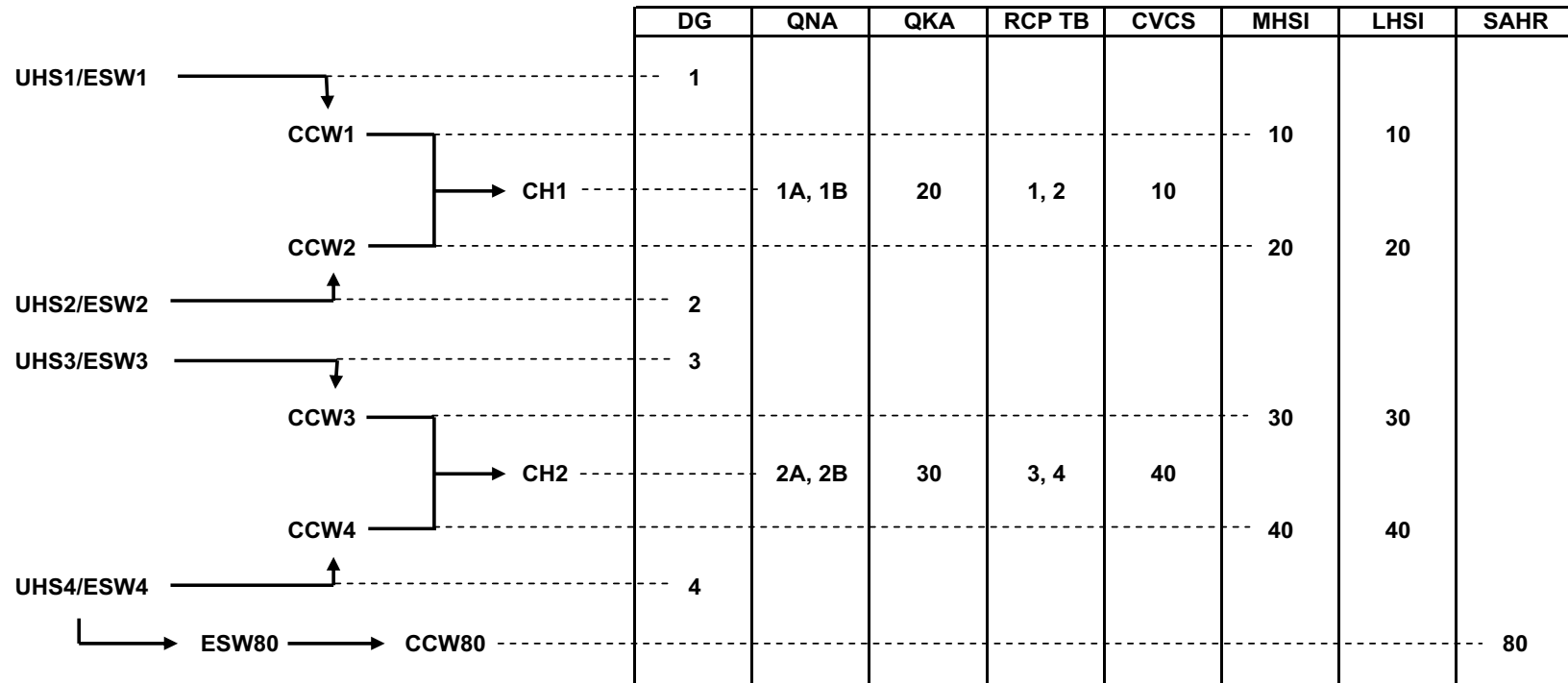
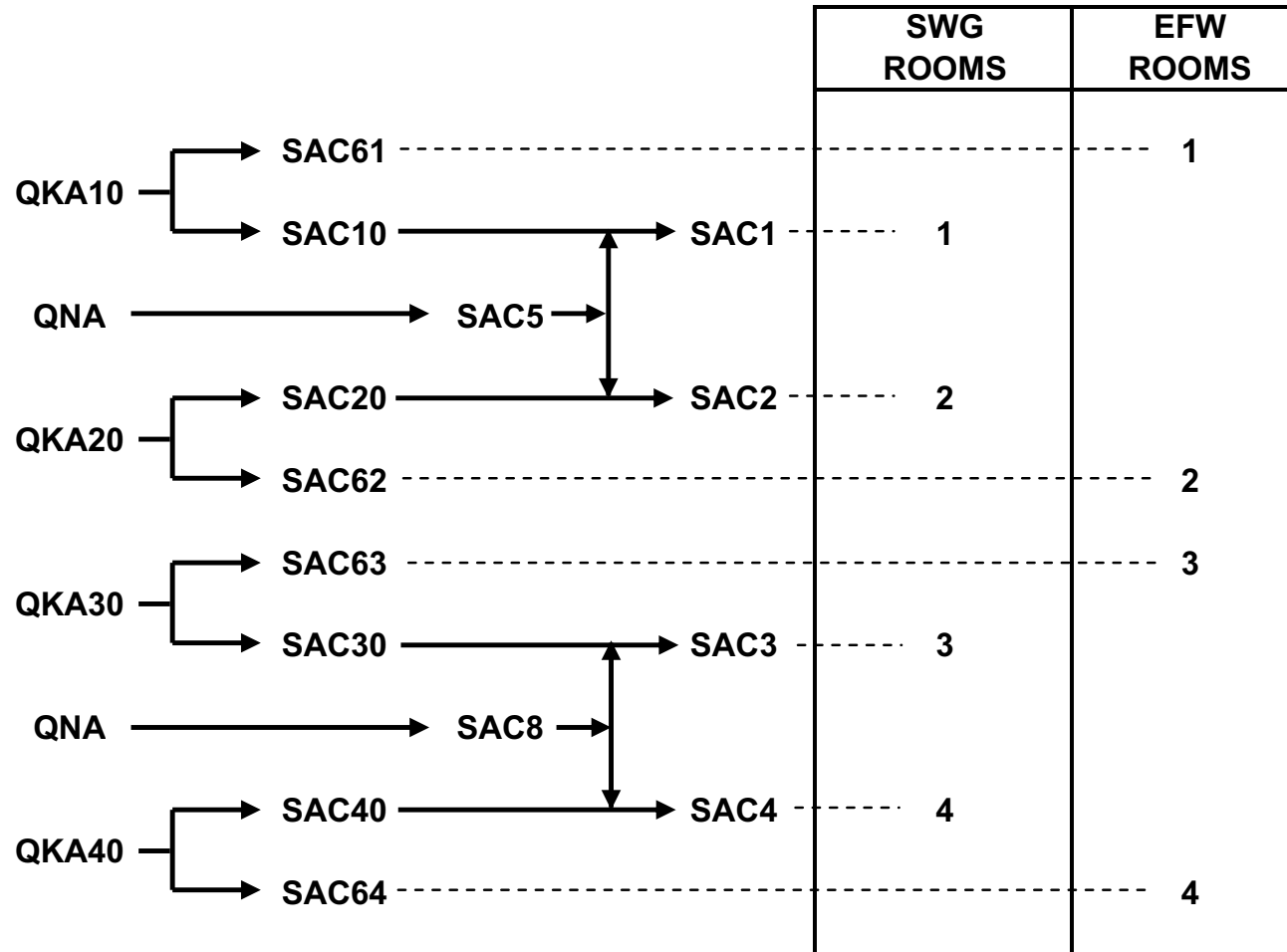


Figure 19.1-1—Cooling Water Dependencies Modeled in the U.S. EPR PRA



EPR6000 T2

Figure 19.1-2—Ventilation Dependencies Modeled in the U.S. EPR PRA



EPR6005 T2

Figure 19.1-3—Selected Dependencies on Electric Power Modeled in the U.S. EPR PRA

		RCP Seals								MSRIV				PSRV			PDSV		CCW Switchover	
		RCP1		RCP2		RCP3		RCP4		1	2	3	4	1	2	3	1	4	CH1	CH2
		L	N	L	N	L	N	L	N											
1E 480V	31BRA									■		■		■					■	
	32BRA										■		■						■	
	33BRA									■			■		■					■
	34BRA										■			■						■
Non 1E 480V	31BRB	■															■			
	32BRB			■																
	33BRB					■														
	34BRB							■									■			
1E 24V	BRW10 /BUW11									■		■		■						
	BRW32 /BUW33										■			■						
	BRW52 /BUW53									■			■							
	BRW70 /BUW71										■			■						
	BRW12 /BUW13																		■	
1E 24V	BRW32 /BUW31																		■	
	BRW52 /BUW51																			■
	BRW72 /BUW73																			■

Note: The non 1E buses in the table are backed by 12-hour batteries; the 1E buses in the table are backed by 2-hr batteries.

EPR6010 T2

Figure 19.1-4—U.S. EPR Initiating Events Contributions - Level 1 Internal Event

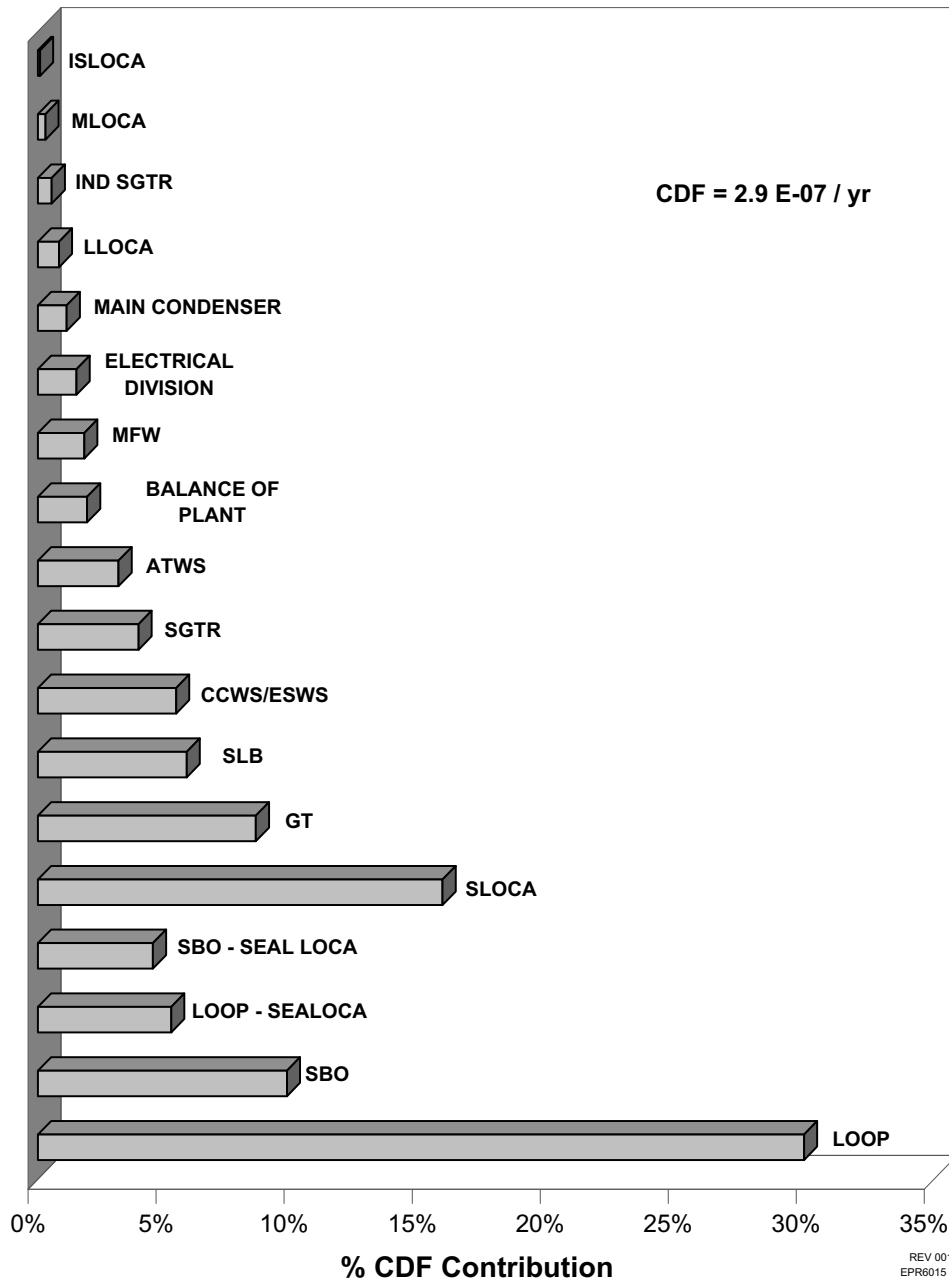


Figure 19.1-5—U.S. EPR Level 1 Internal Events Uncertainty Analysis Results - Cumulative Distributions for Internal Events CDF

