



**INFORMATION SYSTEM ON OCCUPATIONAL EXPOSURE**

**General Distribution**

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**ISOE INFORMATION SHEET**

**North American Technical Center  
Information System on Occupational Exposure**

**United States Boiling Water Reactor (BWR)  
2000 Occupational Dose Benchmarking Chart**

**NATC ISOE Information Sheet No. 01-5**

NATC ISOE Information Sheet No. 01-5 presents the U.S. Boiling Water Reactor (BWR) occupational exposure results for FY 2000. Exposure categories per unit include refueling outage duration and dose, normal operations dose, and total dose.

For comparison, the 2000 worldwide collective dose per reactor unit is provided in the below table:

<b>Country/Region</b>	<b>Collective dose per Reactor (person-Sv)</b>
USA	1.68
Europe	0.93
Japan	1.96

The FY 2000 U.S. BWR charts prepared by NATC include the following:

**Figure 1a: 2000 BWR Outage Duration**

**Figure 1b: 2000 BWR Outage Dose**

**Figure 1c: 2000 BWR Normal Dose**

**Figure 1d: 2000 BWR Total Dose**

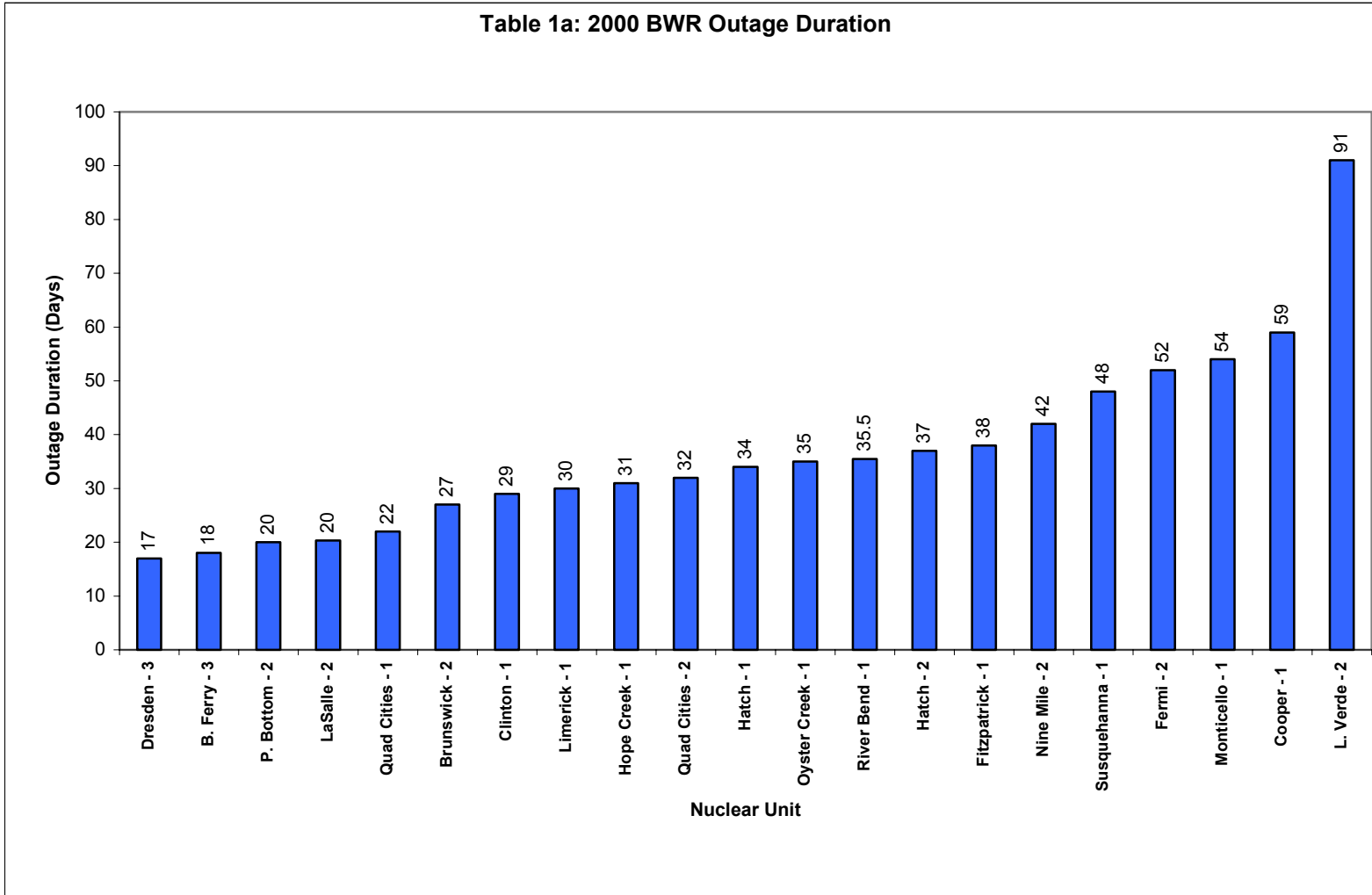
**Figure 2a-d: 2000 BWR Outage Duration Quartiles**

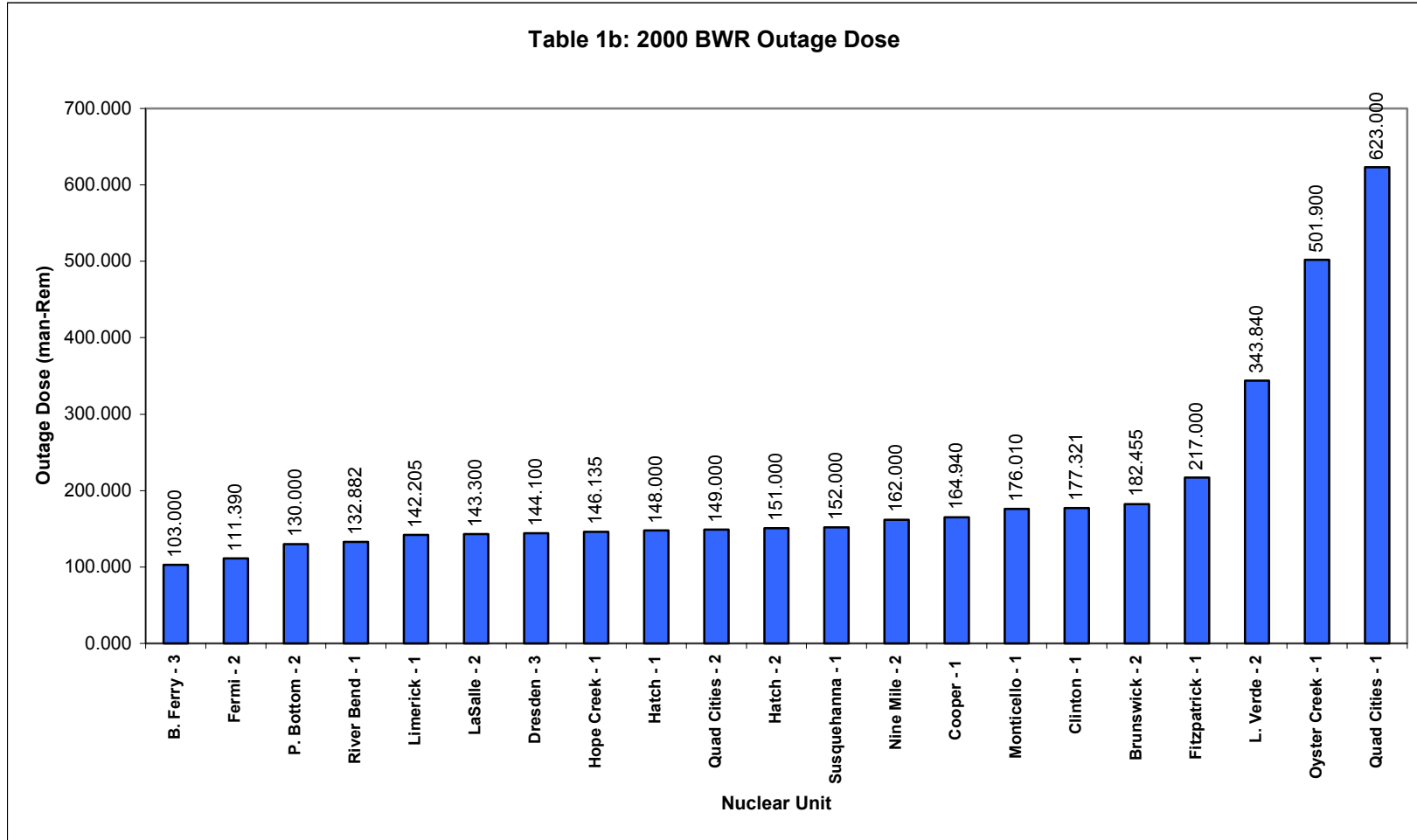
**Figure 3a-d: 2000 BWR Outage Dose Quartiles**

