



**INFORMATION SYSTEM ON OCCUPATIONAL EXPOSURE**

**General Distribution**

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**ISOE INFORMATION SHEET**

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

**North American Boiling Water Reactor (BWR)  
2002 Occupational Dose Benchmarking Charts**

**NATC ISOE Information Sheet No. 03-5**

NATC ISOE Information Sheet No. 03-5 presents the North American Boiling Water Reactor (BWR) occupational exposure results for FY 2002. Exposure categories per unit include refueling outage duration and dose, normal operations dose, and total dose. For comparison, the 2002 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	1.75
Europe	1.08
Japan	

The FY 2002 N.A. BWR charts prepared by NATC include the following:

- Figure 1a: 2002 BWR Outage Duration**
- Figure 1b: 2002 BWR Outage Dose**
- Figure 1c: 2002 BWR Normal Dose**
- Figure 1d: 2002 BWR Total Dose**
- Figure 2a-d: 2002 BWR Outage Duration Quartiles**
- Figure 3a-d: 2002 BWR Outage Dose Quartiles**
- Figure 4a-d: 2002 BWR Normal Dose Quartiles**
- Figure 5a-d: 2002 BWR Total Dose Quartiles**
- Table 6: 2002 BWR Occupational Dose Data**

**Table 1a: 2002 BWR Outage Duration**

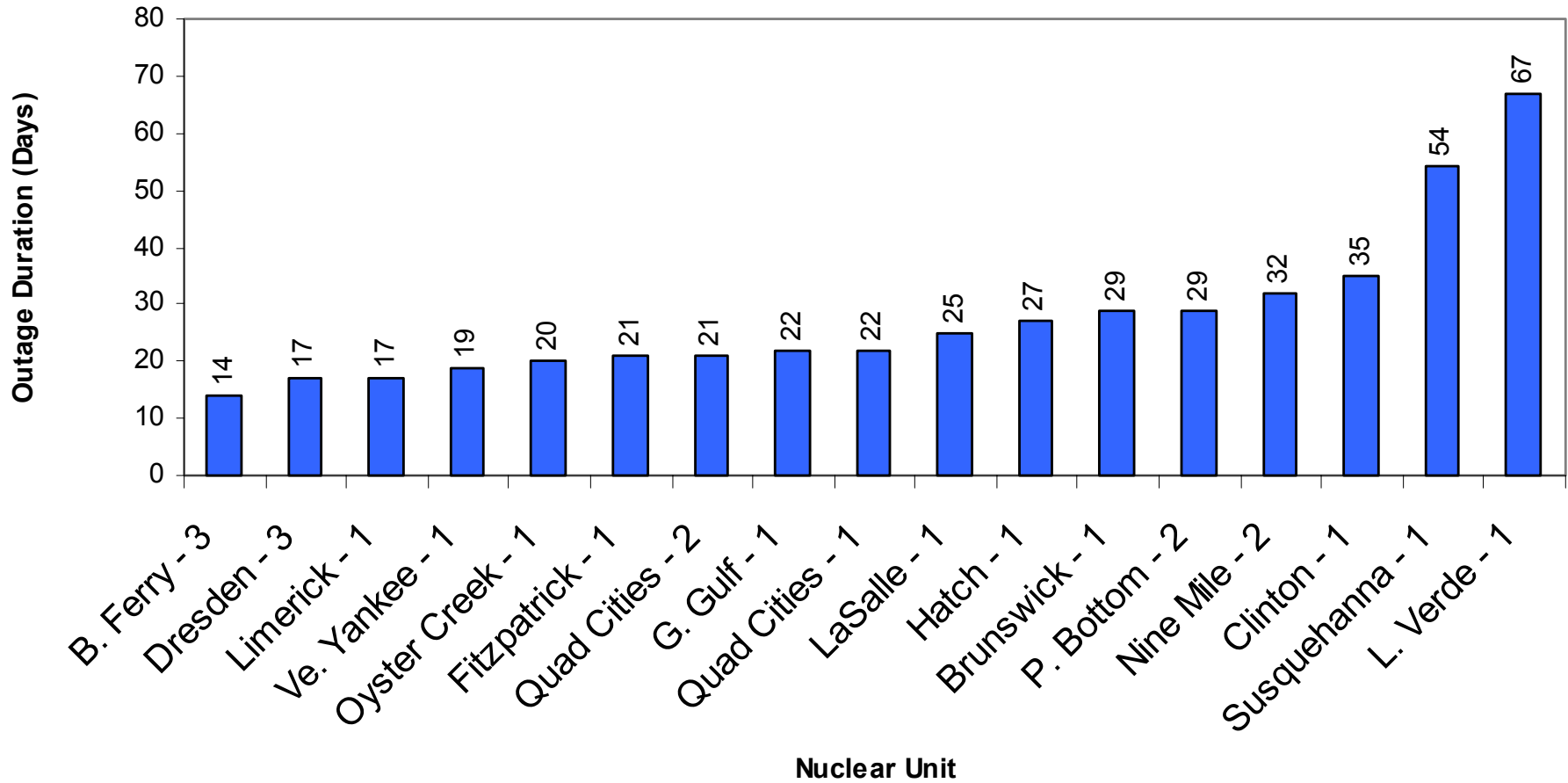


Table 1b: 2002 BWR Outage Dose

