

The cost estimate developed and presented in this decommissioning filing is based on numerous fundamental assumptions, including regulatory requirements, project contingencies, low-level radioactive waste disposal practices, high-level radioactive waste management options, and site restoration requirements. Additionally some of the major planning differences between the 2008 and 2011 cost estimates are:

- **20 Year Extension of Operating License:** *Prairie Island Units 1 and 2 received approval for a 20 year renewed operating license in June 2011.*
- **Spent Fuel Shipping Schedule:** *Due to changes in Minnesota statutes, a variety of cost studies were created, primarily the result of modifications to the spent fuel acceptance pattern of spent fuel storage shipment to the Department of Energy (“DOE”) in order to address the possibility of delays in government acceptance of spent fuel. The Company was required by statute to submit three cost scenario, 60-year, 100-year, and 200-year scenarios. The length of these scenarios is measured from the start of shutdown at the Monticello plant until all spent fuel is removed from all locations. .*

These planning differences lengthen the overall decommissioning time period. An extended time period has multiple impacts including a significant increase in labor costs and extends the period of cost escalation, which creates a higher risk over time. The Company has escalated the 2008 cost estimate in the table below and compared it to the 2011 cost estimate containing the aforementioned changes relating to the spent fuel cooling period and fuel schedules. The comparison table inflates the prior cost estimate using the last approved escalation rate.

**Comparison of Current Cost Estimate to Previous Filing**

	2008 Study In 2011 Inflated Costs (Escalation Rate 2.89%)	2008 Study In 2011 Inflated Costs (Escalation Rate 3.63%)	2011 Cost Estimate (36- Year Scenario)	2011 Cost Estimate (60- Year Scenario)
Monticello	937,828,074	958,208,948	1,022,330,481	1,146,028,000
PI Unit 1	682,433,043	697,263,674	702,000,028	695,048,617
PI Unit 2	763,183,943	779,769,452	831,012,532	827,564,402
	2,383,445,061	2,435,242,074	2,555,343,041	2,668,641,019

Prairie Island’s decommissioning cost increases are primarily due to extended operating time for the Units and the increase in costs in order to deal with an additional 20 years worth of spent fuel at the location along with an increase in the

time spent fuel will be maintained at the location until it is ultimately shipped to the DOE. Whereas, Monticello decommissioning cost increases are primarily the result of the extended spent fuel maintenance period require which is expected in the future.

### **Cost Estimate Supporting Schedules**

- A.1 Monticello Schedule of Annual Expenditures – 36-Year Schedule
- A.2 Monticello Schedule of Annual Expenditures – 60-Year Schedule
- A.3 Monticello Schedule of Annual Expenditures – 100-Year Schedule
- A.4 Monticello Schedule of Annual Expenditures – 200-Year (1) Schedule, No Repackaging
- A.5 Monticello Schedule of Annual Expenditures – 200-Year (2) Schedule, With Spent Fuel Repackaging
- A.6 Prairie Island Schedule of Annual Expenditures – 36-Year Schedule
- A.7 Prairie Island Schedule of Annual Expenditures – 60-Year Schedule
- A.8 Prairie Island Schedule of Annual Expenditures – 100-Year Schedule
- A.9 Prairie Island Schedule of Annual Expenditures – 200-Year (1) Schedule, No Repackaging
- A.10 Prairie Island Schedule of Annual Expenditures – 200-Year (2) Schedule, With Spent Fuel Repackaging

**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
**Monticello Nuclear Generating Plant**

Year	Radiological	Spent Fuel	Site	
			Restoration	Yearly Total
2030	\$17,957,556	\$28,351,388	\$142,203	\$46,451,147
2031	74,522,324	2,427,740	548,003	77,498,068
2032	136,696,946	1,966,707	282,001	138,945,654
2033	98,048,089	1,855,097	77,360	99,980,547
2034	64,331,305	7,163,151	4,000	71,498,457
2035	47,252,630	37,666,327	2,641	84,921,598
2036	14,097,916	1,860,023	0	15,957,940
2037	14,059,397	1,855,098	0	15,914,496
2038	14,059,397	1,855,098	0	15,914,496
2039	14,059,397	1,855,098	0	15,914,496
2040	14,097,916	1,860,023	0	15,957,940
2041	14,059,397	1,855,098	0	15,914,496
2042	14,059,397	1,855,098	0	15,914,496
2043	14,059,397	40,146,932	0	54,206,330
2044	14,097,916	705,105	0	14,803,021
2045	26,241,190	4,109,280	0	30,350,469
2046	42,354,565	7,335,529	0	49,690,094
2047	7,178,483	5,507,061	14,766,846	27,452,391
2048	672,833	13,649,061	17,027,077	31,348,971
2049	0	18,099,561	0	18,099,561
2050	0	10,696,992	0	10,696,992
2051	0	16,616,061	0	16,616,061
2052	0	21,066,561	0	21,066,561
2053	2,068	6,276,689	0	6,278,758
2054	754,916	7,537,089	0	8,292,005
2055	754,916	7,221,989	0	7,976,905
2056	754,916	7,237,459	0	7,992,375
2057	756,984	7,221,989	0	7,978,973
2058	754,916	7,537,089	0	8,292,005
2059	754,916	7,221,989	0	7,976,905
2060	754,916	7,237,459	0	7,992,375
2061	756,984	7,221,989	0	7,978,973
2062	754,916	7,537,089	0	8,292,005
2063	754,916	7,221,989	0	7,976,905
2064	754,916	9,537,459	0	10,292,375
2065	756,984	7,221,989	0	7,978,973
2066	754,916	6,284,475	0	7,039,391
2067	752,847	4,124,434	0	4,877,281
	<u>\$652,481,078</u>	<u>\$336,999,272</u>	<u>\$32,850,132</u>	<u>\$1,022,330,481</u>

*Monticello Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-004, Rev. 0  
 Section 3, Page 20 of 40*

**TABLE 3.1**  
**SCENARIO 1**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2030	21,564	21,215	1,157	18	2,497	46,451
2031	51,116	5,970	4,830	809	14,773	77,498
2032	56,768	27,117	4,217	37,458	13,386	138,946
2033	49,483	16,192	3,074	23,881	7,351	99,981
2034	46,084	9,734	2,754	7,332	5,593	71,498
2035	42,161	30,883	2,068	4,854	4,955	84,922
2036	10,792	667	737	38	3,724	15,958
2037	10,763	665	735	38	3,714	15,914
2038	10,763	665	735	38	3,714	15,914
2039	10,763	665	735	38	3,714	15,914
2040	10,792	667	737	38	3,724	15,958
2041	10,763	665	735	38	3,714	15,914
2042	10,763	665	735	38	3,714	15,914
2043	10,763	665	735	38	3,714	15,914
2044	10,792	667	737	38	3,724	15,958
2045	27,299	31,081	964	3,073	3,971	66,388
2046	30,949	3,182	1,059	4,327	3,543	43,060
2047	18,749	4,744	439	8	2,114	26,055
2048	15,854	6,884	341	0	1,956	25,035
2049	3,618	43	0	0	1,846	5,507
2050	5,653	6,150	0	0	1,846	13,649
2051	6,766	9,488	0	0	1,846	18,100
2052	4,922	3,924	0	0	1,851	10,697
2053	6,395	8,375	0	0	1,846	16,616
2054	7,508	11,713	0	0	1,846	21,067
2055	3,604	0	0	0	1,846	5,450
2056	3,613	0	0	0	1,851	5,464
2057	3,604	0	0	0	1,846	5,450
2058	3,604	0	0	0	1,846	5,450
2059	3,604	0	0	0	1,846	5,450
2060	3,613	0	0	0	1,851	5,464
2061	3,604	0	0	0	1,846	5,450
2062	3,604	0	0	0	1,846	5,450

Monticello Nuclear Generating Plant  
 Decommissioning Cost Analysis

Document X01-1617-004, Rev. 0  
 Section 3, Page 21 of 40

**TABLE 3.1 (continued)**  
**SCENARIO 1**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2063	3,604	0	0	0	1,846	5,450
2064	3,613	0	0	0	1,851	5,464
2065	3,604	0	0	0	1,846	5,450
2066	3,604	0	0	0	1,846	5,450
2067	3,604	0	0	0	1,846	5,450
2068	3,613	0	0	0	1,851	5,464
2069	3,604	0	0	0	1,846	5,450
2070	3,604	0	0	0	1,846	5,450
2071	3,604	0	0	0	1,846	5,450
2072	3,613	0	0	0	1,851	5,464
2073	3,604	0	0	0	1,846	5,450
2074	3,604	0	0	0	1,846	5,450
2075	3,604	0	0	0	1,846	5,450
2076	3,613	0	0	0	1,853	5,467
2077	3,761	580	0	0	2,690	7,032
2078	4,076	1,526	0	0	2,690	8,292
2079	3,997	1,289	0	0	2,690	7,977
2080	4,007	1,289	0	0	2,698	7,994
2081	3,997	1,289	0	0	2,690	7,977
2082	4,076	1,526	0	0	2,690	8,292
2083	3,997	1,289	0	0	2,690	7,977
2084	4,007	1,289	0	0	2,698	7,994
2085	3,997	1,289	0	0	2,690	7,977
2086	4,076	1,526	0	0	2,690	8,292
2087	3,997	1,289	0	0	2,690	7,977
2088	4,582	3,014	0	0	2,698	10,294
2089	3,997	1,289	0	0	2,690	7,977
2090	3,758	581	0	1	2,698	7,037
2091	1,523	699	0	87	1,815	4,124
<b>Total</b>	<b>629,031</b>	<b>222,455</b>	<b>27,520</b>	<b>82,192</b>	<b>184,828</b>	<b>1,146,026</b>