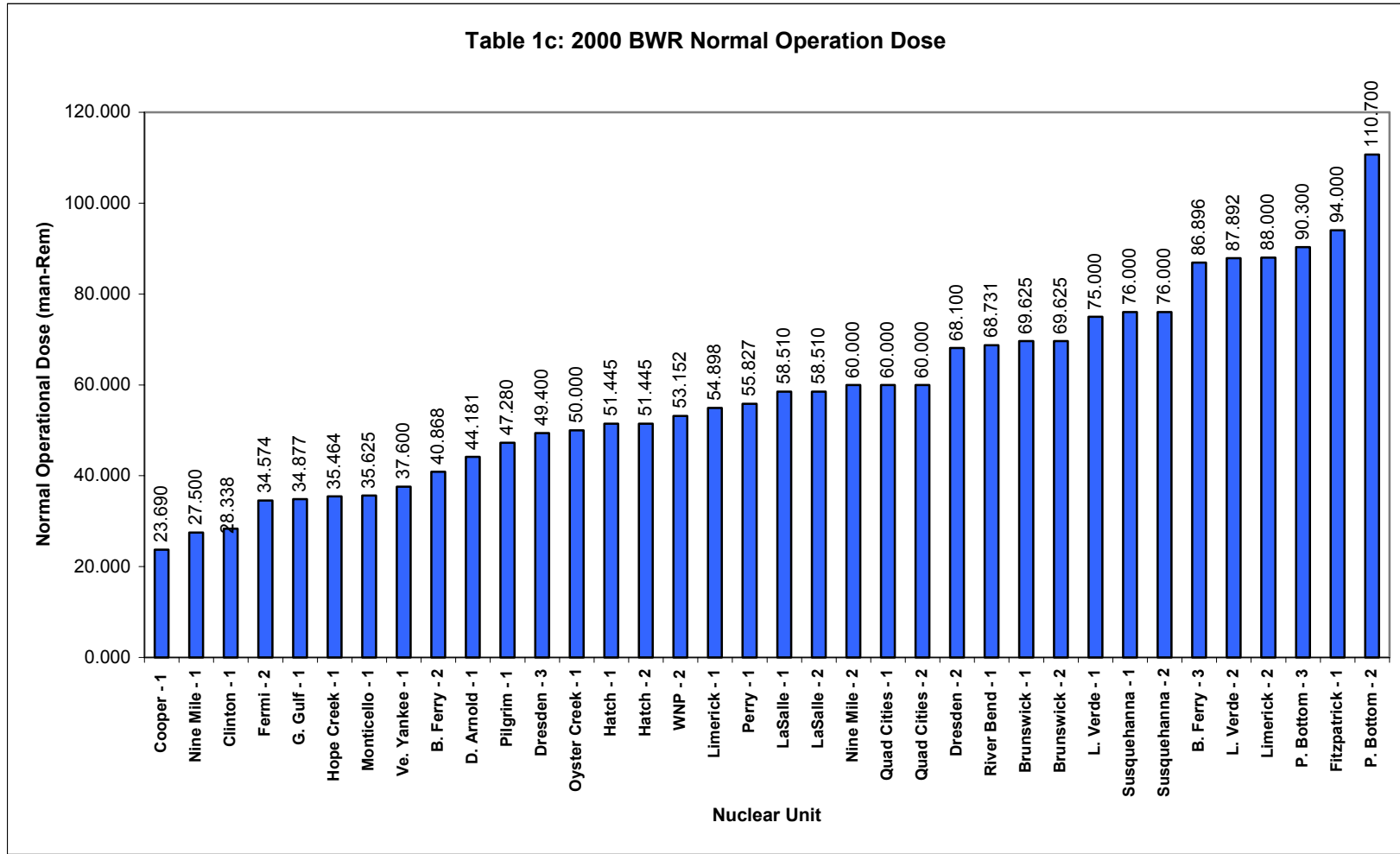
**Figure 4a-d: 2000 BWR Normal Dose Quartiles**

