

## U.S. Nuclear Regulatory Commission Public Meeting Summary

April 14<sup>th</sup>, 2021

**Title:** HEAF Pre-Generic Issue Update

**Meeting Identifier:** 20210341

**Date of Meeting:** April 6<sup>th</sup>, 2021

**Location:** Virtual, Microsoft Teams

**Type of Meeting:** Information with Q&A

**Purpose of the Meeting(s):** Provide an update to stakeholders and the public regarding the status and path forward for pre-Generic Issue (GI) 018: High-Energy Arcing Faults Involving Aluminum Components.

**General Details:** This was a virtual meeting held on April 6<sup>th</sup>, 2021 from 1:00 PM to 2:00 PM. The meeting was open to the public. Present were NRC staff, EPRI staff, NRC contractors from the National Institute of Standards and Technology and Sandia National Laboratories, representatives from the Nuclear Energy Institute, and utilities. There were approximately 70 participants.

**Summary of Presentations:** Michael Franovich (NRR/DRA Director) opened the meeting. JS Hyslop (NRR/DRA/APLB) provided a brief overview of the Generic Issue process as it applies to aluminum HEAF and the upcoming steps in the process. JS Hyslop also introduced the staff's effort to collaborate with the industry on the issue resolution by offering pilot plants to evaluate the potential increase in risk due to aluminum HEAF. The pilot plant efforts will support the staff's determination of the need for further regulatory action. He described the preliminary staff thoughts on the criteria that would be helpful in selecting pilot plants and stressed the benefits—both to NRC and industry—of participation in the pilot plant effort. The remainder of the meeting was reserved for public question and comment.

**Action Items/Next Steps:** The following action items and comments were noted at the meeting:

- The NRC will continue its efforts to seek industry participation in the pilot plant effort to evaluate the risk increase due to aluminum HEAF. The pilot plant efforts will support the staff's determination of the need for further regulatory action.
- An NEI representative noted that the impetus for the pre-GI was overly conservative international testing and that despite the ubiquity of aluminum in the nuclear fleet, extensive damage states have not been observed. Staff responded that subsequent tests have conclusively established that aluminum does have an impact on energy release and the existing model is based on a cabinet without aluminum. Additionally, Information Notice 2017-04 enumerated several HEAF events from operating experience involving aluminum that displayed extensive damage states.
- An NEI representative noted that operating experience is the best indicator of the potential hazard and that it does not justify the amount of effort to continue research. Staff responded that while operating experience is being considered in the development of the zones of influence (ZOI), it is not the only source of data that is being considered. Additionally, operating experience data on HEAF is relatively sparse compared to many

other operational events and may not be reflective of the spectrum of potential damage states.

- An industry representative noted that potential pilot plants will be hesitant to commit prior to knowing what the final tools and methods look like, and that piloting an issue in the GI process carries additional risk to industry. Staff responded that the tools and methods will be published prior to any plant commitments.
- An NEI representative sought clarification on whether industry input on potential modifications, if warranted, would be contingent on participation in the pilot plant process. Staff responded that industry input is not contingent on participation, and that the normal procedures allowing for industry input will be followed.

**Attachments:**

- Meeting Materials ([ML21098A144](#))