**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
**Monticello Nuclear Generating Plant**

Year	Radiological	Spent Fuel	Site	
			Restoration	Yearly Total
2030	\$17,957,556	\$28,351,388	\$142,203	\$46,451,147
2031	74,522,324	2,427,740	548,003	77,498,068
2032	136,696,946	1,966,707	282,001	138,945,654
2033	98,048,089	1,855,097	77,360	99,980,547
2034	64,331,305	7,163,151	4,000	71,498,457
2035	47,252,630	37,666,327	2,641	84,921,598
2036	14,097,916	1,860,023	0	15,957,940
2037	14,059,397	1,855,098	0	15,914,496
2038	14,059,397	1,855,098	0	15,914,496
2039	14,059,397	1,855,098	0	15,914,496
2040	14,097,916	1,860,023	0	15,957,940
2041	14,059,397	1,855,098	0	15,914,496
2042	14,059,397	1,855,098	0	15,914,496
2043	14,059,397	1,855,098	0	15,914,496
2044	14,097,916	1,860,023	0	15,957,940
2045	26,241,190	40,146,932	0	66,388,122
2046	42,354,565	705,105	0	43,059,670
2047	7,178,483	4,109,280	14,766,846	26,054,609
2048	672,833	7,335,529	17,027,077	25,035,439
2049	0	5,507,061	0	5,507,061
2050	0	10,682,061	0	10,682,061
2051	0	10,682,061	0	10,682,061
2052	0	10,696,991	0	10,696,991
2053	0	10,682,061	0	10,682,061
2054	0	10,682,061	0	10,682,061
2055	0	10,682,061	0	10,682,061
2056	0	10,696,991	0	10,696,991
2057	0	10,682,061	0	10,682,061
2058	0	10,682,061	0	10,682,061
2059	0	10,682,061	0	10,682,061
2060	0	10,696,991	0	10,696,991
2061	0	10,682,061	0	10,682,061
2062	0	10,682,061	0	10,682,061
2063	0	10,682,061	0	10,682,061
2064	0	10,696,991	0	10,696,991
2065	0	10,682,061	0	10,682,061
2066	0	10,682,061	0	10,682,061
2067	0	10,682,061	0	10,682,061
2068	0	10,696,991	0	10,696,991
2069	0	10,682,061	0	10,682,061
2070	0	10,682,061	0	10,682,061
2071	0	10,682,061	0	10,682,061

**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
**Monticello Nuclear Generating Plant**

Year	Radiological	Spent Fuel	Site	Yearly Total
			Restoration	
2072	0	10,696,991	0	10,696,991
2073	0	10,682,061	0	10,682,061
2074	0	10,682,061	0	10,682,061
2075	0	10,682,061	0	10,682,061
2076	0	10,696,991	0	10,696,991
2077	0	10,682,061	0	10,682,061
2078	0	10,682,061	0	10,682,061
2079	0	10,682,061	0	10,682,061
2080	0	10,696,991	0	10,696,991
2081	0	10,682,061	0	10,682,061
2082	0	10,682,061	0	10,682,061
2083	0	10,682,061	0	10,682,061
2084	0	10,696,991	0	10,696,991
2085	0	10,682,061	0	10,682,061
2086	0	10,682,061	0	10,682,061
2087	0	10,682,061	0	10,682,061
2088	0	12,996,991	0	12,996,991
2089	0	10,682,061	0	10,682,061
2090	0	13,649,061	0	13,649,061
2091	0	18,099,561	0	18,099,561
2092	0	10,696,991	0	10,696,991
2093	0	16,616,061	0	16,616,061
2094	0	21,066,561	0	21,066,561
2095	0	5,449,561	0	5,449,561
2096	0	5,464,491	0	5,464,491
2097	0	5,449,561	0	5,449,561
2098	0	5,449,561	0	5,449,561
2099	0	5,449,561	0	5,449,561
2100	0	5,449,561	0	5,449,561
2101	0	5,449,561	0	5,449,561
2102	0	5,449,561	0	5,449,561
2103	0	5,449,561	0	5,449,561
2104	0	5,464,491	0	5,464,491
2105	0	5,449,561	0	5,449,561
2106	0	5,449,561	0	5,449,561
2107	0	5,449,561	0	5,449,561
2108	0	7,764,491	0	7,764,491
2109	0	5,449,561	0	5,449,561
2110	0	5,449,561	0	5,449,561
2111	0	5,449,561	0	5,449,561
2112	0	5,464,491	0	5,464,491
2113	0	5,449,561	0	5,449,561

**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
**Monticello Nuclear Generating Plant**

Year	Radiological	Spent Fuel	Site		Yearly Total
			Restoration		
2114	0	5,449,561	0		5,449,561
2115	0	5,449,561	0		5,449,561
2116	0	5,465,030	0		5,465,030
2117	0	6,276,689	0		6,276,689
2118	0	7,537,089	0		7,537,089
2119	0	7,221,989	0		7,221,989
2120	0	7,237,459	0		7,237,459
2121	0	7,221,989	0		7,221,989
2122	0	7,537,089	0		7,537,089
2123	0	7,221,989	0		7,221,989
2124	0	7,237,459	0		7,237,459
2125	0	7,221,989	0		7,221,989
2126	0	7,537,089	0		7,537,089
2127	0	7,221,989	0		7,221,989
2128	0	7,237,459	0		7,237,459
2129	0	7,221,989	0		7,221,989
2130	10,575,023	6,284,475	0		16,859,498
2131	0	4,124,434	0		4,124,434
	\$652,481,078	\$890,411,643	\$32,850,132		\$1,575,742,852

*Monticello Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-004, Rev. 0  
 Section 3, Page 27 of 40*

**TABLE 3.2**  
**SCENARIO 2**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2030	21,564	21,215	1,157	18	2,497	46,451
2031	51,116	5,970	4,830	809	14,773	77,498
2032	56,768	27,117	4,217	37,458	13,386	138,946
2033	49,483	16,192	3,074	23,881	7,351	99,981
2034	46,084	9,734	2,754	7,332	5,593	71,498
2035	42,161	30,883	2,068	4,854	4,955	84,922
2036	10,792	667	737	38	3,724	15,958
2037	10,763	665	735	38	3,714	15,914
2038	10,763	665	735	38	3,714	15,914
2039	10,763	665	735	38	3,714	15,914
2040	10,792	667	737	38	3,724	15,958
2041	10,763	665	735	38	3,714	15,914
2042	10,763	665	735	38	3,714	15,914
2043	10,763	665	735	38	3,714	15,914
2044	10,792	667	737	38	3,724	15,958
2045	27,299	31,081	964	3,073	3,971	66,388
2046	30,949	3,182	1,059	4,327	3,543	43,060
2047	18,749	4,744	439	8	2,114	26,055
2048	15,854	6,884	341	0	1,956	25,035
2049	3,618	43	0	0	1,846	5,507
2050	4,912	3,924	0	0	1,846	10,682
2051	4,912	3,924	0	0	1,846	10,682
2052	4,922	3,924	0	0	1,851	10,697
2053	4,912	3,924	0	0	1,846	10,682
2054	4,912	3,924	0	0	1,846	10,682
2055	4,912	3,924	0	0	1,846	10,682
2056	4,922	3,924	0	0	1,851	10,697
2057	4,912	3,924	0	0	1,846	10,682
2058	4,912	3,924	0	0	1,846	10,682
2059	4,912	3,924	0	0	1,846	10,682
2060	4,922	3,924	0	0	1,851	10,697
2061	4,912	3,924	0	0	1,846	10,682
2062	4,912	3,924	0	0	1,846	10,682

*Monticello Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-004, Rev. 0  
 Section 3, Page 28 of 40*

**TABLE 3.2 (continued)**  
**SCENARIO 2**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2063	4,912	3,924	0	0	1,846	10,682
2064	4,922	3,924	0	0	1,851	10,697
2065	4,912	3,924	0	0	1,846	10,682
2066	4,912	3,924	0	0	1,846	10,682
2067	4,912	3,924	0	0	1,846	10,682
2068	4,922	3,924	0	0	1,851	10,697
2069	4,912	3,924	0	0	1,846	10,682
2070	4,912	3,924	0	0	1,846	10,682
2071	4,912	3,924	0	0	1,846	10,682
2072	4,922	3,924	0	0	1,851	10,697
2073	4,912	3,924	0	0	1,846	10,682
2074	4,912	3,924	0	0	1,846	10,682
2075	4,912	3,924	0	0	1,846	10,682
2076	4,922	3,924	0	0	1,851	10,697
2077	4,912	3,924	0	0	1,846	10,682
2078	4,912	3,924	0	0	1,846	10,682
2079	4,912	3,924	0	0	1,846	10,682
2080	4,922	3,924	0	0	1,851	10,697
2081	4,912	3,924	0	0	1,846	10,682
2082	4,912	3,924	0	0	1,846	10,682
2083	4,912	3,924	0	0	1,846	10,682
2084	4,922	3,924	0	0	1,851	10,697
2085	4,912	3,924	0	0	1,846	10,682
2086	4,912	3,924	0	0	1,846	10,682
2087	4,912	3,924	0	0	1,846	10,682
2088	5,497	5,649	0	0	1,851	12,997
2089	4,912	3,924	0	0	1,846	10,682
2090	4,912	3,924	0	0	1,846	10,682
2091	4,912	3,924	0	0	1,846	10,682
2092	4,922	3,924	0	0	1,851	10,697
2093	4,912	3,924	0	0	1,846	10,682
2094	4,912	3,924	0	0	1,846	10,682
2095	4,912	3,924	0	0	1,846	10,682

*Monticello Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-004, Rev. 0  
 Section 3, Page 29 of 40*

**TABLE 3.2 (continued)**  
**SCENARIO 2**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2096	4,922	3,924	0	0	1,851	10,697
2097	4,912	3,924	0	0	1,846	10,682
2098	4,912	3,924	0	0	1,846	10,682
2099	4,912	3,924	0	0	1,846	10,682
2100	4,912	3,924	0	0	1,846	10,682
2101	4,912	3,924	0	0	1,846	10,682
2102	4,912	3,924	0	0	1,846	10,682
2103	4,912	3,924	0	0	1,846	10,682
2104	4,922	3,924	0	0	1,851	10,697
2105	4,912	3,924	0	0	1,846	10,682
2106	4,912	3,924	0	0	1,846	10,682
2107	4,912	3,924	0	0	1,846	10,682
2108	4,922	3,924	0	0	1,851	10,697
2109	4,912	3,924	0	0	1,846	10,682
2110	4,912	3,924	0	0	1,846	10,682
2111	4,912	3,924	0	0	1,846	10,682
2112	4,922	3,924	0	0	1,851	10,697
2113	4,912	3,924	0	0	1,846	10,682
2114	4,912	3,924	0	0	1,846	10,682
2115	4,912	3,924	0	0	1,846	10,682
2116	4,922	3,924	0	0	1,851	10,697
2117	4,912	3,924	0	0	1,846	10,682
2118	4,912	3,924	0	0	1,846	10,682
2119	4,912	3,924	0	0	1,846	10,682
2120	4,922	3,924	0	0	1,851	10,697
2121	4,912	3,924	0	0	1,846	10,682
2122	4,912	3,924	0	0	1,846	10,682
2123	4,912	3,924	0	0	1,846	10,682
2124	4,922	3,924	0	0	1,851	10,697
2125	4,912	3,924	0	0	1,846	10,682
2126	4,912	3,924	0	0	1,846	10,682
2127	4,912	3,924	0	0	1,846	10,682
2128	5,497	5,649	0	0	1,851	12,997

