

Enclosure 4 to E-48527

Evaluation Forms for CoC 1004 CoC Items

CoC Condition/Technical Specification Evaluation Form

CoC Condition/TS Identifier: _____ CoC-2 _____

* All LCOs also require an Applicability, Condition(s), Required Action(s), Completion Time(s), Surveillance Requirement(s), and Frequency(ies). Refer to NUREG-1745 for additional guidance.

** In performing the risk insight evaluation above, the evaluator should think about subsequent changes to a relocated CoC requirement. Specifically, ask the question "what is the likelihood and worst possible consequences of a future change to this requirement in the less-conservative direction"?

Requirement		CoC Condition 2: The holder of this certificate who desires to change the certificate or technical specifications shall submit an application for amendment of the certificate or technical specifications.	
CoC Body Certified Design	Section I. Technology	No	
	Section II. Design Features	No	
Appendix A - Inspections, Tests, and Evaluations		No	
Appendix B. Technical Specifications	Section 1 Definitions, Use and Application	No	
	Section 2 Approved Contents (Selection Criteria)	A1	No
		A2	No
		A3	No
	Section 3 Limiting Conditions for Operation (LCOs)* and Surveillance Requirements (SRs) (Selection Criteria)	L1	No
		L2	No
		L3	No
Section 4 Administrative Controls	No		
Risk Insight**: Will removing this requirement from the CoC/TS result in...	A significant increase in the probability or consequences of an accident previously evaluated in the cask FSAR?	No	
	The possibility of a new or different kind of accident being created compared to those previously evaluated in the FSAR?	No	
	A Significant reduction in the margin of safety for ISFSI or cask operation?	No	
Evaluation Summary		Eliminate from CoC - not required as it is a regulatory requirement (10 CFR 72.244) that must be met.	

CoC Condition/Technical Specification Evaluation Form

	A Significant reduction in the margin of safety for ISFSI or cask operation?	No
Evaluation Summary		Retain in CoC - part of Certified Design criteria [Technology]. Replace with concise description of dry storage system. See Attachment A at the end of Enclosure 4.

CoC Condition/Technical Specification Evaluation Form

Evaluation Summary	<p>Retain in CoC - part of Certified Design criteria [Technology]. Replace with concise description of dry storage system.</p> <p>See Attachment A at the end of Enclosure 4.</p>
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CoC Condition/Technical Specification Evaluation Form

Evaluation Summary	Remove from CoC – not required as a part of the proposed CoC Certified Design (Technology or Design Features). In addition, Risk Insight responses are all “no”. This information (drawings) is included in the UFSAR. This is simply a cross-reference to the UFSAR for the location of the drawings.
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CoC Condition/Technical Specification Evaluation Form

	A Significant reduction in the margin of safety for ISFSI or cask operation?	No
Evaluation Summary		Remove from CoC – not required as a part of the proposed CoC Certified Design (Technology or Design Features). In addition, Risk Insight responses are all “no”. This information (important to safety basic components) is included in the UFSAR. This also includes a cross-reference to the UFSAR for the location of this information.

CoC Condition/Technical Specification Evaluation Form

CoC Condition/TS Identifier: _____CoC-5_____

* All LCOs also require an Applicability, Condition(s), Required Action(s), Completion Time(s), Surveillance Requirement(s), and Frequency(ies). Refer to NUREG-1745 for additional guidance.

** In performing the risk insight evaluation above, the evaluator should think about subsequent changes to a relocated CoC requirement. Specifically, ask the question "what is the likelihood and worst possible consequences of a future change to this requirement in the less-conservative direction"?

Requirement		CoC Condition 5: If it is necessary to engage active cooling for the OS197FC, the OS197FC-B, the OS197HFC, the OS197HFC-B, or the OS200FC Transfer Casks during transfer of a loaded DSC, the appropriate NRC Division of Spent Fuel Management Project Manager shall be notified within 30 days, via electronic correspondence, of the occurrence. Appropriate detail should be provided, including the date and time of the occurrence, when the active cooling was initiated, the facility at which the transfer was taking place, and the current state of the DSC.	
CoC Body Certified Design	Section I. Technology	No	
	Section II. Design Features	No	
Appendix A - Inspections, Tests, and Evaluations		No	
Appendix B. Technical Specifications	Section 1 Definitions, Use and Application	No	
	Section 2 Approved Contents (Selection Criteria)	A1	No
		A2	No
		A3	No
	Section 3 Limiting Conditions for Operation (LCOs)* and Surveillance Requirements (SRs) (Selection Criteria)	L1	No
		L2	No
		L3	No
Section 4 Administrative Controls	No		
Risk Insight**: Will removing this requirement from the CoC/TS result in...	A significant increase in the probability or consequences of an accident previously evaluated in the cask FSAR?	No – this is a notification requirement (within 30 days) that has no risk or safety basis. LCO 3.1.3 provides time limits for completion of DSC transfer, including requirements for using blowers for active cooling when the TC is in a horizontal orientation on the transfer skid.	
	The possibility of a new or different kind of accident being created compared to those previously evaluated in the FSAR?	No	
	A Significant reduction in the margin of safety for ISFSI or cask operation?	No	