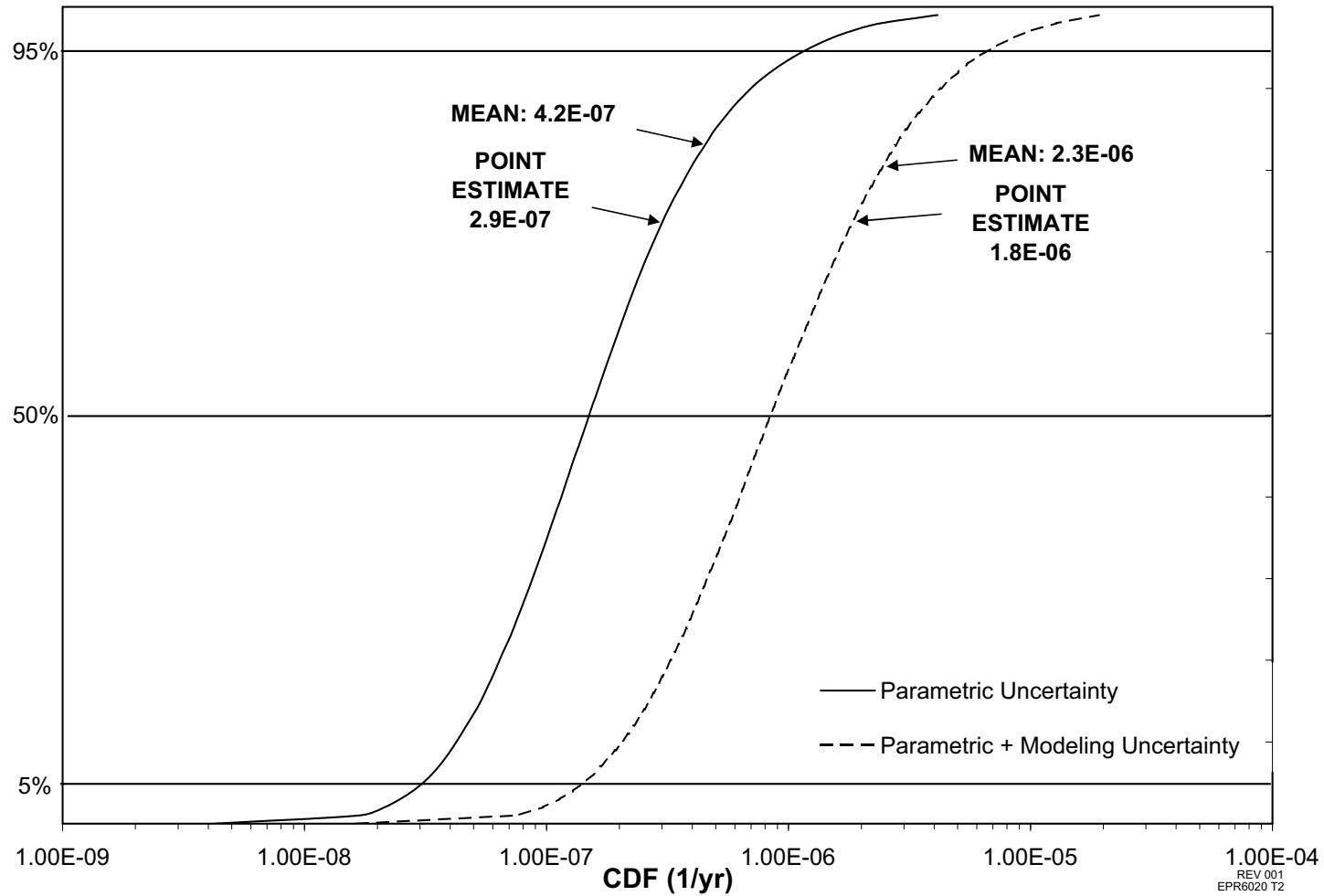
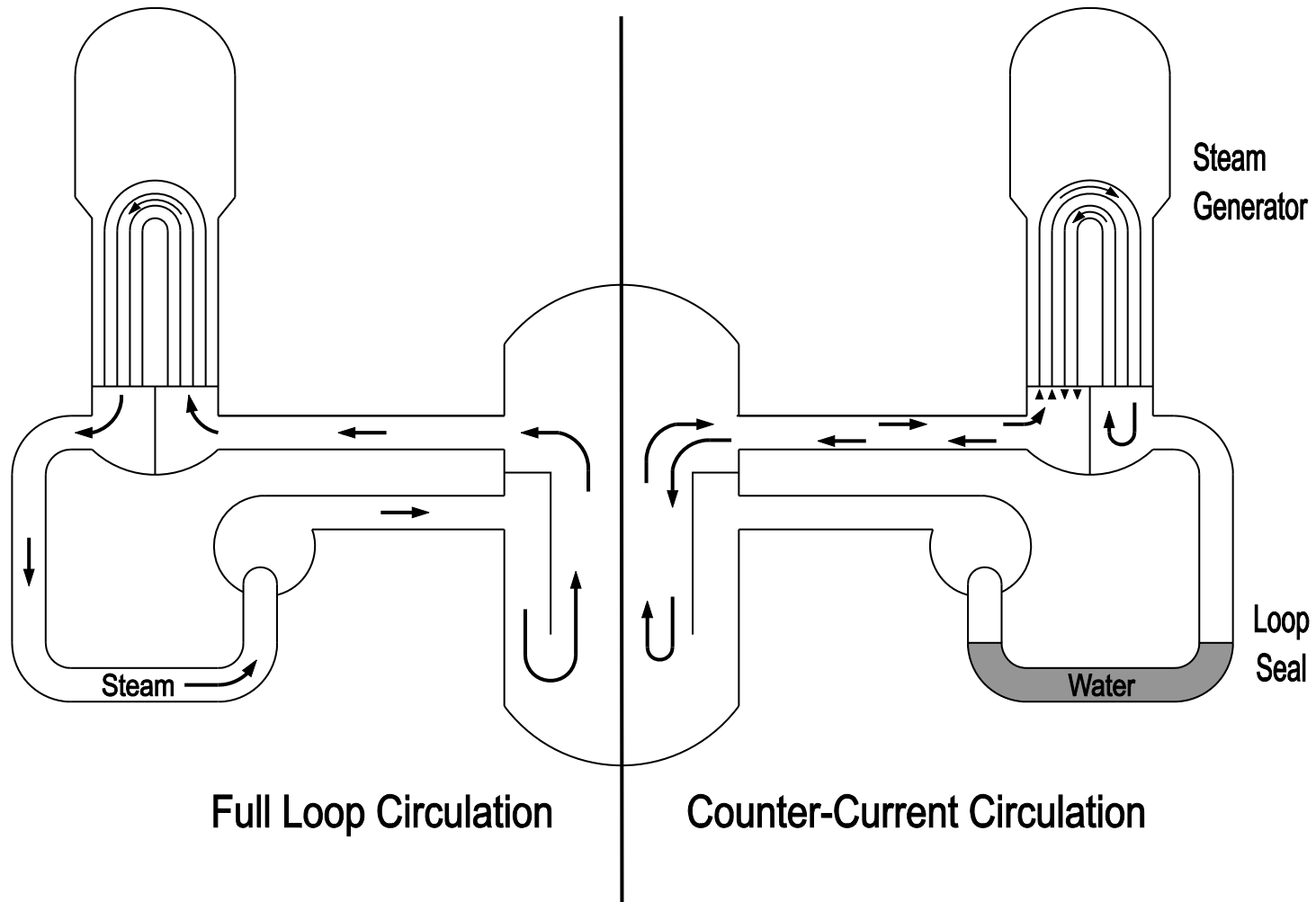
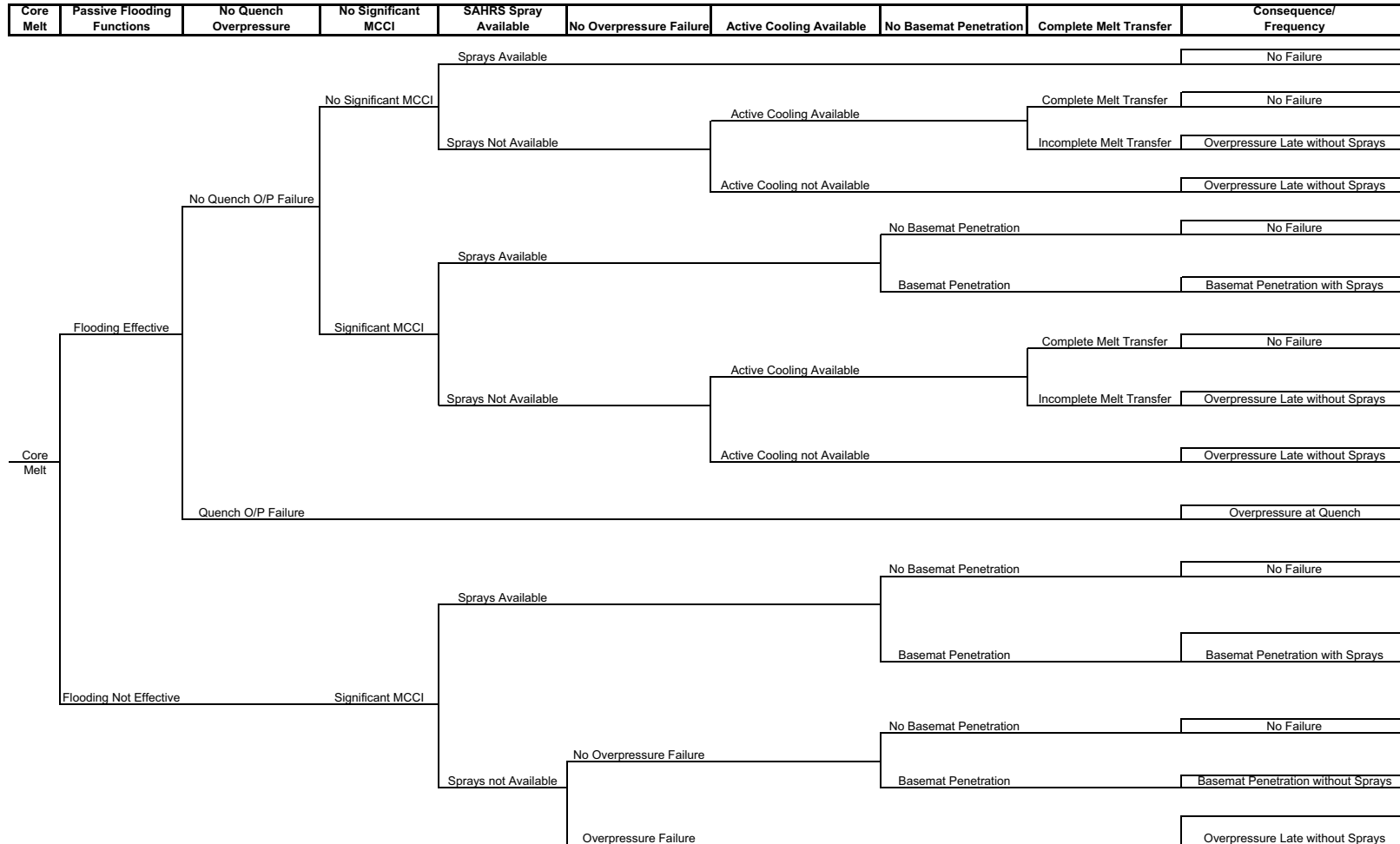


Figure 19.1-6—Natural Circulation Flowpaths in the Primary System



EPR6025 T2

Figure 19.1-7—Decomposition Event Tree for Long Term Challenges



EPR6027 T2

Figure 19.1-8—Composite Containment Fragility Curve at 395°F

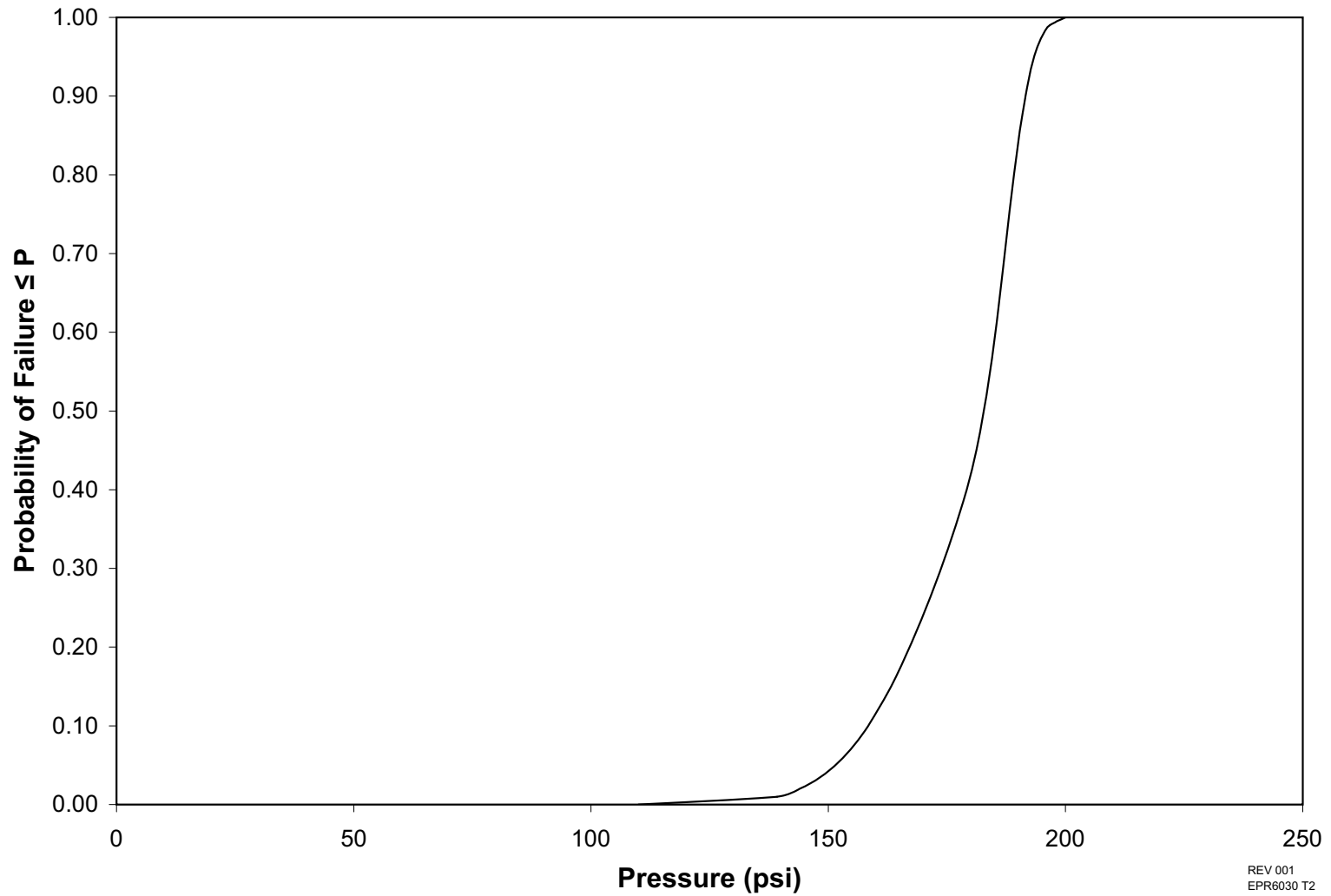


Figure 19.1-9—U.S. EPR Level 2 Internal Events Uncertainty Analysis Results - Cumulative Distribution for Internal Events LRF

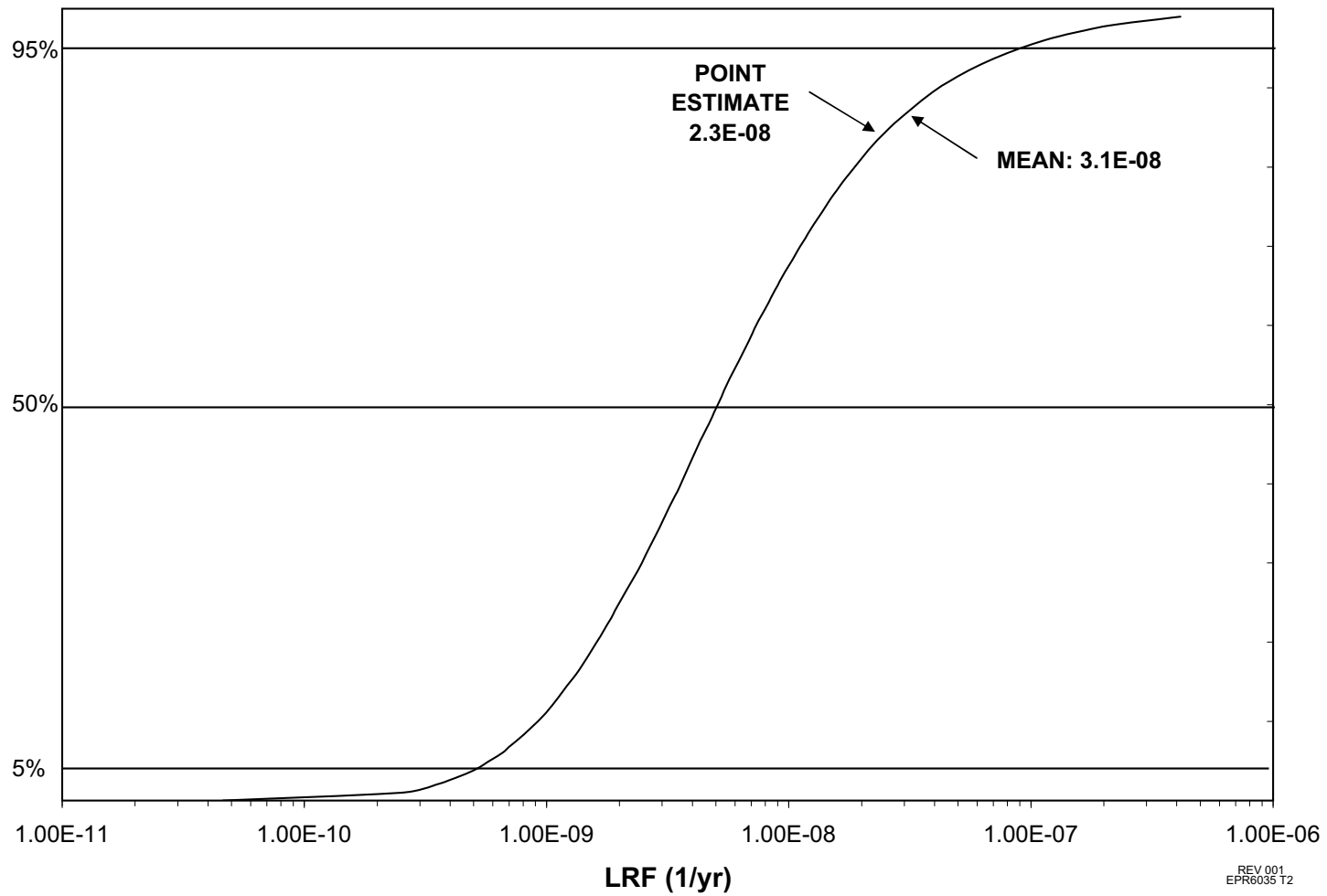
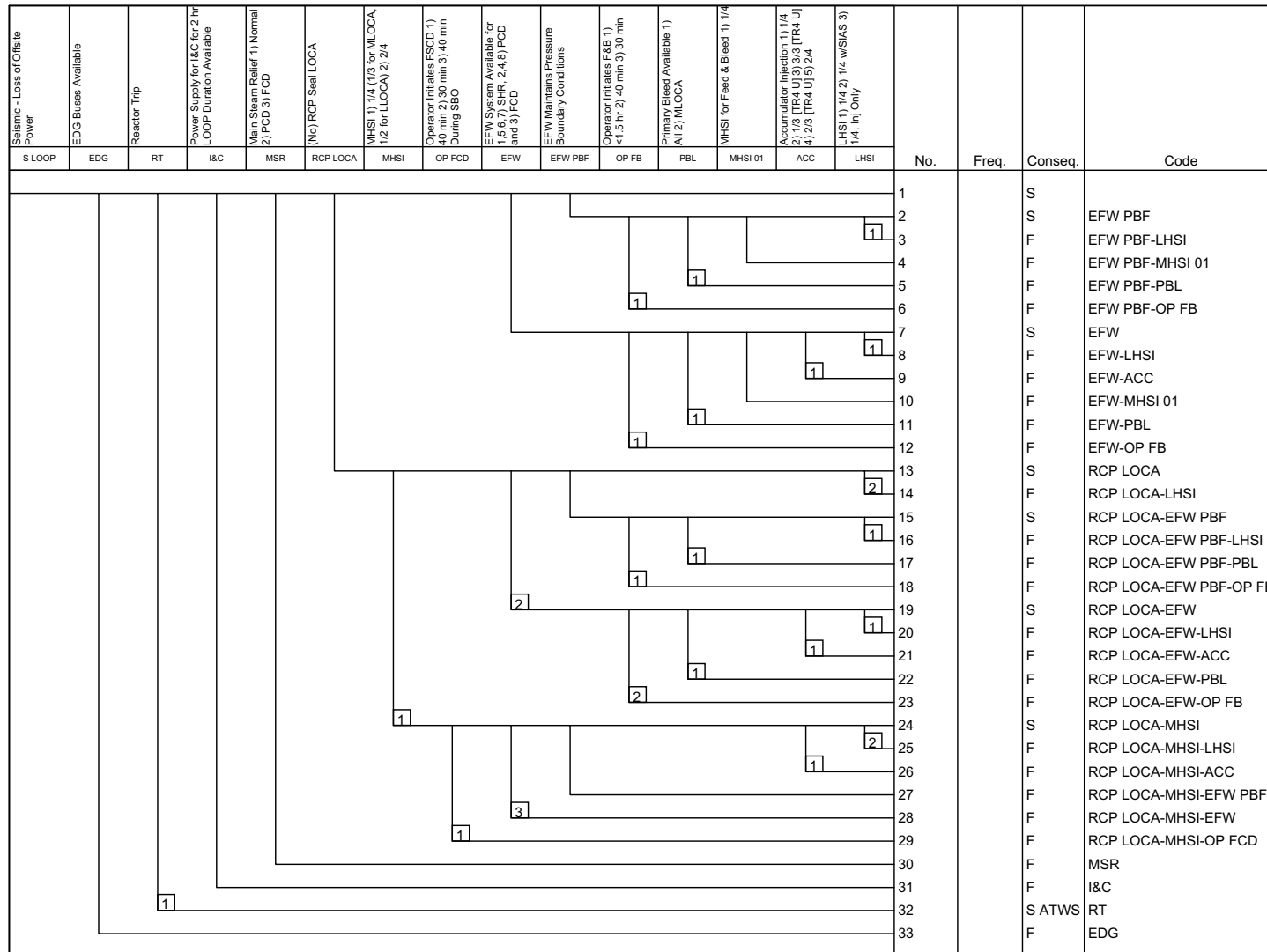