*Monticello Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-004, Rev. 0  
 Section 3, Page 30 of 40*

**TABLE 3.2 (continued)**  
**SCENARIO 2**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2129	4,912	3,924	0	0	1,846	10,682
2130	4,912	3,924	0	0	1,846	10,682
2131	4,912	3,924	0	0	1,846	10,682
2132	4,922	3,924	0	0	1,851	10,697
2133	4,912	3,924	0	0	1,846	10,682
2134	4,912	3,924	0	0	1,846	10,682
2135	4,912	3,924	0	0	1,846	10,682
2136	4,922	3,924	0	0	1,851	10,697
2137	4,912	3,924	0	0	1,846	10,682
2138	4,912	3,924	0	0	1,846	10,682
2139	4,912	3,924	0	0	1,846	10,682
2140	4,922	3,924	0	0	1,851	10,697
2141	4,912	3,924	0	0	1,846	10,682
2142	4,912	3,924	0	0	1,846	10,682
2143	4,912	3,924	0	0	1,846	10,682
2144	4,922	3,924	0	0	1,851	10,697
2145	4,912	3,924	0	0	1,846	10,682
2146	4,912	3,924	0	0	1,846	10,682
2147	4,912	3,924	0	0	1,846	10,682
2148	4,922	3,924	0	0	1,851	10,697
2149	4,912	3,924	0	0	1,846	10,682
2150	4,912	3,924	0	0	1,846	10,682
2151	4,912	3,924	0	0	1,846	10,682
2152	4,922	3,924	0	0	1,851	10,697
2153	4,912	3,924	0	0	1,846	10,682
2154	4,912	3,924	0	0	1,846	10,682
2155	4,912	3,924	0	0	1,846	10,682
2156	4,922	3,924	0	0	1,851	10,697
2157	4,912	3,924	0	0	1,846	10,682
2158	4,912	3,924	0	0	1,846	10,682
2159	4,912	3,924	0	0	1,846	10,682
2160	4,922	3,924	0	0	1,851	10,697
2161	4,912	3,924	0	0	1,846	10,682

*Monticello Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-004, Rev. 0  
 Section 3, Page 31 of 40*

**TABLE 3.2 (continued)**  
**SCENARIO 2**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2162	4,912	3,924	0	0	1,846	10,682
2163	4,912	3,924	0	0	1,846	10,682
2164	4,922	3,924	0	0	1,851	10,697
2165	4,912	3,924	0	0	1,846	10,682
2166	4,912	3,924	0	0	1,846	10,682
2167	4,912	3,924	0	0	1,846	10,682
2168	5,497	5,649	0	0	1,851	12,997
2169	4,912	3,924	0	0	1,846	10,682
2170	4,912	3,924	0	0	1,846	10,682
2171	4,912	3,924	0	0	1,846	10,682
2172	4,922	3,924	0	0	1,851	10,697
2173	4,912	3,924	0	0	1,846	10,682
2174	4,912	3,924	0	0	1,846	10,682
2175	4,912	3,924	0	0	1,846	10,682
2176	4,922	3,924	0	0	1,851	10,697
2177	4,912	3,924	0	0	1,846	10,682
2178	4,912	3,924	0	0	1,846	10,682
2179	4,912	3,924	0	0	1,846	10,682
2180	4,922	3,924	0	0	1,851	10,697
2181	4,912	3,924	0	0	1,846	10,682
2182	4,912	3,924	0	0	1,846	10,682
2183	4,912	3,924	0	0	1,846	10,682
2184	4,922	3,924	0	0	1,851	10,697
2185	4,912	3,924	0	0	1,846	10,682
2186	4,912	3,924	0	0	1,846	10,682
2187	4,912	3,924	0	0	1,846	10,682
2188	4,922	3,924	0	0	1,851	10,697
2189	4,912	3,924	0	0	1,846	10,682
2190	5,653	6,150	0	0	1,846	13,649
2191	6,766	9,487	0	0	1,846	18,100
2192	4,922	3,924	0	0	1,851	10,697
2193	6,395	8,375	0	0	1,846	16,616
2194	7,508	11,713	0	0	1,846	21,067

*Monticello Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-004, Rev. 0  
 Section 3, Page 32 of 40*

**TABLE 3.2 (continued)**  
**SCENARIO 2**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2195	3,604	0	0	0	1,846	5,450
2196	3,613	0	0	0	1,851	5,464
2197	3,604	0	0	0	1,846	5,450
2198	3,604	0	0	0	1,846	5,450
2199	3,604	0	0	0	1,846	5,450
2200	3,604	0	0	0	1,846	5,450
2201	3,604	0	0	0	1,846	5,450
2202	3,604	0	0	0	1,846	5,450
2203	3,604	0	0	0	1,846	5,450
2204	3,613	0	0	0	1,851	5,464
2205	3,604	0	0	0	1,846	5,450
2206	3,604	0	0	0	1,846	5,450
2207	3,604	0	0	0	1,846	5,450
2208	4,188	1,725	0	0	1,851	7,764
2209	3,604	0	0	0	1,846	5,450
2210	3,604	0	0	0	1,846	5,450
2211	3,604	0	0	0	1,846	5,450
2212	3,613	0	0	0	1,851	5,464
2213	3,604	0	0	0	1,846	5,450
2214	3,604	0	0	0	1,846	5,450
2215	3,604	0	0	0	1,846	5,450
2216	3,613	0	0	0	1,852	5,465
2217	3,761	473	0	0	2,043	6,277
2218	4,076	1,418	0	0	2,043	7,537
2219	3,997	1,182	0	0	2,043	7,222
2220	4,007	1,182	0	0	2,049	7,237
2221	3,997	1,182	0	0	2,043	7,222
2222	4,076	1,418	0	0	2,043	7,537
2223	3,997	1,182	0	0	2,043	7,222
2224	4,007	1,182	0	0	2,049	7,237
2225	3,997	1,182	0	0	2,043	7,222
2226	4,076	1,418	0	0	2,043	7,537
2227	3,997	1,182	0	0	2,043	7,222

*Monticello Nuclear Generating Plant  
Decommissioning Cost Analysis*

*Document X01-1617-004, Rev. 0  
Section 3, Page 33 of 40*

**TABLE 3.2 (continued)**  
**SCENARIO 2**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
(thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2228	4,007	1,182	0	0	2,049	7,237
2229	3,997	1,182	0	0	2,043	7,222
2230	3,758	1,981	0	1	11,120	16,859
2231	1,523	699	0	87	1,815	4,124
<b>Total</b>	<b>1,318,713</b>	<b>777,042</b>	<b>27,520</b>	<b>82,192</b>	<b>443,441</b>	<b>2,648,907</b>

Monticello Nuclear Generating Plant  
 Decommissioning Cost Analysis

Document X01-1617-004, Rev. 0  
 Section 3, Page 34 of 40

**TABLE 3.3**  
**SCENARIO 3**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2030	21,564	21,215	1,157	18	2,497	46,451
2031	51,116	5,970	4,830	809	14,773	77,498
2032	56,768	27,117	4,217	37,458	13,386	138,946
2033	49,483	16,192	3,074	23,881	7,351	99,981
2034	46,084	9,734	2,754	7,332	5,593	71,498
2035	42,161	30,883	2,068	4,854	4,955	84,922
2036	10,792	667	737	38	3,724	15,958
2037	10,763	665	735	38	3,714	15,914
2038	10,763	665	735	38	3,714	15,914
2039	10,763	665	735	38	3,714	15,914
2040	10,792	667	737	38	3,724	15,958
2041	10,763	665	735	38	3,714	15,914
2042	10,763	665	735	38	3,714	15,914
2043	10,763	665	735	38	3,714	15,914
2044	10,792	667	737	38	3,724	15,958
2045	27,299	31,081	964	3,073	3,971	66,388
2046	30,949	3,182	1,059	4,327	3,543	43,060
2047	18,749	4,744	439	8	2,114	26,055
2048	15,854	6,884	341	0	1,956	25,035
2049	3,618	43	0	0	1,846	5,507
2050	4,912	3,924	0	0	1,846	10,682
2051	4,912	3,924	0	0	1,846	10,682
2052	4,922	3,924	0	0	1,851	10,697
2053	4,912	3,924	0	0	1,846	10,682
2054	4,912	3,924	0	0	1,846	10,682
2055	4,912	3,924	0	0	1,846	10,682
2056	4,922	3,924	0	0	1,851	10,697
2057	4,912	3,924	0	0	1,846	10,682
2058	4,912	3,924	0	0	1,846	10,682
2059	4,912	3,924	0	0	1,846	10,682
2060	4,922	3,924	0	0	1,851	10,697
2061	4,912	3,924	0	0	1,846	10,682
2062	4,912	3,924	0	0	1,846	10,682

Monticello Nuclear Generating Plant  
 Decommissioning Cost Analysis

Document X01-1617-004, Rev. 0  
 Section 3, Page 35 of 40

TABLE 3.3 (continued)  
 SCENARIO 3  
 SCHEDULE OF TOTAL ANNUAL EXPENDITURES  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2063	4,912	3,924	0	0	1,846	10,682
2064	4,922	3,924	0	0	1,851	10,697
2065	4,912	3,924	0	0	1,846	10,682
2066	4,912	3,924	0	0	1,846	10,682
2067	4,912	3,924	0	0	1,846	10,682
2068	4,922	3,924	0	0	1,851	10,697
2069	4,912	3,924	0	0	1,846	10,682
2070	4,912	3,924	0	0	1,846	10,682
2071	4,912	3,924	0	0	1,846	10,682
2072	4,922	3,924	0	0	1,851	10,697
2073	4,912	3,924	0	0	1,846	10,682
2074	4,912	3,924	0	0	1,846	10,682
2075	4,912	3,924	0	0	1,846	10,682
2076	4,922	3,924	0	0	1,851	10,697
2077	4,912	3,924	0	0	1,846	10,682
2078	4,912	3,924	0	0	1,846	10,682
2079	4,912	3,924	0	0	1,846	10,682
2080	4,922	3,924	0	0	1,851	10,697
2081	4,912	3,924	0	0	1,846	10,682
2082	4,912	3,924	0	0	1,846	10,682
2083	4,912	3,924	0	0	1,846	10,682
2084	4,922	3,924	0	0	1,851	10,697
2085	4,912	3,924	0	0	1,846	10,682
2086	4,912	3,924	0	0	1,846	10,682
2087	4,912	3,924	0	0	1,846	10,682
2088	5,497	5,649	0	0	1,851	12,997
2089	4,912	3,924	0	0	1,846	10,682
2090	4,912	3,924	0	0	1,846	10,682
2091	4,912	3,924	0	0	1,846	10,682
2092	4,922	3,924	0	0	1,851	10,697
2093	4,912	3,924	0	0	1,846	10,682
2094	4,912	3,924	0	0	1,846	10,682
2095	4,912	3,924	0	0	1,846	10,682

