TABLE 1

ACCIDENT ANALYSIS MATRIX

PROCESS SYSTEM EVENT	SINGLE FAILURE INCLUDES FAILURE OF A SHUTDOWN SYSTEM	DUAL FAILURE (COINCIDENT SAFETY SYSTEM UNAVAILABLE)				
		EMERGENCY CORE COOLING FAILURE MODE			CONTAINMENT FAILURE MODE	
		INJECTION	LOOP ISOLATION	CRASH COOL	ISOLATION	DOUSING
Loss of reactivity control	Section 11.3.3.1	Emergency core cooling not required	Emergency core cooling not required	Emergency core cooling not required	Isolation not required	Dousing not required
Loss of primary pressure control - pressurization - depressurization	Section 11.3.3.2.1 Section 11.3.3.2.1.1 Section 11.3.3.2.1.2	Emergency core cooling not required	Emergency core cooling not required	Emergency core cooling not required	Isolation not required	Dousing not required
Loss of secondary side pressure control - pressurization - depressurization	Section 11.3.3.2.2 Section 11.3.3.2.2.3 Bounded by large secondary side pipe breaks Section 11.3.3.2.2.3	Emergency core cooling not required	Emergency core cooling not required	Emergency core cooling not required	Isolation not required	Dousing not required
Loss of Class IV power - complete - partial	Section 11.3.2 Section 11.3.2.1 Section 11.3.2.2	Emergency core cooling not required	Emergency core cooling not required	Emergency core cooling not required	Isolation not required	Dousing not required
Heat transport pump seizure	Section 11.3.4.2	Emergency core cooling not required	Emergency core cooling not required	Emergency core cooling not required	Isolation not required	Dousing not required

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TABLE 1 (CONT'D.)

PROCESS SYSTEM EVENT	SINGLE FAILURE INCLUDES FAILURE OF A SHUTDOWN SYSTEM	DUAL FAILURE (COINCIDENT SAFETY SYSTEM UNAVAILABLE)				
		EMERGENCY CORE COOLING FAILURE MODE			CONTAINMENT FAILURE MODE	
		INJECTION	LOOP ISOLATION	CRASH COOL	ISOLATION	DOUSING
Loss of primary coolant - large breaks - small breaks	Section 11.3.5 Section 11.3.5.1.2.4.1 Section 11.3.5.1.4.1.2 Section 11.3.5.1.2.4.2 Section 11.3.5.1.4.1.1	Section 11.4.2.1.2	Section 11.4.2.3	Section 11.4.2.2	Section 11.4.3.1.1	Section 11.4.3.2.1
SINGLE CHANNEL EVENTS						
End fitting failure	Section 11.3.5.2	Covered by small loss of cooling	Covered by small loss of cooling	Covered by small loss of cooling	Section 11.4.3.1.2.1	Section 11.4.3.2.2
Pressure tube failure	Section 11.3.5.3	Section 11.4.2.1.3	Covered by small loss of cooling	Covered by small loss of cooling	Covered by channel blockage	Section 11.4.3.2.2
Channel blockage	Section 11.3.4.1	Covered by small loss of cooling	Covered by small loss of cooling	Covered by small loss of cooling	Section 11.4.3.1.2.	Section 11.4.3.2.2
Fuel handling failure, on-reactor	Section 11.3.1 Section 11.3.1.1	Covered by small loss of cooling	Covered by small loss of cooling	Covered by small loss of cooling	Section 11.4.3.1.2.3	Section 11.4.3.2.2
Fuel handling failure, on-reactor	Section 11.3.1 Section 11.3.1.2	No signal to initiate emergency cooling	No signal to initiate emergency cooling	No signal to initiate emergency cooling	Covered by end fitting failure	Dousing not required
Pipe breaks in heat transport auxiliary system	Section 11.3.6	No signal to initiate emergency cooling	No signal to initiate emergency cooling	No signal to initiate emergency cooling	No signal to initiate isolation	No signal to initiate dousing

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TABLE 1 (CONT'D.)

PROCESS SYSTEM EVENT	SINGLE FAILURE INCLUDES FAILURE OF A SHUTDOWN SYSTEM	DUAL FAILURE (COINCIDENT SAFETY SYSTEM UNAVAILABLE)				
		EMERGENCY CORE COOLING FAILURE MODE			CONTAINMENT FAILURE MODE	
		INJECTION	LOOP ISOLATION	CRASH COOL	ISOLATION	DOUSING
Feedwater line failure - outside containment	Section 11.3.7.5.1 Section 11.3.5.1.4	Section 11.4.2.5 (no signal to initiate emergency core cooling)	Both loops intact, isolation has no function	Section 11.4.2.5 (no signal to initiate emergency gency core coolg	No signal to initiate isolation	No signal to initiate dousing
inside containment, upstream & downstream of check valve	Section 11.3.7.5 Section 11.3.7.5.3	Section 11.4.2.5 (Emergency core cooling not required)	Both loops intact, isolation has no function	Section 11.4.2.5 (Emergency core cooling not required)	Isolation not required	Covered by steam line failure
Steam line failure - outside containment	Section 11.3.7.6 Section 11.3.7.6.1 Section 11.3.7.6.2	Section 11.4.2.5 (no signal to initiate emergency core cooling)	Both loops intact, isolation has no function	Section 11.4.2.5 (no signal to initiate emergency core cooling)	No signal to initiate isolation	No signal to initiate dousing
Steam line failure - inside containment	Section 11.3.7.6 Section 11.3.7.6.3	Section 11.4.2.5 (covered by single failure case)	Both loops intact, isolation has no function	Section 11.4.2.5.2 (Covered by single failure case)	Isolation not required	Section 11.4.3.2.3
Loss of shutdown cooling	Section 11.3.4.4	No signal to initiate emergency core cooling	Both loops intact, isolation has no function	Crash cooling not required	Isolation not required	Dousing not required
Failure of end shield cooling	Section 11.3.4.4	Emergency core cooling not required	Both loops intact, isolation has no function	No signal to initiate emergency core cooling	Isolation not required	Dousing not required

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