Figure 19.1-10—Event Tree for Seismic Loss of Offsite Power (S LOOP)



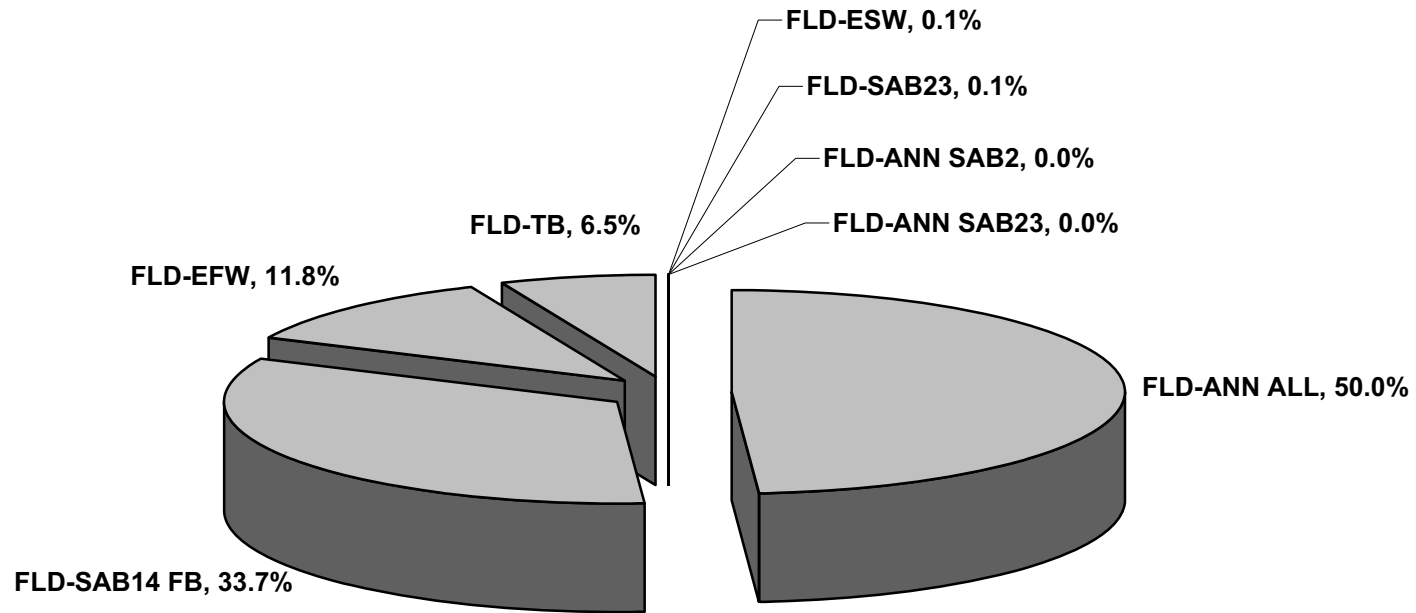
EPR6045 T2

Figure 19.1-11—Event Tree for Seismic Small LOCA (S SLOCA)

Seismic - Small LOCA (0.6 to 3-inch Diameter)	MHSI 1) 1/4 (1/3 for MLOCA 1/2 for LOCA) 2) 2/4	Operator Initiates FSCD 1) 40 min 2) 30 min 3) 40 min During SBO	EFW System Available for 1.5, 6.7, SHR, 2.4, 8) PCD and 3) FCD	EFW Maintains Pressure Boundary Conditions	Operator Initiates FBS 1) <1.5 hr 2) 40 min 3) 30 min	Primary Bleed Available 1) AN2) MLOCA	Accumulator Injection 1) 1/4 2) 1/3 [TR4 U] 3) 3/3 [TR4 U] 4) 2/3 [TR4 U] 5) 2/4	LHSI 1) 1/4 2) 1/4 w/SAS 3) 1/4, Inj Only	No.	Freq.	Conseq.	Code
S SLOCA	MHSI	OP FCD	EFW	EFW PBF	OP FB	PBL	ACC	LHSI				
									1		S	
								2	2		F	LHSI
									3		S	EFW PBF
									4		F	EFW PBF-LHSI
									5		F	EFW PBF-PBL
									6		F	EFW PBF-OP FB
			2						7		S	EFW
									8		F	EFW-LHSI
									9		F	EFW-ACC
									10		F	EFW-PBL
									11		F	EFW-OP FB
	1								12		S	MHSI
									13		F	MHSI-LHSI
									14		F	MHSI-ACC
									15		S	MHSI-EFW PBF
									16		F	MHSI-EFW PBF-LHSI
									17		F	MHSI-EFW PBF-ACC
									18		F	MHSI-EFW PBF-PBL
									19		F	MHSI-EFW PBF-OP FB
			3						20		S	MHSI-EFW
									21		F	MHSI-EFW-LHSI
									22		F	MHSI-EFW-ACC
									23		F	MHSI-EFW-PBL
									24		F	MHSI-EFW-OP FB
		1							25		F	MHSI-OP FCD

EPR6050 T2

Figure 19.1-12—U.S. EPR Initiating Event Contributions - Level 1 Flooding



Flood CDF: 6.1E-08/yr

EPR6055 T2

Figure 19.1-13—U.S. EPR Level 1 Internal Flood Events Uncertainty Analysis Results - Cumulative Distribution for Flood Events CDF

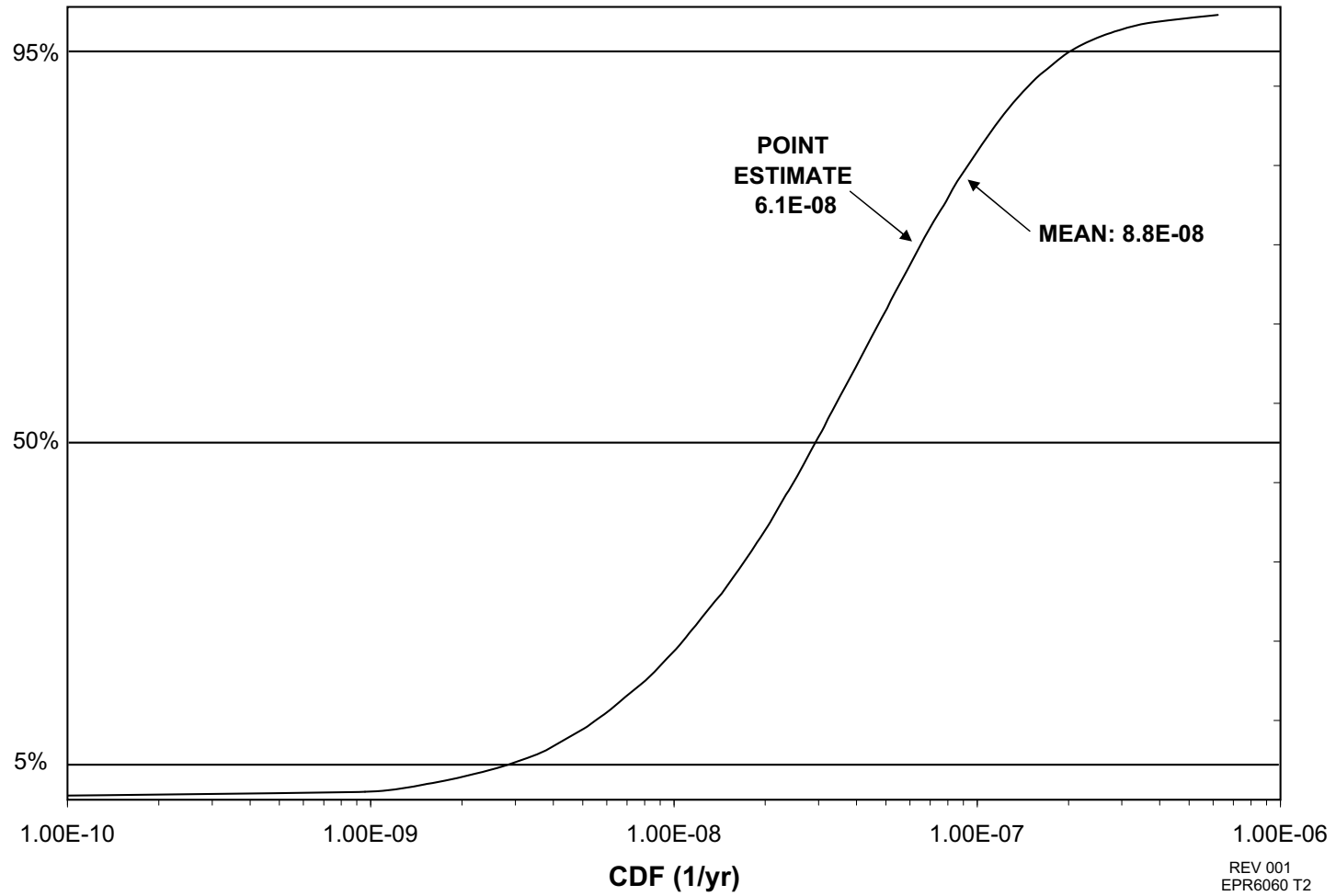


Figure 19.1-14—U.S. EPR Level 2 Flood Events Uncertainty Analysis Results - Cumulative Distribution for Flood Events LRF

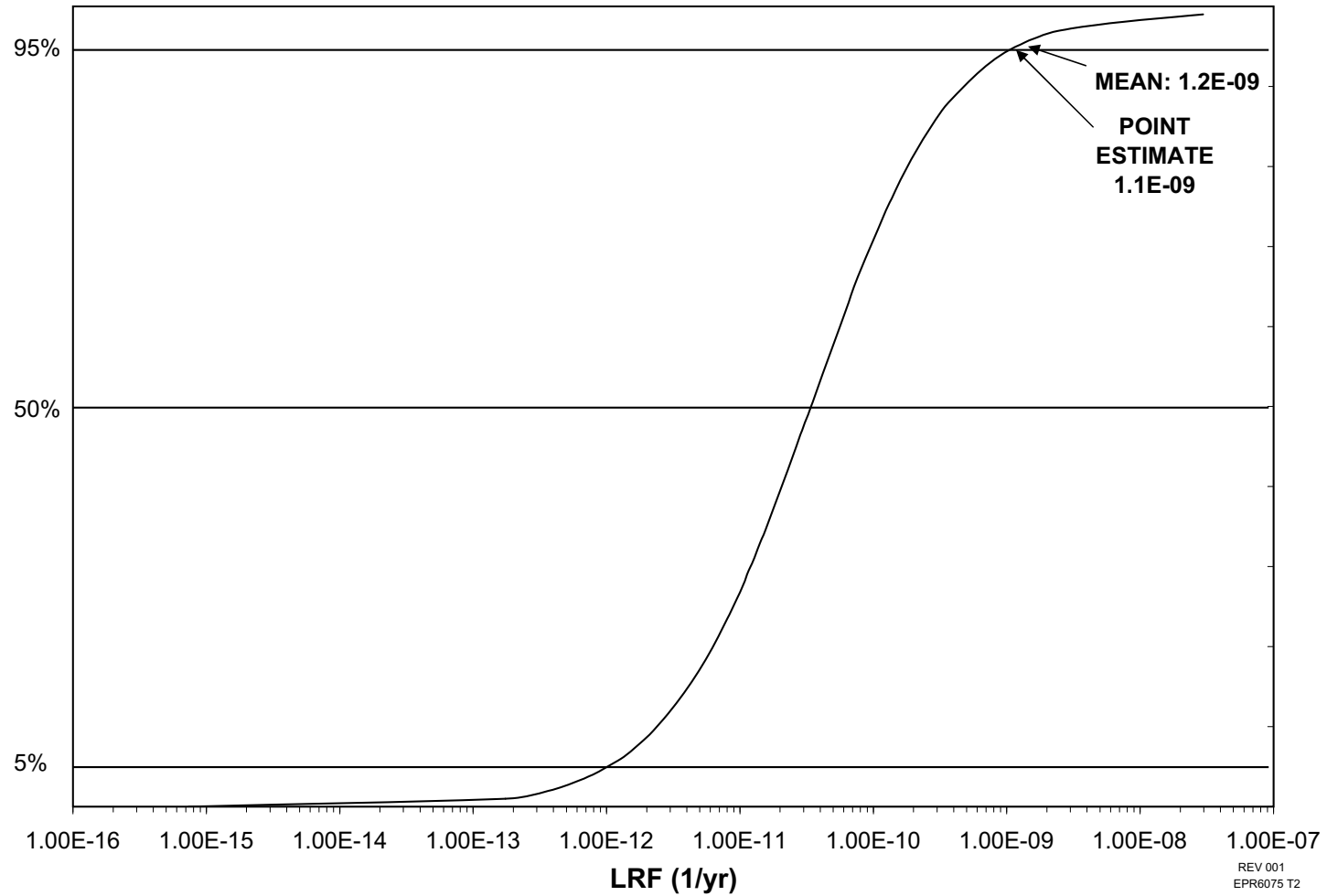
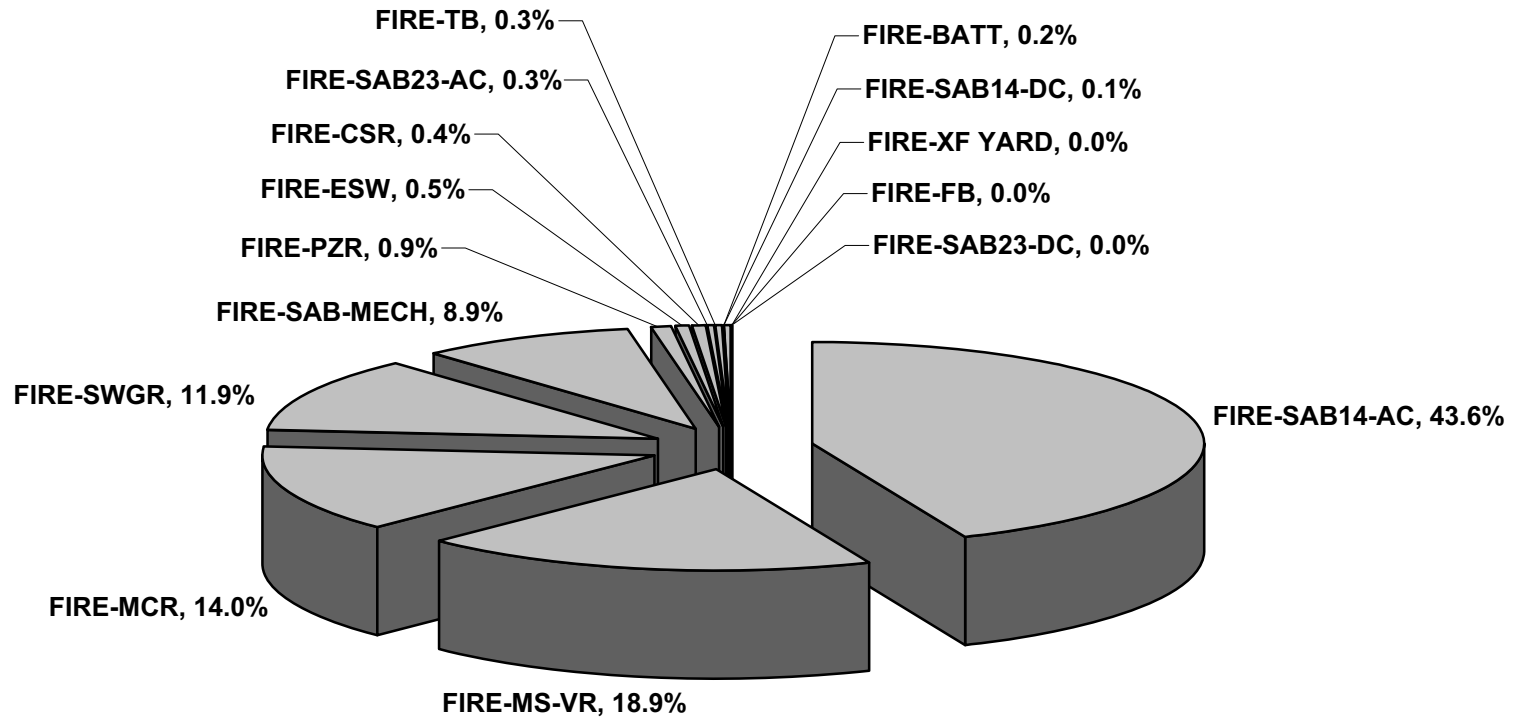