Monticello Nuclear Generating Plant  
 Decommissioning Cost Analysis

Document X01-1617-004, Rev. 0  
 Section 3, Page 36 of 40

TABLE 3.3 (continued)  
 SCENARIO 3  
 SCHEDULE OF TOTAL ANNUAL EXPENDITURES  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2096	4,922	3,924	0	0	1,851	10,697
2097	4,912	3,924	0	0	1,846	10,682
2098	4,912	3,924	0	0	1,846	10,682
2099	4,912	3,924	0	0	1,846	10,682
2100	4,912	3,924	0	0	1,846	10,682
2101	4,912	3,924	0	0	1,846	10,682
2102	4,912	3,924	0	0	1,846	10,682
2103	4,912	3,924	0	0	1,846	10,682
2104	4,922	3,924	0	0	1,851	10,697
2105	4,912	3,924	0	0	1,846	10,682
2106	7,853	12,749	0	0	1,846	22,448
2107	4,912	3,924	0	0	1,846	10,682
2108	11,819	24,616	0	1,438	1,942	39,814
2109	4,912	3,924	0	0	1,846	10,682
2110	4,912	3,924	0	0	1,846	10,682
2111	4,912	3,924	0	0	1,846	10,682
2112	4,922	3,924	0	0	1,851	10,697
2113	11,809	24,616	0	1,438	1,937	39,799
2114	4,912	3,924	0	0	1,846	10,682
2115	4,912	3,924	0	0	1,846	10,682
2116	11,819	24,616	0	1,438	1,942	39,814
2117	4,912	3,924	0	0	1,846	10,682
2118	4,912	3,924	0	0	1,846	10,682
2119	4,912	3,924	0	0	1,846	10,682
2120	4,922	3,924	0	0	1,851	10,697
2121	4,912	3,924	0	0	1,846	10,682
2122	4,912	3,924	0	0	1,846	10,682
2123	4,912	3,924	0	0	1,846	10,682
2124	4,922	3,924	0	0	1,851	10,697
2125	4,912	3,924	0	0	1,846	10,682
2126	4,912	3,924	0	0	1,846	10,682
2127	4,912	3,924	0	0	1,846	10,682
2128	5,497	5,649	0	0	1,851	12,997

Monticello Nuclear Generating Plant  
 Decommissioning Cost Analysis

Document X01-1617-004, Rev. 0  
 Section 3, Page 37 of 40

TABLE 3.3 (continued)  
 SCENARIO 3  
 SCHEDULE OF TOTAL ANNUAL EXPENDITURES  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2129	4,912	3,924	0	0	1,846	10,682
2130	11,809	24,616	0	1,438	1,937	39,799
2131	4,912	3,924	0	0	1,846	10,682
2132	4,922	3,924	0	0	1,851	10,697
2133	4,912	3,924	0	0	1,846	10,682
2134	4,912	3,924	0	0	1,846	10,682
2135	13,878	30,823	0	1,869	1,965	48,535
2136	4,922	3,924	0	0	1,851	10,697
2137	4,912	3,924	0	0	1,846	10,682
2138	4,912	3,924	0	0	1,846	10,682
2139	4,912	3,924	0	0	1,846	10,682
2140	4,922	3,924	0	0	1,851	10,697
2141	4,912	3,924	0	0	1,846	10,682
2142	4,912	3,924	0	0	1,846	10,682
2143	4,912	3,924	0	0	1,846	10,682
2144	4,922	3,924	0	0	1,851	10,697
2145	14,568	32,892	0	2,013	1,974	51,446
2146	4,912	3,924	0	0	1,846	10,682
2147	4,912	3,924	0	0	1,846	10,682
2148	4,922	3,924	0	0	1,851	10,697
2149	4,912	3,924	0	0	1,846	10,682
2150	4,912	3,924	0	0	1,846	10,682
2151	4,912	3,924	0	0	1,846	10,682
2152	4,922	3,924	0	0	1,851	10,697
2153	4,912	3,924	0	0	1,846	10,682
2154	4,912	3,924	0	0	1,846	10,682
2155	4,912	3,924	0	0	1,846	10,682
2156	4,922	3,924	0	0	1,851	10,697
2157	4,912	3,924	0	0	1,846	10,682
2158	4,912	3,924	0	0	1,846	10,682
2159	4,912	3,924	0	0	1,846	10,682
2160	4,922	3,924	0	0	1,851	10,697
2161	4,912	3,924	0	0	1,846	10,682

Monticello Nuclear Generating Plant  
 Decommissioning Cost Analysis

Document X01-1617-004, Rev. 0  
 Section 3, Page 38 of 40

**TABLE 3.3 (continued)**  
**SCENARIO 3**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2162	4,912	3,924	0	0	1,846	10,682
2163	4,912	3,924	0	0	1,846	10,682
2164	4,922	3,924	0	0	1,851	10,697
2165	4,912	3,924	0	0	1,846	10,682
2166	4,912	3,924	0	0	1,846	10,682
2167	4,912	3,924	0	0	1,846	10,682
2168	5,497	5,649	0	0	1,851	12,997
2169	4,912	3,924	0	0	1,846	10,682
2170	4,912	3,924	0	0	1,846	10,682
2171	4,912	3,924	0	0	1,846	10,682
2172	4,922	3,924	0	0	1,851	10,697
2173	4,912	3,924	0	0	1,846	10,682
2174	4,912	3,924	0	0	1,846	10,682
2175	4,912	3,924	0	0	1,846	10,682
2176	4,922	3,924	0	0	1,851	10,697
2177	4,912	3,924	0	0	1,846	10,682
2178	4,912	3,924	0	0	1,846	10,682
2179	4,912	3,924	0	0	1,846	10,682
2180	4,922	3,924	0	0	1,851	10,697
2181	4,912	3,924	0	0	1,846	10,682
2182	4,912	3,924	0	0	1,846	10,682
2183	4,912	3,924	0	0	1,846	10,682
2184	4,922	3,924	0	0	1,851	10,697
2185	4,912	3,924	0	0	1,846	10,682
2186	4,912	3,924	0	0	1,846	10,682
2187	4,912	3,924	0	0	1,846	10,682
2188	4,922	3,924	0	0	1,851	10,697
2189	4,912	3,924	0	0	1,846	10,682
2190	5,653	6,150	0	0	1,846	13,649
2191	6,766	9,487	0	0	1,846	18,099
2192	4,922	3,924	0	0	1,851	10,697
2193	6,395	8,375	0	0	1,846	16,616
2194	7,508	11,713	0	0	1,846	21,066

Monticello Nuclear Generating Plant  
 Decommissioning Cost Analysis

Document X01-1617-004, Rev. 0  
 Section 3, Page 39 of 40

**TABLE 3.3 (continued)**  
**SCENARIO 3**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2195	3,604	0	0	0	1,846	5,449
2196	3,613	0	0	0	1,851	5,464
2197	3,604	0	0	0	1,846	5,449
2198	3,604	0	0	0	1,846	5,449
2199	3,604	0	0	0	1,846	5,449
2200	3,604	0	0	0	1,846	5,449
2201	3,604	0	0	0	1,846	5,449
2202	3,604	0	0	0	1,846	5,449
2203	3,604	0	0	0	1,846	5,449
2204	3,613	0	0	0	1,851	5,464
2205	3,604	0	0	0	1,846	5,449
2206	3,604	0	0	0	1,846	5,449
2207	3,604	0	0	0	1,846	5,449
2208	11,086	22,416	0	1,438	1,942	36,882
2209	3,604	0	0	0	1,846	5,449
2210	3,604	0	0	0	1,846	5,449
2211	3,604	0	0	0	1,846	5,449
2212	3,613	0	0	0	1,851	5,464
2213	10,501	20,691	0	1,438	1,937	34,567
2214	3,604	0	0	0	1,846	5,449
2215	3,604	0	0	0	1,846	5,449
2216	3,613	0	0	0	1,851	5,465
2217	3,761	473	0	0	2,043	6,277
2218	4,076	1,418	0	0	2,043	7,537
2219	3,997	1,182	0	0	2,043	7,222
2220	4,007	1,182	0	0	2,049	7,237
2221	3,997	1,182	0	0	2,043	7,222
2222	4,076	1,418	0	0	2,043	7,537
2223	3,997	1,182	0	0	2,043	7,222
2224	4,007	1,182	0	0	2,049	7,237
2225	3,997	1,182	0	0	2,043	7,222
2226	4,076	1,418	0	0	2,043	7,537
2227	3,997	1,182	0	0	2,043	7,222

*Monticello Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-004, Rev. 0  
 Section 3, Page 40 of 40*

**TABLE 3.3 (continued)**  
**SCENARIO 3**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2228	4,007	1,182	0	0	2,049	7,237
2229	3,997	1,182	0	0	2,043	7,222
2230	3,758	1,981	0	1	11,120	16,860
2231	1,767	799	0	87	1,815	4,468
<b>Total</b>	<b>1,381,903</b>	<b>965,981</b>	<b>27,520</b>	<b>94,700</b>	<b>444,201</b>	<b>2,914,305</b>