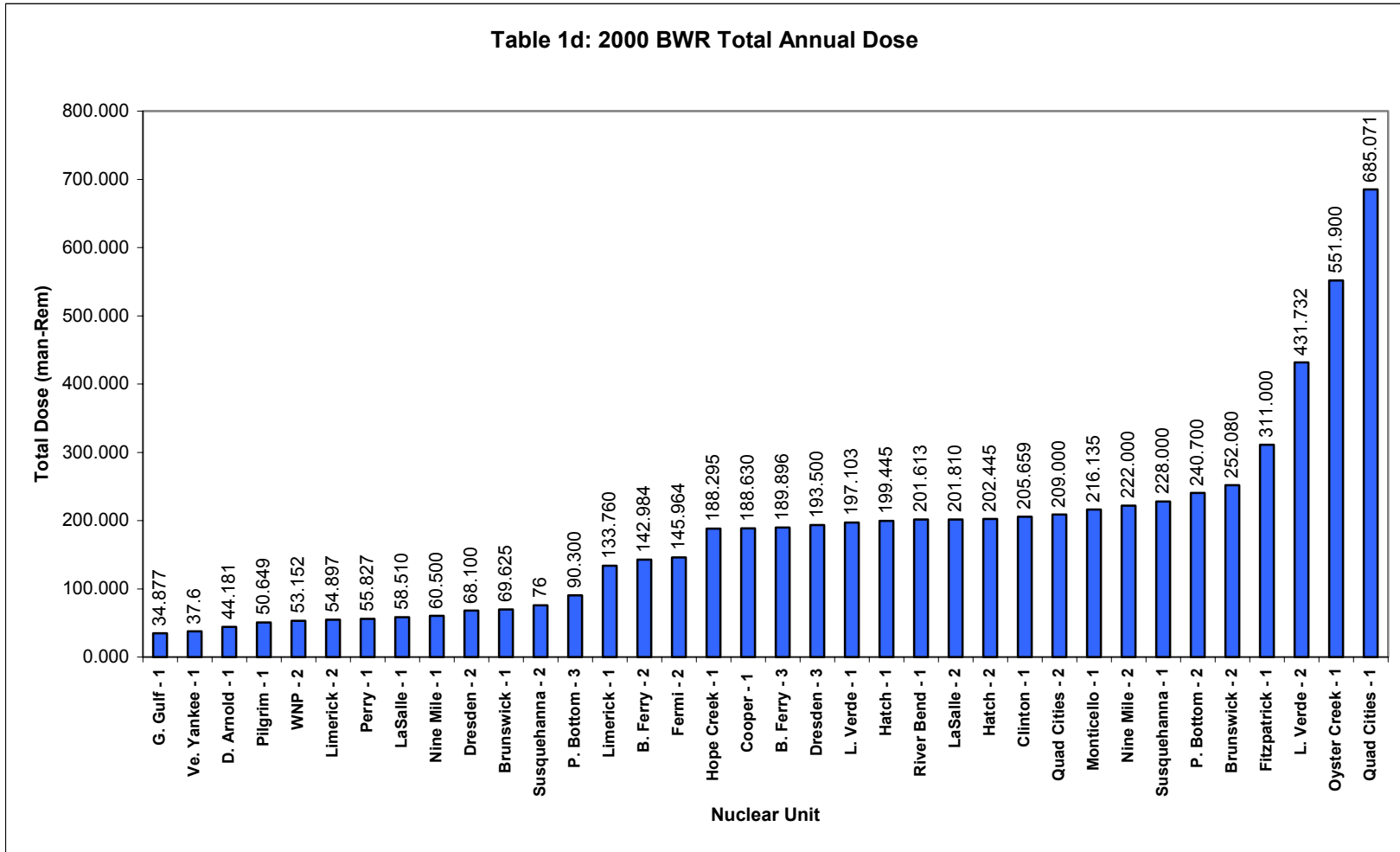
**Figure 5a-d: 2000 BWR Total Dose Quartiles**

**Table 6: 2000 BWR Occupational Dose Data**

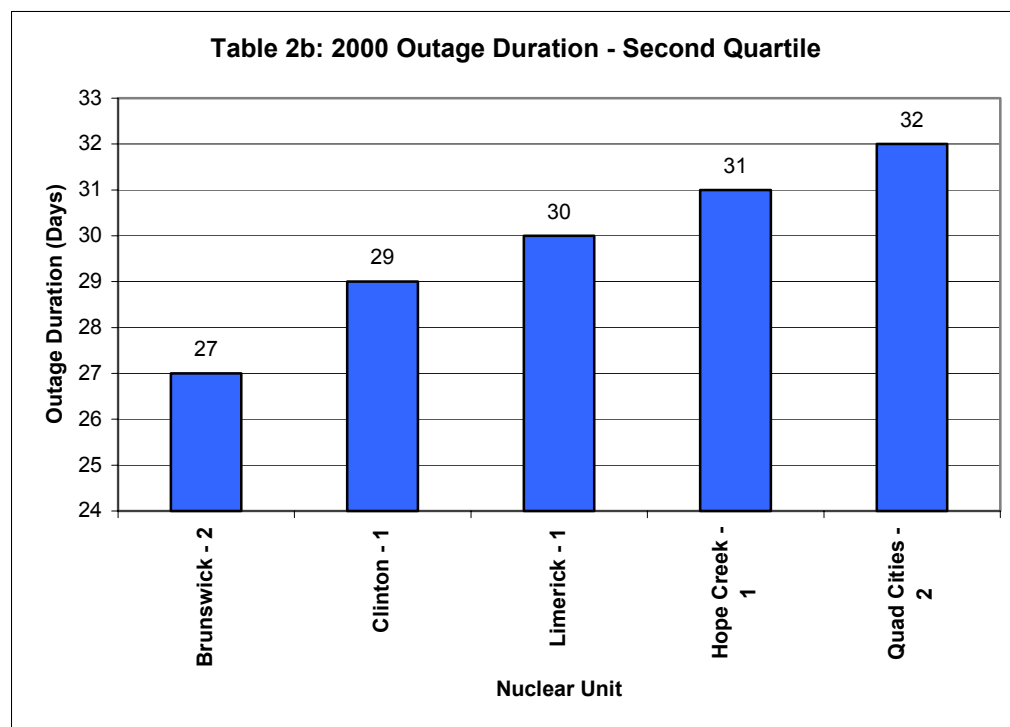
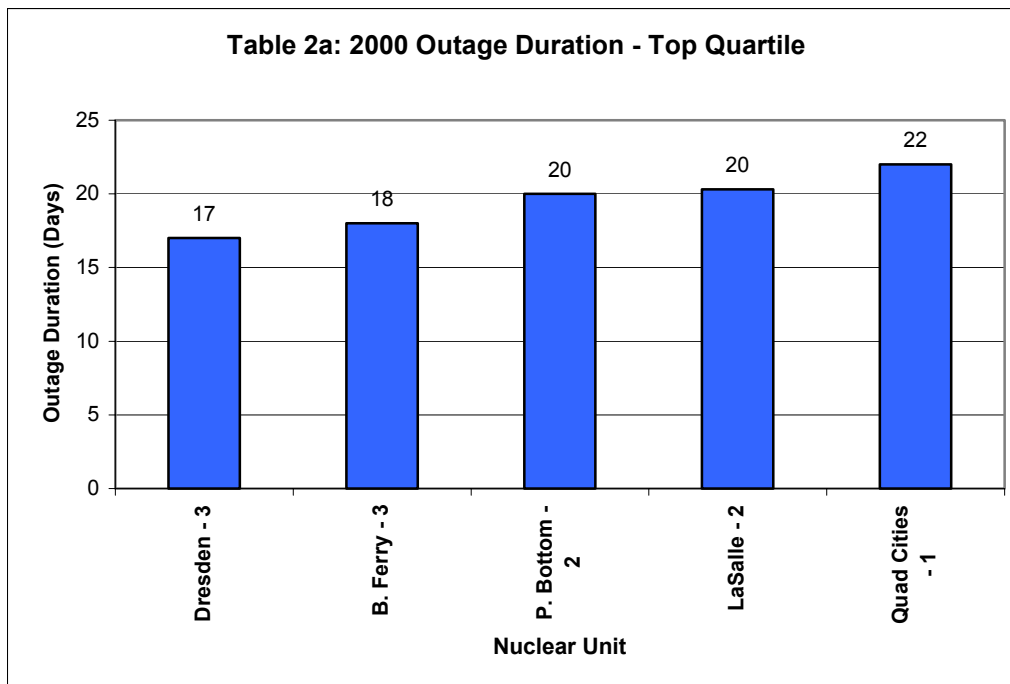