Figure 19.1-15—U.S. EPR Initiating Event Contributions - Level 1 Fire



Fire CDF: 1.8E-07/yr

EPR6065 T2

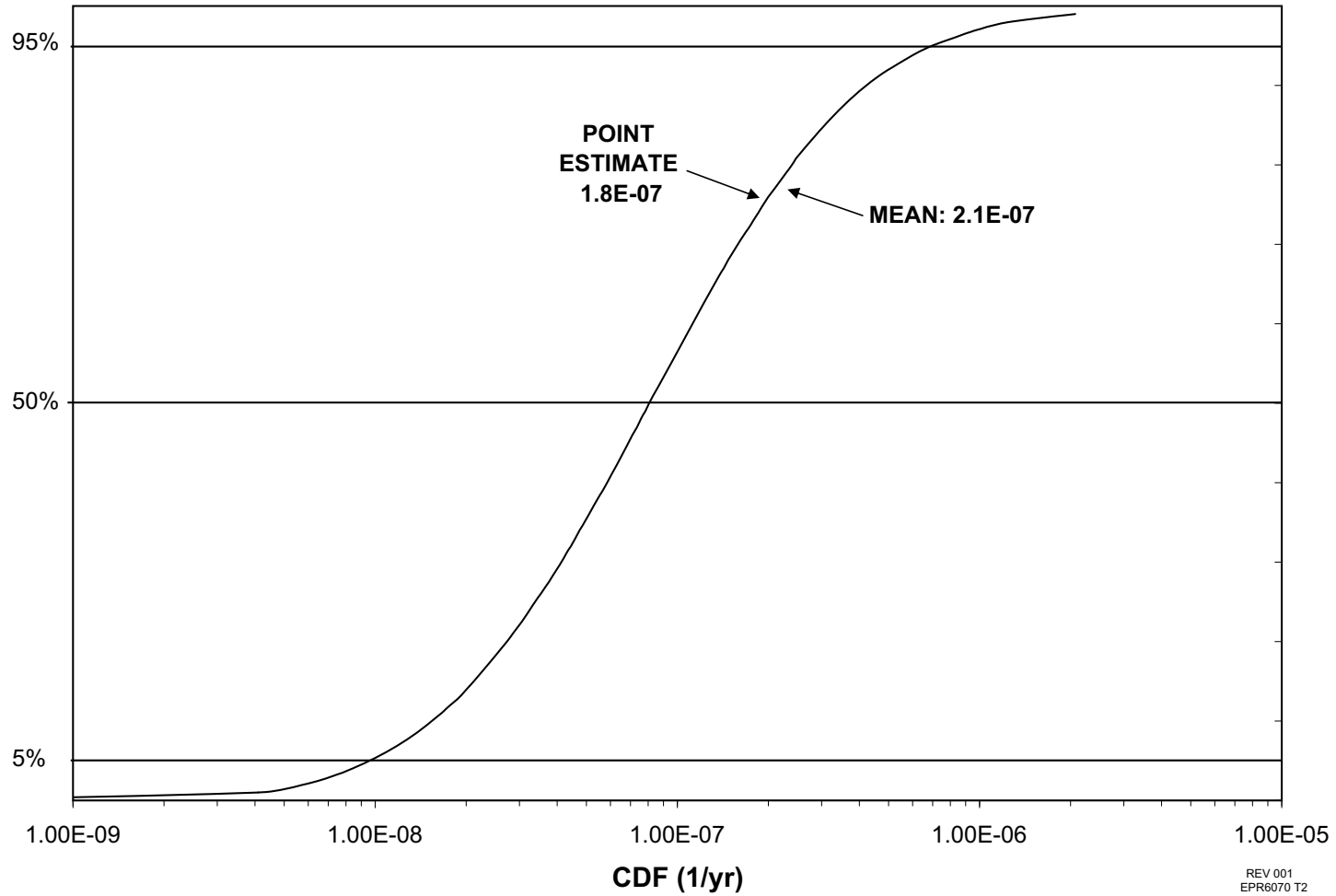
Figure 19.1-16—Cross-section of Safeguard Building 4 Illustrating the PRA Fire Areas

Official Use Only - Security Sensitive Information - Withhold under 10 CFR 2.390

Figure 19.1-17—Cross-section of Safeguard Building 2 Illustrating the PRA Fire Areas

Official Use Only - Security Sensitive Information - Withhold under 10 CFR 2.390

Figure 19.1-18—U.S. EPR Level 1 Internal Fire Events Uncertainty Analysis Results - Cumulative Distribution for Fire Events CDF



REV 001
EPR6070 T2

Figure 19.1-19—U.S. EPR Level 2 Fire Events Uncertainty Analysis Results - Cumulative Distribution Function for Fire Events LRF

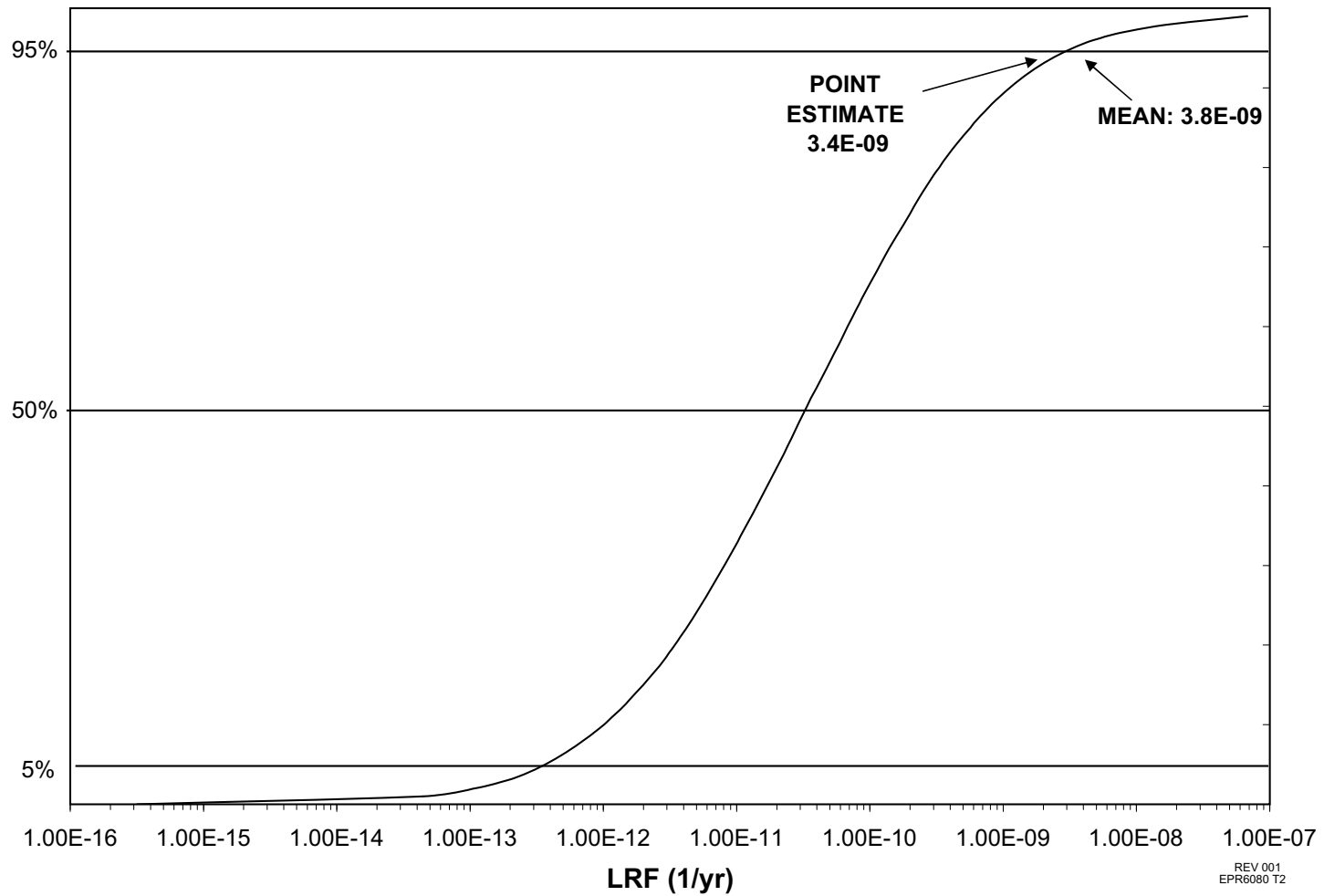
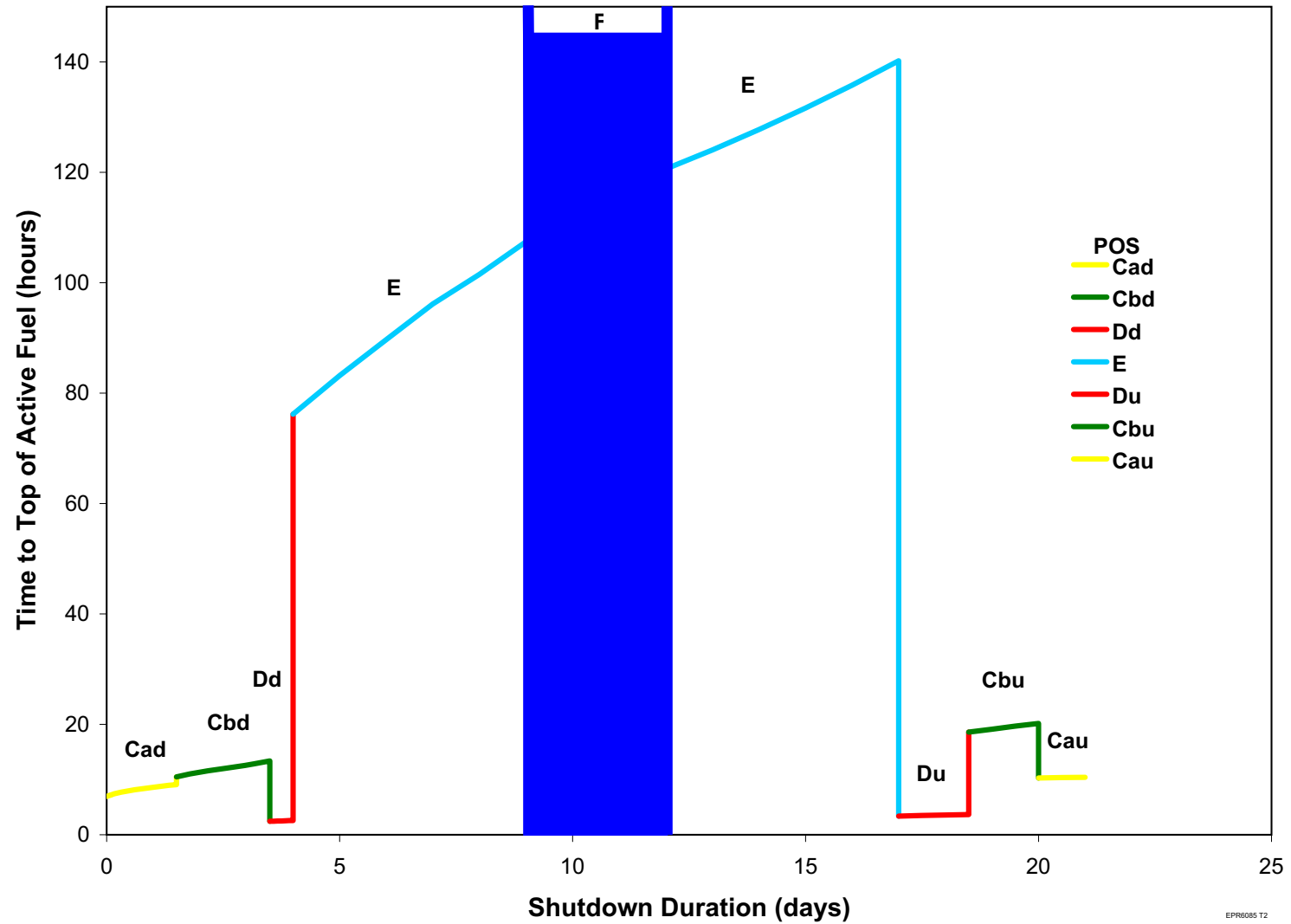
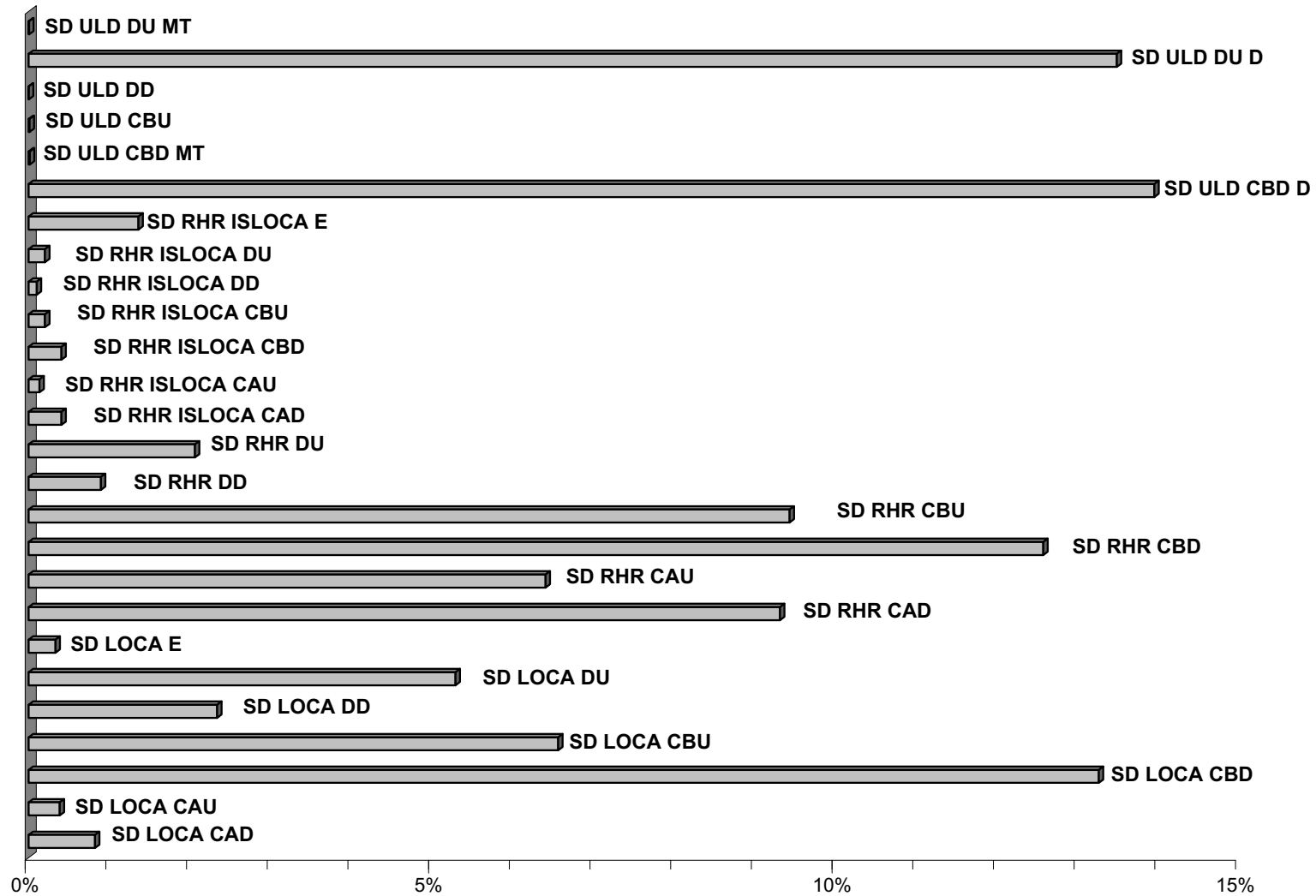


