

Areva DC Cask Loading Strategy Options

RAI Number	RAI subset	Summary of item	A (Full Design)	B		C (Remove Spent Fuel)
				In-Scope Design	Out of Scope Design (Conceptual Design)	
Potential New RAI		Capability to remove spent fuel from fuel handling building.	DC		DC/COL	DC
		GDC 2 - Describe failure of nonsafety components on SSC	DC		DC/COL	DC
09.01.04-5 (eRAI 1537)	a	Identify safety vs non-safety related components	DC	DC	DC/COL	DC
	b	describe safety function of facility components	DC	DC	DC/COL	DC
	c	Define single failure criteria	DC	DC	COL RAI	DC
	d	Describe emergency cooling avail and needed for cask	DC		COL RAI	DC
	e	Describe safety interlocks provided	DC	DC	COL RAI	DC
09.01.04-6 (eRAI 1537)		Describe seismic and safety classification summary	DC	DC	DC/COL	DC
09.01.04-7 (eRAI 1537)	a	Describe penetration cover details and drain prevention	DC	DC		DC
	b	Address failure when cask connected and method to prevent draindown	DC		COL RAI	
	c	Provide details of gates that separate pit and SFP	DC	DC		DC
	d	Address operator error during cask loading and affect on SFP	DC	DC (Penetration Cover Only)	COL RAI	DC
09.01.04-15 (eRAI 4524)	a	Provide details of operation information and process	DC	DC	COL RAI	DC
	b	Describe how SRP and GDCs met	DC	DC	DC/COL	DC
	c	Provide ITAAC for out of scope portion (interface reqt)	DC (ITAAC)	DC (ITAAC)	DC (Interface Requirements) and COL (ITAAC)	DC (ITAAC)
	d	Describe operation design, interlock, manual/auto feature, system control and redundancy/deversity	DC		COL/RAI	DC
	e	Describe design, maintenance, and operation of cask loading components	DC	DC	DC/COL	
	f	Operator training, rigging, lifting, inspection and procedures	COL ITEM		COL/RAI	COL ITEM
	g	Provide international operating experience	DC	DC (Penetration Cover Only)	DC/COL	
09.01.04-16 (eRAI 4524) Evaluate the following failure scenarios:	a	Evaluate Drop assembly	DC	DC (Penetration Cover Only)	COL RAI	DC
	b	Evaluate drop or tipping of the cask,	DC		COL RAI	DC
	c	Evaluate improper connection/alignment of the cask and the penetration	DC		COL RAI	
	d	Evaluate operator error	DC	DC (Penetration Cover Only)	COL RAI	DC
	e	Evaluate failure of the penetration seals	DC	DC (Penetration Cover Only)	COL RAI	DC (Penetration Cover Only)
	f	Evaluate failure of the cask handling machine	DC		COL RAI	
	g	Evaluate effect of a seismic event	DC	DC	COL RAI	DC

Areva DC Cask Loading Strategy Options

RAI Number	RAI subset	Summary of item	A (Full Design)	B		C (Remove Spent Fuel)
				In-Scope Design	Out of Scope Design (Conceptual Design)	
09.01.04-17 (eRAI 4524)		Include pool water level Tech Spec	DC (Only if all SFP gates not Seismic I)	DC (Only if all SFP gates not Seismic I)		DC (Only if all SFP gates not Seismic I)
	a	Eval seismic event when loading fuel and draindown	DC	DC	COL RAI	DC
09.01.04-18 (eRAI 4660)	a	Describe dose rate when personnel in cask area below	DC		COL RAI	
	b	Provide dose assessment for various cask operations	DC		COL RAI	DC
	c	Provide details of flange/pentration leakage and how it meets 20.1406	DC	DC		DC
KEY						
CODE	DEFINITION					
DC	RAI should be addressed by DC applicant at DC stage					
COL ITEM	COL Info Item should be created at DC stage					
DC/COL	RAI should be addressed at DC stage for conceptual design and at COL stage for the site specific design					
COL RAI	RAI should be addressed by COL applicant at COL stage					

Available Options for DC and COL Applicants

