

NRC September 22, 2017 Feedback on CoC 1004 Amendment 16 Changes

Discussion Handout for TN Americas Certificate of Compliance No. 1004 Amendment #16

| Form # | Certificate of Compliance Proposed Changes | Feedback | Question/Comment |
|--------|--|--------------|--|
| 1 | CoC 1 (eliminate from CoC) | Comment | 1-1) NRC Counsel recommends language options for this condition, to be provided to TN counsel. |
| 2 | CoC 2 (eliminate from CoC) | No questions | - |
| 3 | CoC 3a (retain in CoC with concise description in enclosure 4, Attachment A) | Question | 3-1) It is convenient to have the model nomenclature in the CoC. It is difficult to distinguish the features of each canister model just by designation. |
| 4 | CoC 3b (retain in CoC with concise description in enclosure 4, Attachment A) | Question | 4-1) Proposed language deleted first sentence of section 3b. 4-2) Proposed language deleted statement that Transfer Cask (TC) designed and fabricated to meet NUREG-0612 and ANSI N14.6; could fit under Design Features section for TC. Proposed language deleted additional TC models (next to last sentence on section 3b, CoC Revision 14). |
| 5 | CoC 3c (remove from CoC) | Comment | "Drawings" not in CoCs of other vendors. |
| 6 | CoC 3d (remove from CoC) | Comment | "Basic Components" not in CoC of other vendors. |
| 7 | CoC 4 (eliminate from CoC) | Comment | "72.232(d)" is regulation and not in CoC of other vendors. |
| 8 | CoC 5 (eliminate from CoC) | No questions | - |
| 9 | CoC 6 (eliminate from CoC) | Comment | "Quality Assurance" is in CoC of all other vendors, duplicates applicable regulation. |
| 10 | CoC 7 - first paragraph (relocate to TS - Administrative Controls) | Question | 10-1) Will language remain the same in the relocated TS? |
| 11 | CoC 7 - second paragraph (relocate to TS - Administrative Controls) | Question | 11-1) Will language remain the same in the relocated TS? |
| 12 | CoC 8 (relocate to the FSAR) | Question | 12-1) Staff does not consider the 10 CFR 72.190 discussion in the evaluation summary as applicable to the item under discussion (dry runs). This technical specification seems to better fit under an Administrative Controls section. |
| 13 | TS 1.1 (relocate Definitions to TS Appendix B, Section 1) | Comment | NRC will need to review changes to definitions, justification should be provided for changes/additions/deletions. |
| 14 | TS 1.2 (relocate Logical Connectors to TS Appendix B, Section1) | No questions | - |

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| 15 | TS 1.3 (relocate Completion Times to TS Appendix B, Section 1) | No questions | - |
| 16 | TS 1.4 (relocate Frequency to TS Appendix B, Section 1) | No questions | - |
| 17 | TS 2.1 (relocate Fuel to be Stored to TS Appendix B, Section 2) | No questions | - |
| 18 | TS 2.1.1 (relocate to TS Appendix B, Section 2) | No questions | - |
| 19 | TS 2.2.1 & TS 2.2.2 (relocate to TS Appendix B, Section 2) | Question | 19-1) Could TS 2.2.1, requiring fuel to be placed in safe condition, be incorporated into Section 3 as part of LCO(s)? Could TS 2.2.2, requiring notification to NRC Ops Center, be incorporated under Administrative Controls, under a new name? |
| 20 | TS 2.2.3 (eliminate, requirement is redundant to TS 2.2.2) | Question | 20-1) The justification for the change does not seem to correlate with the TS requirement. This reporting requirement covers instances which do not fall under the reporting requirements of 10 CFR 72.75. |
| 21 | TS 3.0 (retain) | No questions | - |
| 22 | TS 3.1.1 (retain) | No questions | - |
| 23 | TS 3.1.2 (retain) | No questions | - |
| 24 | TS 3.1.3 (retain) | No questions | - |
| 25 | TS 3.1.4 (retain) | No questions | - |
| 26 | TS 3.2.1 (retain) | No questions | - |
| 27 | TS 4.0 (delete) | No questions | - |
| 28 | TS 4.1 - first paragraph and table (delete, redundant information) | Comment | Staff requests a list of tables and figures that will remain in the tech specs (i.e., section 4.1) or relocated to the FSAR as a part of the evaluation summary for these kinds of changes. It is difficult to assess based on the current write-up. |
| 29 | TS 4.1 - Notes and proposed alternatives provision (replace with enclosure 8 Attachment 8) | No questions | - |
| 30 | TS 4.2.1 - first two paragraph (move to CoC, Section 2 - Design Features) | No questions | - |

