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Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Attention: Mr. Frederick Brown
Office of New Reactors

Docket No. 52-046
MKD/NW-18-0016L

Subject: Resolution Plan of PRA-based SMA for APR1400 design certification

Based on the January 9th, 2018 meeting between the NRC and KHNP on the APR1400 Seismic Margin Analysis (SMA) it is KHNP's understanding that NRC management has begun investigating the removal of the SMA insights from the scope of the APR1400 Design Certification Application (DCA) review in order to maintain a 42 month schedule for the review of the design certification application

It is KHNP's current understanding that this action would result in the SMA insights being specifically excluded from the rule certifying the APR1400 design when it is issued. The exclusion of the SMA insights would not appear to save much time on the schedule and introduce additional uncertainties:

- There is very little difference in the time needed to revise the DCD to either remove the SMA insights from the DCD or to fully incorporate the SMA insights into the DCD
 - Either way the Staff would still need to review and concur with the DCD changes resulting from either change, "carving out" SMA insights or the proper incorporation SMA insights, were properly made
 - In carving out the SMA insights from the DCD review, it is believed that the NRC staff may introduce some uncertainty regarding the process and schedule going forward. This uncertainty or risk would be the result of the Staff adopting a new process, and perhaps policy, regarding Part 52 and could potentially impact the 42 month schedule.
- Either way the Staff would need to reschedule both Phase 4 and the Phase 5 ACRS meeting (from April to a future date) for Chapter 19 to accommodate the required changes to Chapter.

KHNP's current position is to retain the SMA insights in the current scope for the APR1400 DCA and maintain the original 42 month review for Phase 6. In support of KHNP's position, KHNP is applying all necessary resources to completing the SMA and has taken the actions to revise and enhance its SMA analysis to be in line with NRC Staff expectations. These actions were identified in our recent meeting with the Staff, and include:

- Applying methodology familiar to the NRC and improving the SMA model, adding seismic failure of BOP SSCs,
- Analyzing and presenting the results based on HCLPF
- Including insights of Random Failures and Operator Actions

KHNP's revised SMA, including the insights, will be completed and formally submitted by February 14 (as final).

KHNP offers the following schedule for NRC planning:

- Draft results of the SMA "cutsets" and Plant HCLPF to be completed by Jan 26 and placed in the electronic reading room (ERR)
- Draft responses to RAI 19-10, and 19-85 with DCD markups by Feb 2 placed in ERR
- Face to face meeting to walk through the SMA results and address preliminary/initial questions on Feb 6
- Establish prompt, frequent (and effective) communication to rapidly respond to NRC comments
- Locate APR1400 team's SME for SMA in WDCC, as necessary, to facilitate an efficient NRC review of the SMA
- Issue final RAI 19-10 and 19-85 with DCD mark ups by Feb 14

KHNP would be prepared to meet with the ACRS subcommittee for Chapter 19 on June 5 and full committee around July 11 (depending on ACRS schedule).

Please note that KHNP has already begun the necessary actions to complete and submit this work on the time line provided above.

It is recognized that the interim Phase 4 and 5 milestones will need to be readjusted. KHNP respectfully requests that the NRC staff and ACRS continue the necessary support to allow the SMA to be included in the APR1400 DCA and to be reviewed within the original 42 month schedule.

Please be assured KHNP recognizes the importance of “on time delivery” and a “complete and high quality response” to support this schedule.

KHNP looks forward to your response.

Sincerely,



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