

CoC Condition/Technical Specification Evaluation Form - CoC original

CoC Condition/TS Identifier: CoC-First Statement

* 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		This certificate is conditional upon fulfilling the requirements of 10 CFR Part 72, as applicable, the attached Appendix A (Technical Specifications) and Appendix B (Approved Contents and Design Features) for aboveground systems except Version E, HI-TRAC MS, MPC-32M, and Version 1 of MPC-32 and MPC-68; the attached Appendix C (Technical Specifications) and Appendix D (Approved Contents and Design Features) for the HI-STORM 100S Version E, HI-TRAC MS, MPC-32M, and Version 1 of MPC-32 and MPC-68M; or the attached Appendix A-100U (Technical Specifications) and Appendix B-100U (Approved Contents and Design Features) for underground systems, and the conditions specified below:	
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	

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	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>Rewrite to specify correct contents of reorganized Appendices: "This certificate is conditional upon fulfilling the requirements of 10 CFR Part 72, as applicable, the attached Appendix A (Inspections, Tests and Evaluations) and Appendix B (Technical Specifications) for aboveground systems except Version E, HI-TRAC MS, MPC-32M, and Version 1 of MPC-32 and MPC-68; the attached Appendix C (Inspections, Tests and Evaluations) and Appendix D (Technical Specifications) for the HI-STORM 100S Version E, HI-TRAC MS, MPC-32M, and Version 1 of MPC-32 and MPC-68M; or the attached Appendix A-100U (Inspections, Tests and Evaluations) and Appendix B-100U (Technical Specifications) for underground systems, and the conditions specified below:"</p>

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CoC Condition/TS Identifier: CoC-1.a

* 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 1: a. Model No.: HI-STORM 100 Cask System The HI-STORM 100 Cask System (the cask) consists of the following components: (1) interchangeable multi-purpose canisters (MPCs), which contain the fuel; (2) a storage overpack (HI-STORM), which contains the MPC during storage; and (3) a transfer cask (HI-TRAC), which contains the MPC during loading, unloading and transfer operations. The cask stores up to 32 pressurized water reactor fuel assemblies or 68 boiling water reactor fuel assemblies.	
CoC Body Certified Design	Section I. Technology	Yes	
	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	

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	The possibility of a new or different kind of accident being created compared to those previously evaluated in the FSAR?	Yes – since a different non-analyzed DSC configuration could conceivably be loaded
	A Significant reduction in the margin of safety for ISFSI or cask operation?	No
Evaluation Summary		Keep in CoC Section I as this is a description of the dry storage system.

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CoC Condition/TS Identifier: CoC-1.b

* 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”?

<p>Requirement</p>	<p>CoC Condition 1:</p> <p>b. Description</p> <p>The HI-STORM 100 Cask System is certified as described in the Final Safety Analysis Report (FSAR) and in the U.S. Nuclear Regulatory Commission’s (NRC) Safety Evaluation Report (SER) accompanying the Certificate of Compliance (CoC). The cask comprises three discrete components: the MPC, the HI-TRAC transfer cask, and the HI-STORM storage overpack.</p> <p>The MPC is the confinement system for the stored fuel. It is a welded, cylindrical canister with a honeycombed fuel basket, a baseplate, a lid, a closure ring, and the canister shell. All MPC components that may come into contact with spent fuel pool water or the ambient environment are made entirely of stainless steel or passivated aluminum/aluminum alloys such as the neutron absorbers. The canister shell, baseplate, lid, vent and drain port cover plates, and closure ring are the main confinement boundary components. All confinement boundary components are made entirely of stainless steel. The honeycombed basket, which contains neutron absorbing material, provides criticality control.</p> <p>There are twelve types of MPCs: the MPC-24, MPC-24E, MPC-24EF, MPC-32, MPC-32F, MPC 32 Version 1, MPC 32M, MPC-68, MPC-68 Version 1, MPC-68F, MPC-68FF, and MPC-68M. The number suffix indicates the maximum number of fuel assemblies permitted to be loaded in the MPC. All twelve MPC models have the same external diameter.</p>
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	<p>The HI-TRAC transfer cask provides shielding and structural protection of the MPC during loading, unloading, and movement of the MPC from the spent fuel pool to the storage overpack. The transfer cask is a multi-walled (carbon steel/lead/carbon steel) cylindrical vessel with a neutron shield jacket attached to the exterior. All transfer cask sizes have identical cavity diameters. The higher weight HI TRAC transfer casks have thicker shielding and larger outer dimensions than the lighter HI TRAC transfer casks.</p> <p>Above Ground Systems</p> <p>The HI-STORM 100 or 100S storage overpack provides shielding and structural protection of the MPC during storage. The HI-STORM 100S is a variation of the HI-STORM 100 overpack design. The overpack is a heavy-walled steel and concrete, cylindrical vessel. Its side wall consists of plain (un-reinforced) concrete that is enclosed between inner and outer carbon steel shells. The overpack has air vent at the bottom and at the top to allow air to circulate naturally through the cavity to cool the MPC inside. The HI-STORM 100 UVH is an alternative version of the overpack, with a similar design, but no air vents. A loaded MPC is stored within the HI-STORM 100 or 100S storage overpack in a vertical orientation. The HI-STORM 100A and 100SA are variants of the HI-STORM 100 family and are outfitted with an extended baseplate and gussets to enable the overpack to be anchored to the concrete storage pad in high seismic applications. The version E can be arrayed in a free standing or anchored configuration.</p> <p>Underground Systems</p> <p>The HI-STORM 100U System is an underground storage system identified with the HI-STORM 100 Cask System. The HI-STORM 100U storage Vertical Ventilated Module (VVM) utilizes a storage design identified as an air-cooled vault or caisson. The HI-STORM 100U storage VVM relies on vertical ventilation instead of conduction through the soil, as it is essentially a below-grade</p>
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		storage cavity. Air inlets and outlets allow air to circulate naturally through the cavity to cool the MPC inside. The subterranean steel structure is seal welded to prevent ingress of any groundwater from the surrounding subgrade, and it is mounted on a stiff foundation. The surrounding subgrade and a top surface pad provide significant radiation shielding. A loaded MPC is stored within the HI-STORM 100U storage VVM in the vertical orientation.	
CoC Body Certified Design	Section I. Technology	Yes	
	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?	Yes – since a different non-analyzed configuration could conceivably be loaded. However, some statements are overly prescriptive or are not focused on describing the SSC and can therefore be removed without creating the possibility of a non-analyzed configuration being loaded.	
	A Significant reduction in the margin of safety for ISFSI or cask operation?	No	
Evaluation Summary		Keep in CoC Section I as this is a description of the dry storage system. Remove the following statements as overly prescriptive and therefore unnecessary in the CoC:	

