

From: Lingam, Siva
Sent: Monday, October 18, 2021 4:05 PM
To: Matthew.Cox@aps.com
Cc: Dixon-Herrity, Jennifer; Zoulis, Antonios; Hughey, John; Thomas.N.Weber@aps.com
Subject: Palo Verde 1, 2, and 3 - Second Pre-submittal Meeting for the Proposed Exemption to Eliminate DAFAS Using RIPE Process

We like to request for a second pre-submittal meeting to discuss the subject matter, during the 1st week of November 2021. Please let me know your available dates and timings for the proposed meeting. The purpose of this meeting is for the NRC staff to provide its expectations on the exemption request and provide feedback from observation of the IDP, and allow APS to ask for any additional clarifications prior to its submittal.

Please note the following technical concerns raised by the NRC staff that will also be discussed during the proposed second meeting:

Item #1: NRC Review of Special Circumstances

During the Integrated Decision-Making Panel (IDP), Palo Verde alluded that it plans to seek an exemption from 50.62(c)(1) by relying on the special circumstance that the application of the rule is not necessary to achieve the underlying purpose of the rule (10 CFR 50.12(a)(2)(ii)). However, the preliminary IDP technical justification appears to rely on undue hardship (50.12(a)(2)(iii)). The defense-in-depth/safety margin (DID/SM) justification basis could differ under special circumstance. An exemption request will need to explain the basis for the special circumstance being claimed with respect to the DID/SM justification provided.

Item #2: NRC Review of Crediting Manual Actuation of AFS in Lieu of DAFAS

The licensee plans to rely on manual actuation of Auxiliary Feedwater System (AFS) as the only alternative to the diverse automatic actuation of AFS by Diverse Auxiliary Feedwater Actuation System (DAFAS). Essentially, the licensee appears to credit procedures that provide for manual actuation of AFS within 10 minutes is being credited as an element of DID in lieu of DAFAS. However, other elements of the licensee's preliminary DID justification indicate no increase in human error associated with the removal of DAFAS. NRC review guidance in the Standard Review Plan Chapter 18, Attachment A, directs additional NRC staff review of operator manual actions required in less than 30 minutes. For example, the submittal of information such as the basis for the action time margin, uncertainties associated with operator's ability to perform the actions, details regarding how AFS will be controlled once manually actuated, and details of crew validation runs could support a determination that operator actions are feasible and reliable without the need for a detailed, in-depth review if the licensee's exemption request demonstrates low safety significance. In addition, because the IDP technical justification appears to indicate that human error uncertainties associated with manual actuation of AFS may already be incorporated into the PRA model, the NRC staff will need to understand how this uncertainty information is integrated into the exemption justification.

Item #3: NRC Review of DID Strategy

An exemption request should provide clarity and details regarding the elements of the planned DID strategy including the logic path through each DID element that is relied upon to maintain

adequate safety margins. Information provided should be well-reasoned, support critical elements of DID, and provide a complete explanation of the DID/SM justification, including by addressing matters such as RG 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis," Item C.2.1.1.2). While the preliminary IDP contains DID information, a RIPE exemption request will need to reformulate this DID information and augment it as needed to demonstrate that auxiliary feedwater is initiated (with elimination of DAFAS) such that sufficient DID is maintained, commensurate with the risk associated with loss of feedwater accidents.

Thank you.

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