



AMERICA'S NUCLEAR SOLUTION

Consolidated Interim Storage of Spent
Nuclear Fuel and Reactor Related GTCC Waste

Discuss Request for Supplemental
Information for CISF

Rockville, Maryland

22 August 2016



Agenda

- (NRC/WCS) 1:00 P.M. – 1:10 P.M. - Introductions and opening remarks
- (WCS) 1:10 P.M. – 2:25 P.M. - How WCS intends to address questions/concerns expressed
- The storage systems that WCS intends to include in its application.
 - How the application intends to ensure canisters awaiting shipment to WCS meet its license.
 - How the application intends to ensure canisters received at WCS will meet its license.
 - How WCS plans to provide additional and clearer language in its application, technical specifications, and safety analysis report to ensure common understanding of WCS' application and clarity.
- (WCS) 2:25 P.M. – 2:50 P.M. - WCS's progress, plans, and practices in responding to requests and observations in NRC's June 22, 2016, letter.
- Providing responses in standard format.
 - Solicit any comments or suggestions on response format, including how WCS is addressing necessary level of detail.
- (WCS) 2:50 P.M. – 3:05 P.M. - WCS CISF application high level schedule
- (NRC/WCS) 3:05 P.M. – 3:20 P.M. - Public questions and comments
- (NRC/WCS) 3:20 P.M. – 3:30 P.M. - Closing remarks



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Storage Systems at the WCS CISF

Cask System	NRC Docket No.	Canister	Overpack	Priority Site
NUHOMS [®] MP187 Cask System	72-11 (SNM-2510)	FO-DSC	HSM (Model 80)	Rancho Seco
		FC-DSC		
		FF-DSC		
Advanced Standardized NUHOMS [®] System	72-1029	NUHOMS [®] 24PT1	AHSM	SONGS Unit 1
Standardized NUHOMS [®] System	72-1004	NUHOMS [®] 61BT	HSM Model 102	Millstone Unit 1 Oyster Creek
		NUHOMS [®] 61BTH Type 1		
NAC-MPC	72-1025	Yankee Class	VCC	Yankee Rowe
		Connecticut Yankee	VCC	Connecticut Yankee
		LACBWR	VCC	La Crosse
NAC-UMS	72-1015	Classes 1 thru 5	VCC	Maine Yankee
MAGNASTOR	72-1031	TSC1 thru TSC4	CC1 thru CC4	Zion Kewaunee



Initial License Application

Priority on currently licensed systems for shutdown sites:

◆ NAC International

- **Maine Yankee**
- **Connecticut Yankee**
- **Yankee Rowe**
- **La Crosse**
- **Zion**

◆ AREVA NUHOMS®

- **Rancho Seco**
- SONGS Unit 1
- Millstone Unit 1
- Oyster Creek* (S/D scheduled 2019)

Red indicates a “stranded” (ISFSI only) site identified in the 2012 Final Report of the “Blue Ribbon Commission on America’s Nuclear Future” (BRC)

* Fuel Burned less than 45 GWd/MTU



Licensing Basis for WCS CISF

- WCS CISF Licensing Basis includes:
 - WCS CISF SAR
 - Incorporates FSARs of six NRC approved storage systems by reference
 - Evaluated the six NRC approved storage systems for WCS site parameters
 - Site-Specific License Conditions and Tech Specs
 - Focused on the unloading of transportation casks and the transfer and storage of canistered spent fuel at WCS site.
 - Limits contents and canister designs to those authorized under specific NRC approved Certificates and Site Specific licenses.



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Prior to Shipment to WCS CISF

- Before a canister may be shipped to WCS;
 - A verification is performed to confirm it conforms to the approved WCS CISF Licensing Basis which considers:
 - CoC Amendment/FSAR revision under which it was loaded.
 - Vendor/Licensee changes accepted under 10 CFR 72.48



Prior to Shipment to WCS CISF

- Canister may be shipped if:
 - The CoC Amendment/FSAR revision is compatible with the WCS CISF Licensing Basis, and
 - There are 10 CFR 72.48 changes that affect the canister that have already been incorporated into a referenced FSAR revision.
- If there are Part 72.48 changes made by Vendors or Licensees that affect the canister:
 - WCS will determine if the Part 72.48 change is incorporated in a referenced FSAR revision.
 - If not, WCS will do its own Part 72.48 analysis to see if the change affects the ability of the canister to meet the WCS CISF Licensing Basis.



Conformance of Canisters to WCS Licensing Basis

NAC-MPC Storage System

Certificate Amendment 72-1025	Canister	Tech Specs Compatible with WCS Configuration		
		Canister	Contents	Loading Procedures
6	Yankee Rowe Connecticut Yankee Yankee Class LACBWR	Yes	Yes	Yes
5	Yankee Rowe Connecticut Yankee Yankee Class	Yes	Yes	Yes
4	Yankee Rowe Connecticut Yankee Yankee Class	Yes	Yes	Yes
3	Yankee Rowe Connecticut Yankee Yankee Class	Yes	Yes	Yes
2	Yankee Rowe Connecticut Yankee	Yes	Yes	Yes
1	Yankee Rowe	Yes	Yes	Yes
0	Yankee Rowe	Yes	Yes	Yes

WCS will include a “crosswalk” in its application that compares its licensing basis with CoC Amendments/FSAR revisions under which canisters were loaded.



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Shipment of Canisters to WCS CISF

NAC-MPC Storage System

Certificate Amendment 72-1025	Canister	Tech Specs Compatible with WCS Configuration			Licensee/ Vendor 72.48 Change	WCS 72.48 Required	Notes
		Canister	Contents	Loading Procedures			
6	Yankee Rowe Connecticut Yankee Yankee Class LACBWR	Yes	Yes	Yes	No	No	
					Yes	Yes	
5	Yankee Rowe Connecticut Yankee Yankee Class	Yes	Yes	Yes	No	No	
					Yes	Yes	
4	Yankee Rowe Connecticut Yankee Yankee Class	Yes	Yes	Yes	No	No	Increased vacuum drying times. Decreased time limits for canisters in transfer casks.
					Yes	Yes	
3	Yankee Rowe Connecticut Yankee Yankee Class	Yes	Yes	Yes	No	No	
					Yes	Yes	
2	Yankee Rowe Connecticut Yankee	Yes	Yes	Yes	No	No	
					Yes	Yes	
1	Yankee Rowe	Yes	Yes	Yes	No	No	
					Yes	Yes	
0	Yankee Rowe	Yes	Yes	Yes	No	No	
					Yes	Yes	

WCS proposes a standard process to evaluate whether loaded canisters meet the WCS CISF licensing basis prior to shipment.



Receipt at WCS CISF

- Upon arrival at WCS, canisters will be evaluated to assure that they continue to meet the terms, conditions of use, and technical specifications of one of the six storage systems
- If the canisters cannot be evaluated to meet these conditions, WCS would undertake an evaluation to determine if:
 - WCS's site specific license could be amended to accept the canister in its post shipment configuration;
 - an evaluation done under 10 CFR 72.48 for the WCS site would support putting the canister in storage at WCS, or
 - WCS will isolate the transport cask, notify the NRC, and develop an action plan for the canister.



WCS Plan

- We are preparing a new WCS SAR Section 1.2.4 that will clarify our proposed licensing basis.
- We are continuing to review the application for areas that need clarification, including the RSIs, observations, and feed back from today's meeting.
- We plan to identify clarifications in time to prepare them for the October 31, 2016 submittal.
- We believe this plan affords us time to factor in any questions you have today. If you desire more information on this approach, we are happy to work with you.