**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
**Prairie Island Nuclear Generating Plant Unit 1**

Year	Radiological	Spent Fuel	Site	Yearly Total
			Restoration	
2033	\$20,701,498	\$4,123,438	\$193,306	\$25,018,242
2034	65,563,951	4,906,818	823,827	71,294,597
2035	105,206,413	25,352,381	1,516,829	132,075,623
2036	80,410,761	8,568,217	1,776,358	90,755,336
2037	40,375,165	17,753,018	1,357,175	59,485,358
2038	4,875,193	4,919,018	0	9,794,211
2039	4,875,193	11,336,018	0	16,211,211
2040	4,888,549	4,773,218	0	9,661,768
2041	4,875,193	17,753,018	0	22,628,211
2042	4,875,193	4,919,018	0	9,794,211
2043	4,875,193	17,595,468	0	22,470,661
2044	4,888,549	4,930,768	0	9,819,318
2045	4,875,193	17,753,018	0	22,628,211
2046	4,875,193	4,761,468	0	9,636,661
2047	4,875,193	17,031,191	0	21,906,384
2048	4,888,549	4,208,690	0	9,097,240
2049	9,841,103	23,371,249	0	33,212,352
2050	28,105,438	3,481,122	0	31,586,560
2051	7,633,571	2,939,003	8,892,023	19,464,597
2052	716,179	2,947,055	13,790,172	17,453,406
2053	336,565	2,939,003	6,480,627	9,756,195
2054	0	2,939,003	0	2,939,003
2055	0	2,939,003	0	2,939,003
2056	0	2,947,055	0	2,947,055
2057	0	3,660,830	0	3,660,830
2058	0	3,669,133	0	3,669,133
2059	0	3,503,280	0	3,503,280
2060	0	3,660,830	0	3,660,830
2061	0	4,810,830	0	4,810,830
2062	0	3,511,583	0	3,511,583
2063	0	3,497,376	0	3,497,376
2064	12,232,310	878,445	0	13,110,755
	<b>\$424,790,144</b>	<b>\$242,379,566</b>	<b>\$34,830,317</b>	<b>\$702,000,028</b>

**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
**Prairie Island Nuclear Generating Plant Unit 2**

Year	Radiological	Spent Fuel	Site	Yearly Total
			Restoration	
2034	\$8,442,377	\$3,619,455	\$36,517	\$12,098,350
2035	52,983,468	25,622,919	271,970	78,878,356
2036	100,692,157	8,667,802	1,457,118	110,817,077
2037	98,333,455	17,753,018	1,843,242	117,929,716
2038	74,544,069	4,919,018	1,776,026	81,239,113
2039	21,696,940	11,336,018	253,023	33,285,981
2040	12,952,615	4,773,219	0	17,725,834
2041	12,917,225	17,753,018	0	30,670,244
2042	12,917,225	4,919,018	0	17,836,244
2043	12,917,225	17,595,468	0	30,512,694
2044	12,952,615	4,930,769	0	17,883,384
2045	12,917,225	17,753,018	0	30,670,244
2046	12,917,225	4,761,468	0	17,678,694
2047	12,917,225	17,031,192	0	29,948,417
2048	12,952,615	4,208,691	0	17,161,306
2049	17,740,755	23,371,249	0	41,112,004
2050	35,615,211	3,481,122	0	39,096,333
2051	10,410,156	2,939,003	12,023,581	25,372,740
2052	670,743	2,947,055	18,646,740	22,264,539
2053	315,213	2,939,003	8,762,949	12,017,165
2054	0	2,939,003	0	2,939,003
2055	0	2,939,003	0	2,939,003
2056	0	2,947,055	0	2,947,055
2057	0	3,660,830	0	3,660,830
2058	0	3,669,133	0	3,669,133
2059	0	3,503,280	0	3,503,280
2060	0	3,660,830	0	3,660,830
2061	0	4,810,830	0	4,810,830
2062	0	3,511,583	0	3,511,583
2063	0	3,497,376	0	3,497,376
2064	10,796,730	878,445	0	11,675,175
	<u>\$548,602,472</u>	<u>\$237,338,893</u>	<u>\$45,071,168</u>	<u>\$831,012,532</u>

*Prairie Island Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-005, Rev. 0  
 Section 3, Page 22 of 59*

**TABLE 3.1**  
**SCENARIO 1**  
**PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 1**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2033	17,130	1,230	1,277	22	1,855	21,515
2034	46,893	8,331	4,493	3,217	5,015	67,949
2035	49,761	47,408	3,416	20,766	7,064	128,415
2036	39,995	22,519	2,718	16,011	6,002	87,244
2037	27,809	14,690	1,859	7,219	4,248	55,825
2038	2,138	486	643	35	2,832	6,133
2039	3,742	5,299	643	35	2,832	12,550
2040	2,144	488	645	35	2,840	6,150
2041	5,346	10,112	643	35	2,832	18,967
2042	2,138	486	643	35	2,832	6,133
2043	5,346	10,112	643	35	2,832	18,967
2044	2,144	488	645	35	2,840	6,150
2045	5,346	10,112	643	35	2,832	18,967
2046	2,138	486	643	35	2,832	6,133
2047	5,346	10,112	643	35	2,832	18,967
2048	2,144	488	645	35	2,840	6,150
2049	10,350	15,591	756	653	2,924	30,273
2050	19,746	2,944	1,033	2,173	2,752	28,648
2051	13,944	3,679	435	15	1,229	19,302
2052	12,332	5,328	322	0	907	18,890
2053	7,004	2,755	152	0	904	10,814
2054	2,324	591	0	0	903	3,818
2055	2,246	354	0	0	903	3,503
2056	2,370	709	0	0	906	3,984
2057	2,246	354	0	0	903	3,503
2058	2,206	236	0	0	903	3,346
2059	2,285	473	0	0	903	3,661
2060	2,251	354	0	0	906	3,512
2061	2,285	473	0	0	903	3,661
2062	2,285	473	0	0	903	3,661
2063	2,285	473	0	0	903	3,661
2064	2,251	354	0	0	906	3,512
2065	2,285	473	0	0	903	3,661

*Prairie Island Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-005, Rev. 0  
 Section 3, Page 23 of 59*

**TABLE 3.1 (continued)**  
**SCENARIO 1**  
**PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 1**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2066	2,285	473	0	0	903	3,661
2067	2,246	354	0	0	903	3,503
2068	2,291	473	0	0	906	3,669
2069	2,285	473	0	0	903	3,661
2070	2,246	354	0	0	903	3,503
2071	2,285	473	0	0	903	3,661
2072	2,291	473	0	0	906	3,669
2073	2,246	354	0	0	903	3,503
2074	2,285	473	0	0	903	3,661
2075	2,573	1,335	0	0	903	4,811
2076	2,251	354	0	0	906	3,512
2077	2,242	1,560	0	0	11,928	15,730
2078	560	14	0	2	302	878
<b>Total</b>	<b>338,339</b>	<b>185,624</b>	<b>23,541</b>	<b>50,458</b>	<b>97,088</b>	<b>695,049</b>

Note: Columns may not add due to rounding

*Prairie Island Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-005, Rev. 0  
 Section 3, Page 29 of 59*

**TABLE 3.2**  
**SCENARIO 1**  
**PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 2**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2034	6,873	537	564	9	769	8,753
2035	45,154	20,295	3,779	1,449	4,540	75,218
2036	50,222	28,412	4,173	18,032	6,466	107,305
2037	54,418	32,418	2,815	18,462	6,155	114,269
2038	50,541	8,859	2,412	11,082	4,685	77,578
2039	17,552	6,516	895	1,611	3,050	29,625
2040	10,229	516	645	38	2,786	14,214
2041	13,410	10,140	643	38	2,778	27,009
2042	10,201	515	643	38	2,778	14,175
2043	13,410	10,140	643	38	2,778	27,009
2044	10,229	516	645	38	2,786	14,214
2045	13,410	10,140	643	38	2,778	27,009
2046	10,201	515	643	38	2,778	14,175
2047	13,410	10,140	643	38	2,778	27,009
2048	10,229	516	645	38	2,786	14,214
2049	18,063	15,758	756	768	2,828	38,173
2050	26,563	3,541	1,033	2,561	2,460	36,157
2051	18,607	5,023	435	15	1,131	25,210
2052	15,198	7,272	322	0	909	23,701
2053	8,351	3,668	152	0	905	13,075
2054	2,324	591	0	0	903	3,818
2055	2,246	354	0	0	903	3,503
2056	2,370	709	0	0	906	3,984
2057	2,246	354	0	0	903	3,503
2058	2,206	236	0	0	903	3,346
2059	2,285	473	0	0	903	3,661
2060	2,251	354	0	0	906	3,512
2061	2,285	473	0	0	903	3,661
2062	2,285	473	0	0	903	3,661
2063	2,285	473	0	0	903	3,661
2064	2,251	354	0	0	906	3,512
2065	2,285	473	0	0	903	3,661

*Prairie Island Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-005, Rev. 0  
 Section 3, Page 30 of 59*

**TABLE 3.2 (continued)**  
**SCENARIO 1**  
**PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 2**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2066	2,285	473	0	0	903	3,661
2067	2,246	354	0	0	903	3,503
2068	2,291	473	0	0	906	3,669
2069	2,285	473	0	0	903	3,661
2070	2,246	354	0	0	903	3,503
2071	2,285	473	0	0	903	3,661
2072	2,291	473	0	0	906	3,669
2073	2,246	354	0	0	903	3,503
2074	2,285	473	0	0	903	3,661
2075	2,573	1,335	0	0	903	4,811
2076	2,251	354	0	0	906	3,512
2077	2,242	1,259	0	0	10,794	14,294
2078	560	14	0	2	302	878
<b>Total</b>	<b>471,673</b>	<b>187,619</b>	<b>23,130</b>	<b>54,335</b>	<b>90,809</b>	<b>827,564</b>

