

Southern Nuclear

*NRC Public Meeting on VEGP
Draft RAIs*

12/8/15 – Rockville, MD



Draft RAI 1.a

Confirm that SSCs credited in a PRA Functionality determination are the same SSCs relied upon to perform the specified safety function.

VEGP Proposed Response:

- Currently, the same SSCs relied upon to perform the specified safety function are credited in the PRA Functionality assessment.
- VEGP may credit alternative SSCs to establish PRA Functionality if modeled in the PRA. This is not prohibited by NEI 06-09.

Draft RAI 1.b.i

Confirm that all human actions required to achieve PRA functionality upon loss of specified safety function are modeled in the PRA (i.e., are proceduralized and trained on or so simple to be skill of the craft).

VEGP Proposed Response: Human actions required to achieve PRA Functionality upon loss of specified safety function are modeled in the PRA, and are proceduralized and trained.

Draft RAI 1.b.ii (part 1)

Confirm that actions to open doors during loss of room cooling are explicitly proceduralized and trained on and summarize the evaluation concluding the HEPs are extremely small.

VEGP Proposed Response Plan:

- Actions to open doors when required are proceduralized and trained on.
- HEPs for failure to open doors are very low (simple actions, low stress, with long available time).

Draft RAI 1.b.ii (part 2)

Clarify why these actions [opening doors] have a “negligible” impact on CDF and LERF and the associated CT that will be used when room cooling is unavailable.

VEGP Proposed Response Plan:

- Change in CDF and LERP is negligible to zero when critical room doors can be propped open during loss of room cooling and the time available for this action is long.
- Actual RICT is based on plant configuration.
- A maximum of 30 day RICT is possible.

Draft RAI 1.b.iii

If any other human actions are directly or indirectly credited in the CT length calculations, please provide the same information requested in 1.b.ii about each action.

VEGP Proposed Response Plan:

Human actions not evaluated in the PRA will not be credited in CT length calculations.

Draft RAI 1.c

Confirm that PRA Functionality does not include any scenarios that allow any design basis accident to proceed directly to core damage or containment failure.

VEGP Proposed Response Plan:

NRC SE on NEI 06-09 has no requirements to identify scenarios that proceed directly to core damage or containment failure when a PRA Functionality evaluation is performed.

Draft RAI 2.a

Confirm that the acceptable PRA Function modeled in the PRA is also available and sufficient for the remaining design basis accident scenarios that are not modeled in the PRA.

VEGP Proposed Response Plan:

For design basis accident scenarios that are not modeled in the PRA because they do not affect CDF or LERF, the PRA Functionality evaluation will ensure SSCs not supporting CDF/LERF will remain available.

Draft RAI 2.b

Confirm there are no safety functions required to reach a safe and stable state but not included in the PRA because they are only required after the 24 hour mission time generally used in the PRA.

VEGP Proposed Response Plan:

- VEGP PRA was developed and peer reviewed against the NRC endorsed standards and meets mission time and initiator selection requirements.
- The VEGP PRA quality has been reviewed by the NRC and considered acceptable for NRC approved risk-informed applications, such as 50.69 and 5B.
- NRC SE on NEI 06-09 has no special requirements for selection of mission times and initiators.

Draft RAI 2.c

For LOF cases, please elaborate on how adequate safety margins are maintained and provide some clarifying examples of adequate safety margins for where the PRA success criteria (e.g., flow rates, temperature limits) differ from the design criteria.

VEGP Proposed Response Plan:

- NRC SE on NEI 06-09 clearly states that, *“The design, operation, testing methods, and acceptance criteria for SSCs, specified in applicable codes and standards (or alternatives approved for use by the NRC) will continue to be met as described in the plant licensing basis (including the final safety analysis report and bases to TSs), since these are not affected by risk-informed changes to the CTs. Similarly, there is no impact to safety analysis acceptance criteria as described in the plant licensing basis. Thus, safety margins are maintained by the proposed methodology, and the third key safety principle of RG 1.177 is satisfied.”*
- VEGP LAR and responses to NRC RAIs demonstrate that the above statements are fully applicable to VEGP without exceptions.
- VEGP intends to enter a RICT during emergent plant conditions if TS inoperable SSCs are demonstrated to be PRA Functional such that a loss of safety function is no longer possible.

Draft RAI EDG CTs

Provide technical justification for the addition of a RICT for the Required Actions associated with LCO 3.8.1 Condition C.

VEGP Proposed Response Plan:

- A RICT can be applied to the 14 day AOT with the CTG available (Condition B) OR if the CTG is unavailable (Condition C).
- Plants that rely on a non-TS AAC source can apply a RICT to a TS DG when the non-TS AAC source is non-functional. The RICT would account for either situation.
- NRC SE on NEI 06-09 has no special requirements for treating DGs different than other SSCs.