Figure 19.1-20—Time to TAF - Level 1 Shutdown



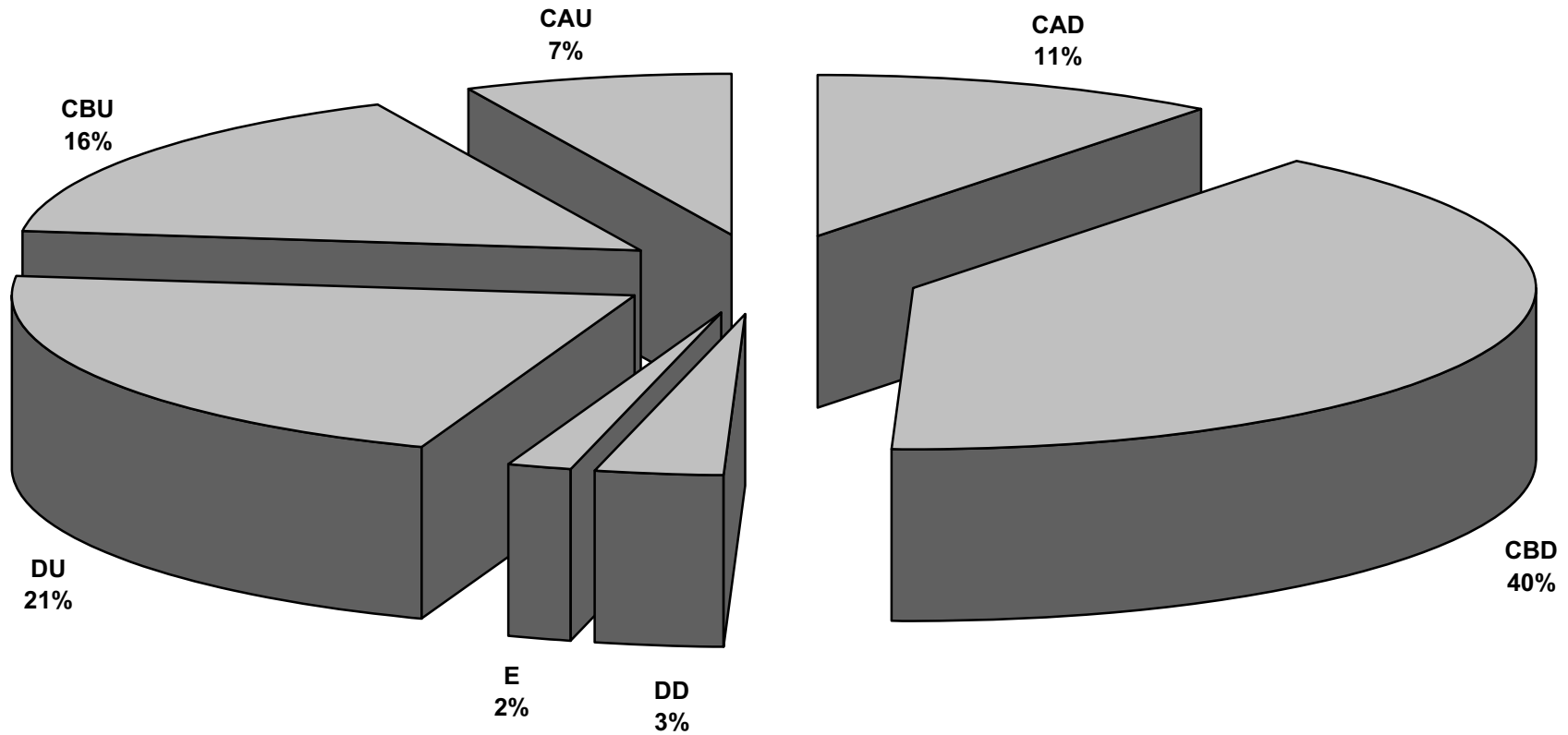
EPR6085 T2

Figure 19.1-21—U.S. EPR Initiating Event Contributions - Level 1 Shutdown



EPR6090 T2

Figure 19.1-22—U.S. EPR Shutdown State Contribution - Level 1 Shutdown



Shutdown CDF = 5.8 E-08

EPR6095 T2

Figure 19.1-23—U.S. EPR Level 1 Shutdown Events Uncertainty Analysis Results Cumulative Distribution for Low Power and Shutdown CDF

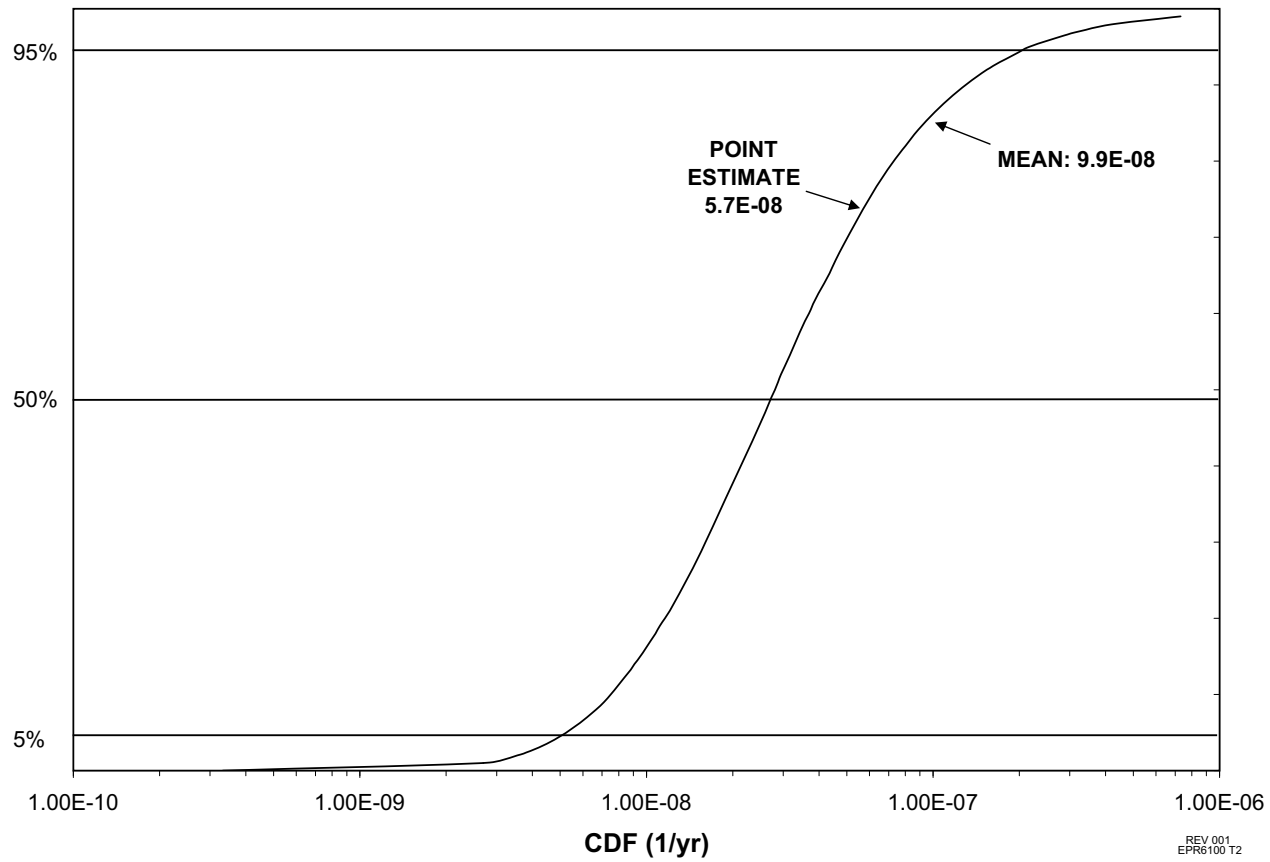
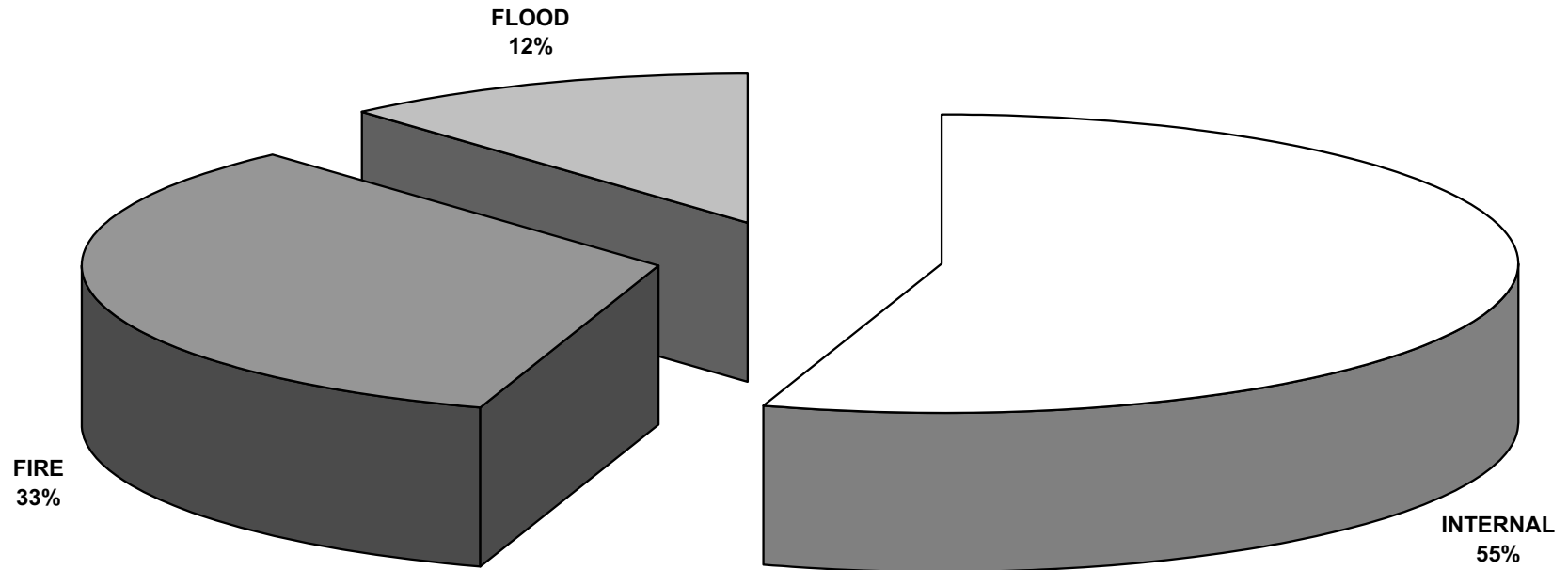


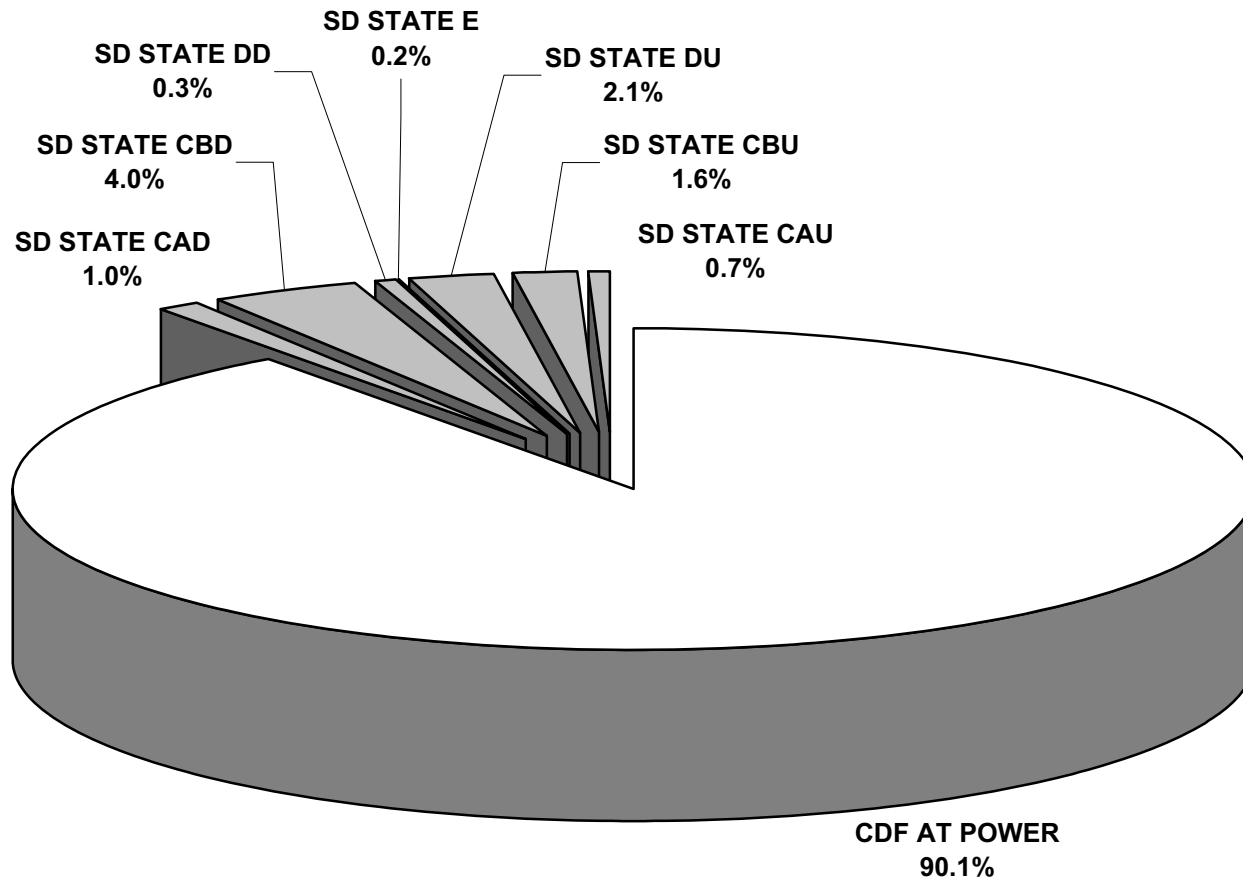
Figure 19.1-24—U.S. EPR Level 1 Initiating Event Contributions to Total CDF at Power