Note: Columns may not add due to rounding

**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
**Prairie Island Nuclear Generating Plant Unit 1**

Year	Radiological	Spent Fuel	Site	
			Restoration	Yearly Total
2033	\$20,701,498	\$620,158	\$193,306	\$21,514,962
2034	65,563,951	1,561,088	823,827	67,948,867
2035	105,206,413	21,691,551	1,516,829	128,414,793
2036	80,410,761	5,056,634	1,776,358	87,243,753
2037	40,375,165	14,092,188	1,357,175	55,824,528
2038	4,875,193	1,258,188	0	6,133,381
2039	4,875,193	7,675,188	0	12,550,381
2040	4,888,549	1,261,635	0	6,150,184
2041	4,875,193	14,092,188	0	18,967,381
2042	4,875,193	1,258,188	0	6,133,381
2043	4,875,193	14,092,188	0	18,967,381
2044	4,888,549	1,261,635	0	6,150,184
2045	4,875,193	14,092,188	0	18,967,381
2046	4,875,193	1,258,188	0	6,133,381
2047	4,875,193	14,092,188	0	18,967,381
2048	4,888,549	1,261,635	0	6,150,184
2049	9,841,103	20,432,246	0	30,273,349
2050	28,105,438	542,119	0	28,647,557
2051	7,633,571	2,439,392	8,892,023	18,964,986
2052	716,179	3,719,214	13,790,172	18,225,564
2053	336,565	3,301,875	6,480,627	10,119,067
2054	0	2,939,003	0	2,939,003
2055	0	2,939,003	0	2,939,003
2056	0	2,947,055	0	2,947,055
2057	0	2,939,003	0	2,939,003
2058	0	2,939,003	0	2,939,003
2059	0	2,939,003	0	2,939,003
2060	0	2,947,055	0	2,947,055
2061	0	2,939,003	0	2,939,003
2062	0	2,939,003	0	2,939,003
2063	0	2,939,003	0	2,939,003
2064	0	2,947,055	0	2,947,055
2065	0	2,939,003	0	2,939,003
2066	0	2,939,003	0	2,939,003
2067	0	2,939,003	0	2,939,003
2068	0	2,947,055	0	2,947,055
2069	0	2,939,003	0	2,939,003
2070	0	2,939,003	0	2,939,003
2071	0	2,939,003	0	2,939,003
2072	0	2,947,055	0	2,947,055
2073	0	2,939,003	0	2,939,003
2074	0	2,939,003	0	2,939,003
2075	0	4,089,003	0	4,089,003
2076	0	2,947,055	0	2,947,055

**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
**Prairie Island Nuclear Generating Plant Unit 1**

Year	Site			Yearly Total
	Radiological	Spent Fuel	Restoration	
2077	0	2,939,003		2,939,003
2078	0	2,939,003		2,939,003
2079	0	2,939,003		2,939,003
2080	0	2,947,055		2,947,055
2081	0	2,939,003		2,939,003
2082	0	2,939,003		2,939,003
2083	0	2,939,003		2,939,003
2084	0	2,947,055		2,947,055
2085	0	2,939,003		2,939,003
2086	0	2,939,003		2,939,003
2087	0	2,939,003		2,939,003
2088	0	2,947,055		2,947,055
2089	0	2,939,003		2,939,003
2090	0	2,939,003		2,939,003
2091	0	3,276,195		3,276,195
2092	0	3,611,517		3,611,517
2093	0	3,633,753		3,633,753
2094	0	3,818,380		3,818,380
2095	0	3,503,280		3,503,280
2096	0	3,984,233		3,984,233
2097	0	3,503,280		3,503,280
2098	0	3,345,730		3,345,730
2099	0	3,660,830		3,660,830
2100	0	3,503,531		3,503,531
2101	0	3,660,830		3,660,830
2102	0	3,660,830		3,660,830
2103	0	3,660,830		3,660,830
2104	0	3,511,583		3,511,583
2105	0	3,660,830		3,660,830
2106	0	3,660,830		3,660,830
2107	0	3,503,280		3,503,280
2108	0	3,669,133		3,669,133
2109	0	3,660,830		3,660,830
2110	0	3,503,280		3,503,280
2111	0	3,660,830		3,660,830
2112	0	3,669,133		3,669,133
2113	0	3,503,280		3,503,280
2114	0	3,660,830		3,660,830
2115	0	4,810,830		4,810,830
2116	0	3,511,583		3,511,583
2117	12,232,310	3,513,919		15,746,229
2118	0	882,154		882,154
	\$424,790,144	\$354,231,004	\$34,830,317	\$813,851,465

**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
**Prairie Island Nuclear Generating Plant Unit 2**

Year	Radiological	Spent Fuel	Site	Yearly Total
			Restoration	
2034	\$8,442,377	\$273,725	\$36,517	\$8,752,620
2035	52,983,468	21,962,089	271,970	75,217,526
2036	100,692,157	5,156,219	1,457,118	107,305,494
2037	98,333,455	14,092,188	1,843,242	114,268,886
2038	74,544,069	1,258,188	1,776,026	77,578,283
2039	21,696,940	7,675,188	253,023	29,625,151
2040	12,952,615	1,261,635	0	14,214,251
2041	12,917,225	14,092,188	0	27,009,414
2042	12,917,225	1,258,188	0	14,175,414
2043	12,917,225	14,092,188	0	27,009,414
2044	12,952,615	1,261,635	0	14,214,251
2045	12,917,225	14,092,188	0	27,009,414
2046	12,917,225	1,258,188	0	14,175,414
2047	12,917,225	14,092,188	0	27,009,414
2048	12,952,615	1,261,635	0	14,214,251
2049	17,740,755	20,432,246	0	38,173,001
2050	35,615,211	542,119	0	36,157,330
2051	10,410,155	2,439,392	12,023,581	24,873,129
2052	670,743	3,719,214	18,646,740	23,036,697
2053	315,213	3,301,875	8,762,949	12,380,037
2054	0	2,939,003	0	2,939,003
2055	0	2,939,003	0	2,939,003
2056	0	2,947,055	0	2,947,055
2057	0	2,939,003	0	2,939,003
2058	0	2,939,003	0	2,939,003
2059	0	2,939,003	0	2,939,003
2060	0	2,947,055	0	2,947,055
2061	0	2,939,003	0	2,939,003
2062	0	2,939,003	0	2,939,003
2063	0	2,939,003	0	2,939,003
2064	0	2,947,055	0	2,947,055
2065	0	2,939,003	0	2,939,003
2066	0	2,939,003	0	2,939,003
2067	0	2,939,003	0	2,939,003
2068	0	2,947,055	0	2,947,055
2069	0	2,939,003	0	2,939,003
2070	0	2,939,003	0	2,939,003
2071	0	2,939,003	0	2,939,003
2072	0	2,947,055	0	2,947,055
2073	0	2,939,003	0	2,939,003
2074	0	2,939,003	0	2,939,003
2075	0	4,089,003	0	4,089,003
2076	0	2,947,055	0	2,947,055

**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
**Prairie Island Nuclear Generating Plant Unit 2**

Year	Site			Yearly Total
	Radiological	Spent Fuel	Restoration	
2077	0	2,939,003	0	2,939,003
2078	0	2,939,003	0	2,939,003
2079	0	2,939,003	0	2,939,003
2080	0	2,947,055	0	2,947,055
2081	0	2,939,003	0	2,939,003
2082	0	2,939,003	0	2,939,003
2083	0	2,939,003	0	2,939,003
2084	0	2,947,055	0	2,947,055
2085	0	2,939,003	0	2,939,003
2086	0	2,939,003	0	2,939,003
2087	0	2,939,003	0	2,939,003
2088	0	2,947,055	0	2,947,055
2089	0	2,939,003	0	2,939,003
2090	0	2,939,003	0	2,939,003
2091	0	3,276,195	0	3,276,195
2092	0	3,611,517	0	3,611,517
2093	0	3,633,754	0	3,633,754
2094	0	3,818,380	0	3,818,380
2095	0	3,503,280	0	3,503,280
2096	0	3,984,233	0	3,984,233
2097	0	3,503,280	0	3,503,280
2098	0	3,345,730	0	3,345,730
2099	0	3,660,830	0	3,660,830
2100	0	3,503,531	0	3,503,531
2101	0	3,660,830	0	3,660,830
2102	0	3,660,830	0	3,660,830
2103	0	3,660,830	0	3,660,830
2104	0	3,511,583	0	3,511,583
2105	0	3,660,830	0	3,660,830
2106	0	3,660,830	0	3,660,830
2107	0	3,503,280	0	3,503,280
2108	0	3,669,133	0	3,669,133
2109	0	3,660,830	0	3,660,830
2110	0	3,503,280	0	3,503,280
2111	0	3,660,830	0	3,660,830
2112	0	3,669,133	0	3,669,133
2113	0	3,503,280	0	3,503,280
2114	0	3,660,830	0	3,660,830
2115	0	4,810,830	0	4,810,830
2116	0	3,511,583	0	3,511,583
2117	10,796,729	3,497,376	0	14,294,106
2118	0	878,445	0	878,445
	\$548,602,470	\$352,673,359	\$45,071,168	\$946,346,997

*Prairie Island Nuclear Generating Plant  
Decommissioning Cost Analysis*

*Document X01-1617-005, Rev. 0  
Section 3, Page 36 of 59*

**TABLE 3.3**  
**SCENARIO 2**  
**PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 1**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
(thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2033	17,130	1,230	1,277	22	1,855	21,515
2034	46,893	8,331	4,493	3,217	5,015	67,949
2035	49,761	47,408	3,416	20,766	7,064	128,415
2036	39,995	22,519	2,718	16,011	6,002	87,244
2037	27,809	14,690	1,859	7,219	4,248	55,825
2038	2,138	486	643	35	2,832	6,133
2039	3,742	5,299	643	35	2,832	12,550
2040	2,144	488	645	35	2,840	6,150
2041	5,346	10,112	643	35	2,832	18,967
2042	2,138	486	643	35	2,832	6,133
2043	5,346	10,112	643	35	2,832	18,967
2044	2,144	488	645	35	2,840	6,150
2045	5,346	10,112	643	35	2,832	18,967
2046	2,138	486	643	35	2,832	6,133
2047	5,346	10,112	643	35	2,832	18,967
2048	2,144	488	645	35	2,840	6,150
2049	10,350	15,591	756	653	2,924	30,273
2050	19,746	2,944	1,033	2,173	2,752	28,648
2051	13,865	3,443	435	15	1,207	18,965
2052	12,175	4,856	322	0	873	18,226
2053	6,846	2,282	152	0	839	10,119
2054	2,128	0	0	0	811	2,939
2055	2,128	0	0	0	811	2,939
2056	2,133	0	0	0	814	2,947
2057	2,128	0	0	0	811	2,939
2058	2,128	0	0	0	811	2,939
2059	2,128	0	0	0	811	2,939
2060	2,133	0	0	0	814	2,947
2061	2,128	0	0	0	811	2,939
2062	2,128	0	0	0	811	2,939
2063	2,128	0	0	0	811	2,939
2064	2,133	0	0	0	814	2,947
2065	2,128	0	0	0	811	2,939

*Prairie Island Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-005, Rev. 0  
 Section 3, Page 37 of 59*

