

# Technical Report Administrative Change Notice

*Complete only applicable items.*

<b>1. Document Number:</b> 000-30R-MGR0-03500-000-000	<b>2. Revision:</b> 000	<b>3. ACN:</b> 03
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<b>4. Title:</b> Preclosure Nuclear Safety Design Bases	ENG.20080417.0001
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<b>5. Approvals:</b>		
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Responsible Manager or Project Engineer:	<div style="display: flex; justify-content: space-between;"> <span>Thomas Dunn Print name and sign</span> </div>	<div style="display: flex; justify-content: space-between;"> <span>4/17/08 Date</span> </div>

6. Affected Pages	7. Reason for, and Description of Change:
D-4	<p>Reason: Transcription errors in source document. These changes are in response to CR 11980. Description of changes:</p> <p>On Page D-4 in Table D-1, the cited representative event sequence (in column 6) for item AP.WH.HAC.02 is incorrectly listed as WHF-ESD03-TAD (Seq. 2-2). However, the cited event sequence does not exist. The text is revised to state that the correct representative event sequence is WHF-ESD03-AODPC (Seq. 2-2) to be consistent with the cited reference for this event sequence: Table 6.9-1 in Ref. 8.2.8, <i>Wet Handling Facility Reliability and Event Sequence Categorization Analysis</i> (050-PSA-WH00-00200-000-00A CACN 001).</p>
D-20	<p>On Page D-20 in Table D-1, the cited representative event sequence (in column 6) for item VC.WH.04 is incorrectly listed as WHF-ESD13-TAD. However, the cited event sequence is incorrect. The text is revised to state that the correct representative event sequence is WHF-ESD16-CSNF (Seq. 4-3) to be consistent with the cited reference for this event sequence: Table 6.9-1 in Ref. 8.2.8, <i>Wet Handling Facility Reliability and Event Sequence Categorization Analysis</i> (050-PSA-WH00-00200-000-00A CACN 001).</p>

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

System or Facility (System Code)	Subsystem or Function (as Applicable)	Component <sup>d</sup>	Nuclear Safety Design Bases		Representative Event Sequence (Sequence Number <sup>e</sup> )
			Safety Function	Controlling Parameters and Values	
Aging (AP) (continued)	Aging Handling/ Cask Transfer (continued)	Cask Transfer Trailer  (for use with Transportation Casks and Horizontal Shielded Transfer Casks (HSTCs)  (PWR DPC: [170-HAT0-TRLY-00001])  (BWR DPC: [170-HAT0-TRLY-00002])	Preclude fuel tank explosion	AP.WH.HAT.09. The cask transfer trailer fuel tank shall preclude fuel tank explosions. (Ref. 8.2.8, Table 6.9-1)	Initiating event does not require further analysis <sup>b</sup>
			Reduce severity of a drop	AP.WH.HAT.10. The cask transfer trailer shall preclude dropping a cask from a height greater than 6 feet measured from the equipment base. (Ref. 8.2.8, Table 6.9-1)	WHF-ESD04-DPC (Seq. 2-4)
			Preclude puncture of a cask	AP.WH.HAT.11. The cask transfer trailer shall preclude puncture of a cask due to collision. (Ref. 8.2.8, Table 6.9-1)	Initiating event does not require further analysis <sup>b</sup>
			Preclude puncture of a cask	AP.WH.HAT.12. The cask transfer trailer shall be designed to preclude puncture of a cask due to the spectrum of seismic events <sup>a</sup> . (Ref. 8.2.4, Table 6.10-5)	Initiating event does not require further analysis <sup>b</sup>
	Aging Handling/ Aging Overpack	Aging Overpack (TAD: [170-HAC0-ENCL-00003])  (Vertical DPC: [170-HAC0-ENCL-00002])	Protect against <sup>c</sup> direct exposure to personnel	AP.WH.HAC.01. The mean conditional probability of loss of shielding of the aging overpack resulting from an impact or collision shall be less than or equal to $1 \times 10^{-5}$ per impact. (Ref. 8.2.8, Table 6.9-1)	WHF-ESD03-AODPC (Seq. 3-2)
				AP.WH.HAC.02. The mean conditional probability of loss of shielding of the aging overpack resulting from a drop shall be less than or equal to $5 \times 10^{-6}$ per drop. (Ref. 8.2.8, Table 6.9-1)	WHF-ESD03-AODPC (Seq. 2-2)
Cask/Canister/ Waste Package Process System (MR)	Cask Cooling	Cask/DPC Overpressure Protection Features	Protect against <sup>c</sup> cask failure due to overpressure	MR.WH.01. 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 $8 \times 10^{-6}$ per cask. (Ref. 8.2.8, Table 6.9-1)	WHF-ESD16-CSNF (Seq. 4-1)

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

System or Facility (System Code)	Subsystem or Function (as Applicable)	Component <sup>d</sup>	Nuclear Safety Design Bases		Representative Event Sequence (Sequence Number <sup>e</sup> )
			Safety Function	Controlling Parameters and Values	
Surface Nuclear Confinement HVAC System (VC) (continued)	Surface Nuclear Confinement HVAC (continued)	Portions of the surface nuclear confinement HVAC system that exhaust from areas with a potential for a breach (continued)	Mitigate the consequences of radionuclide release (continued)	VC.WH.02. The mean probability that the HVAC system (including HEPA filtration of exhaust air from the WHF confinement areas) becomes unavailable during a 1-day mission time following a radionuclide release from the cask sampling and cooling process shall be less than or equal to $1 \times 10^{-3}$ . (Ref. 8.2.8, Table 6.9-1)	WHF-ESD16-CSNF (Seq. 4-3)
		Portions of the surface nuclear confinement HVAC system that support the cooling of ITS electrical equipment and battery rooms	Support ITS electrical function	VC.WH.03. 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 $2 \times 10^{-2}$ per ITS electrical train over a period of 720 hours following a radionuclide release. (Ref. 8.2.8, Table 6.9-1)	WHF-ESD13-TAD (Seq. 2-5)
				VC.WH.04. 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 $5 \times 10^{-4}$ per ITS electrical train over a period of 24 hours following a cask overpressure or a cooling system line break. (Ref. 8.2.8, Table 6.9-1)	WHF-ESD16-CSNF (Seq. 4-3)
Surface Non-Confinement HVAC System (VN)	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	VN.WH.01. 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 $2 \times 10^{-2}$ per ITS electrical train over a period of 720 hours following a radionuclide release. (Ref. 8.2.8, Table 6.9-1)	WHF-ESD13-TAD (Seq. 2-5)