BSC

Calculation/Analysis Change Notice

Complete only applicable items.

1. QA: ~~NA~~ QA
2. Page 1 of 3

3. Document Identifier:	4. Rev.:	5. CACN:
050-PSA-WH00-00200-000-00A	00A	001

6. Title:
Wet Handling Facility Reliability and Event Sequence Categorization Analysis

ENG.20080417.0002

7. Reason for Change:
It was found that incorrect event sequences are used as representative event sequence in Table 6.9-1 of the affected document.

8. Supersedes Change Notice: ☐ Yes If, Yes, CACN No.: _____ ☒ No

9. Change Impact:

Inputs Changed:	☐ Yes	☒ No	Results Impacted:	☒ Yes	☐ No
Assumptions Changed:	☐ Yes	☒ No	Design Impacted:	☐ Yes	☒ No

10. Description of Change:

There is no change on the calculation method by this CACN001. The following changes will be made to the document 050-PSA-WH00-00200-000-00A:

1/ Page 234 – item 11, change "WHF-ESD03-TAD (Seq. 2-2)" to "WHF-ESD03-AODPC (Seq. 2-2)" in "Representative event Sequence (Sequence Number)" column.
2./ Page 248 - item 80, change "WHF-ESD13-TAD (Seq. 2-5)" to "WHF-ESD16-CSNF (Seq. 4-3)" in "Representative event Sequence (Sequence Number)" column.

Insert revised pages 234 and 248 that include change bars to identify revisions.

11. REVIEWS AND APPROVAL

Printed Name	Signature	Date
11a. Originator: Phuoc Le		4/17/08
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11e. Design Authority: B, Rushinko		4/17/08

4/17/08

Table 6.9-1. Preclosure Nuclear Safety Design Bases for the WHF ITS SSCs (Continued)

System or Facility (System Code)	Subsystem or Function (as Applicable)[d]	Component	Nuclear Safety Design Bases		Representative Event Sequence (Sequence Number)	Source
			Safety Function	Controlling Parameters and Values		
				11. The mean conditional probability of loss of shielding of the aging overpack resulting from a drop shall be less than or equal to 5×10^{-6} per drop.	WHF-ESD03-AODPC (Seq. 2-2)	AO-SHIELD-DROP
Cask/Canister Process System	Cask Cooling	Cask/DPC Overpressure Protection Features	Protect against[c] cask failure due to overpressure	12. The mean probability of an overpressure of a cask or cooling system line during the cask cooling operation shall be less than or equal to 8×10^{-6} per cask.	WHF-ESD16-CSNF (Seq. 4-1)	OVERPRESSURIZATION
DOE and Commercial Waste Package System)	Canistered Spent Nuclear Fuel	Dual-Purpose Canister (DPC) (Analyzed as a Representative Canister)	Provide containment	13. The mean conditional probability of breach of a canister resulting from a drop of the canister shall be less than or equal to 1×10^{-5} per drop.	WHF-ESD13-DPC (Seq. 2-3)	CANISTER-DROP
				14. The mean conditional probability of breach of a canister resulting from a drop of a load onto the canister shall be less than or equal to 1×10^{-5} per drop.	WHF-ESD13-DPC (Seq. 5-3)	CANISTER-DROP
				15. The mean conditional probability of breach of a canister resulting from a side impact or collision shall be less than or equal to 1×10^{-8} per impact.	WHF-ESD13-DPC (Seq. 4-3)	CANISTER-IMPACT

Table 6.9-1. Preclosure Nuclear Safety Design Bases for the WHF ITS SSCs (Continued)

System or Facility (System Code)	Subsystem or Function (as Applicable)[d]	Component	Nuclear Safety Design Bases		Representative Event Sequence (Sequence Number)	Source
			Safety Function	Controlling Parameters and Values		
		Portions of the surface nuclear confinement HVAC system that support the cooling of ITS electrical equipment and battery rooms	Support ITS electrical function	79. The mean conditional probability of failure of the portions of the surface nuclear confinement HVAC system that support the cooling of ITS electrical equipment and battery rooms in the WHF shall be less than or equal to 2×10^{-2} per ITS electrical train over a period of 720 hours following a radionuclide release.	WHF-ESD13-TAD (Seq. 2-5)	EP-WHF-COOL-1 and EP-WHF-COOL-2
				80. The mean conditional probability of failure of the portions of the surface nuclear confinement HVAC system that support the cooling of ITS electrical equipment and battery rooms in the WHF shall be less than or equal to 5×10^{-4} per ITS electrical train over a period of 24 hours following a cask overpressure or a cooling system line break.	WHF-ESD16-CSNF (Seq. 4-3)	EP-WHF-COOL-1-24 and EP-WHF-COOL-2 - 24
Surface Non-Confinement HVAC System	Surface Non-Confinement HVAC	Portions of the surface non-confinement HVAC system that support the cooling of ITS electrical equipment and battery rooms (EDGF)	Support ITS electrical function	81. The mean conditional probability of failure of the portions of the surface non-confinement HVAC system that support the cooling of ITS electrical equipment and battery rooms in the EDGF shall be less than or equal to 2×10^{-2} per ITS electrical train over a period of 720 hours following a radionuclide release.	WHF-ESD13-TAD (Seq. 2-5)	
Wet Handling Facility	Wet Handling Facility (WHF)	Shield Doors (Including Anchorages)	Protect against[c] direct exposure of personnel	82. Equipment shield doors shall have a mean probability of inadvertent opening of less than or equal to 1×10^{-7} per waste container handled.	WHF-ESD29-TAD (Seq. 3)	050-29-SHLDDR-DIRCT-EXP