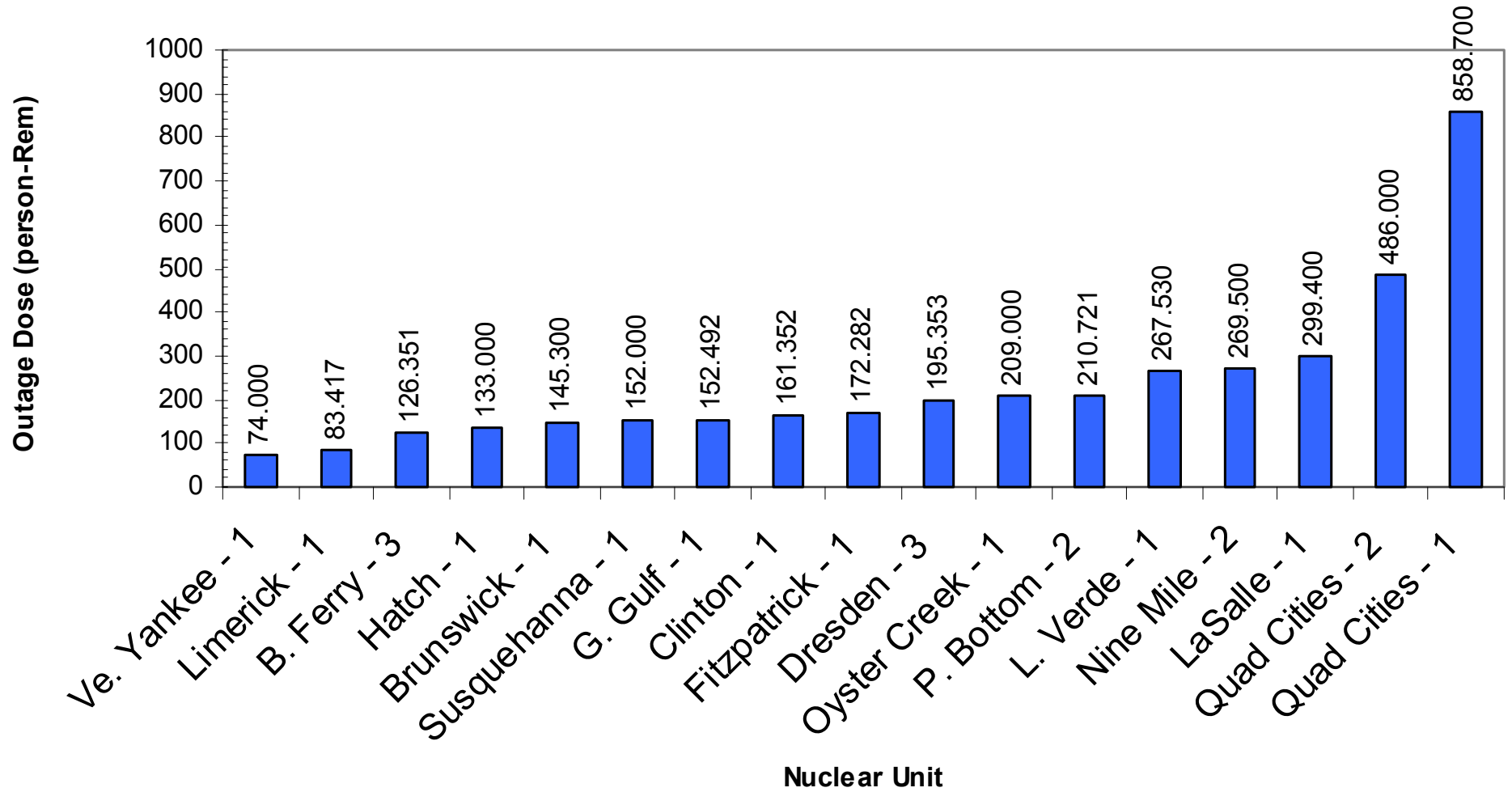


Table 1c: 2002 BWR Normal Operation Dose

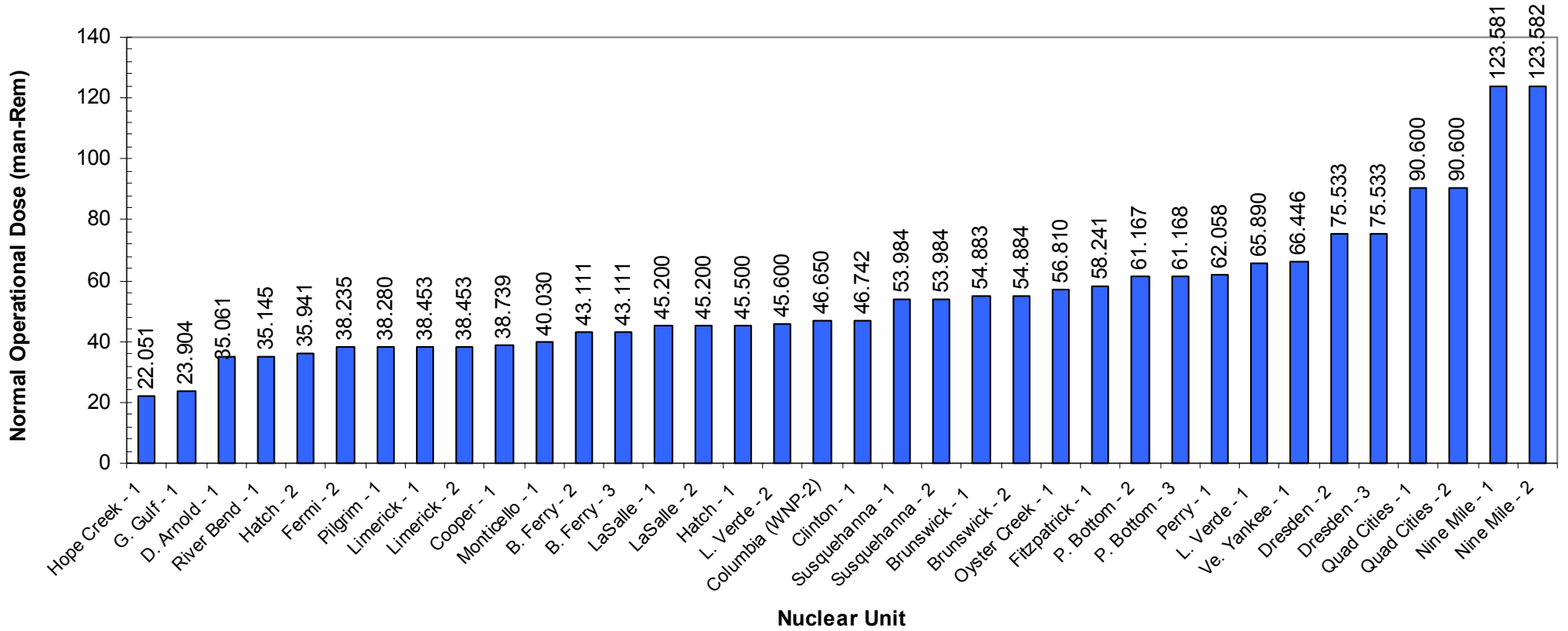
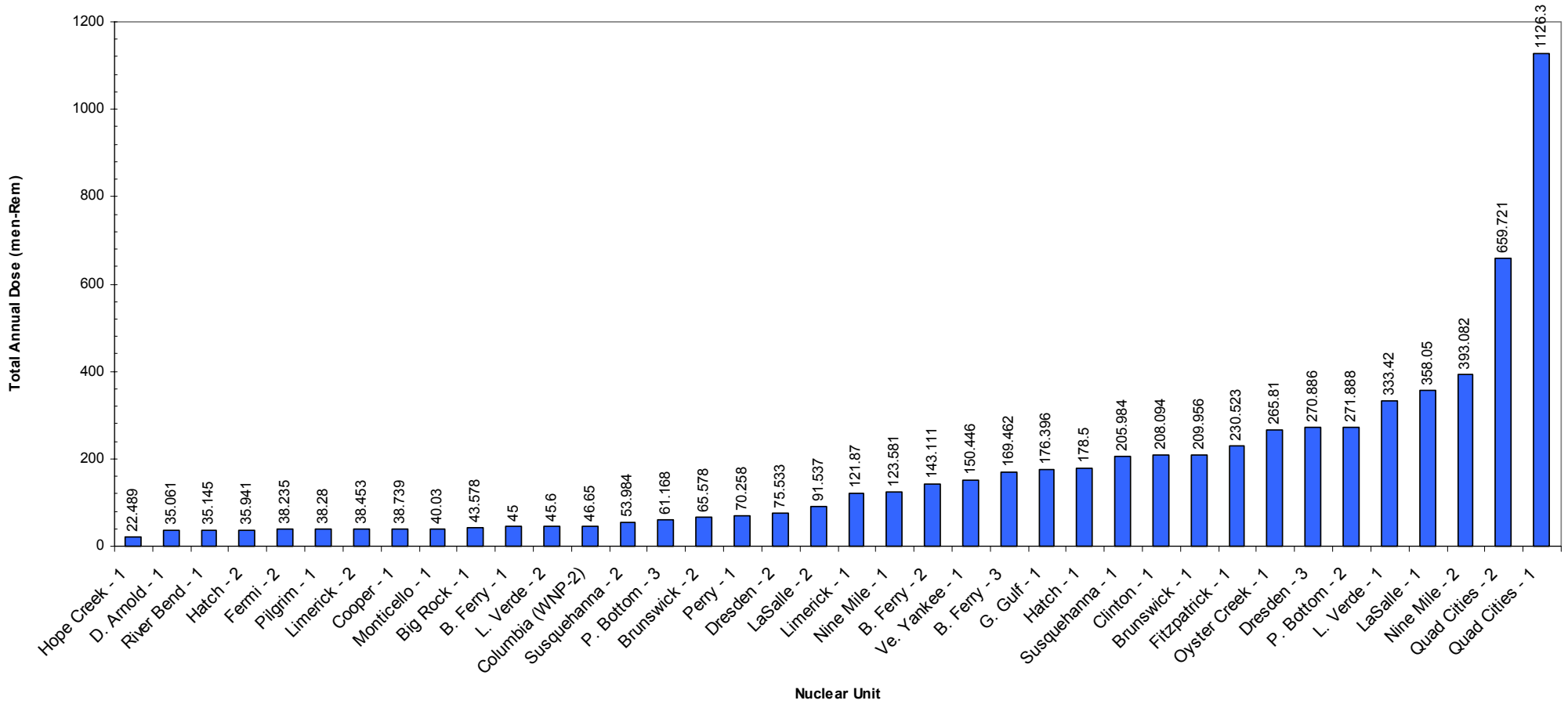
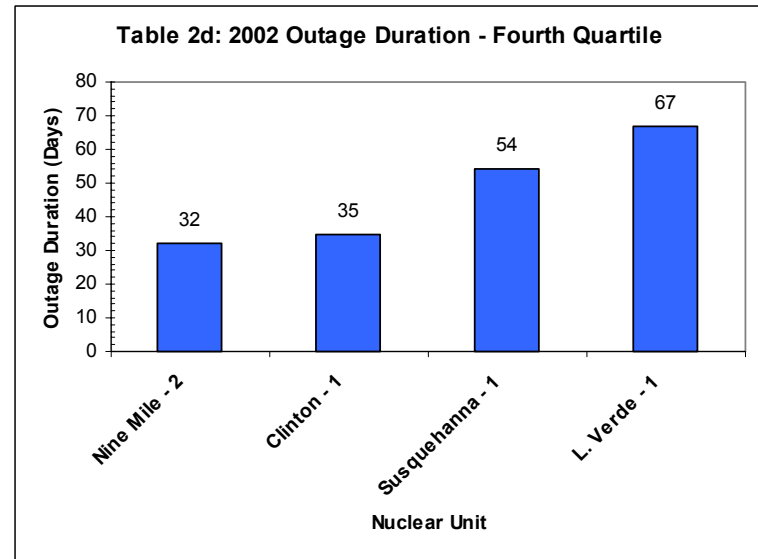
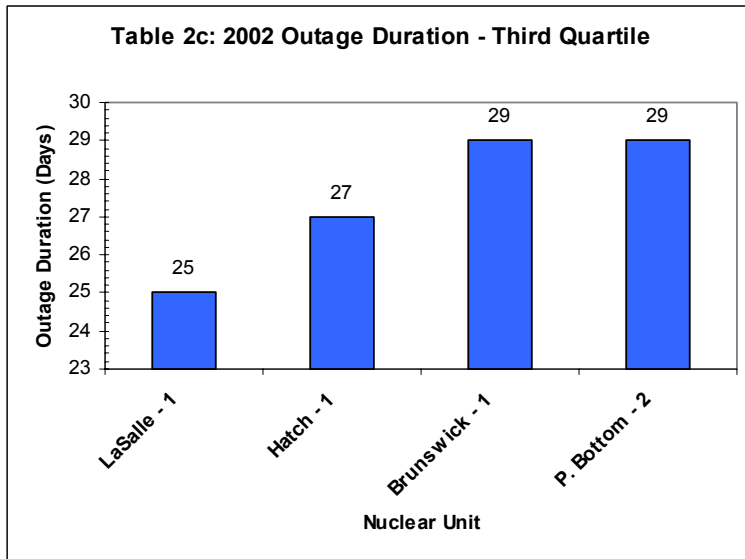
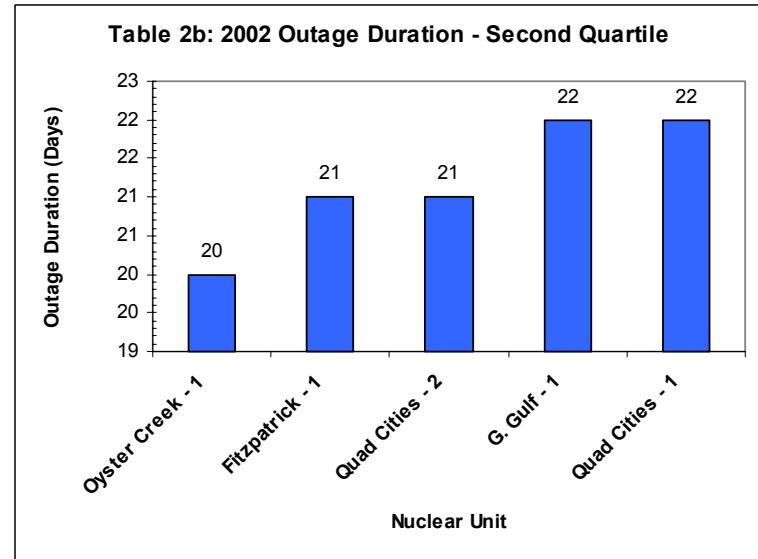
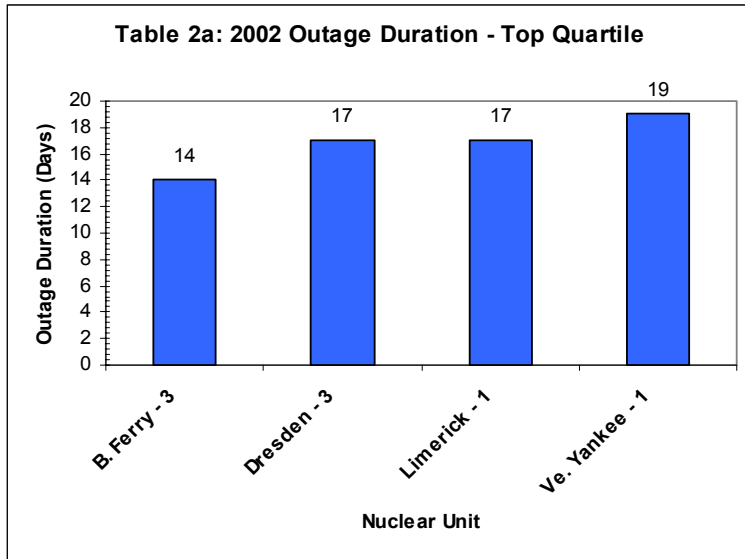