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| 31 | TS 4.2.1 - third paragraph (move to CoC, Section 2 - Design Features) | No questions | - |
| 32 | TS 4.2.2 (move to CoC, Section 2 - Design Features) | No questions | - |
| 33 | TS 4.2.3 - first two paragraphs and table (move to CoC, Section 2 - Design Features) | No questions | - |
| 34 | TS 4.2.3 - last two paragraphs (eliminate from TS) | Comment | 34-1) Staff evaluation shows impact to risk criteria 1 and 3. |
| 35 | TS 4.2.4 (move to FSAR, add to TS ref. FSAR location for code alternative) | Comment | 35-1) The provision on other ASME code alternatives on the last page of TS 4.2.4, specifically mirrors 10 CFR 72.244 "Application for amendment of a certificate of compliance." |
| 36 | TS 4.3 & 4.3.1 (move to CoC Section 2 - Design Features) | No questions | - |
| 37 | TS 4.3.2 (delete, redundant to TS 5.3.1) | No questions | - |
| 38 | TS 4.3.3-1 (move to TS Appendix A - IT&E) | Question | 38-1) IT&E is a logical option, but are there other alternatives that may reduce the size of the CoC, such as a listing of requirements in the FSAR with a single line pointer in the CoC? |
| 39 | TS 4.3.3-2 (move to TS Appendix A - IT&E) | Comment | See 38-1. |
| 40 | TS 4.3.3-3 (move to TS Appendix A - IT&E) | Comment | See 38-1. |
| 41 | TS 4.3.3-4 (move to TS Appendix A - IT&E) | Comment | See 38-1. |
| 42 | TS 4.3.3-5 (move to TS Appendix A - IT&E) | Comment | See 38-1. |
| 43 | TS 4.3.3-6 (move to TS Appendix A - IT&E) | Comment | See 38-1. |
| 44 | TS 4.3.3-7 (move to TS Appendix A - IT&E) | Comment | See 38-1. |
| 45 | TS 4.3.3-8 (move to TS Appendix A - IT&E) | Comment | See 38-1. |
| 46 | TS 4.3.3-9 (move to TS Appendix A - IT&E) | Comment | See 38-1. |

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| 47 | TS 4.3.3-10 (move to TS Appendix A - IT&E) | Comment | See 38-1. |
| 48 | TS 4.3.3-11 (combine with TS 4.3.3-9) | Comment | See 38-1. |
| 49 | TS 4.4 (move to TS Appendix B, Section 2 - Approved Contents) | Question | 49-1) May fit better under "Administrative Control", or "Design Features". |
| 50 | TS 4.4.1 (move to CoC Section 2 - Design Features) | Question | See 49-1. |
| 51 | TS 4.4.2 (delete) | Comment | 51-1) Staff evaluation shows impacts to the 3 risk criteria. |
| 52 | TS 4.4.3 (delete) | Comment | 52-1) Staff evaluation shows impacts to the 3 risk criteria. |
| 53 | TS 4.4.4 (delete) | Comment | 53-1) Staff evaluation shows impacts to the 3 risk criteria. |
| 54 | TS 4.5 (move to TS Appendix A - IT&E) | Question | 54-1) It is not clear if the 2 nd sentence will be deleted, to be consistent with TS 5.2.4c and the proposed relocation of that TS. |
| 55 | TS 5.1 (delete) | Comment | 55-1) TN should verify UFSAR sections contain all of the aspects of last two paragraphs of TS 5.1, and update them as appropriate. 55-2) Discuss retaining the following statement in the TS: "Each user of the standardized NUHOMS System shall prepare, review, and approve written procedures for all normal operations (cask handling, loading movement and surveillance) and maintenance at the ISFSI prior to its operation. The operating procedures suggested generically in the UFSAR should provide the basis for the user's written operating procedures. Written procedures shall be established, implemented, and maintained." |
| 56 | TS 5.1.1 (delete) | No questions | - |
| 57 | TS 5.1.2 (delete) | Comment | 57-1) TS 5.1.2 #2 best fits in the revised TS 5.3.1. |
| 58 | TS 5.2 (retain) | No questions | - |
| 59 | TS 5.2.1 (delete) | No questions | - |
| 60 | TS 5.2.2 (delete) | Comment | Evaluation summary should have reference to location in UFSAR. |