**TABLE 3.3 (continued)**  
**SCENARIO 2**  
**PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 1**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2066	2,128	0	0	0	811	2,939
2067	2,128	0	0	0	811	2,939
2068	2,133	0	0	0	814	2,947
2069	2,128	0	0	0	811	2,939
2070	2,128	0	0	0	811	2,939
2071	2,128	0	0	0	811	2,939
2072	2,133	0	0	0	814	2,947
2073	2,128	0	0	0	811	2,939
2074	2,128	0	0	0	811	2,939
2075	2,415	863	0	0	811	4,089
2076	2,133	0	0	0	814	2,947
2077	2,128	0	0	0	811	2,939
2078	2,128	0	0	0	811	2,939
2079	2,128	0	0	0	811	2,939
2080	2,133	0	0	0	814	2,947
2081	2,128	0	0	0	811	2,939
2082	2,128	0	0	0	811	2,939
2083	2,128	0	0	0	811	2,939
2084	2,133	0	0	0	814	2,947
2085	2,128	0	0	0	811	2,939
2086	2,128	0	0	0	811	2,939
2087	2,128	0	0	0	811	2,939
2088	2,133	0	0	0	814	2,947
2089	2,128	0	0	0	811	2,939
2090	2,128	0	0	0	811	2,939
2091	2,128	0	0	0	811	2,939
2092	2,133	0	0	0	814	2,947
2093	2,128	0	0	0	811	2,939
2094	2,128	0	0	0	811	2,939
2095	2,128	0	0	0	811	2,939
2096	2,133	0	0	0	814	2,947
2097	2,128	0	0	0	811	2,939
2098	2,128	0	0	0	811	2,939

*Prairie Island Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-005, Rev. 0  
 Section 3, Page 38 of 59*

**TABLE 3.3 (continued)**  
**SCENARIO 2**  
**PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 1**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2099	2,128	0	0	0	811	2,939
2100	2,128	0	0	0	811	2,939
2101	2,128	0	0	0	811	2,939
2102	2,128	0	0	0	811	2,939
2103	2,128	0	0	0	811	2,939
2104	2,133	0	0	0	814	2,947
2105	2,128	0	0	0	811	2,939
2106	2,128	0	0	0	811	2,939
2107	2,128	0	0	0	811	2,939
2108	2,133	0	0	0	814	2,947
2109	2,128	0	0	0	811	2,939
2110	2,128	0	0	0	811	2,939
2111	2,128	0	0	0	811	2,939
2112	2,133	0	0	0	814	2,947
2113	2,128	0	0	0	811	2,939
2114	2,128	0	0	0	811	2,939
2115	2,415	863	0	0	811	4,089
2116	2,133	0	0	0	814	2,947
2117	2,128	0	0	0	811	2,939
2118	2,128	0	0	0	811	2,939
2119	2,128	0	0	0	811	2,939
2120	2,133	0	0	0	814	2,947
2121	2,128	0	0	0	811	2,939
2122	2,128	0	0	0	811	2,939
2123	2,128	0	0	0	811	2,939
2124	2,133	0	0	0	814	2,947
2125	2,128	0	0	0	811	2,939
2126	2,128	0	0	0	811	2,939
2127	2,128	0	0	0	811	2,939
2128	2,133	0	0	0	814	2,947
2129	2,128	0	0	0	811	2,939
2130	2,128	0	0	0	811	2,939
2131	2,128	0	0	0	811	2,939

*Prairie Island Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-005, Rev. 0  
 Section 3, Page 39 of 59*

**TABLE 3.3 (continued)**  
**SCENARIO 2**  
**PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 1**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2132	2,133	0	0	0	814	2,947
2133	2,128	0	0	0	811	2,939
2134	2,128	0	0	0	811	2,939
2135	2,128	0	0	0	811	2,939
2136	2,133	0	0	0	814	2,947
2137	2,128	0	0	0	811	2,939
2138	2,128	0	0	0	811	2,939
2139	2,128	0	0	0	811	2,939
2140	2,133	0	0	0	814	2,947
2141	2,128	0	0	0	811	2,939
2142	2,128	0	0	0	811	2,939
2143	2,128	0	0	0	811	2,939
2144	2,133	0	0	0	814	2,947
2145	2,128	0	0	0	811	2,939
2146	2,128	0	0	0	811	2,939
2147	2,128	0	0	0	811	2,939
2148	2,133	0	0	0	814	2,947
2149	2,128	0	0	0	811	2,939
2150	2,128	0	0	0	811	2,939
2151	2,128	0	0	0	811	2,939
2152	2,133	0	0	0	814	2,947
2153	2,128	0	0	0	811	2,939
2154	2,128	0	0	0	811	2,939
2155	2,415	863	0	0	811	4,089
2156	2,133	0	0	0	814	2,947
2157	2,128	0	0	0	811	2,939
2158	2,128	0	0	0	811	2,939
2159	2,128	0	0	0	811	2,939
2160	2,133	0	0	0	814	2,947
2161	2,128	0	0	0	811	2,939
2162	2,128	0	0	0	811	2,939
2163	2,128	0	0	0	811	2,939
2164	2,133	0	0	0	814	2,947

*Prairie Island Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-005, Rev. 0  
 Section 3, Page 40 of 59*

**TABLE 3.3 (continued)**  
**SCENARIO 2**  
**PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 1**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2165	2,128	0	0	0	811	2,939
2166	2,128	0	0	0	811	2,939
2167	2,128	0	0	0	811	2,939
2168	2,133	0	0	0	814	2,947
2169	2,128	0	0	0	811	2,939
2170	2,128	0	0	0	811	2,939
2171	2,128	0	0	0	811	2,939
2172	2,133	0	0	0	814	2,947
2173	2,128	0	0	0	811	2,939
2174	2,128	0	0	0	811	2,939
2175	2,128	0	0	0	811	2,939
2176	2,133	0	0	0	814	2,947
2177	2,128	0	0	0	811	2,939
2178	2,128	0	0	0	811	2,939
2179	2,128	0	0	0	811	2,939
2180	2,133	0	0	0	814	2,947
2181	2,128	0	0	0	811	2,939
2182	2,128	0	0	0	811	2,939
2183	2,128	0	0	0	811	2,939
2184	2,133	0	0	0	814	2,947
2185	2,128	0	0	0	811	2,939
2186	2,128	0	0	0	811	2,939
2187	2,128	0	0	0	811	2,939
2188	2,133	0	0	0	814	2,947
2189	2,128	0	0	0	811	2,939
2190	2,128	0	0	0	811	2,939
2191	2,206	236	0	0	914	3,356
2192	2,291	473	0	0	916	3,680
2193	2,285	473	0	0	914	3,671
2194	2,324	591	0	0	914	3,829
2195	2,533	1,217	0	0	914	4,664
2196	2,370	709	0	0	916	3,995
2197	2,246	354	0	0	914	3,514

*Prairie Island Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-005, Rev. 0  
 Section 3, Page 41 of 59*

**TABLE 3.3 (continued)**  
**SCENARIO 2**  
**PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 1**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2198	2,206	236	0	0	914	3,356
2199	2,285	473	0	0	914	3,671
2200	2,246	354	0	0	914	3,514
2201	2,285	473	0	0	914	3,671
2202	2,285	473	0	0	914	3,671
2203	2,285	473	0	0	914	3,671
2204	2,251	354	0	0	916	3,522
2205	2,285	473	0	0	914	3,671
2206	2,285	473	0	0	914	3,671
2207	2,246	354	0	0	914	3,514
2208	2,291	473	0	0	916	3,680
2209	2,285	473	0	0	914	3,671
2210	2,246	354	0	0	914	3,514
2211	2,285	473	0	0	914	3,671
2212	2,291	473	0	0	916	3,680
2213	2,246	354	0	0	914	3,514
2214	2,285	473	0	0	914	3,671
2215	2,285	473	0	0	914	3,671
2216	2,251	354	0	0	916	3,522
2217	2,246	1,560	0	0	11,940	15,746
2218	562	14	0	2	304	882
<b>Total</b>	<b>637,251</b>	<b>188,211</b>	<b>23,541</b>	<b>50,458</b>	<b>211,216</b>	<b>1,110,676</b>

Note: Columns may not add due to rounding

*Prairie Island Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-005, Rev. 0  
 Section 3, Page 42 of 59*

**TABLE 3.4**  
**SCENARIO 2**  
**PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 2**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2034	6,873	537	564	9	769	8,753
2035	45,154	20,295	3,779	1,449	4,540	75,218
2036	50,222	28,412	4,173	18,032	6,466	107,305
2037	54,418	32,418	2,815	18,462	6,155	114,269
2038	50,541	8,859	2,412	11,082	4,685	77,578
2039	17,552	6,516	895	1,611	3,050	29,625
2040	10,229	516	645	38	2,786	14,214
2041	13,410	10,140	643	38	2,778	27,009
2042	10,201	515	643	38	2,778	14,175
2043	13,410	10,140	643	38	2,778	27,009
2044	10,229	516	645	38	2,786	14,214
2045	13,410	10,140	643	38	2,778	27,009
2046	10,201	515	643	38	2,778	14,175
2047	13,410	10,140	643	38	2,778	27,009
2048	10,229	516	645	38	2,786	14,214
2049	18,063	15,758	756	768	2,828	38,173
2050	26,563	3,541	1,033	2,561	2,460	36,157
2051	18,528	4,787	435	15	1,109	24,873
2052	15,040	6,799	322	0	875	23,037
2053	8,193	3,195	152	0	840	12,380
2054	2,128	0	0	0	811	2,939
2055	2,128	0	0	0	811	2,939
2056	2,133	0	0	0	814	2,947
2057	2,128	0	0	0	811	2,939
2058	2,128	0	0	0	811	2,939
2059	2,128	0	0	0	811	2,939
2060	2,133	0	0	0	814	2,947
2061	2,128	0	0	0	811	2,939
2062	2,128	0	0	0	811	2,939
2063	2,128	0	0	0	811	2,939
2064	2,133	0	0	0	814	2,947
2065	2,128	0	0	0	811	2,939

*Prairie Island Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-005, Rev. 0  
 Section 3, Page 43 of 59*