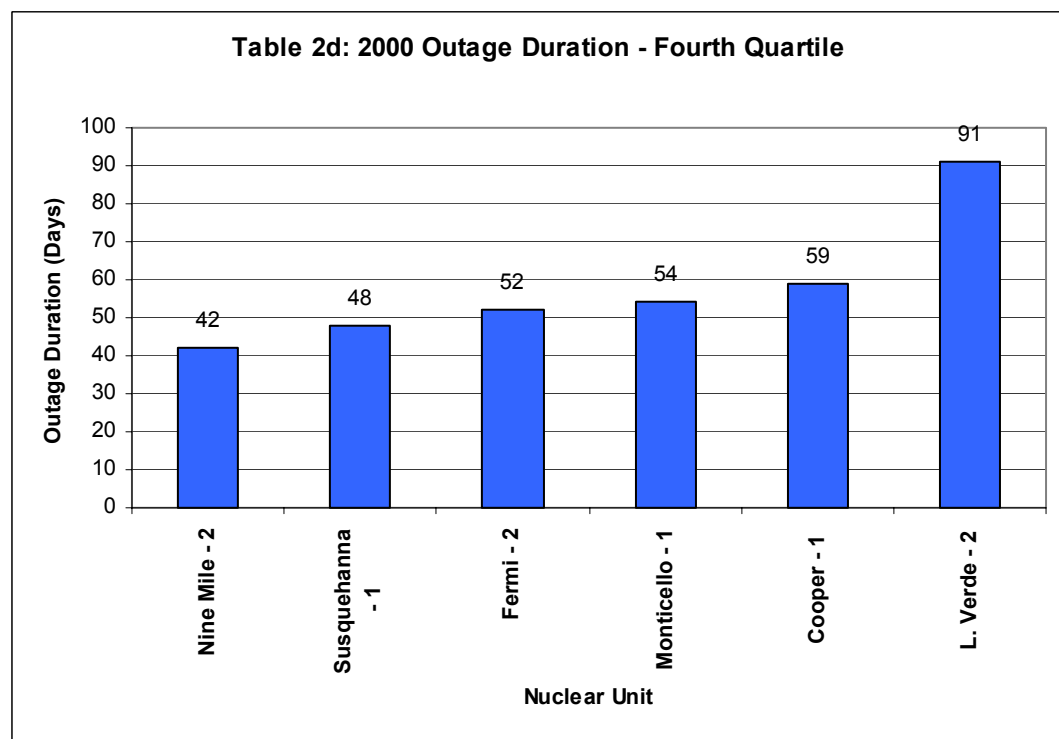
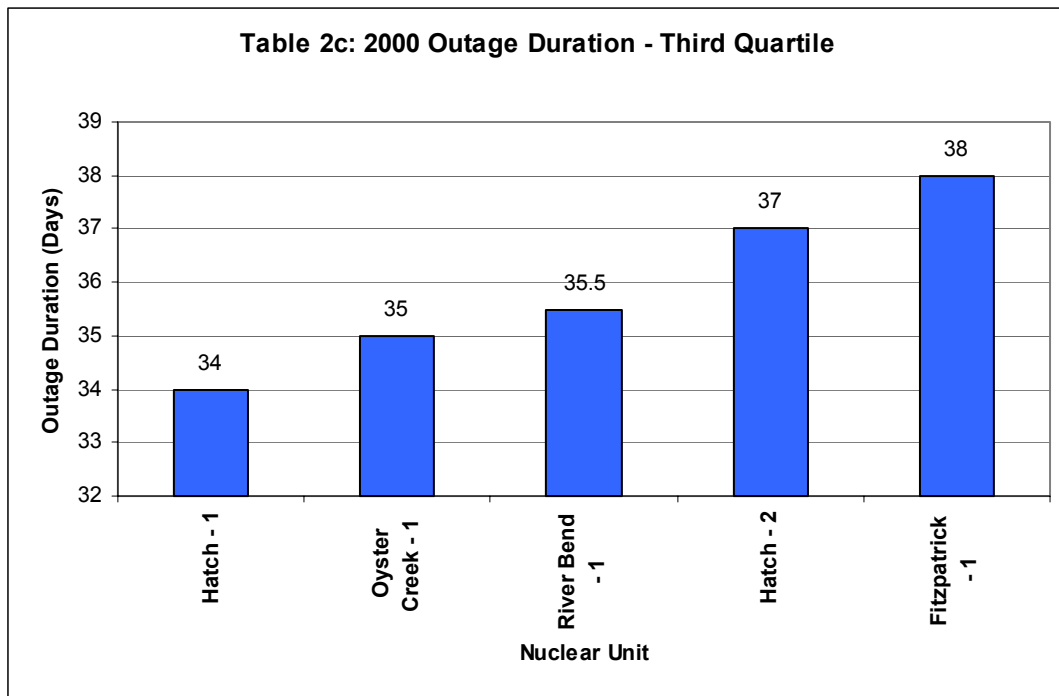




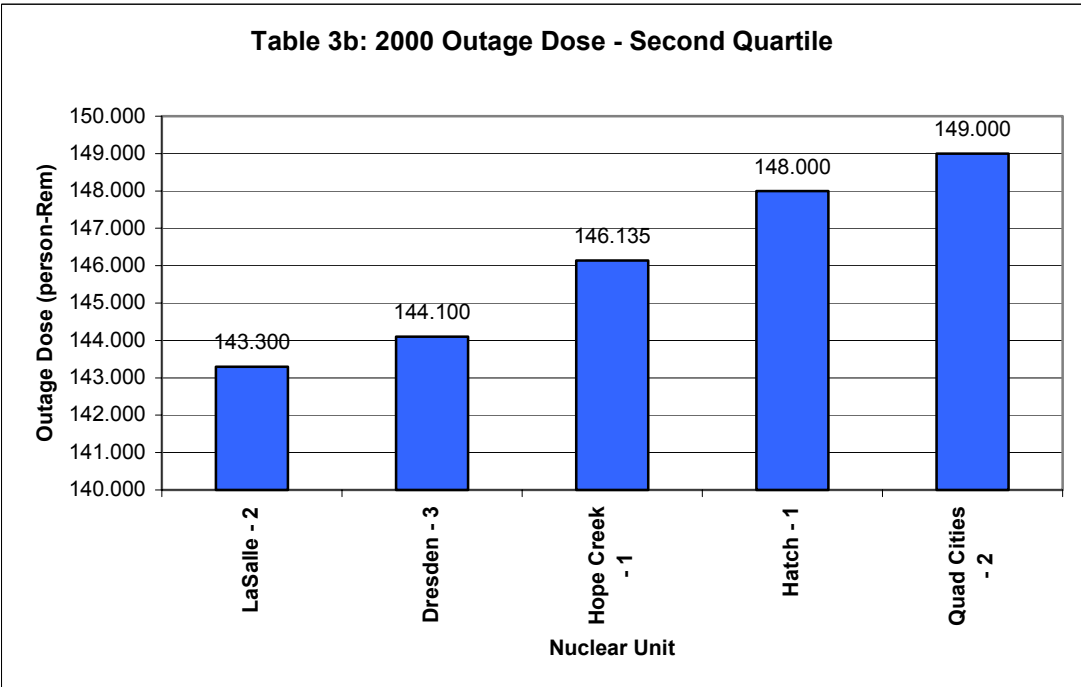
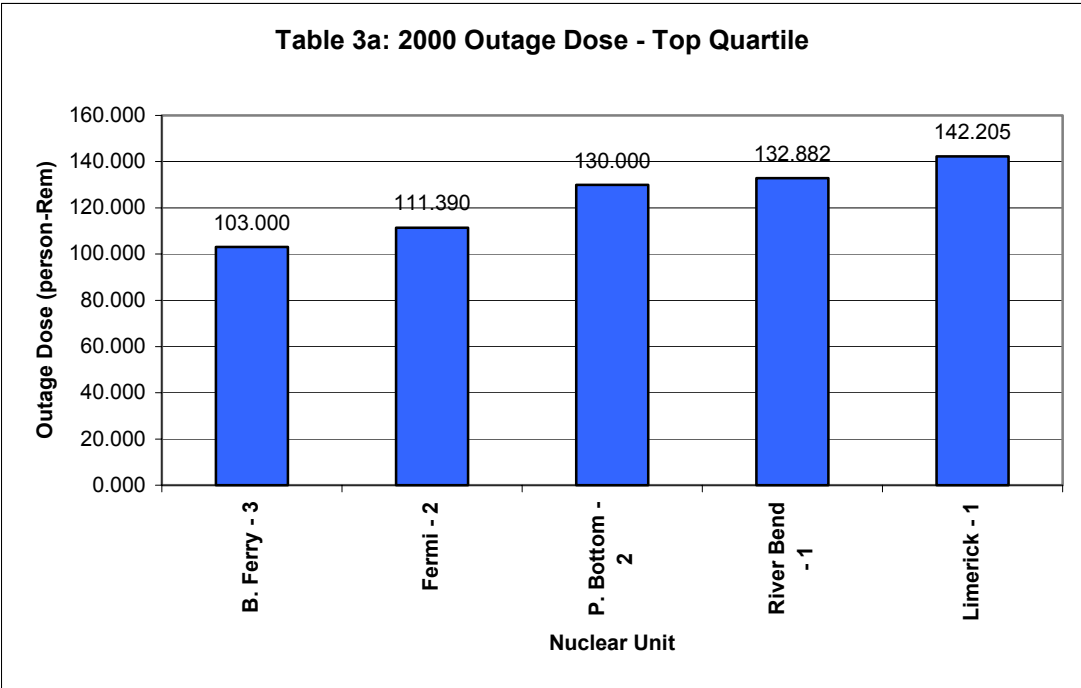