AT POWER TOTAL CDF = 5.3 E-07 / yr

EPR6105 T2

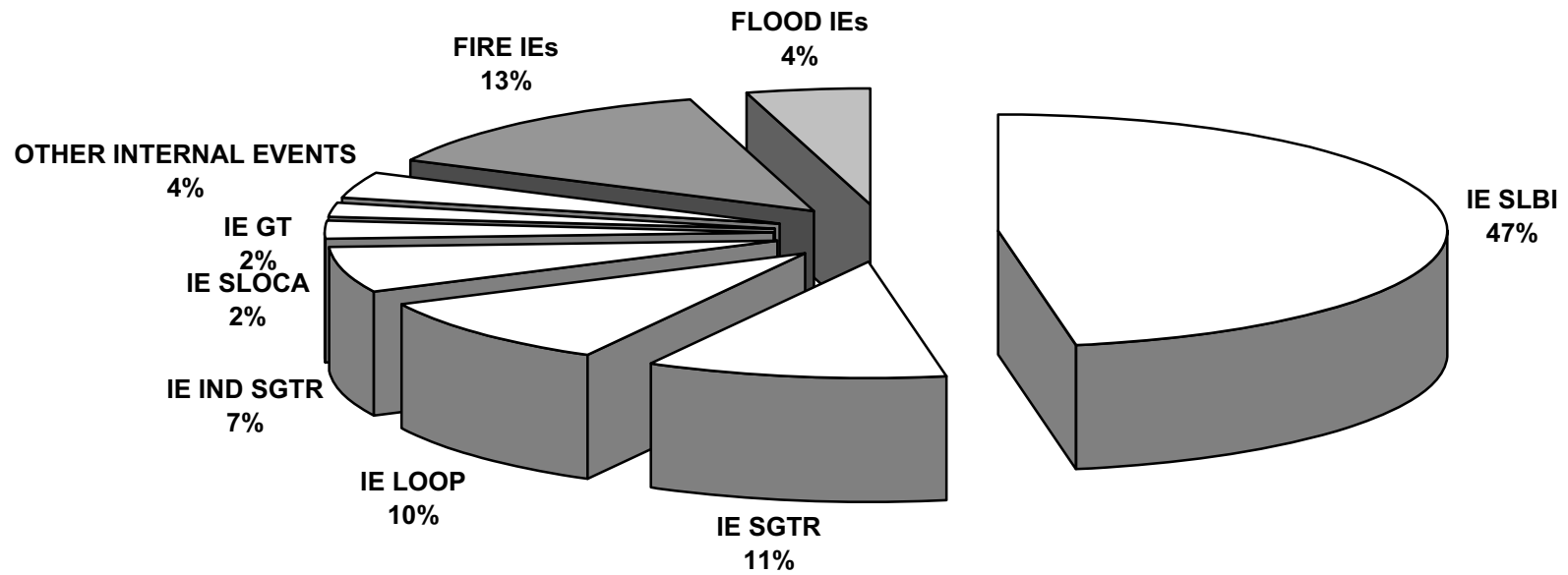
Figure 19.1-25—U.S. EPR POS Contributions to Total CDF



Total CDF = 5.8 E-07/yr

EPR6110 T2

Figure 19.1-26—U.S. EPR Level 2 Initiating Event Contribution to Total At-Power LRF



Total At-power LRF: 2.7E-08/yr

REV 001
EPR6130 T2

Figure 19.1-27—U.S. EPR Level 2 Release Category Contribution to Total At-Power LRF

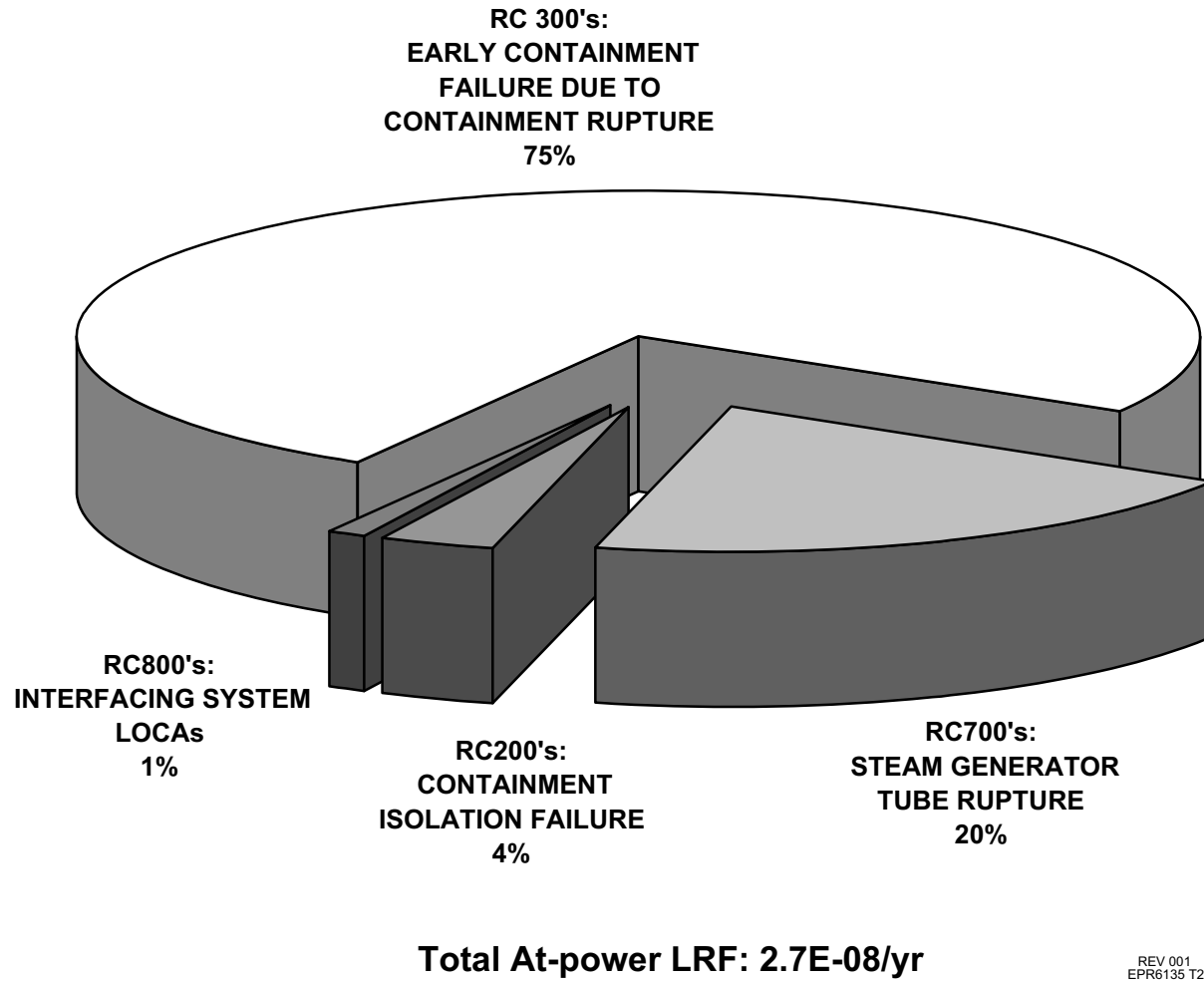
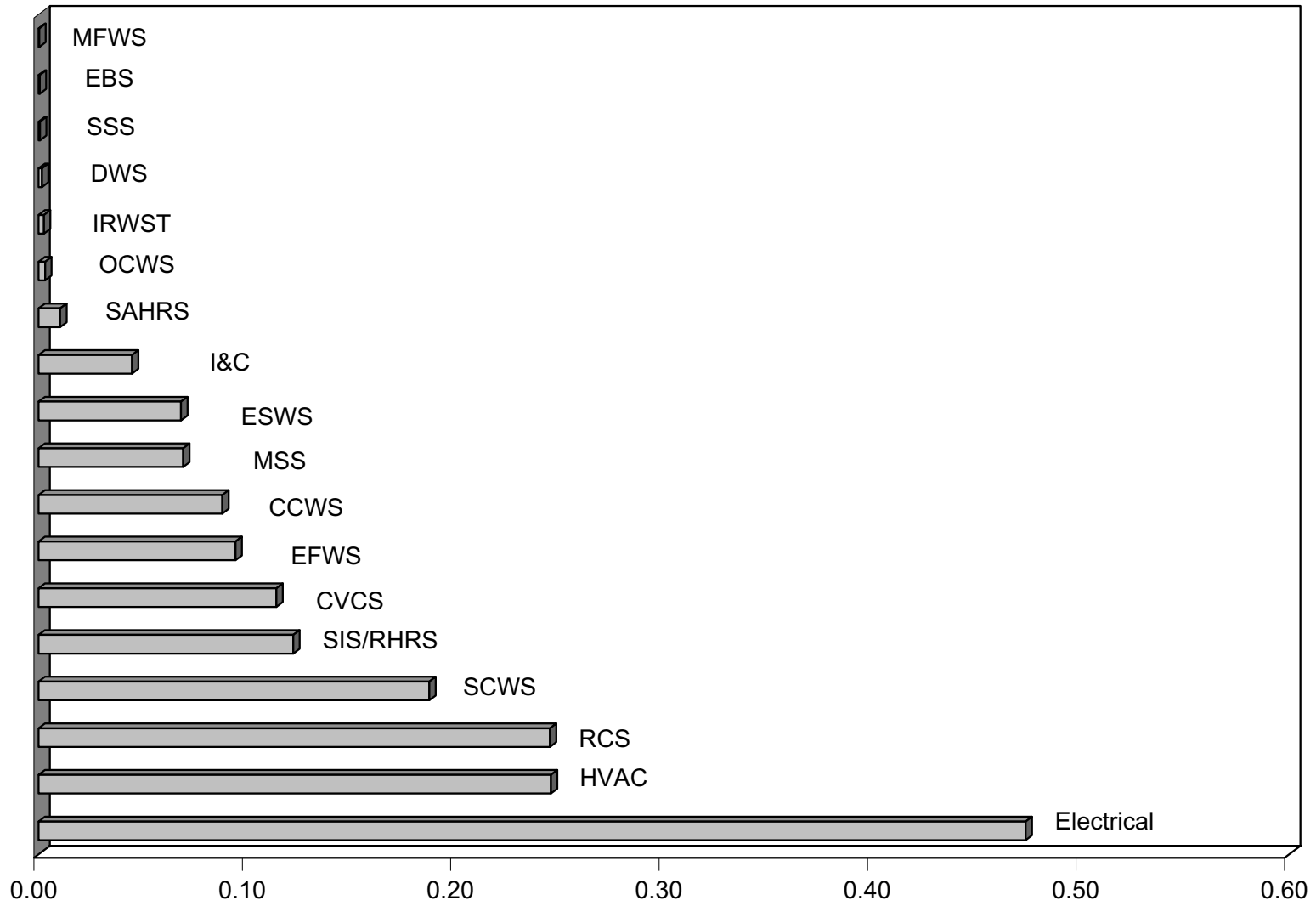


Figure 19.1-28—U.S. EPR System Ranked by Importance (FV) - Level 1 Total



EPR6115 T2

Figure 19.1-29— U.S. EPR Level 1 Internal Events Total Uncertainty Analysis Results Cumulative Distribution for All Internal, Fire and Flood Events CDF

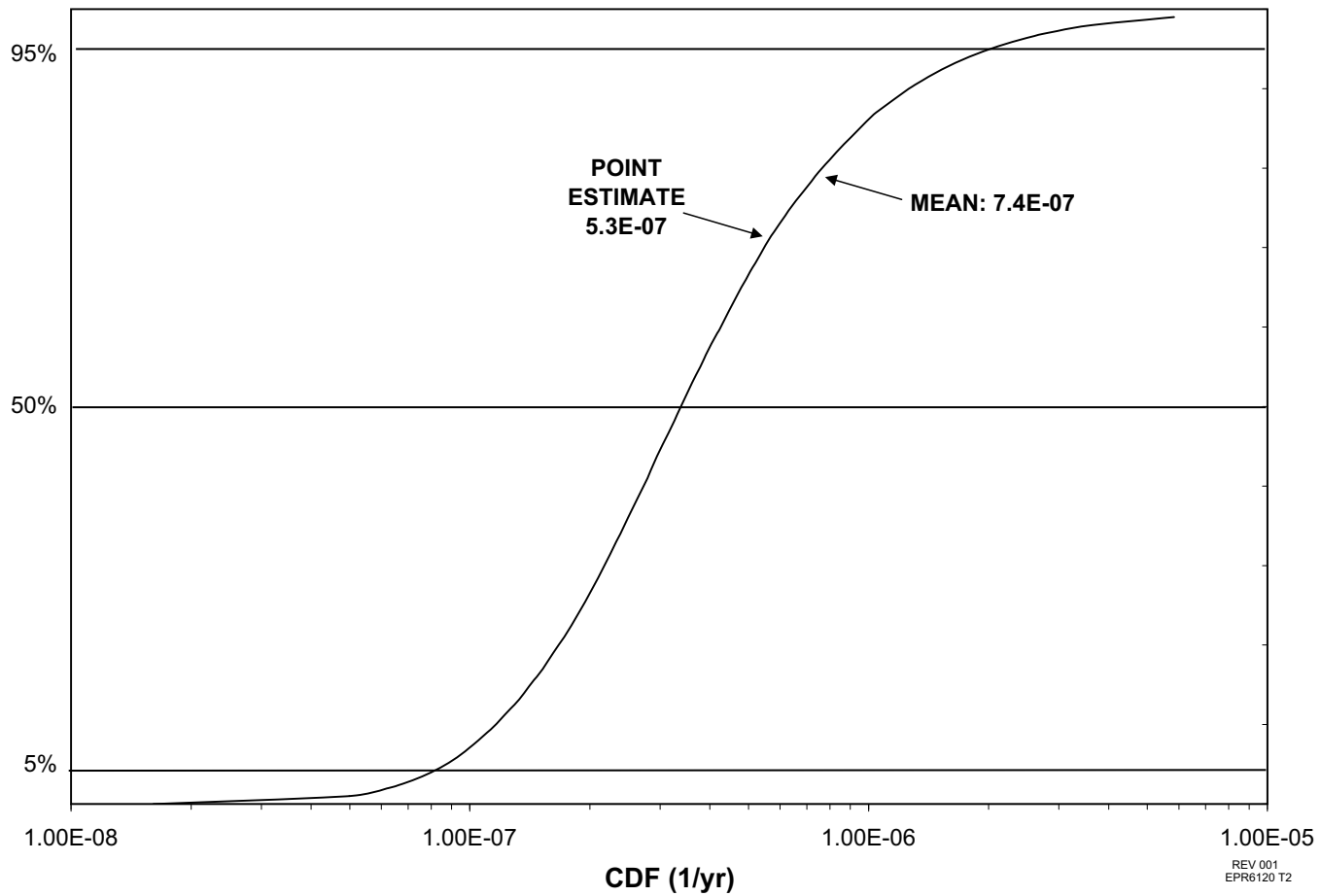


Figure 19.1-30—U.S. EPR Level 2 Internal Events Total Uncertainty Analysis Results Cumulative Distribution for All Internal, Fire and Flood Events LRF