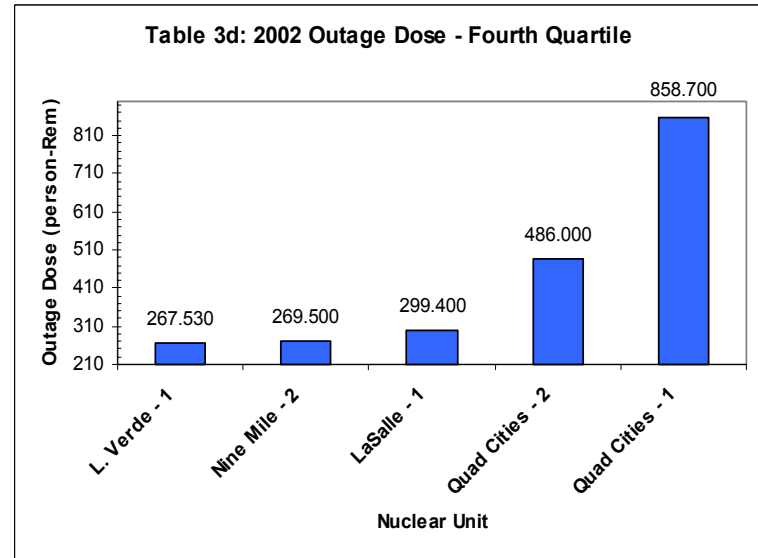
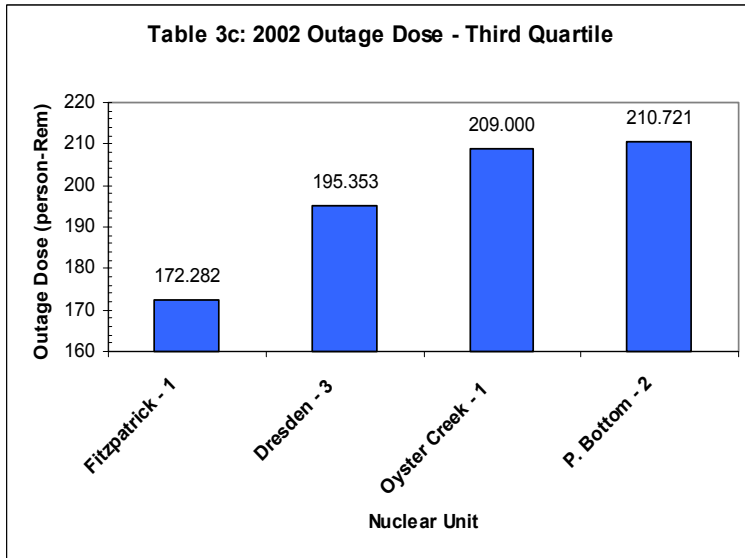
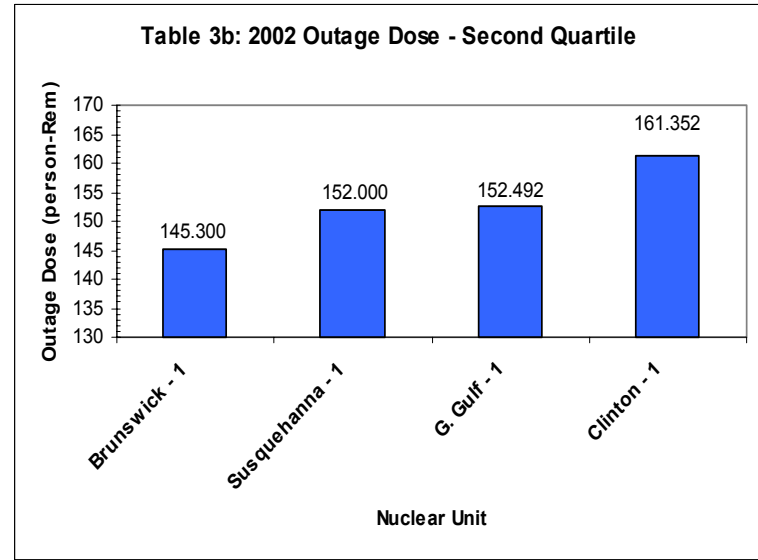
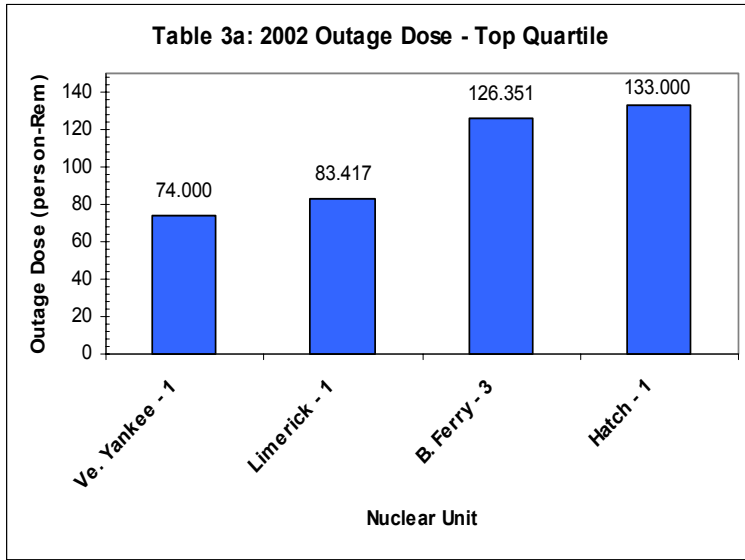
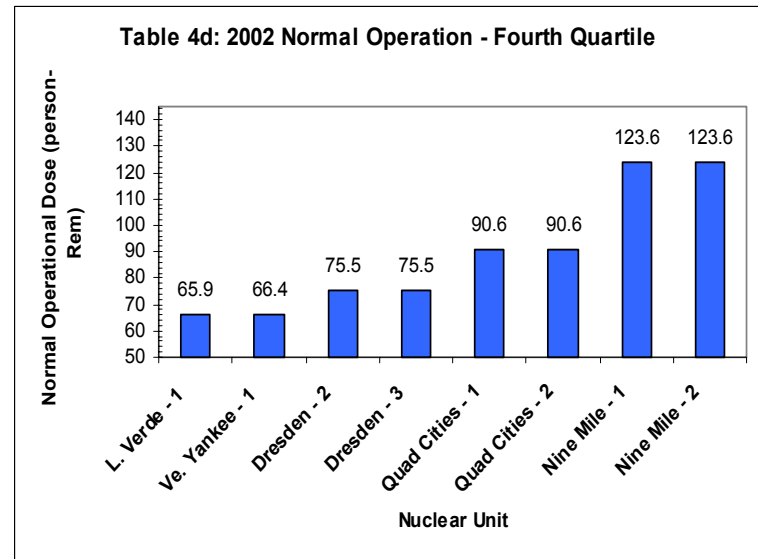
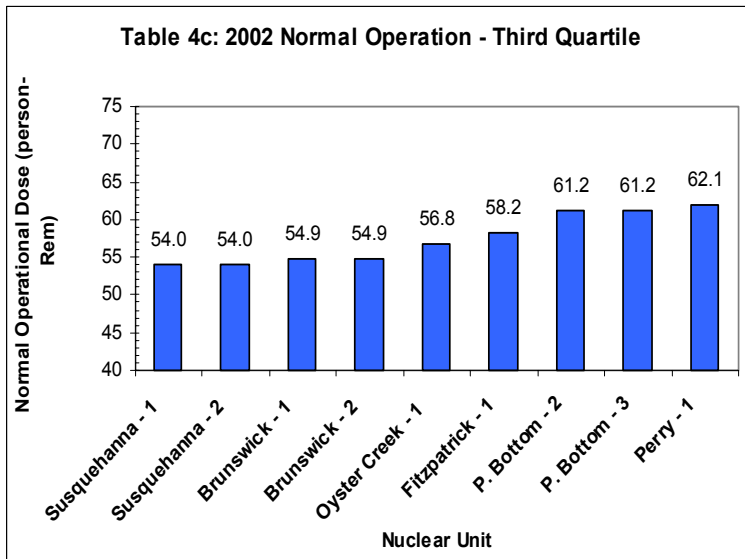
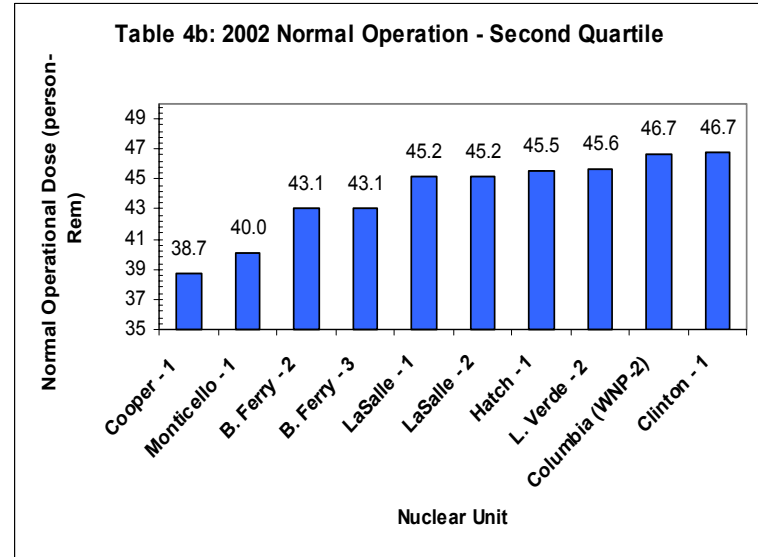
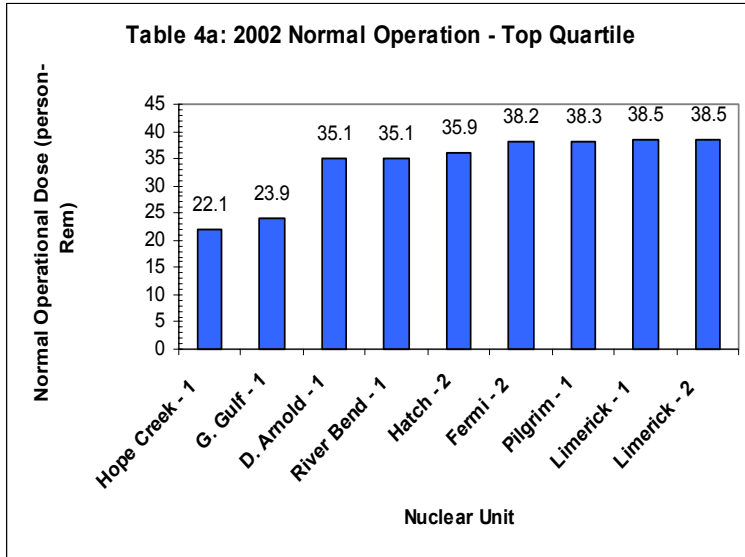