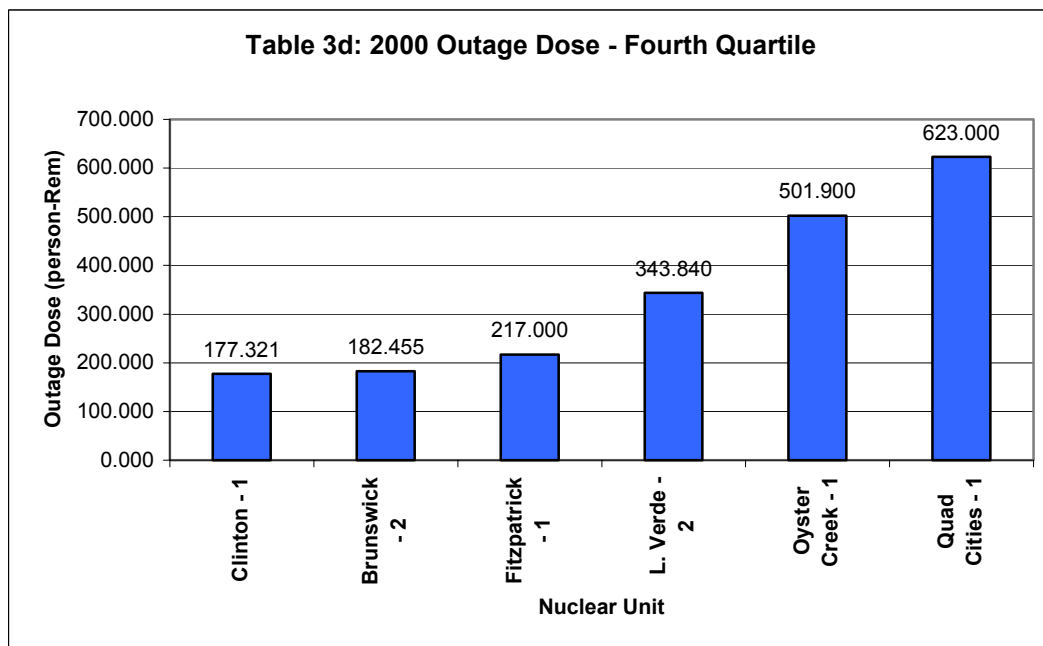
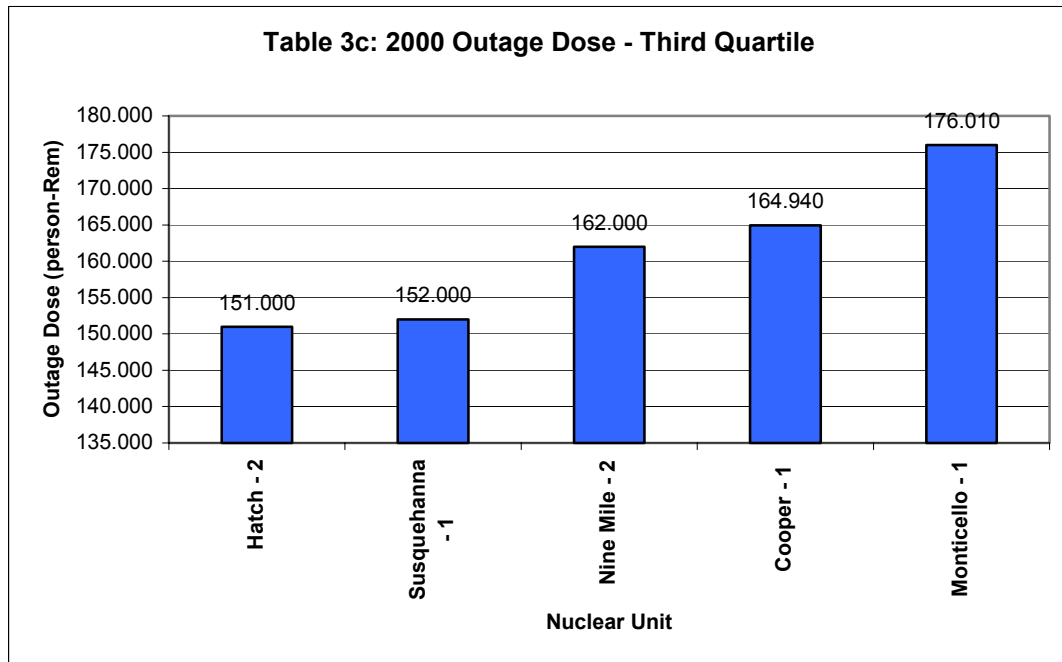