	<ol style="list-style-type: none">1) "The cask comprises three discrete components: the MPC, the HI-TRAC transfer cask, and the HI-STORM storage overpack."2) "The higher weight HI TRAC transfer casks have thicker shielding and larger outer dimensions than the lighter HI TRAC transfer casks."3) "The HI-STORM 100S is a variation of the HI-STORM 100 overpack design."4) "The HI-STORM 100U storage VVM relies on vertical ventilation instead of conduction through the soil, as it is essentially a below-grade storage cavity."5) "The surrounding subgrade and a top surface pad provide significant radiation shielding."
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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: Operating Procedures: Written operating procedures shall be prepared for cask handling, loading, movement, surveillance, and maintenance. The user’s site-specific written operating procedures shall be consistent with the technical basis described in Chapter 8 of the FSAR.	
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	

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Evaluation Summary	Deleted from CoC – not required as compliance with 10 CFR 72.150, which requires that documented procedures be followed, is a regulatory requirement that must be met.
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CoC Condition/Technical Specification Evaluation Form - CoC original

CoC Condition/TS Identifier: CoC-3

* 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 3: Acceptance tests and maintenance program: Written cask acceptance tests and maintenance program shall be prepared consistent with the technical basis described in Chapter 9 of the FSAR.	
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	

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Evaluation Summary	Delete from CoC – note required as this statement merely refers to the FSAR and so does not need to be repeated in the CoC.
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CoC Condition/Technical Specification Evaluation Form - CoC original

CoC Condition/TS Identifier: CoC-4

* 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 4: Quality: Activities in the areas of design, purchase, fabrication, assembly, inspection, testing, operation, maintenance, repair, modification of structures, systems and components, and decommissioning that are important to safety shall be conducted in accordance with a Commission-approved quality assurance program which satisfies the applicable requirements of 10 CFR Part 72, Subpart G, and which 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	

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	A Significant reduction in the margin of safety for ISFSI or cask operation?	No
Evaluation Summary	Delete 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/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: Heavy Loads Requirements: Each lift of an MPC, a HI-TRAC transfer cask, or any HI-STORM overpack must be made in accordance to the existing heavy loads requirements and procedures of the licensed facility at which the lift is made. A plant-specific review (under 10 CFR 50.59 or 10 CFR 72.48, if applicable) is required to show operational compliance with existing plant specific heavy loads requirements. Lifting operations outside of structures governed by 10 CFR Part 50 must be in accordance with Section 5.5 of Appendix A or Section 5.2 of Appendix C and Sections 3.4.6 and 3.5 (if applicable) of Appendix B or D, for above ground systems, section 5.5 of Appendix A-100U for the underground systems.	
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 Adherence to heavy load lifting procedures is necessary to preclude the possibility of a cask drop during loading operations inside the plant’s fuel handling building (per 10 CFR 50) and during transfer operations (per 10 CFR 72). A significant increase in	