Table 1d: 2002 BWR Total Annual Dose











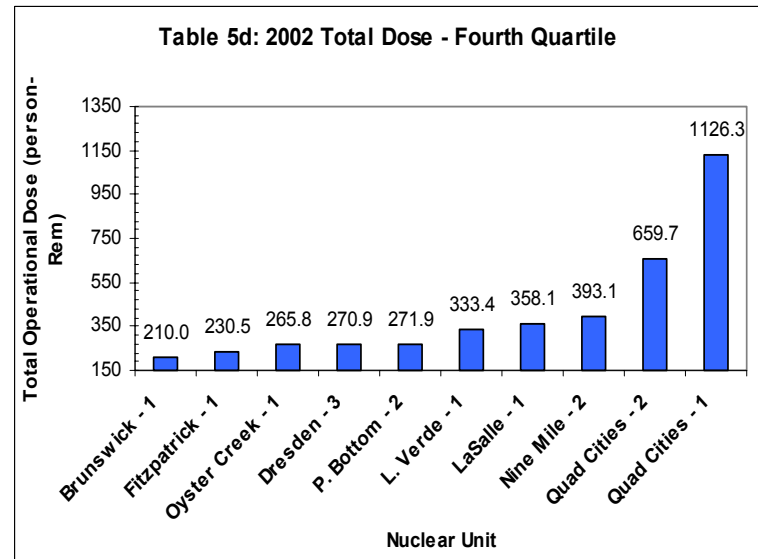
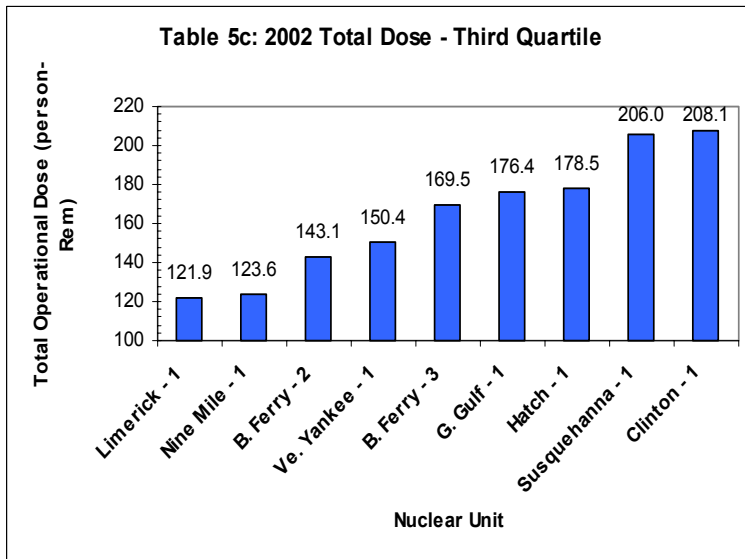
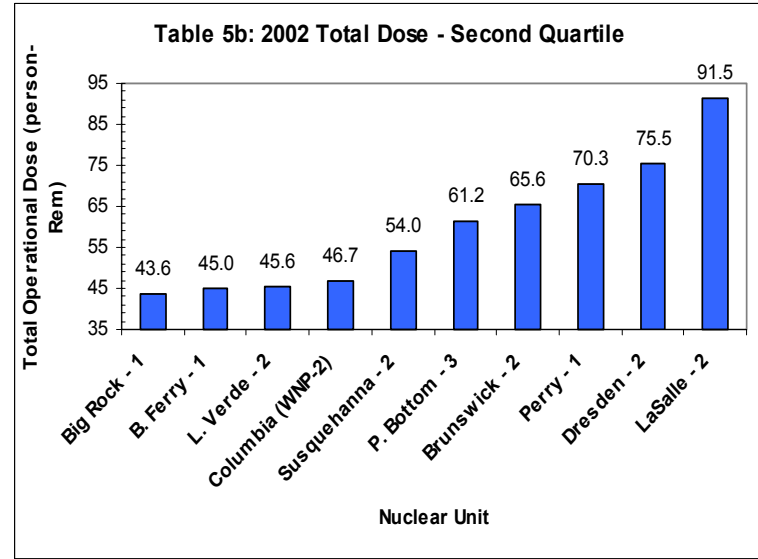
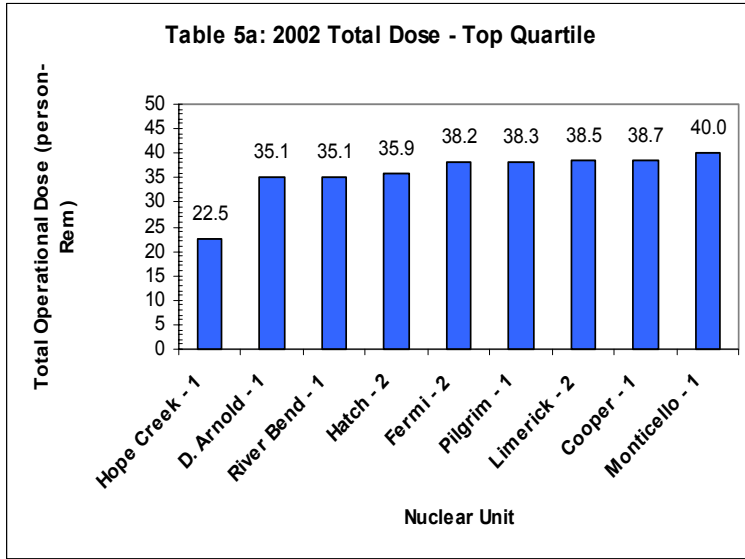


