITUTE AND INDUSTRY REPRESENTATIVES TO DISCUSS INDUSTRY'S PROPOSED CHANGES TO THE OPEN PHASE CONDITION VOLUNTARY INDUSTRY

INITIATIVE (NRC BULLETIN 2012-01) DATE: JUNE 13, 2019

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**ADAMS Accession Nos.:** 

ML19144A371 Mtg. Summary;

ML19127A355 NEI Slide Presentation;

ML19122A321 Draft Technical Report;

ML19122A333 Draft OPC Initiative, Rev 3;

ML19114A550 Mtg. Notice;

ML19144A373 Package \*concurred via email NRR-106

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DATE	6/10/2019	6/10/2019	6/13 /2019	6/10/2019

**OFFICIAL RECORD COPY** 

## **Meeting Participants**

Names	Organization
Eric Benner	NRC
Mike Franovich	NRC
Roy Mathew	NRC
Donna Williams	NRC
Hari Kodali	NRC
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Vijay Goel	NRC
Eric Bowman	NRC
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Stephen Campbell	NRC
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Kayla Gamin	NRC
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Greg Krueger	NEI
Stephen Geier	NEI
Maggie Staiger	NEI
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Nikki DeRosia	AEP
Greg Hill	AEP
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Richard Anoba	Jensen Hughes
Stephen Naron	Exelon
Kazimierz Leja	Exelon
Hank Morehouse	Exelon
Mohamed Mustafa	Entergy
Gregory Norris	Entergy
Ayodele Ishola-Salawu	NextEra
Joey Clark	Certrec Corporation
Phil Lashleyd	First Energy Corporation
Mark Rice	Energy-Northwest
Shawn Simon	INPO
Wayne Johnson	EPRI
Gary Miller	Dominion Energy
Jordon Vaughan	Duke Energy
Bryan Carroll	Duke Energy

Names	Organization
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Brad Dolan	TVA
Preston Cooper	TVA
Jana Bergman	Curtiss-Wright
Mathew Dickerson	Cooper Nuclear Station
Kari Osborne	Southern Nuclear
Bill Freebain	Platts
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Mark Sharp	Stars Alliance
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