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		the probability of a cask drop would occur if these heavy load handling procedures are not followed.
	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>Based on this evaluation these Heavy Load Requirements should be moved to Section 4 of Appendixes B, D, and B-100U - Administrative Controls. Note that this administrative control is applicable to heavy load lifting procedures at the ISFSI. Lifts within the Reactor Building are governed by existing 10 CFR Part 50 license requirements.</p> <p>However, Appendix B-100U is not being updated at this time. So, to avoid complicating the relationships between the CoC main body and the Appendixes, these requirements will remain in the CoC main body for now.</p>

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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: Approved Contents: Contents of the HI-STORM 100 Cask System must meet the fuel specifications given in Appendices B or D, as applicable, for aboveground systems or B-100U for underground systems to this certificate.	
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	
		A3	
	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		Delete from the CoC - This statement in the CoC merely points to information in the Appendices.	

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CoC Condition/TS Identifier: CoC-7

* 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: Design Features: Features or characteristics for the site, cask or ancillary equipment must be in accordance with Appendices B for aboveground systems or B-100U for underground systems to this certificate.	
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	

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	A Significant reduction in the margin of safety for ISFSI or cask operation?	No All important design features will be discussed in the CoC
Evaluation Summary		Delete from CoC as this is an unnecessary cross-reference. All important design features will be included in the CoC or its Appendices.

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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		CoC Condition 8: Changes to the CoC: The holder of this certificate who desires to make changes to the certificate, which includes Appendices A and A-100U (Technical Specifications) and Appendices B and B-100U (Approved Contents and Design Features), shall submit an application for amendment of the certificate.	
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	

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	A Significant reduction in the margin of safety for ISFSI or cask operation?	No
Evaluation Summary	Delete from CoC - not required as 10CFR72 does not allow changes to the CoC of its appendices without an application for amendment to the certificate.	

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CoC Condition/TS Identifier: CoC-9

* 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 9: Special Requirements for First System in Place	
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 flow rate test will still be performed in accordance with Chapter 9 of the FSAR.	
	The possibility of a new or different kind of accident being created compared to those previously evaluated in the FSAR?	No. The flow rate test will still be performed in accordance with Chapter 9 of the FSAR.	
	A Significant reduction in the margin of safety for ISFSI or cask operation?	No. The test merely confirms the equipment has been manufactured and will operate in conformance with the certified design. The quality assurance program will still ensure that the SFSCs are manufactured and operate as designed. Furthermore, LCO 3.1.2 will still ensure the heat removal safety function of the SFSCs.	

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<p>Evaluation Summary</p>	<p>Delete from CoC – not required as the test merely confirms the equipment has been manufactured and will operate in conformance with the certified design. The quality assurance program will still ensure that the SFSCs are manufactured and operate as designed. Furthermore, LCO 3.1.2 will still ensure the heat removal safety function of the SFSCs.</p> <p>Also, the statements referring to Part 72 are not required as compliance with reporting specifications in 10 CFR 72.4 and 10 CFR 72.212 are regulatory requirements that must be met.</p>
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CoC Condition/TS Identifier: CoC-10

* 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 10: Pre-operational Testing and Training Exercise	
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?	N/A	
	The possibility of a new or different kind of accident being created compared to those previously evaluated in the FSAR?	N/A	
	A Significant reduction in the margin of safety for ISFSI or cask operation?	N/A	
Evaluation Summary		Based on this evaluation, these Pre-operational Testing and Training Exercises should be moved to Appendixes B, D, and B-100U as these testing and	

	<p>training exercises ensure that the equipment will operate and perform safety functions as designed.</p> <p>The specifics of dry run training should be performed by the general licensee prior to initial use of the system to load spent fuel. In addition, the general licensee's training program is subject to NRC inspection.</p> <p>However, Appendix B-100U is not being updated at this time. So, to avoid complicating the relationships between the CoC main body and the Appendixes, these requirements will remain in the CoC main body for now.</p>
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CoC Condition/TS Identifier: CoC-11

* 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 11: 11. The NRC has approved an exemption request by the CoC applicant from the requirements of 10 CFR 72.236(f), to allow a Supplemental Cooling System to provide for decay heat removal in accordance with Section 3.1.4 of Appendices A, C, and A-100U.	
CoC Body Certified Design	Section I. Technology	No	
	Section II. Design Features	Yes	
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?	Yes – the Supplemental Cooling System is applied where needed to prevent overheating of the system.	
	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 - CoC original

Evaluation Summary	Keep in CoC Section II. The supplement cooling system is a design feature approved for decay heat removal.
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CoC Condition/Technical Specification Evaluation Form - CoC original

