

MEB-CQ-201505 14.3.3 Responses

Note: The issue transmittal included two items numbered Issue #9, one for Section 3.2.1 and one for Section 14.3.3. For ease of reference, the issues in 14.3.3 have been renumbered.

Issue #10

Section 1.3 of [DCD Tier 1](#) states that “The figure legend and acronym and abbreviation list are provided for information only and are not part of the Tier 1 DCD.” A similar statement appears in multiple tables, such as Table 2.4.1-3 (page 2.4-9) where it states “The column ‘Item No.’ is information only (not part of certified design).” This language could create confusion about the process for changing Tier 1 information described in 10 CFR 52.63. In particular, the idea of “information only” material appears to differ from the definitions of Tier 1 information that have appeared in previous design certification rule Appendices to 10 CFR Part 52. Therefore, it should be revised for consistency with these processes and in a manner that retains a unique (though possibly generically phrased) identifier that enables traceability of component information throughout the DCD. A related example can be found in the [AP1000 DCD Tier 1](#) on page 1.2-2, where the “Interpretation of Figures” section provides some discussion on as-built attributes and their relationship to safety functions that has been accepted by the NRC staff; however, this AP1000 section does not address the “Item No.” portion described above.

Response

The statement “The figure legend and acronym and abbreviation list are provided for information only and are not part of the Tier 1 DCD” will be revised to avoid confusion, but maintain the traceability of the component.

Also, it would be helpful to have discussions on the considerations of the previously accepted approach.

Issue #11

DCD Tier 1, Table 2.3-3 is inconsistent with the remainder of Tier 1. Several systems, as named in the table, do not appear in later sections with the appropriate ITAAC. The system naming and ITAAC references should be made consistent across Tier 1. Examples include:

- a. Safety Depressurization and Vent System – not found
- b. Containment Air Monitoring/Sampling System – not found
- c. Auxiliary Feedwater Pump Turbine System – not found
- d. Station Heating System – not found
- e. Breathing Air System – not found
- f. Instrument Air System – not found
- g. Service Air System – not found
- h. EDG System – located, but only discusses ITAAC for a moderate-energy system, not a high-energy system as it is listed.
- i. Auxiliary Steam System - This section is stated as “no entry” (2.7.1.9)

Response

Table 2.3-3 will be updated to clearly identify the system as shown in the attached MEB-CQ-201505 14.3 #11 markup.

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Issue #12

Grouped systems in DCD Tier 1, Table 2.3-3 should be split into separate entries such that the necessary ITAAC can be referenced and the staff can make associated findings in accordance with SRP 14.3.3 that the scope is appropriate. For example, SI/ SCS and Essential/Normal Chilled Water System should be separated into individual systems.

Response

Table 2.3-3 will be updated to clearly identify the systems as shown in the attached MEB-CQ-201505 14.3 #12 markup.

Issue #13

The following list summarizes some inconsistencies or errors found in the review of DCD Tier 2, Section 14.3.3 and associated sections. These should be addressed, and the document should be checked for additional related issues.

- a. Discussion in DCD Tier 2, Revision 0, Section 14.3.2.3 states that Section 2.3 of the Tier 1 material includes piping systems and components, including the treatment of motor-operated valves (MOVs), power-operated valves (POVs), and check valves, as well as dynamic qualification, welding, fasteners, and safety classification of SSCs. Upon staff review of Tier 1, Revision 0, Section 2.3, it was noted that portions of this list were not discussed in the section. Please revise Tier 1 Section 2.3 to reflect this discussion.

Response

Some information written in Section 14.3.2.3 is not included in ITAAC Section 2.3. KHNP is planning to revise the APR1400 ITAAC after the “standard ITAAC” developed by NEI is issued. At that time, we will reflect this request and provide the consistency between DCD Tier 2, Revision 0, Section 14.3.2.3 and ITAAC.

- b. There is a persistent typo in the acceptance criteria of several ITAAC. “Exists and concludes” should be used in place of “exits and concludes”.

Response

The following ITAACs have corrected from exit(s) to exist(s) as shown in the attached MEB-CQ-201505 14.3 #13b markup:

- Table 2.4.3-4 (8 of 8)
- Table 2.4.4-4 (7 of 7)
- Table 2.4.6-4 (6 of 6)
- Table 2.6.2-3 (7 of 7)
- Table 2.7.1-4 (6 of 6)
- Table 2.7.1.2-4 (6 of 6)
- Table 2.7.1.4-4 (5 of 5)
- Table 2.7.1.5-4 (7 of 7)
- Table 2.7.1.8-3 (5 of 5)
- Table 2.7.2.1-4 (5 of 5)
- Table 2.7.2.2-4 (7 of 7)
- Table 2.7.2.5-4 (4 of 4)
- Table 2.7.2.6-4 (5 of 5)
- Table 2.7.4.3-4 (6 of 6)

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- Table 2.7.4.5-1 (3 of 3)
- Table 2.7.5.2-3 (2 of 2)
- Table 2.11.2-4 (6 of 6)

- c. Tier 1 Table 2.3-1 refers to Tier 1 Section 2.7.2.5 as Radioactive Drain System which is inconsistent with the actual name of the Section Equipment and Floor Drainage System. Tier 1 Table 2.3-3 refers to a Component Cooling System and Drain System” which is inconsistent with the later system names of “Component Cooling Water System” and “Equipment and Floor Drainage System,” respectively.

Response

Table 2.3-3 will be updated to clearly identify the systems as shown in the attached MEB-CQ-201505 14.3 #13c markup.

- d. Tier 1, page 2.4-6 lists the steam generator as an entirely ASME Section III Class 1 component. This is not consistent with Table 3.2-1 in Tier 2.

Response

The steam generator Code applicability will be revised to be consistent with Table 3.2-1 in Tier 2, which lists the steam generator as ASME Section III Class 1 and 2 components.