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Subject: Entergy PNPS LAR re: RWM Bypass Allowance for Rx Startup - Acceptance Review Determination - Unacceptable with opportunity to supplement application
Date: Monday, January 30, 2012 11:08:00 AM

Walter,

The purpose of this e-mail is to provide the initial results of the NRC staff's acceptance review of the subject PNPS license amendment request dated December 29, 2011. The acceptance review was performed to determine if there is sufficient technical information in scope and depth to allow the NRC staff to complete its detailed technical review. The acceptance review is also intended to identify whether the application has any readily apparent information insufficiencies in its characterization of the regulatory requirements or the licensing basis of the plant.

The NRC staff has reviewed the application and concludes that the information delineated below is necessary to enable the NRC staff to make an independent assessment regarding the acceptability of the proposed LAR in terms of regulatory requirements and the protection of public health and safety and the environment. In order to make the application complete, the NRC staff requests that PNPS supplement the application to address the information requested below.

As we discussed, please let me know your availability to support a conference call to discuss these information insufficiencies. We would like to have the call this week, but no later than 2/7/12 to support our review schedule. This message will be added to ADAMS as an official agency record. If you have any questions, please contact me.

General description of Information Insufficiencies

Use of Precedent: The application does not appropriately justify the cited precedential license amendment.

Regulatory Basis: The application does not specify how the proposed TS change is consistent with 10 CFR 50.36 requirements, or what regulatory requirement would be addressed by submitting a report to the NRC if a startup were performed with an inoperable RWM.

Sufficiency of Information: The application is missing an essential safety analysis (low-power rod withdrawal error).

Information Insufficiencies / Acceptance Review Questions

Please address the following apparent discrepancies between the referenced precedent (Oyster Creek License Amendment 119) and the present request:

1. At the time the Oyster Creek license amendment was approved, the staff understood that the licensee intended to replace the original RWM with new equipment. Please discuss what similar measures are being taken to ensure that the reliability of the RWM will be improved following the planned operating cycle.
2. The Oyster Creek required actions include the use of two additional staff members to verify rod movement: (1) a second licensed operator, and (2) a reactor engineer from the Core Engineering Group. The Pilgrim TS are both less restrictive and less specific. Please discuss what ensures that the proposed Pilgrim TS provide similar assurances that the BPWS will be enforced and the potential for operator error will be reduced to a level similar to that for RWM malfunction.
3. The discussion in the precedential SE states that the RWM limits rod worth to minimize the consequences of both the control rod drop accident and the control rod withdrawal error; however the technical analysis of the present amendment request addresses only the control rod drop accident. The technical evaluation considers the rod withdrawal error as follows: "The rod withdrawal transient at low power does not exceed fuel design limits even with a maximum error rod." Given that (1) PNPS is a different vintage BWR from the precedent plant, (2) BWR core design strategies have generally become more aggressive in the 25 years between the precedent TS change and the present amendment request, and (3) General Electric has modified its neutronic design and safety analysis methods in the intervening 25 years, the present request lacks the requisite safety analysis to demonstrate that the same consideration is true for Pilgrim today. Please provide a summary of a cycle-specific or bounding analysis, using current-generation analytic methods, to verify that the rod withdrawal transient at low power does not exceed fuel design limits even with a maximum error rod.
4. 10 CFR 50.36(c)(2)(i) states that, "when a limiting condition for operation of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specifications until the condition can be met." The proposal to submit a report to the NRC does not remedy the RWM inoperability that would require this proposed action. Please explain what NRC regulation would require the submission of a report to the NRC in the event that PNPS operators were to start the reactor with an inoperable RWM more than once in a calendar year.

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