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| 61 | TS 5.2.3 (delete) | Comment | 61-1) Radiological environmental monitoring program is related not only to 10 CFR 72.104. This requirement is not part of the dose measurement program at the controlled area boundary and various other locations such as the ISFSI fence. |
| 62 | TS 5.2.4 (delete) | No questions | - |
| 63 | TS 5.2.4a (move to TS Appendix B, Section 4 – Administrative Controls) | No questions | - |
| 64 | TS 5.2.4b (retain, move to LCO) | No questions | - |
| 65 | TS 5.2.4c (retain, move to LCO) | No questions | - |
| 66 | TS 5.2.4d (move to UFSAR) | Question | 66-1) This TS is a requirement for decontamination of the surfaces of the transfer cask and the DSC, and is not related to radiation shielding. The TS best fits an LCO. |
| 67 | TS 5.2.4e (delete) | Comment | 67-1) This requirement: 1) provides information to the workers on the radiation level they are exposed to, and 2) provides a means for identification of potential misload. The table best fits an LCO. |
| 68 | TS 5.2.5 (move parts to LCO, and parts to UFSAR) | Question | 68-1) How will the TS be incorporated in the LCO language? |
| 69 | TS 5.2.6 (move to TS Appendix B, Section 4 – Administrative Controls) | No questions | - |
| 70 | TS 5.3.1 (move to TS Appendix A – IT&E) | Question | 70-1) TS parts appear to be a better fit for LCO or Administrative Control. 70-2) How does proposed change address part B of TS? |
| 71 | TS 5.3.2 (move to UFSAR) | No questions | - |
| 72 | TS 5.3.3 (should become an LCO in TS Appendix B, Section 3 – LCO) | Question | 72-1) Why is this risk significant? Could this be included solely in operating procedures? |
| 73 | TS 5.3.4 (remove first paragraph, move 2nd paragraph to TS Appendix B, Section 4 - Administrative Control.) | Comment | 73-1) 1 st paragraph - the inspection requirement is necessary for radiation protection. |
| 74 | TS 5.4 (HSM dose evaluation program should be move to CoC Appendix A ITE section) | Question | 74-1) The evaluation form has a “yes” in L3, but not in ITE. Requirement can meet two criteria, L3 or ITE. Clarify proposed change. |

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| 75 | TS 5.5 (Concrete testing should be moved to CoC Appendix A ITE section) | No questions | - |
| 76 | TS 5.6 (Relocate to the UFSAR section which covers the HSM-H thermal performance methodology) | Comment | 76-1) Discuss retaining the "...except for change... exceed 8% of their nominal design values..." |
| 77 | TS Table 1-1a (retain A1 & A2 information, move table to FSAR) | Question | 77-1) Certain parameters appear to best fit in the TS, in accordance with 10 CFR 72.236: minimum fuel assembly cooling time, maximum assembly weight, and fuel cladding information. 77-2) How will the global cooling parameter appear in the proposed revised tables? |
| 78 | TS Table 1-1b (retain A1 & A2 information, move table to FSAR) | Comment | 78-1) Certain parameters appear to best fit in the TS, in accordance with 10 CFR 72.236: minimum fuel assembly cooling time, maximum assembly weight, and fuel cladding information. |
| 79 | TS Table 1-1c and 1-1j (retain A1 & A2 information, move table to FSAR) | Comment | 79-1) Correction needed for minimum cooling time for group 3 in both tables. Certain parameters appear to best fit in the TS, in accordance with 10 CFR 72.236: maximum assembly weight, and fuel cladding information. |
| 80 | TS Table 1-1d (move table to FSAR) | No questions | - |
| 81 | TS Table 1-1e (retain A1 information, move table to FSAR) | Question | 81-1) Discussion on: adding minimum fuel assembly cooling time to Table 1-1e and removing reference to table 1-1ee on page T-6 (since that table is proposed as removed from TS). |
| 82 | TS Table 1-1f, 1-1m, 1-1bb, 1-1nn (move table to FSAR) | Comment | 82-1) Foot note (3): 24PTH-S-LC "Not authorized for storage" except for B&W 15X15, best fits Section 2, Approved Content. |
| 83 | TS Table 1-1g, 1-1g1, 1-1g2, 1-1g3; TS Table 1-1p, 1-1q, 1-1q1; TS Table 1-1v, 1-1w, 1-1w1, 1-1x; TS Table 1-1cc, 1-1dd, 1-1dd1; TS Table 1-1jj, 1-1kk; TS Table 1-1oo and 1-1pp (all retained) | No questions | - |
| 84 | TS Table 1-1h, 1-1k, 1-1r, 1-1ff, 1-1rr, 1-1ss (all retained) | No questions | - |

