

## **NRR-DMPSPEm Resource**

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**From:** Valentin-Olmeda, Milton  
**Sent:** Wednesday, January 9, 2019 1:01 PM  
**To:** KIRKLAND, WILLIAM HANK  
**Cc:** STEWART, TRACEY (SCE&G - 8); Sebrosky, Joseph  
**Subject:** VC Summer Clarification Question on Fussell-Vesely Values

Hank,

As part of the ongoing audit review of the VC Summer Seismic PRA submittal (ADAMS Accession No. ML18271A109), the NRC staff continues to work on a technical checklist similar to that in Enclosure 1 of our letter dated July 10, 2018 (ADAMS Accession No. ML18115A138). To proceed with our review, the following information is requested for clarification purposes:

- Please provide information from the SPRA quantification notebook, specifically;
  - a list of structures, systems and components (SSCs) modeled and associated fragility and Fussell-Vesely values, and
  - a list of human failure events and their associated Fussell-Vesely values.

This information is needed to review the broader list of seismically-failed SSCs in addition to the 5 SSCs provided in Table 5.4-3 to understand the extent of the event beyond the 5 SSCs in Table 5.4-3.

- The staff noticed that Fussell-Vesely values were not specifically calculated, but were approximated using a method described on Page 51 of the VC Summer SPRA submittal. Please further describe this approximation method used in your analysis. Also, please explain the extent that separation of variables was used.

These items are needed to complete Topics 12 and 16 of the technical checklist used to assess the VC Summer SPRA submittal.

Your prompt response will be greatly appreciated.  
If any questions, please contact me or Joe Sebrosky (301-415-1132).

Respectfully,

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