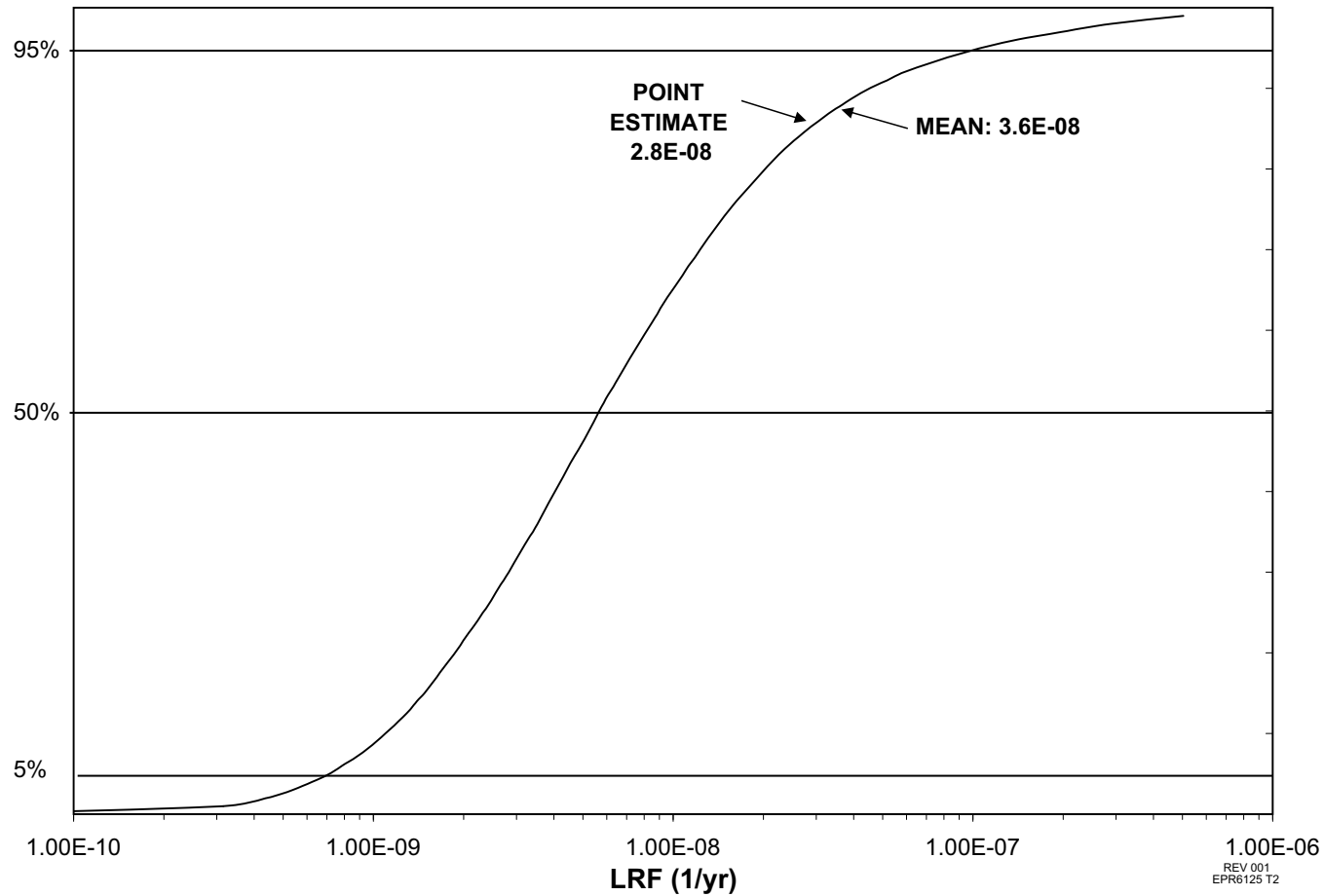
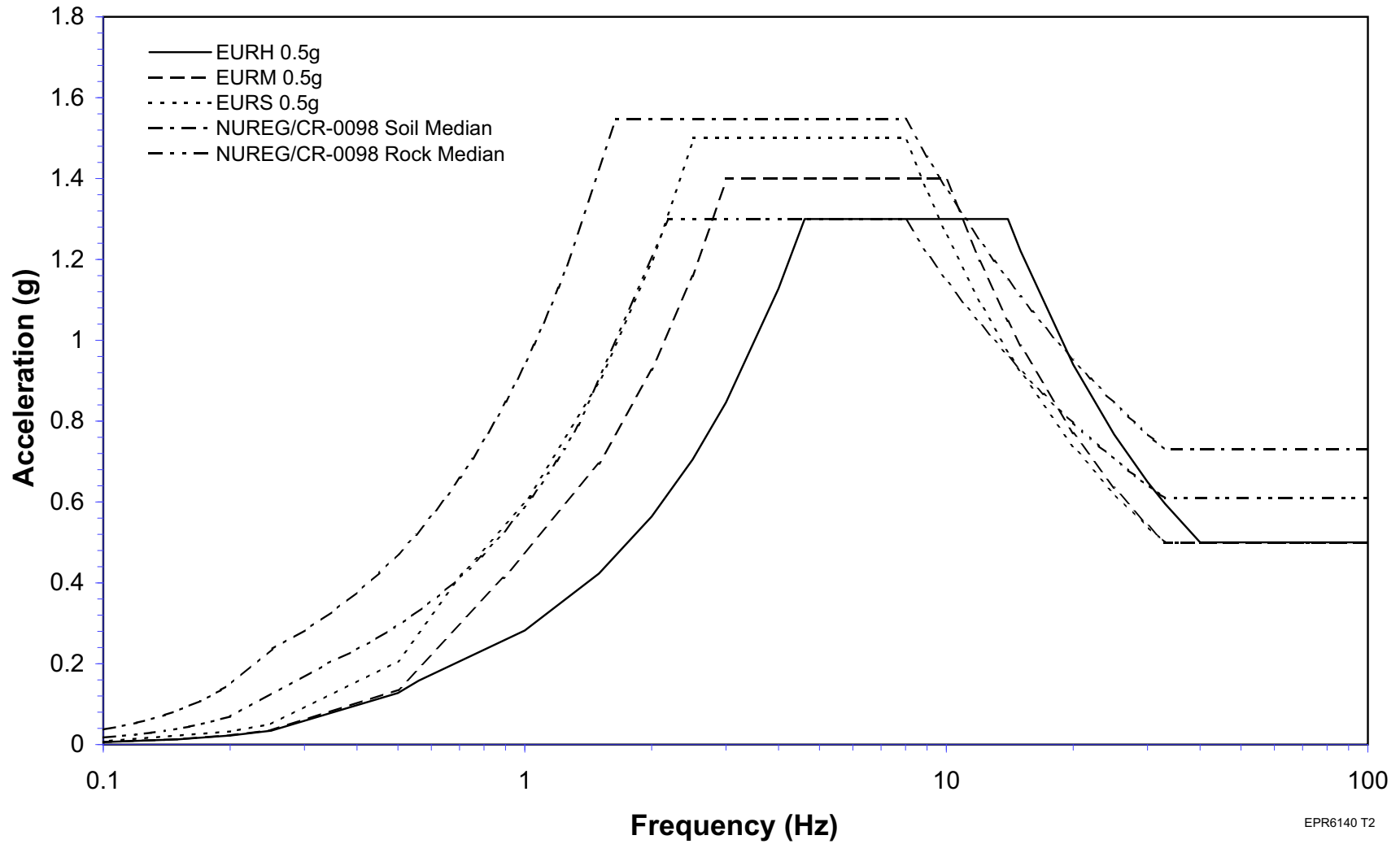
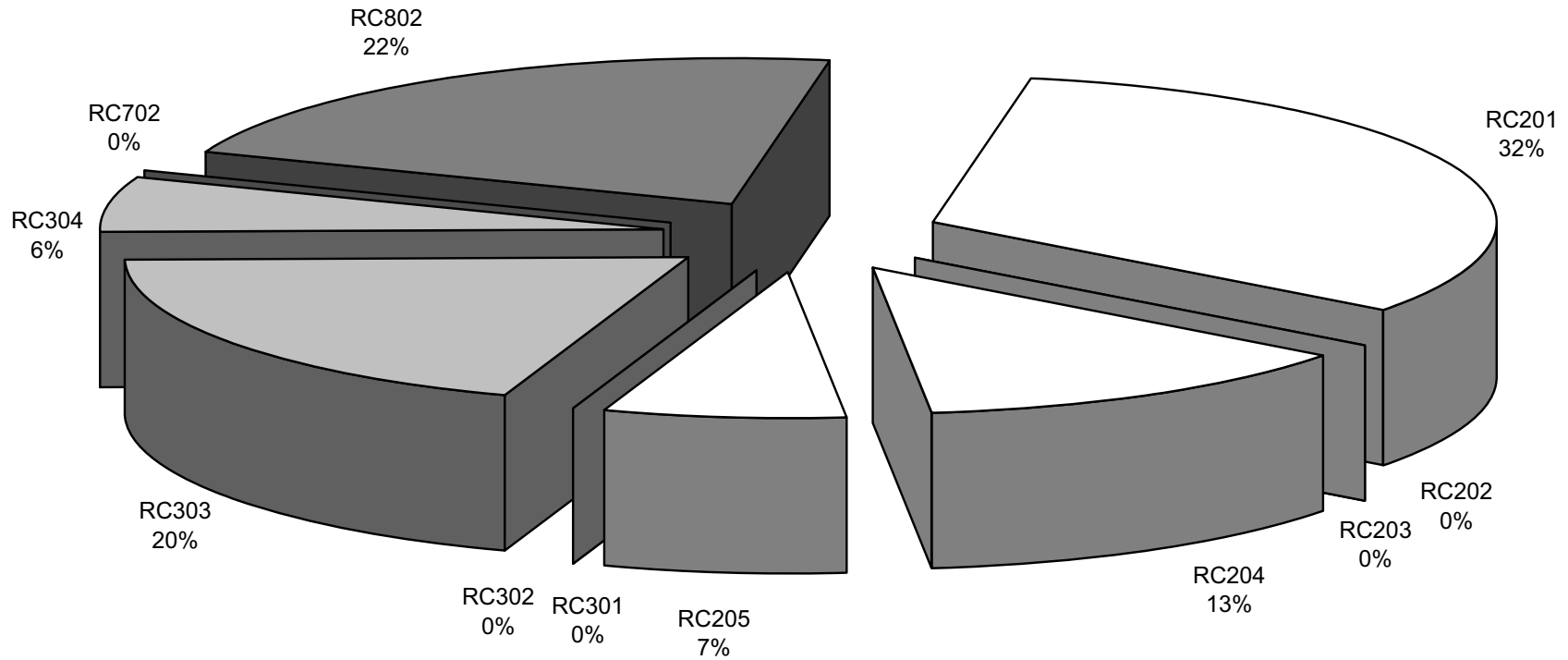


Figure 19.1-31—Comparison of SME and RLE for Hard and Soft Soil Sites



EPR6140 T2

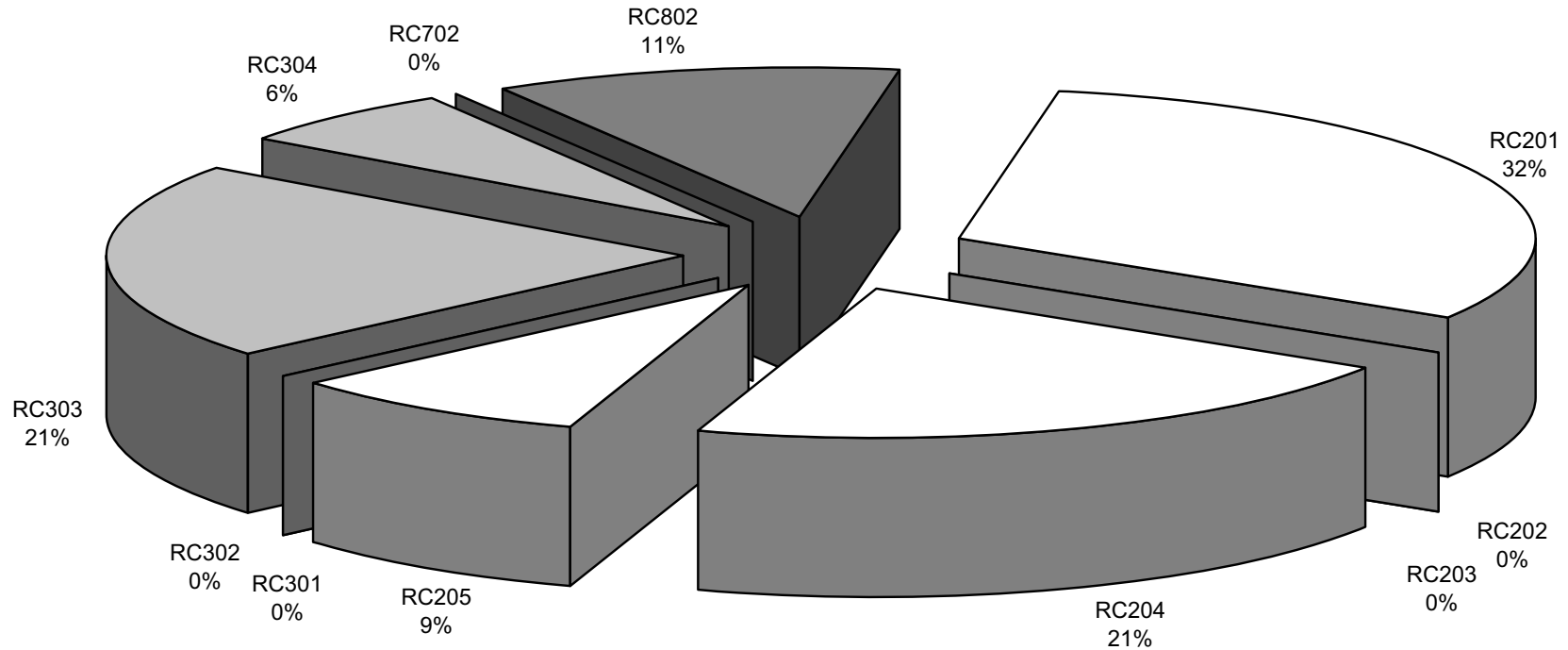
Figure 19.1-32—POS CA Release Category Contributions to Shutdown LRF



POS CA Shutdown LRF = 1.4 E-09/yr

EPR6145 T2

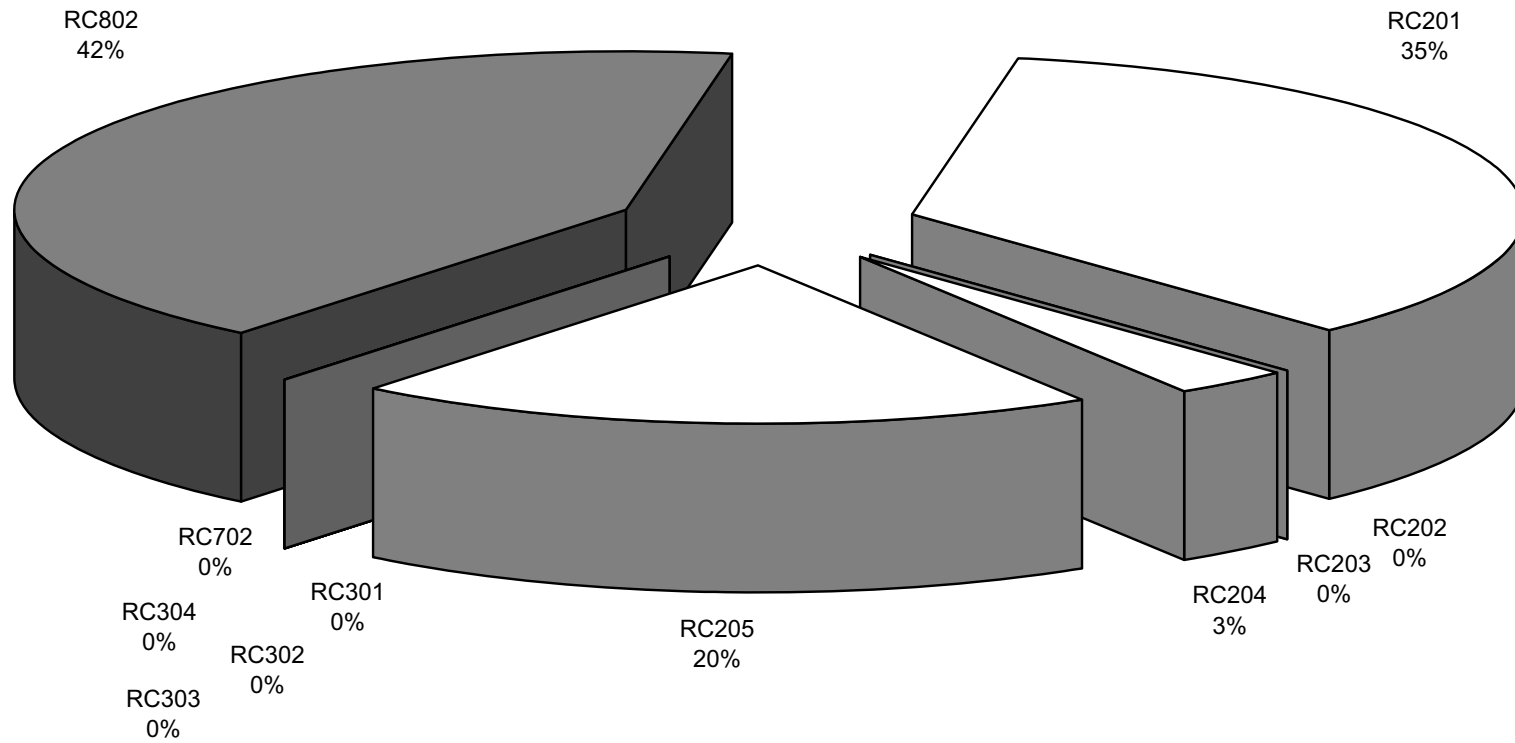
Figure 19.1-33—POS CB Release Category Contributions to Shutdown LRF



