From:	Richard Guzman
To:	Reynolds, Ronnie J:(Constellation Nuclear)
Subject:	FW: SHARE file Observations on Response to Question 06 and 22.pdf
Date:	Tuesday, June 13, 2023 12:15:00 PM
Attachments:	SHARE file Observations on Response to Question 06.pdf

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Ron – see notes attached per the high-level observation discussion from Todd Hilsmeier.

Thanks,
Rich

Staff Observations on
Response to Questions 06 & 22 (FLEX credit)

[6.a , 22.a - describe and justify approach]

Response did not justify NMP1's approach for FLEX failure rates (i.e., 2x permanently installed failure rates):

- Response did not provide a basis for the 2x factor (value seems arbitrary)
- PWROG-18042 (where FLEX failure rates are based on industry experience and vetted by industry and approved by NRC) suggests the 2x factor is too low.
- Response primarily focused on questioning PWROG-18042 (i.e., "it's too conservative"), which doesn't validate NMP1's approach.
- Response seems ok with FTS failure rates in PWROG-18042, and these FTS failure rates are 10-16x larger than the permanently installed SSCs. This suggests the 2x factor used by licensee is too low.
- NMP1's approach (or justification of approach) does not consider available generic or plant-specific FLEX data.
- Doesn't meet Conclusion 6 of NRC Memo dated May 6, 2022 (ML22014A084) which states, "should not use failure rates for permanently install equipment."
- Response states that DG FTR probability in PWROG-18042 is biased to failing within the first hour (i.e., short FLEX run times). However, from PWROG-18042, early DG FTR events (before reaching stable conditions) are counted as FTS.

[6.c , 22.c - provide updated uncertainty analysis]

- Response states FLEX failure probability uncertainty has a minor impact on RICT results (i.e., not a key source of uncertainty).

  However, for LCOs 3.6.3.C and 3.6.3.H in Table 6c-3, the impact of FLEX failure probability uncertainty is significant (i.e., impacts RICT by 50% or more).

  - FLEX failure probability is a key source of uncertainty.

- Response mentions one RMA to address FLEX uncertainty (i.e., dedicating the N+1 FLEX generator during AC or DC RICT). It is unclear what this RMA represents:
  - Describe RMA in more detail?
  - How does this RMA reduce risk (i.e., how credited in PRA sensitivity study)?
  - Is there sufficient time to credit a spare FLEX DG?
  - Since FLEX uncertainties primarily impact fire CDF sequences, what fire-specific RMAs can be implemented?