CoC Condition/Technical Specification Evaluation Form

Evaluation Summary	Eliminate from CoC - does not meet Selection Criteria for new CoC format and is strictly a notification requirement that is not defined by regulation. LCO 3.1.3 adequately covers the action required when DSC transfer is not completed within a specified timeframe and actions to initiate active cooling within a specified time limit.
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CoC Condition/Technical Specification Evaluation Form

CoC Condition/TS Identifier: _____ CoC-6 _____

* All LCOs also require an Applicability, Condition(s), Required Action(s), Completion Time(s), Surveillance Requirement(s), and Frequency(ies). Refer to NUREG-1745 for additional guidance.

** In performing the risk insight evaluation above, the evaluator should think about subsequent changes to a relocated CoC requirement. Specifically, ask the question "what is the likelihood and worst possible consequences of a future change to this requirement in the less-conservative direction"?

Requirement		CoC Condition 6: Activities in the areas of design, purchase, fabrication, assembly, inspection, testing, operation, maintenance, repair, modification of structures, systems and components, and decommissioning shall be conducted in accordance with a quality assurance program that satisfies the applicable requirements of 10 CFR Part 72, Subpart G, and that is established, maintained, and executed with regard to the cask system.	
CoC Body Certified Design	Section I. Technology	No	
	Section II. Design Features	No	
Appendix A - Inspections, Tests, and Evaluations		No	
Appendix B. Technical Specifications	Section 1 Definitions, Use and Application	No	
	Section 2 Approved Contents (Selection Criteria)	A1	No
		A2	No
		A3	No
	Section 3 Limiting Conditions for Operation (LCOs)* and Surveillance Requirements (SRs) (Selection Criteria)	L1	No
		L2	No
		L3	No
Section 4 Administrative Controls	No		
Risk Insight**: Will removing this requirement from the CoC/TS result in...	A significant increase in the probability or consequences of an accident previously evaluated in the cask FSAR?	No	
	The possibility of a new or different kind of accident being created compared to those previously evaluated in the FSAR?	No	
	A Significant reduction in the margin of safety for ISFSI or cask operation?	No	

CoC Condition/Technical Specification Evaluation Form

Evaluation Summary	Eliminate from CoC - not required as compliance with the QA provisions in 10 CFR 72 Subpart G is a regulatory requirement that must be met.
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CoC Condition/Technical Specification Evaluation Form

	A Significant reduction in the margin of safety for ISFSI or cask operation?	No
Evaluation Summary		Relocate this CoC Condition to TS - Administrative Controls. Note that this administrative control is applicable to heavy load lifting procedures at the ISFSI. Lifts of the DSC and TC within the Reactor Building are governed by existing 10 CFR Part 50 license requirements.

CoC Condition/Technical Specification Evaluation Form

CoC Condition/TS Identifier: CoC-7 (second paragraph)

* All LCOs also require an Applicability, Condition(s), Required Action(s), Completion Time(s), Surveillance Requirement(s), and Frequency(ies). Refer to NUREG-1745 for additional guidance.

** In performing the risk insight evaluation above, the evaluator should think about subsequent changes to a relocated CoC requirement. Specifically, ask the question "what is the likelihood and worst possible consequences of a future change to this requirement in the less-conservative direction"?

Requirement		CoC Condition 7 (second paragraph): If a single failure proof crane is not used, the licensee must evaluate the accidental drop of the shielding components of the OS197L TC under 10 CFR 50.59, 10 CFR 72.48, and 10 CFR 72.212, and evaluate the consequences of the accident drops.	
CoC Body Certified Design	Section I. Technology	No	
	Section II. Design Features	No	
Appendix A - Inspections, Tests, and Evaluations		No	
Appendix B. Technical Specifications	Section 1 Definitions, Use and Application	No	
	Section 2 Approved Contents (Selection Criteria)	A1	No
		A2	No
		A3	No
	Section 3 Limiting Conditions for Operation (LCOs)* and Surveillance Requirements (SRs) (Selection Criteria)	L1	No
		L2	No
		L3	No
Section 4 Administrative Controls	Yes		
Risk Insight**: Will removing this requirement from the CoC/TS result in...	A significant increase in the probability or consequences of an accident previously evaluated in the cask FSAR?	Yes If a single failure proof crane is not used, the probability of a drop of the OS197L TC shielding components is significantly increased. The accidental drop of the top trailer shielding is evaluated in FSAR Appendix W. However, the licensee must evaluate the accidental drop of the shielding components of the OS197L TC under 10 CFR 50.59, 10 CFR 72.48, and 10 CFR 72.212, and evaluate the consequences of the accident drops to ensure the existing analysis is bounding.	
	The possibility of a new or different kind of accident being created compared to those previously evaluated in the FSAR?	No	
	A Significant reduction in the margin of safety for ISFSI or cask operation?	No	