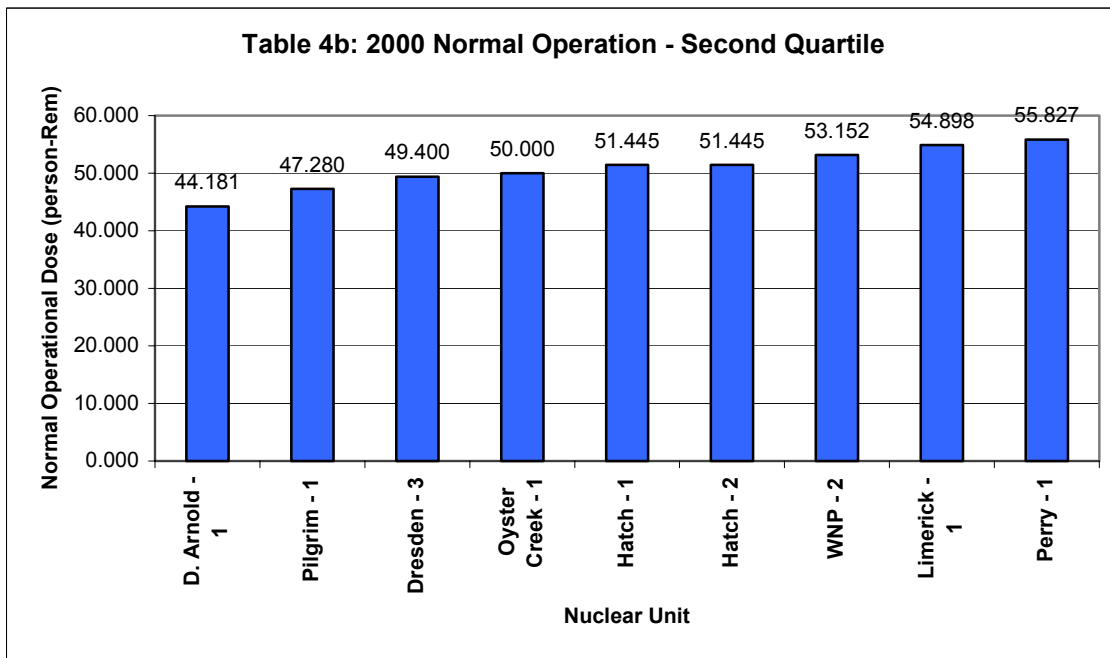
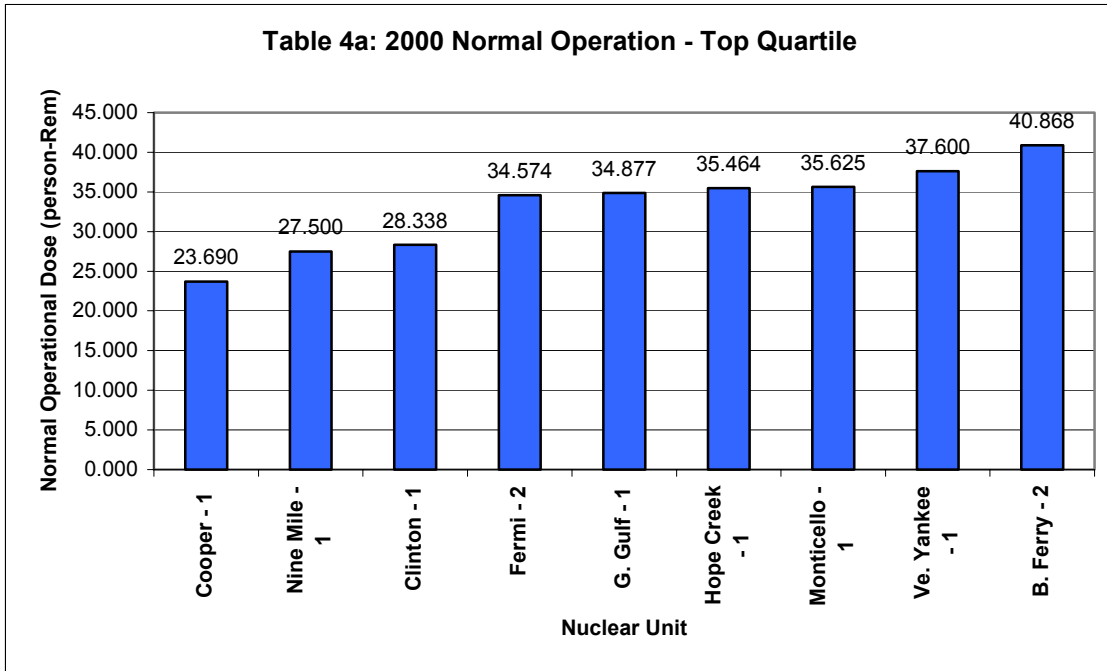


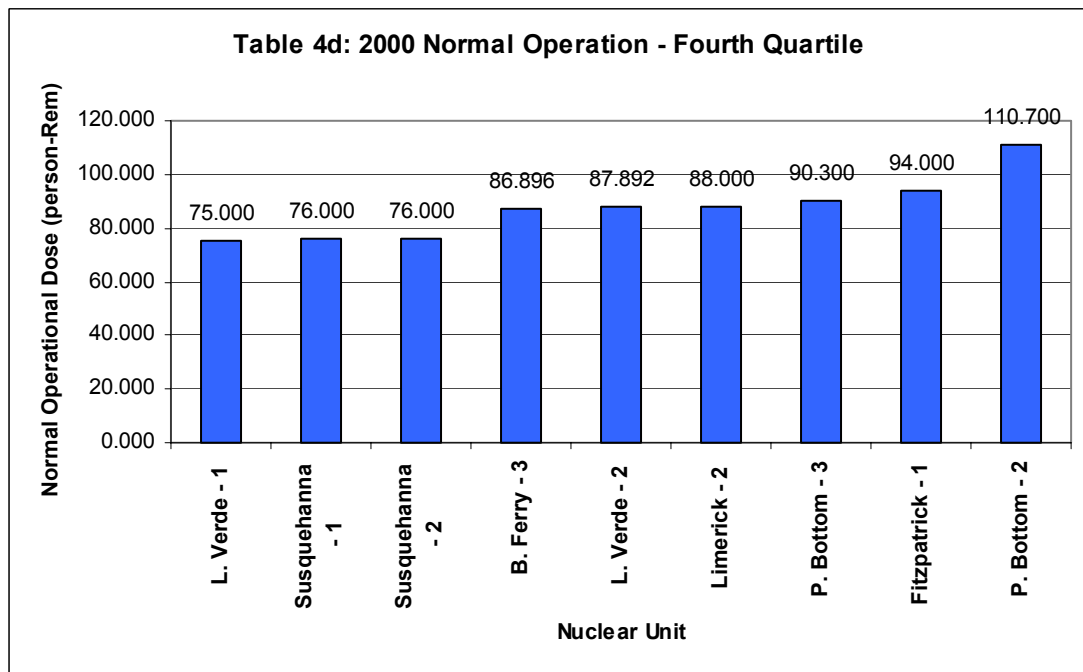
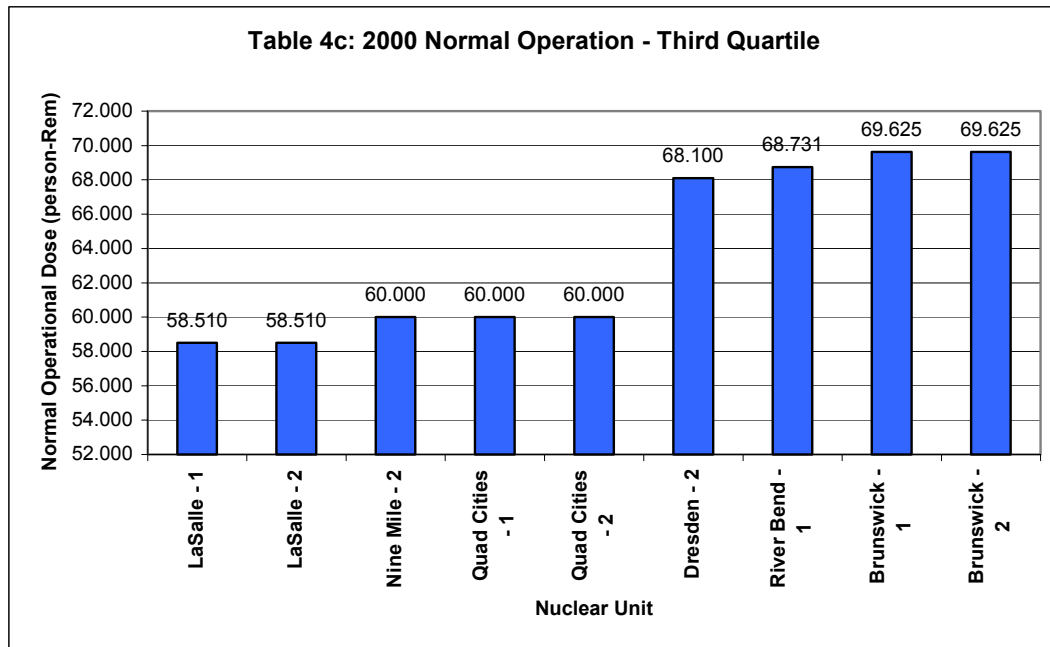