POS CB Shutdown LRF = 3.0 E-09/yr

EPR6150 T2

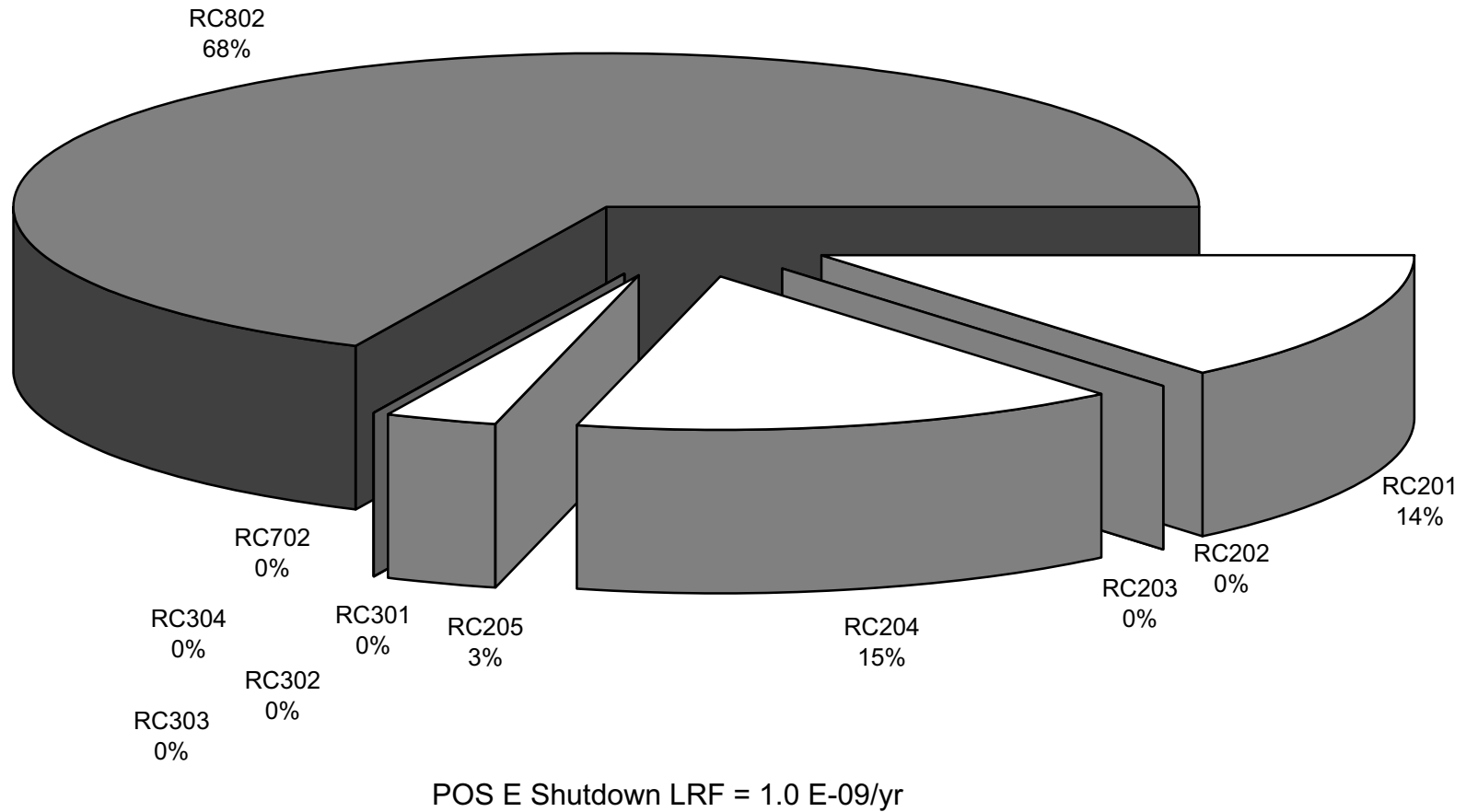
Figure 19.1-34—POS D Release Category Contributions to Shutdown LRF



POS D Shutdown LRF = 3.6 E-10/yr

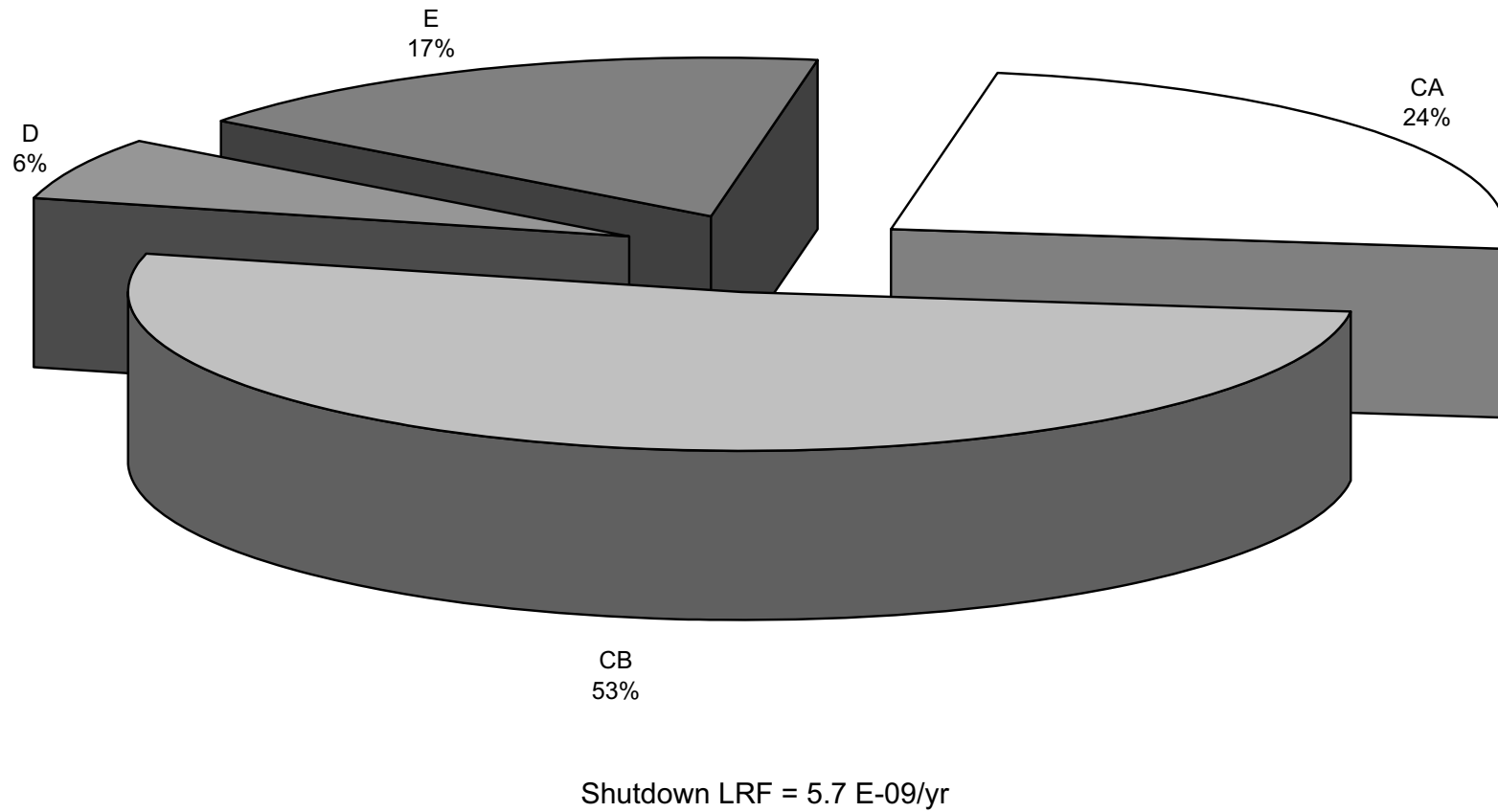
EPR6155 T2

Figure 19.1-35—POS E Release Category Contributions to Shutdown LRF



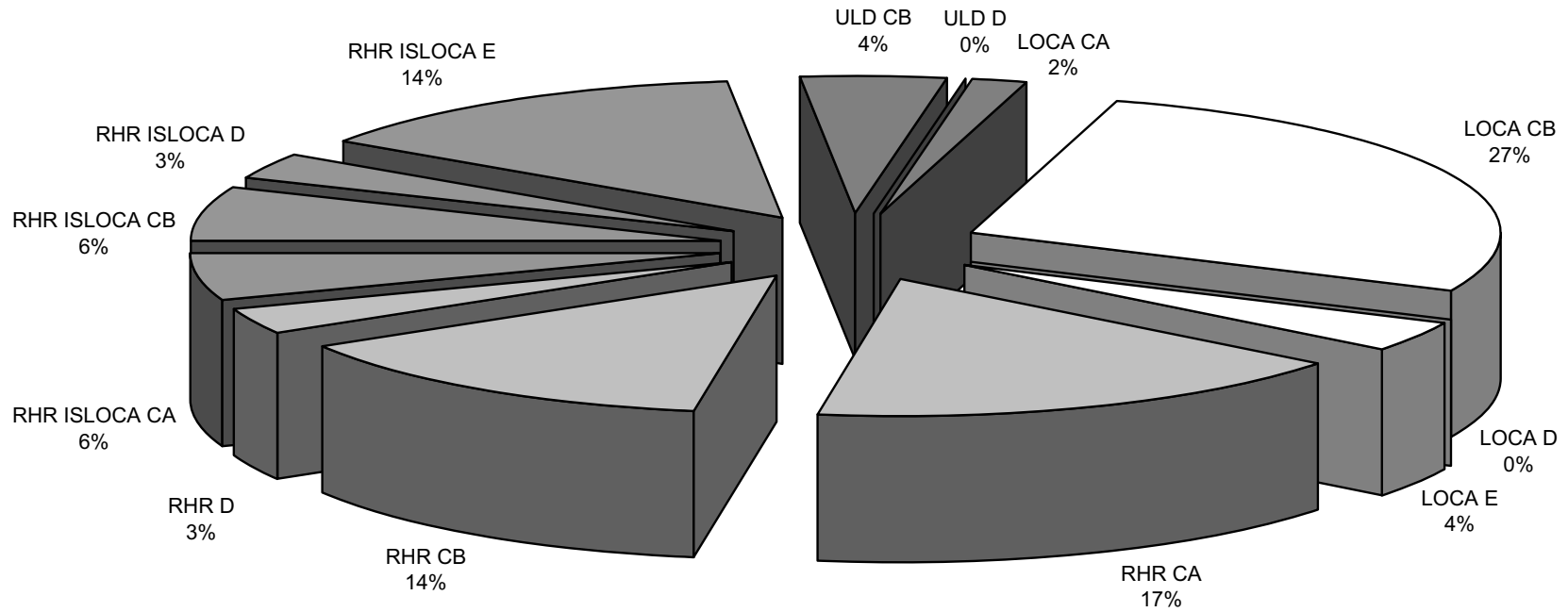
EPR6160 T2

Figure 19.1-36—POS Contributions to Shutdown LRF



EPR6165 T2

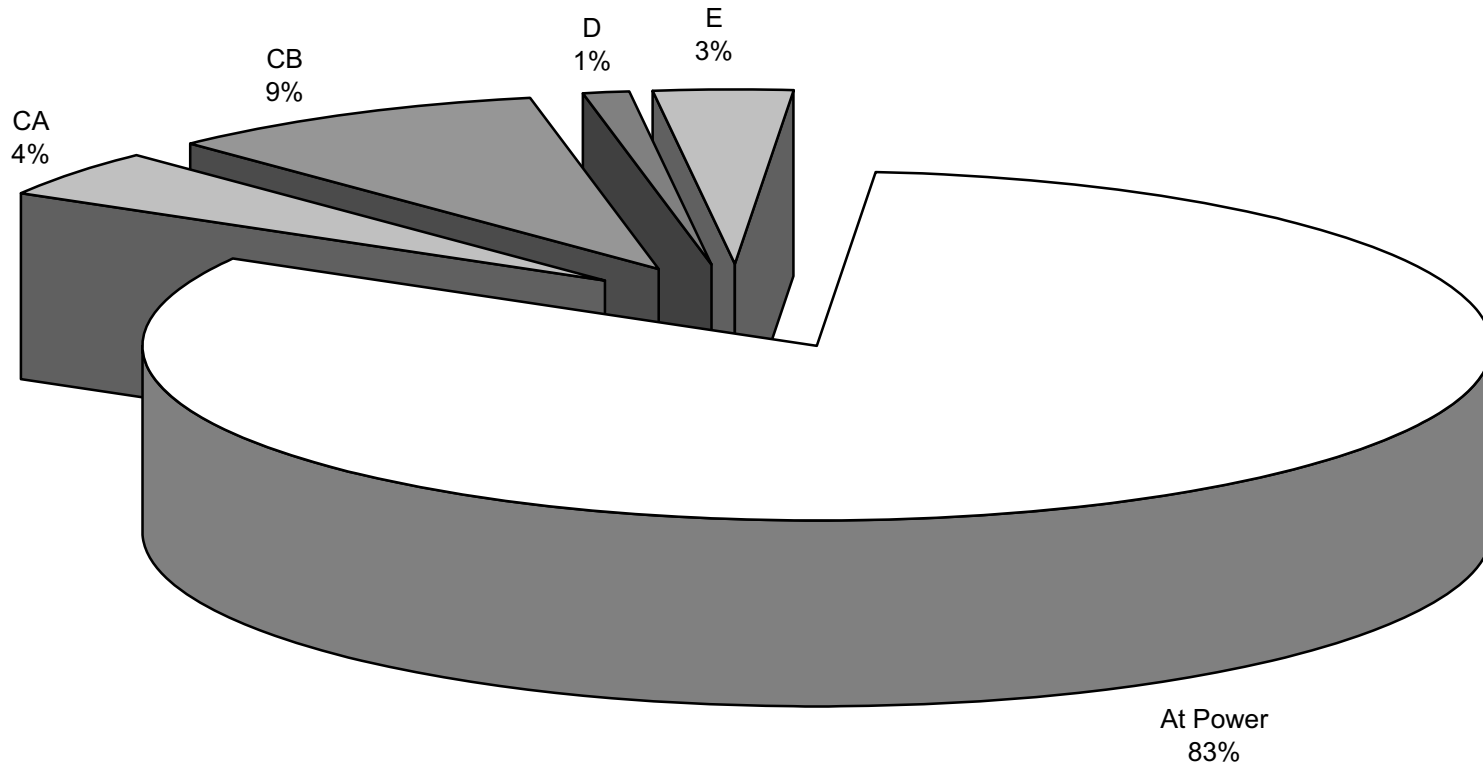
Figure 19.1-37—Initiating Events Contributions to Shutdown LRF



Shutdown LRF = 5.7 E-09/yr

EPR6170 T2

Figure 19.1-38—POS Contributions to Total LRF



Total LRF = 3.2 E-08/yr

EPR6175 T2

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