CoC Condition/TS Identifier: CoC-13

* 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 13: Authorization: The HI-STORM 100 Cask System, which is authorized by this certificate, is hereby approved for general use by holders of 10 CFR Part 50 licenses for nuclear reactors at reactor sites under the general license issued pursuant to 10 CFR 72.210, subject to the conditions specified by 10 CFR 72.212, this certificate, and the attached Appendices A, B, A-100U, B-100U, C, and D as applicable. The HI-STORM 100 Cask System may be fabricated and used in accordance with any approved amendment to CoC No. 1014 listed in 10 CFR 72.214. Each of the licensed HI-STORM 100 System components (i.e., the MPC, overpack, and transfer cask), if fabricated in accordance with any of the approved CoC Amendments, may be used with one another provided an assessment is performed by the CoC holder that demonstrates design compatibility.	
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	

CoC Condition/Technical Specification Evaluation Form - CoC original

	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		Delete from CoC - not required as these are regulatory requirements (10 CFR 72.210 through 72.214) that must be met.

CoC Condition/Technical Specification Evaluation Form - CoC original

CoC Condition/TS Identifier: CoC-14

* 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 14: FSAR UPDATE FOR RENEWED COC: The CoC holder shall submit an updated FSAR to the Commission, in accordance with 10 CFR 72.4, within 90 days after the effective date of the renewal. The updated FSAR shall reflect the changes and CoC holder commitments resulting from the review and approval of the renewal of the CoC.	
CoC Body Certified Design	Section I. Technology		No
	Section II. Design Features		No
	Section III. CoC Renewal		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

CoC Condition/Technical Specification Evaluation Form - CoC original

	A Significant reduction in the margin of safety for ISFSI or cask operation?	No
Evaluation Summary	Delete from CoC - not required as these are regulatory requirements that must be met.	

CoC Condition/Technical Specification Evaluation Form - CoC original

CoC Condition/TS Identifier: CoC-15

* 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 15: 72.212 EVALUATIONS FOR RENEWED COC USE: Any general licensee that initiates spent fuel dry storage operations with the HI-STORM 100 system after the effective date of the renewal of the CoC and any general licensee operating a HI-STORM 100 system as of the effective date of the renewal of the CoC, including those that put additional storage systems into service after that date, shall:</p> <p>a. As part of the evaluations required by 10CFR72.212(b)(5), include the evaluations related to the terms, conditions, and specifications of this CoC amendment as modified (i.e., changed or added) as a result of the renewal of the CoC.</p> <p>b. As part of the document review required by 10CFR72.212(b)(6), include a review of the FSAR changes resulting from the renewal of the CoC; and</p> <p>c. Ensure that the evaluations required by 10CFR72.212(b)(7) and (8) capture the evaluations and review described in (a) and (b) of this CoC condition.</p>	
CoC Body Certified Design	Section I. Technology	No	
	Section II. Design Features	No	
	Section III. CoC Renewal	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)*	L1	No
		L2	No
L3		No	

CoC Condition/Technical Specification Evaluation Form - CoC original

	and Surveillance Requirements (SRs) (Selection Criteria)		
	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?	Yes – if the site 72.212 evaluations are not updated appropriately when the CoC is renewed, the 72.212 may be missing up-to-date information important to safety conclusions.	
Evaluation Summary		Move to Appendix A Section 2 as this information important to the site-specific 72.212 evaluations.	

CoC Condition/Technical Specification Evaluation Form - CoC original

CoC Condition/TS Identifier: CoC-16

* 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 16: AMENDMENTS AND REVISIONS FOR RENEWED COC: All future amendments and revisions to this CoC shall include evaluations of the impacts to aging management activities (i.e., time limited aging analyses and aging management programs to assure they remain adequate for any changes to SSCs within the scope of renewal.	
CoC Body Certified Design	Section I. Technology		No
	Section II. Design Features		No
	Section III. CoC Renewal		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 – Each CoC Amendment is a stand-alone document that can be used independently from previous or future Amendments. Thus, this statement existing in one Amendment has no impact on subsequent Amendments.
	The possibility of a new or different kind of accident being created compared to those previously evaluated in the FSAR?		No – Each CoC Amendment is a stand-alone document that can be used independently from previous or future Amendments. Thus, this statement existing in one Amendment has no impact on subsequent Amendments.

CoC Condition/Technical Specification Evaluation Form - CoC original

	<p>A Significant reduction in the margin of safety for ISFSI or cask operation?</p>	<p>No – Each CoC Amendment is a stand-alone document that can be used independently from previous or future Amendments. Thus, this statement existing in one Amendment has no impact on subsequent Amendments.</p>
<p>Evaluation Summary</p>		<p>Delete from CoC as each CoC Amendment is a stand-alone document that can be used independently from previous or future Amendments. Thus, this statement existing in one Amendment has no impact on subsequent Amendments.</p>