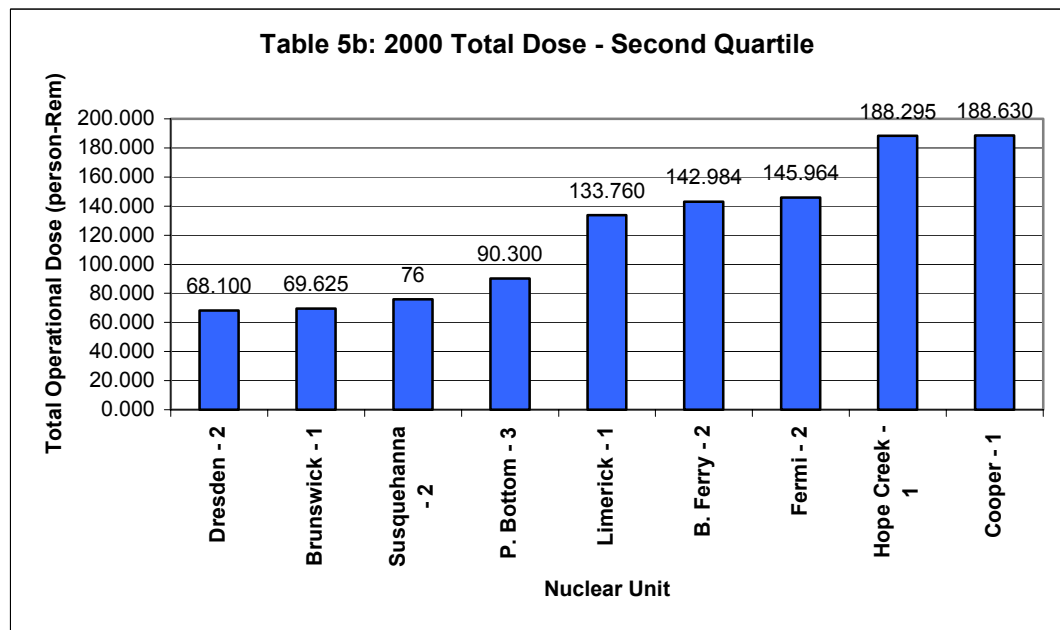
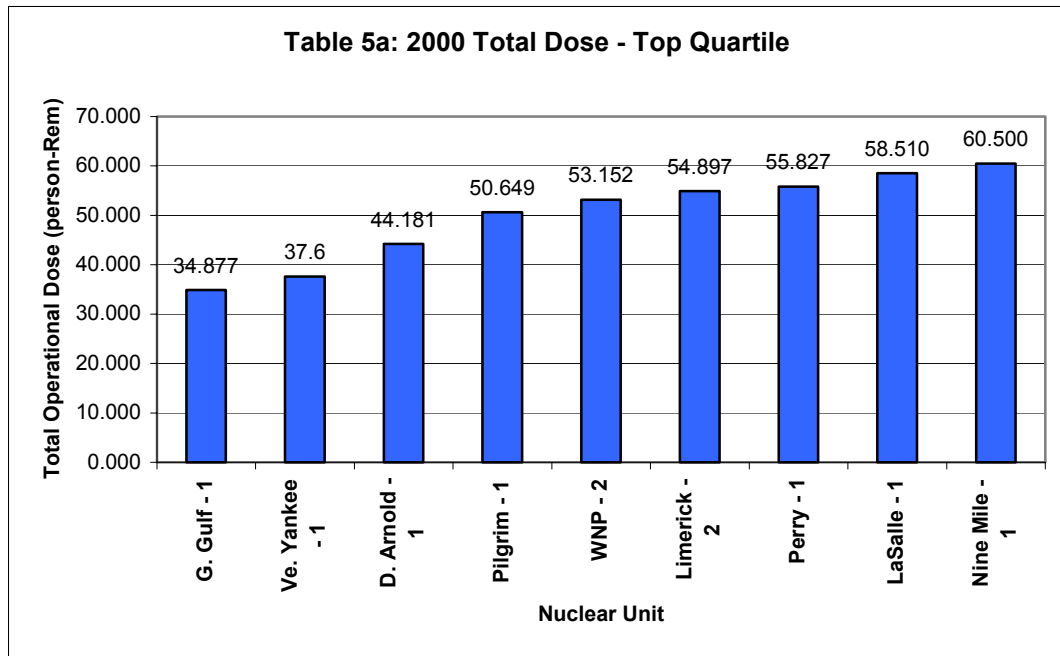


