

September 12, 2013 Public Meeting on Seismic Walkdowns Questions Handout

On March 12, 2012, the Nuclear Regulatory Commission (NRC) staff issued a letter requesting additional information per Title 10 to the *Code of Federal Regulations*, Section 50.54(f) (hereafter called the 50.54(f) letter). The letter requested licensees to conduct seismic hazard walkdowns to verify current plant configuration with the current licensing basis (CLB). According to the letter, the walkdowns should use appropriate methods and procedures to identify and address degraded, nonconforming, or unanalyzed conditions through the corrective action program (CAP), and verify the adequacy of the monitoring and maintenance procedures.

Consistent with Enclosure 3 of the 50.54(f) letter, the NRC staff provided significant input into the development of a guidance document by industry. The NRC endorsed an Electric Power Research Institute (EPRI) guidance document that resulted from this effort (referred to as the EPRI Guidance),¹ because the NRC staff determined that the use of the guidance, coupled with appropriate training, would meet the objectives and requests of the 50.54(f) letter.

Following the staff's initial review of the Walkdown Reports, regulatory site audits were conducted at a sampling of plants. Based on the walkdown reviews and site audits, the NRC staff has identified additional information necessary to allow the staff to confirm that the process used by licensees in the performance of the Seismic Walkdown and Walk-Bys met the intent of the 50.54(f) letter objectives and requests. The NRC requests licensees to submit additional information so the staff is able to complete its reviews of the Walkdown Reports.

1. In-Field Completion and Reporting of the Checklists, and Reporting the Overall Outcomes of the Seismic Walkdowns and Walk-bys

The EPRI guidance, Section 4, *Seismic Walkdowns and Area Walk-bys*, states that the results of the walkdown for each item on the seismic walkdown equipment list (SWEL) and the walk-by of each nearby area was to be documented on the checklists shown in Appendix C, *Checklists*. A key activity of the walkdowns and walk-bys was the in-field completion of the checklists by the seismic walkdown engineers (SWEs). The checklists submitted to the NRC may have been re-typed for readability, but should have been fully reflective of the checklists as completed by the SWEs in the field (including the finding and basis for any potentially adverse seismic conditions (PASCs) due to a no (N) or unknown (U) determination made in the field) with changes only for spelling and grammatical errors. The NRC staff identified during the site audits that this process may have been modified by licensees or licensee contractors. Provide the following information in order to further clarify the process followed for completing these checklists:

- A. Confirm whether the checklists provided to the SWEs for use in the field were identical to the checklists in Appendix C of the EPRI guidance, except for pre-marking items that were not applicable. For example, some licensees used digital representations of the same checklists, which is acceptable when the content was

¹ The EPRI Guidance, EPRI 1025286, is found in the Agencywide Document Access and Management System (ADAMS) at Accession No. ML12188A031.

identical to the guidance checklists, including providing space for comments. If an alternate or modified checklist was used, including any other areas that are pre-marked, describe the modifications and the reasoning for each change such that it demonstrates that the intent of each question in the checklist was met.

- B. Confirm whether the questions on the checklists, answered by a designation of yes (Y), no (N), or unknown (U) and any explanatory information, were fully completed and signed by both SWEs in the field for the as-found condition during the walkdown or walk-by. If the actual process or timing for completing the checklist was different, describe the process that was used such that it demonstrates the intent of the guidance of in-field verification was met.
- C. Confirm whether the checklists submitted to the NRC included all of the original notes and determinations that were completed by the SWEs in the field during the walkdown or walk-by. If not part of the submittal, provide the checklists originally completed by the SWEs in the field.

2. Process for the Determination of PASCs

The guidance intended that a determination of no (N) or unknown (U) for an item in the walkdown or walk-by checklists represents a PASC that would be subject to a licensing basis evaluation (LBE) or entry into the corrective action program (CAP) within the existing timeframe for newly identified information to be entered in the CAP. During the staff's reviews and audits, it noted that some licensees dispositioned some items originally marked as no (N) or unknown (U) prior to submitting the checklist results.

Confirm whether a table of all of the PASCs identified in the field was included in the original submittal to the NRC, as described in the EPRI Guidance on page 8-4. If some designations of the no (N) or unknown (U) items in the checklist were resolved to yes (Y) and not included in the Walkdown Report, describe in detail the process used by the SWEs when completing the checklist. Include any modifications to the guidance and how the intent of the EPRI guidance was met.

3. Assessing, Dispositioning, and Reporting Potentially Adverse Seismic Conditions

Section 5, *Seismic Licensing Basis Evaluations*, of the EPRI Guidance provides information on the conduct of LBEs. This section provided guidance on a means to demonstrate that a PASC was consistent with the plant's CLB after review. For clarity, update the table referenced in question 2, above, listing all of the PASCs that were identified by the SWEs in the field during the walkdowns and walk-bys, including a description of how the PASC was dispositioned, as follows: 1) for each PASC that was entered into the CAPs, provide the CAP reference number, initiation date, and (if known) the planned completion date, 2) for all other PASCs, provide the result of the licensing evaluation or determination and the basis for the result per the EPRI Guidance.

4. Conduct of the Peer Review Process

Section 6, *Peer Review*, of the EPRI Guidance provides guidance acceptable to the NRC staff that would support claims by licensees that the endorsed guidance was followed and that the objectives and requests in the 50.54(f) letter were met. Reporting

of the peer review was also discussed in Section 8, Submittal Report, and a checklist for review of the SWEL was provided in Appendix F, *Checklist for Peer Review of SSC Selection*. It was expected that the peer review team would have sufficient independence and experience such that any inconsistencies between the conduct and the reporting of the conduct would be identified and addressed. The NRC staff's reviews and site audits identified areas where the independence of the peer reviewers was questioned. Provide the following information to demonstrate that the intent of the peer review process was followed:

For each of the areas described in the guidance on page 6-1, list the names of the peer reviewers who performed the task. Provide the name of the lead peer reviewer, a list of the areas the lead peer reviewer reviewed, and describe their involvement, if any, in other seismic walkdown-related activities outside of the peer review function. If there are differences in the review areas or in the manner in which the peer reviews were conducted, describe the actual process that was followed such that the intent of the guidance is demonstrated.