

**From:** Kimberly Manzione [<mailto:K.Manzione@Holtec.com>]  
**Sent:** Friday, November 20, 2015 4:31 PM  
**To:** Goshen, John  
**Subject:** [External\_Sender] RE: Final Condition 9 language

John,

Holtec concurs with the below condition.

Thanks,  
Kim

**From:** Goshen, John [<mailto:John.Goshen@nrc.gov>]  
**Sent:** Tuesday, November 17, 2015 3:21 PM  
**To:** Kimberly Manzione  
**Subject:** Final Condition 9 language

Kim, I believe this has the changes you recommended. I will need Holtec's concurrence on this. Thanks,  
John

9. SPECIAL REQUIREMENTS FOR FIRST SYSTEMS IN PLACE

- a. For the storage configuration, each user of a HI-STORM 100 Cask and HI-STORM 100U Cask with a heat load equal to or greater than 20 kW shall perform a thermal validation test in which the user measures the total air mass flow rate through the cask system using direct measurements of air velocity in the inlet vents. The user shall then perform an analysis of the cask system with the taken measurements to demonstrate that the measurements validate the analytic methods described in Chapter 4 of the FSAR. The thermal validation test and analysis results shall be submitted in a letter report to the NRC pursuant to 10 CFR 72.4 within 180 days of the user's loading of the first cask with a heat load equal to or greater than 20 kW. To satisfy condition 9(a) for casks of the same system type (i.e., HI-STORM 100 casks, HI-STORM 100U casks), in lieu of additional submittals pursuant to 10 CFR 72.4, users may document in their 72.212 report a previously performed test and analysis submitted by letter report to the NRC that demonstrates validation of the analytic methods described in Chapter 4 of the FSAR.
- b. For the transfer configuration, each user of the HI-STORM 100 Cask and HI-STORM 100U Cask shall procure, if necessary, a Supplemental Cooling System (SCS) capable of providing the thermal-hydraulic characteristics (coolant temperature at the annulus inlet, coolant temperature located at the annulus outlet, and coolant flow rate) that will ensure that thermal limits (described in Appendix 2.C of the FSAR) are not exceeded during transfer operations. The thermal-hydraulic characteristics of the SCS shall be determined using the analytical methods described in Chapter 4 for the transfer configuration. For the transfer configuration, each first time user shall measure the SCS thermal-hydraulic characteristics to validate the performance of the SCS. The SCS analysis and validation shall be documented in an update to the 72.212 report within 180 days of the user's first transfer operation with the SCS. Condition 9(b) does not apply to the MPC-68M.

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