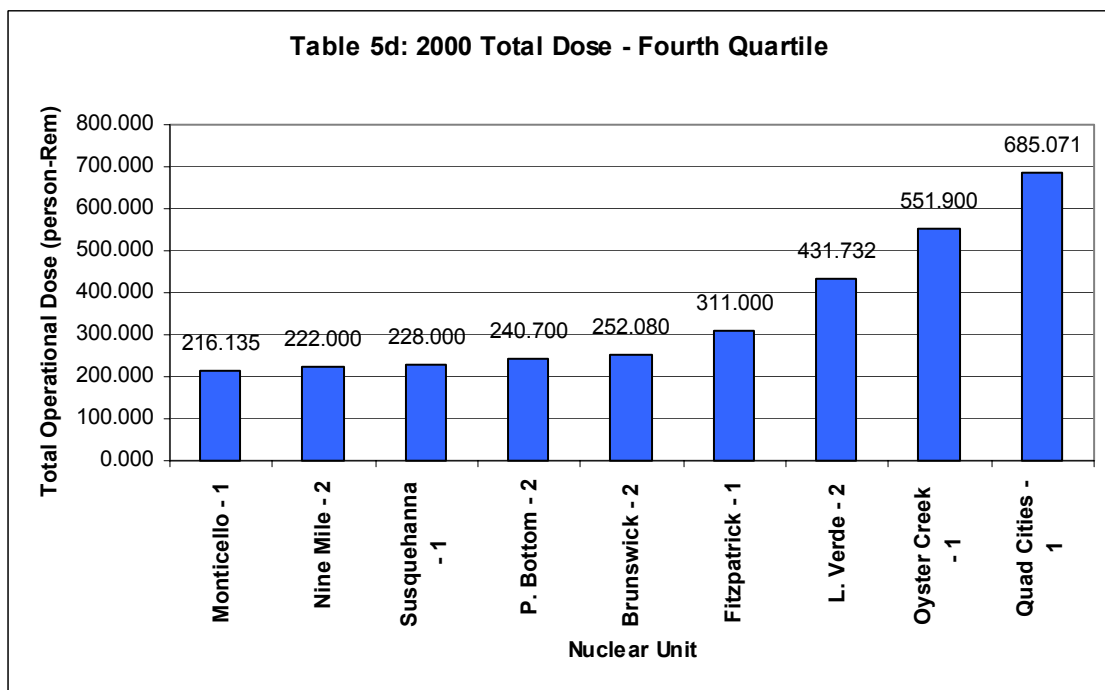
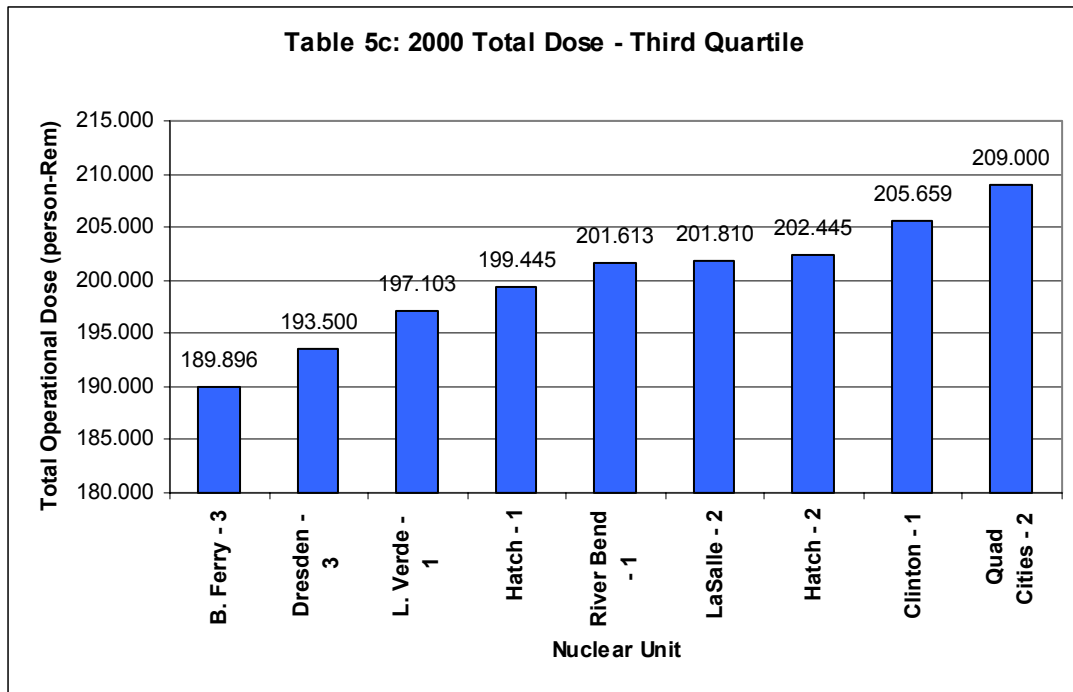












**Table 6: 2000 BWR Occupational Dose Data**

Nuclear Unit	Outage Start Date	Outage End Date	Outage Duration	Outage Dose	Normal Operation	Other Shutdowns	Total Dose	Goals	Comments 3 yr av	USNRC TLD Site Values
Big Rock - 1							0.000		Decommis	
B. Ferry - 1	N/A	N/A					0.000			
B. Ferry - 2	N/A	N/A			40.868	102.116	142.984			333.215
B. Ferry - 3	4/15/2000	5/3/2000	18	103.000	86.896		189.896			332.88
Brunswick - 1	N/A	N/A			69.625		69.625	350.000	189	321.785
Brunswick - 2	2/26/2000	3/25/2000	27	182.455	69.625		252.080		15	
Clinton - 1	10/16/2000	11/14/2000	29	177.321	28.338		205.659		161	253.382
Cooper - 1	3/4/2000	5/2/2000	59	164.940	23.690		188.630	198.430	143	199.589
Dresden - 2	N/A	N/A			68.100		68.100			
Dresden - 3	9/15/2000	10/2/2000	17	144.100	49.400		193.500			261.684
D. Arnold - 1	N/A	N/A			44.181		44.181			44.181
Fermi - 2	3/31/2000	5/22/2000	52	111.390	34.574		145.964		81	145.964
G. Gulf - 1	N/A	N/A			34.877		34.877			34.877
Hatch - 1	10/1/2000	11/4/2000	34	148.000	51.445		199.445			
Hatch - 2	2/24/2000	4/2/2000	37	151.000	51.445		202.445			401.891
Hope Creek - 1	4/22/2000	5/24/2000	31	146.135	35.464	6.696	188.295			188.295
Fitzpatrick - 1	10/11/2000	11/18/2000	38	217.000	94.000		311.000			300.997
LaSalle - 1	N/A	N/A			58.510		58.510			
LaSalle - 2	11/11/2000	12/1/2000	20	143.300	58.510		201.810			260.32
L. Verde - 1	N/A	N/A			74.756	59.004	133.760			
L. Verde - 2	3/18/2000	6/16/2000	91	343.840	87.892		431.732			
Limerick - 1	3/1/2000	3/31/2000	30	142.205	54.898		197.103	140.000	9	
Limerick - 2	N/A	N/A			54.897		54.897	140.000		260.611
Millstone - 1							0.000			
Monticello - 1	1/7/2000	3/3/2000	54	176.010	35.625	4.500	216.135		93	216.136
Nine Mile - 1	N/A	N/A			27.500	33.000	60.500	65.000	160	282.838
Nine Mile - 2	3/4/2000	4/15/2000	42	162.000	60.000		222.000	252.000	211	282.780
Oyster Creek - 1	10/14/2000	11/18/2000	35	501.900	50.000		551.900			614.379
P. Bottom - 2	9/1/2000	9/21/2000	20	130.000	110.700		240.700			330.928
P. Bottom - 3	N/A	N/A			90.300		90.300			
Perry - 1	N/A	N/A			55.827		55.827			55.827
Pilgrim - 1	N/A	N/A			47.280	3.369	50.649			50.797
Quad Cities - 1	10/14/2000	11/3/2000	22	623.000	60.000	2.071	685.071		309	893.766
Quad Cities - 2	1/22/2000	2/12/2000	32	149.000	60.000		209.000		16	
River Bend - 1	3/31/2000	5/6/2000	36	132.882	68.731		201.613	201.000	247.76	216.053
Susquehanna - 1	3/18/2000	5/6/2000	48	152.000	76.000		228.000	400.000	187	331.163
Susquehanna - 2	N/A	N/A			76.000		76.000		187	
Ve. Yankee - 1	N/A	N/A			37.600		37.600	50.000	137	37.846
WNP - 2	N/A	N/A			53.152		53.152			53.152