

Significance Determination of Inspection Findings that Cause Initiating Event Occurrences Category 2 Public Meeting

Stephen Vaughn NRC/NRR/DIRS/IPAB February 26, 2015





Discuss proposed changes to:

1) IMC 0308, Attachment 3, "Significance Determination Process Basis Document"

2) RASP, Volume 1, Section 8 "Initiating Events Analyses"

Protecting People and the Environment





 Reach a common understanding of the proposed revisions and the conceptual/technical basis supporting the proposed revisions.



- The NRC received industry's proposed revisions on 2/17/15
- The proposed revisions were shared with NRC staff
- Over the past week some staff were able to provided feedback, but not all stakeholders
- Professional perspectives should be shared to continue progress



RASP, Volume 1, Section 8:

- 1) Does separating the SDP guidance from other programs (e.g., ASP and MD 8,3) adds clarity?
- 2) Should there be a separate section for findings that do not cause IE occurrence?
- 3) Should RASP refer to IMC 0609, Appendix A, Exhibit 1 for IE screening?

- <u>Per IMC 0609, Appendix A</u>: Findings that ONLY cause a plant trip/scram (i.e., the IE-TRANS in the SPAR model) screen to Green.
- <u>Possible revision to IMC 0609, Appendix A</u>: Should findings that cause a scram/plant trip AND the loss of the normal heat removal path (e.g., LOCHS and LOMFW) without any additional complications (e.g., internal flooding, SG level) screen to Green?



• Remove the phrase "multiply by an inverse year (1/year)".

NOTE: Staff proposed changes to IMC 0308, Att 3, Section 8 suggests providing the mathematical basis for the relationship between ICCDP and \triangle CDF

- Considerations when determining the increase in IEF given a finding was the proximate cause of an IE occurrence:
 - Additional contributing causes/factors?
 - Exposure time of the finding?
 - Recovery credit



IMC 0308, Attachment 3:

1) Discussion of CCDP and ΔCDF. Recommend clarifying the relationship of both metrics instead of removing the CCDP language.



2) Does the SDP, by design, model what happened in the past? Model what is expected in the future? Both?

Backwards look –

- Finding is the *proximate cause* of a degraded condition
- The SDP actually estimates the [risk] given the degraded condition that resulted from the [finding] for the time the degraded condition existed. The nominal [risk], which accounts for normal maintenance, during this time, is subtracted from the [finding risk] to obtain a change in [risk] due to the degraded condition alone.

Forwards look –

The philosophy behind the establishment of [inspection findings] was essentially to assume that conditions indicated by the finding, if their root causes were uncorrected, be equivalent to accepting a de facto increase in the CDF and LERF metrics. [The condition] is indicative of an underlying performance issue that, if uncorrected, would be expected to result in similar occurrences with the same frequency.

Next Steps...

- Staff will revise IMC 0308, Attachment 3 and RASP Volume 1 concurrently.
- After NRC staff feedback is incorporated, the staff will communicate the draft revisions at a Category 2 public meeting (e.g., ROP WG monthly meeting).