CoC Condition/Technical Specification Evaluation Form

Evaluation Summary	<p>Relocate this CoC Condition to TS, Appendix B, TS Section 4 – Administrative Controls</p> <p>An evaluation (procedural control) must be performed by the licensee (reactor licensee, CoC holder or GL) under 10 CFR 50.59, or 10 CFR 72.48 and 10 CFR 72.212 of the accidental drop of shielding components of the OS197L TC, and consequences must be judged to be acceptable [if single failure proof crane is not used for the lift].</p>
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CoC Condition/Technical Specification Evaluation Form

CoC Condition/TS Identifier: _____CoC-8_____

* All LCOs also require an Applicability, Condition(s), Required Action(s), Completion Time(s), Surveillance Requirement(s), and Frequency(ies). Refer to NUREG-1745 for additional guidance.

** In performing the risk insight evaluation above, the evaluator should think about subsequent changes to a relocated CoC requirement. Specifically, ask the question “what is the likelihood and worst possible consequences of a future change to this requirement in the less-conservative direction”?

Requirement		<p>CoC Condition 8: A dry run training exercise of the loading, closure, handling, unloading and transfer of the Standardized NUHOMS® System shall be conducted by each licensee prior to the first use of the system to load spent nuclear fuel assemblies. The training exercise shall not be conducted with spent nuclear fuel in the canister. The dry run may be performed in an alternate step sequence from the actual procedural guidelines in the SAR. The dry run shall include, but need not be limited to the following:</p> <p>Loading Operations</p> <ul style="list-style-type: none"> a. Fuel Loading b. DSC sealing, drying and backfilling operations c. TC downending and transport to the ISFSI d. DSC transfer to the HSM e. Use of the remote crane operations and laser/optical systems for targeting if the OS197L TC is to be used for loading f. Manual crane operations if the OS197L TC is to be used for loading <p>Unloading Operations</p> <ul style="list-style-type: none"> a. DSC retrieval from the HSM b. Flooding of the DSC c. Opening of the DSC 	
CoC Body Certified Design	Section I. Technology	No	
	Section II. Design Features	No	
Appendix A - Inspections, Tests, and Evaluations		No	
Appendix B. Technical Specifications	Section 1 Definitions, Use and Application	No	
	Section 2 Approved Contents (Selection Criteria)	A1	No
		A2	No
		A3	No
	Section 3 Limiting Conditions for Operation (LCOs)* and Surveillance Requirements (SRs) (Selection Criteria)	L1	No
		L2	No
		L3	No

CoC Condition/Technical Specification Evaluation Form

	Section 4 Administrative Controls	No
Risk Insight**: Will removing this requirement from the CoC/TS result in...	A significant increase in the probability or consequences of an accident previously evaluated in the cask FSAR?	No
	The possibility of a new or different kind of accident being created compared to those previously evaluated in the FSAR?	No
	A Significant reduction in the margin of safety for ISFSI or cask operation?	No
Evaluation Summary	<p>Relocate this CoC Condition to the FSAR.</p> <p>A training program is required to comply with 72.190 and the general QA requirement to ensure personnel are qualified to perform their assigned tasks. The specifics of classroom and dry run training are adequately controlled by the general licensee's training program - which is subject to NRC inspection.</p>	

Attachment A

The Standardized NUHOMS[®] System is a horizontal, canister-based, dry spent fuel storage system. The Standardized NUHOMS[®] System is comprised of a dry shielded canister (DSC), a horizontal storage module (HSM), and a transfer cask (TC). The welded metal DSC provides confinement and criticality control for the storage and transfer of spent fuel. The concrete HSM provides radiation shielding while allowing for cooling of the DSC and fuel by natural convection during storage. The TC is used to facilitate the loading of spent fuel into the DSC at the reactor spent fuel pool building, preparation of the DSC for storage operations, and subsequent transfer of the DSC into the HSM (and out of the HSM for eventual transport and disposal offsite or for other purposes). The TC provides the necessary radiation shielding during these operations.

The following DSC models are authorized for use in the Standardized NUHOMS[®] System: 24P, 52B, 61BT, 32PT, 24PHB, 24PTH, 32PTH1, 37PTH, 61BTH, and 69BTH.

The following HSM models are authorized for use: Standardized HSM, HSM-H, HSM-HS.

The following TC models are authorized for use in the Standardized NUHOMS[®] System: Standardized TC, OS197, OS197H, OS197L, OS200.

With the exception of the TC, fuel transfer and auxiliary equipment necessary for ISFSI operations are not included as part of the Standardized NUHOMS[®] System referenced in this certificate of compliance (CoC). Such site-specific equipment may include, but is not limited to, special lifting devices, the transfer trailer and the skid positioning system.