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| 85 | TS Table 1-1i (retain A1 & A2 information, move table to FSAR) | Question | 85-1) Certain parameters appear to best fit in the TS table, in accordance with 10 CFR 72.236: maximum fuel assembly weight. |
| 86 | TS Table 1-1l (retain A1 & A2 information, move table to FSAR) | Question | 86-1) Certain parameters appear to best fit in the TS, in accordance with 10 CFR 72.236: minimum fuel assembly cooling time, maximum fuel assembly weight, and fuel cladding information. |
| 87 | TS Table 1-1n, 1-1ee, 1-1qq (A2 information will be retained) | No questions | - |
| 88 | TS Table 1-1t (retain A1 & A2 information, move table to FSAR) | Question | 88-1) Certain parameters appear to best fit in the TS, in accordance with 10 CFR 72.236: minimum fuel assembly cooling time, and retain maximum assembly weight. |
| 89 | TS Table 1-1u (move table to FSAR) | No questions | - |
| 90 | TS Table 1-1aa (retain A1 & A2 information, move table to FSAR) | Question | 90-1) Certain parameters appear to best fit in the TS, in accordance with 10 CFR 72.236: minimum fuel assembly cooling time, and maximum assembly weight. |
| 91 | TS Table 1-1gg (retain A1 & A2 information, move table to FSAR) | Question | 91-1) Certain parameters appear to best fit in the TS, in accordance with 10 CFR 72.236: minimum fuel assembly cooling time, and retaining maximum assembly weight. |
| 92 | TS Table 1-1ii (move Table to the SAR) | No questions | - |
| 93 | TS Table 1-1ll (retain A1 & A2 information, move table to FSAR) | Question | 93-1) Certain parameters appear to best fit in the TS, in accordance with 10 CFR 72.236: minimum fuel assembly cooling time, and retain maximum assembly weight. |
| 94 | TS Table 1-2a, 1-2c; TS Table 1-2b; TS Table 1-2n, 1-2o, 1-2p; TS Table 1-2q; TS Table 1-3a through 1-3p; TS Table 1-4a through 1-4i; TS Table 1-6a, 1-6b; TS Table 1-6c, 1-6d; TS Table 1-7a through 1-7m (moved tables to UFSAR) | No questions | - |
| 95 | TS Figure 1-1 (retain figure) | No questions | - |
| 96 | TS Figure 1-2 through 1-4a; 1-8, 1-9; 1-11 through 1-15a; 1-17 through 1-24, 1-25a, 1-25b; 1-26 through 1-28c; 1-29; 1-30; 1-31 through 1-36, 1-38; 1-39, 1-40 (retain figure) | No questions | - |

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| 97 | TS Figure 14b; 1-16; 1-25; 1-37 (retain figure) | No questions | - |
| 98 | TS Figure 1-5, 1-6, 1-7; 1-41, 1-42 (retain figure) | No questions | - |
| 99 | TS Figure 1-10, 1-10a (retain figure) | No questions | - |