Table 6: 2002 BWR Occupational Dose Data

Nuclear Unit	Outage Start Date	Outage End Date	Outage Duration	Outage Dose	Normal Operation	Other Shutdowns	Total Dose	Goals	Comments	TLD Values
B. Ferry - 1	N/A	N/A	0			45.000	45.000		admin. Shutd	
B. Ferry - 2	N/A	N/A	0		43.111	100.000	143.111			
B. Ferry - 3	3/26/2002	4/10/2002	14	126.351	43.111		169.462			357.573
Big Rock - 1	N/A	N/A	0			43.578	43.578		decomm.	43.538
Brunswick - 1	3/2/2002	4/1/2002	29	145.300	54.883	9.773	209.956	180 OG		
Brunswick - 2	N/A	N/A	0		54.884	10.694	65.578	350 AG		275.534
Clinton - 1	4/7/2002	5/12/2002	35	161.352	46.742		208.094	194 OG	210 AG	208.094
Columbia (WNP-2)	N/A	N/A	0		46.650		46.650			46.650
Cooper - 1	N/A	N/A	0		38.739		38.739			38.739
D. Arnold - 1	N/A	N/A	0		35.061		35.061			35.061
Dresden - 2	N/A	N/A	0		75.533		75.533			
Dresden - 3	3/1/2002	3/18/2002	17	195.353	75.533		270.886	165 OG		355.011
Fermi - 2	N/A	N/A	0		38.235		38.235			38.235
Fitzpatrick - 1	10/11/2002	11/1/2002	21	172.282	58.241		230.523	140 OG/191 AG		230.523
G. Gulf - 1	10/1/2002	10/23/2002	22	152.492	23.904		176.396			176.396
Hatch - 1	3/23/2002	4/19/2002	27	133.000	45.500		178.500	135 OG		
Hatch - 2	N/A	N/A	0		35.941		35.941	166 AG		214.441
Hope Creek - 1	N/A	N/A	0		22.051	0.438	22.489	27 AG		
L. Verde - 1	9/14/2002	11/20/2002	67	267.530	65.890		333.420			
L. Verde - 2	N/A	N/A	0		45.600		45.600			
LaSalle - 1	1/10/2002	2/6/2002	25	299.400	45.200	13.450	358.050	210.5 AG		
LaSalle - 2	N/A	N/A	0		45.200	46.337	91.537	210.5 AG		449.587
Limerick - 1	3/29/2002	4/17/2002	17	83.417	38.453		121.870	91 OG	158.574 est	
Limerick - 2	N/A	N/A	0		38.453		38.453			160.324
Millstone - 1	N/A	N/A	0				0.000		coldshutdown	
Monticello - 1	N/A	N/A	0		40.030		40.030			
Nine Mile - 1	N/A	N/A	0		123.581		123.581			
Nine Mile - 2	3/16/2002	4/17/2002	32	269.500	123.582		393.082			516.663
Oyster Creek - 1	10/15/2002	11/4/2002	20	209.000	56.810		265.810			265.810
P. Bottom - 2	3/1/2002	3/30/2002	29	210.721	61.167		271.888			
P. Bottom - 3	N/A	N/A	0		61.168		61.168			333.056

Nuclear Unit	Outage Start Date	Outage End Date	Outage Duration	Outage Dose	Normal Operation	Other Shutdowns	Total Dose	Goals	Comments	TLD Values
Perry - 1	N/A	N/A	0		62.058	8.200	70.258			70.258
Pilgrim - 1	N/A	N/A	0		38.280		38.280	36 AG		38.280
Quad Cities - 1	3/1/2002	3/23/2002	22	858.700	90.600	177.000	1126.300	708.000		
Quad Cities - 2	2/12/2002	3/4/2002	21	486.000	90.600	83.121	659.721	708.000		1786.000
River Bend - 1	N/A	N/A	0		35.145		35.145			35.145
Susquehanna - 1	3/2/2002	4/26/2002	54	152.000	53.984		205.984	165 OG		
Susquehanna - 2	N/A	N/A	0		53.984		53.984	265 AG		
Ve. Yankee - 1	10/5/2002	10/24/2002	19	74.000	66.446	10.000	150.446			150.446