**TABLE 3.4 (continued)**  
**SCENARIO 2**  
**PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 2**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2066	2,128	0	0	0	811	2,939
2067	2,128	0	0	0	811	2,939
2068	2,133	0	0	0	814	2,947
2069	2,128	0	0	0	811	2,939
2070	2,128	0	0	0	811	2,939
2071	2,128	0	0	0	811	2,939
2072	2,133	0	0	0	814	2,947
2073	2,128	0	0	0	811	2,939
2074	2,128	0	0	0	811	2,939
2075	2,415	863	0	0	811	4,089
2076	2,133	0	0	0	814	2,947
2077	2,128	0	0	0	811	2,939
2078	2,128	0	0	0	811	2,939
2079	2,128	0	0	0	811	2,939
2080	2,133	0	0	0	814	2,947
2081	2,128	0	0	0	811	2,939
2082	2,128	0	0	0	811	2,939
2083	2,128	0	0	0	811	2,939
2084	2,133	0	0	0	814	2,947
2085	2,128	0	0	0	811	2,939
2086	2,128	0	0	0	811	2,939
2087	2,128	0	0	0	811	2,939
2088	2,133	0	0	0	814	2,947
2089	2,128	0	0	0	811	2,939
2090	2,128	0	0	0	811	2,939
2091	2,128	0	0	0	811	2,939
2092	2,133	0	0	0	814	2,947
2093	2,128	0	0	0	811	2,939
2094	2,128	0	0	0	811	2,939
2095	2,128	0	0	0	811	2,939
2096	2,133	0	0	0	814	2,947
2097	2,128	0	0	0	811	2,939
2098	2,128	0	0	0	811	2,939

*Prairie Island Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-005, Rev. 0  
 Section 3, Page 44 of 59*

**TABLE 3.4 (continued)**  
**SCENARIO 2**  
**PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 2**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2099	2,128	0	0	0	811	2,939
2100	2,128	0	0	0	811	2,939
2101	2,128	0	0	0	811	2,939
2102	2,128	0	0	0	811	2,939
2103	2,128	0	0	0	811	2,939
2104	2,133	0	0	0	814	2,947
2105	2,128	0	0	0	811	2,939
2106	2,128	0	0	0	811	2,939
2107	2,128	0	0	0	811	2,939
2108	2,133	0	0	0	814	2,947
2109	2,128	0	0	0	811	2,939
2110	2,128	0	0	0	811	2,939
2111	2,128	0	0	0	811	2,939
2112	2,133	0	0	0	814	2,947
2113	2,128	0	0	0	811	2,939
2114	2,128	0	0	0	811	2,939
2115	2,415	863	0	0	811	4,089
2116	2,133	0	0	0	814	2,947
2117	2,128	0	0	0	811	2,939
2118	2,128	0	0	0	811	2,939
2119	2,128	0	0	0	811	2,939
2120	2,133	0	0	0	814	2,947
2121	2,128	0	0	0	811	2,939
2122	2,128	0	0	0	811	2,939
2123	2,128	0	0	0	811	2,939
2124	2,133	0	0	0	814	2,947
2125	2,128	0	0	0	811	2,939
2126	2,128	0	0	0	811	2,939
2127	2,128	0	0	0	811	2,939
2128	2,133	0	0	0	814	2,947
2129	2,128	0	0	0	811	2,939
2130	2,128	0	0	0	811	2,939
2131	2,128	0	0	0	811	2,939

*Prairie Island Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-005, Rev. 0  
 Section 3, Page 45 of 59*

**TABLE 3.4 (continued)**  
**SCENARIO 2**  
**PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 2**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2132	2,133	0	0	0	814	2,947
2133	2,128	0	0	0	811	2,939
2134	2,128	0	0	0	811	2,939
2135	2,128	0	0	0	811	2,939
2136	2,133	0	0	0	814	2,947
2137	2,128	0	0	0	811	2,939
2138	2,128	0	0	0	811	2,939
2139	2,128	0	0	0	811	2,939
2140	2,133	0	0	0	814	2,947
2141	2,128	0	0	0	811	2,939
2142	2,128	0	0	0	811	2,939
2143	2,128	0	0	0	811	2,939
2144	2,133	0	0	0	814	2,947
2145	2,128	0	0	0	811	2,939
2146	2,128	0	0	0	811	2,939
2147	2,128	0	0	0	811	2,939
2148	2,133	0	0	0	814	2,947
2149	2,128	0	0	0	811	2,939
2150	2,128	0	0	0	811	2,939
2151	2,128	0	0	0	811	2,939
2152	2,133	0	0	0	814	2,947
2153	2,128	0	0	0	811	2,939
2154	2,128	0	0	0	811	2,939
2155	2,415	863	0	0	811	4,089
2156	2,133	0	0	0	814	2,947
2157	2,128	0	0	0	811	2,939
2158	2,128	0	0	0	811	2,939
2159	2,128	0	0	0	811	2,939
2160	2,133	0	0	0	814	2,947
2161	2,128	0	0	0	811	2,939
2162	2,128	0	0	0	811	2,939
2163	2,128	0	0	0	811	2,939
2164	2,133	0	0	0	814	2,947

*Prairie Island Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-005, Rev. 0  
 Section 3, Page 46 of 59*

**TABLE 3.4 (continued)**  
**SCENARIO 2**  
**PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 2**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2165	2,128	0	0	0	811	2,939
2166	2,128	0	0	0	811	2,939
2167	2,128	0	0	0	811	2,939
2168	2,133	0	0	0	814	2,947
2169	2,128	0	0	0	811	2,939
2170	2,128	0	0	0	811	2,939
2171	2,128	0	0	0	811	2,939
2172	2,133	0	0	0	814	2,947
2173	2,128	0	0	0	811	2,939
2174	2,128	0	0	0	811	2,939
2175	2,128	0	0	0	811	2,939
2176	2,133	0	0	0	814	2,947
2177	2,128	0	0	0	811	2,939
2178	2,128	0	0	0	811	2,939
2179	2,128	0	0	0	811	2,939
2180	2,133	0	0	0	814	2,947
2181	2,128	0	0	0	811	2,939
2182	2,128	0	0	0	811	2,939
2183	2,128	0	0	0	811	2,939
2184	2,133	0	0	0	814	2,947
2185	2,128	0	0	0	811	2,939
2186	2,128	0	0	0	811	2,939
2187	2,128	0	0	0	811	2,939
2188	2,133	0	0	0	814	2,947
2189	2,128	0	0	0	811	2,939
2190	2,128	0	0	0	811	2,939
2191	2,206	236	0	0	914	3,356
2192	2,291	473	0	0	916	3,680
2193	2,285	473	0	0	914	3,671
2194	2,324	591	0	0	914	3,829
2195	2,533	1,217	0	0	914	4,664
2196	2,370	709	0	0	916	3,995
2197	2,246	354	0	0	914	3,514

*Prairie Island Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-005, Rev. 0  
 Section 3, Page 47 of 59*

**TABLE 3.4 (continued)**  
**SCENARIO 2**  
**PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 2**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2198	2,206	236	0	0	914	3,356
2199	2,285	473	0	0	914	3,671
2200	2,246	354	0	0	914	3,514
2201	2,285	473	0	0	914	3,671
2202	2,285	473	0	0	914	3,671
2203	2,285	473	0	0	914	3,671
2204	2,251	354	0	0	916	3,522
2205	2,285	473	0	0	914	3,671
2206	2,285	473	0	0	914	3,671
2207	2,246	354	0	0	914	3,514
2208	2,291	473	0	0	916	3,680
2209	2,285	473	0	0	914	3,671
2210	2,246	354	0	0	914	3,514
2211	2,285	473	0	0	914	3,671
2212	2,291	473	0	0	916	3,680
2213	2,246	354	0	0	914	3,514
2214	2,285	473	0	0	914	3,671
2215	2,285	473	0	0	914	3,671
2216	2,251	354	0	0	916	3,522
2217	2,246	1,259	0	0	10,806	14,311
2218	562	14	0	2	304	882
<b>Total</b>	<b>770,585</b>	<b>190,206</b>	<b>23,130</b>	<b>54,335</b>	<b>204,937</b>	<b>1,243,192</b>

Note: Columns may not add due to rounding

*Prairie Island Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-005, Rev. 0  
 Section 3, Page 48 of 59*

**TABLE 3.5**  
**SCENARIO 3**  
**PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 1**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2033	17,130	1,230	1,277	22	1,855	21,515
2034	46,893	8,331	4,493	3,217	5,015	67,949
2035	49,761	47,408	3,416	20,766	7,064	128,415
2036	39,995	22,519	2,718	16,011	6,002	87,244
2037	27,809	14,690	1,859	7,219	4,248	55,825
2038	2,138	486	643	35	2,832	6,133
2039	3,742	5,299	643	35	2,832	12,550
2040	2,144	488	645	35	2,840	6,150
2041	5,346	10,112	643	35	2,832	18,967
2042	2,138	486	643	35	2,832	6,133
2043	5,346	10,112	643	35	2,832	18,967
2044	2,144	488	645	35	2,840	6,150
2045	5,346	10,112	643	35	2,832	18,967
2046	2,138	486	643	35	2,832	6,133
2047	5,346	10,112	643	35	2,832	18,967
2048	2,144	488	645	35	2,840	6,150
2049	10,350	15,591	756	653	2,924	30,273
2050	19,746	2,944	1,033	2,173	2,752	28,648
2051	13,865	3,443	435	15	1,207	18,965
2052	12,175	4,856	322	0	873	18,226
2053	6,846	2,282	152	0	839	10,119
2054	2,128	0	0	0	811	2,939
2055	2,128	0	0	0	811	2,939
2056	2,133	0	0	0	814	2,947
2057	2,128	0	0	0	811	2,939
2058	2,128	0	0	0	811	2,939
2059	2,128	0	0	0	811	2,939
2060	2,133	0	0	0	814	2,947
2061	2,128	0	0	0	811	2,939
2062	2,128	0	0	0	811	2,939
2063	2,128	0	0	0	811	2,939
2064	2,133	0	0	0	814	2,947
2065	2,128	0	0	0	811	2,939

*Prairie Island Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-005, Rev. 0  
 Section 3, Page 49 of 59*

**TABLE 3.5 (continued)**  
**SCENARIO 3**  
**PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 1**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2066	2,128	0	0	0	811	2,939
2067	2,128	0	0	0	811	2,939
2068	2,133	0	0	0	814	2,947
2069	2,128	0	0	0	811	2,939
2070	2,128	0	0	0	811	2,939
2071	2,128	0	0	0	811	2,939
2072	2,133	0	0	0	814	2,947
2073	2,128	0	0	0	811	2,939
2074	2,128	0	0	0	811	2,939
2075	2,415	863	0	0	811	4,089
2076	2,133	0	0	0	814	2,947
2077	2,128	0	0	0	811	2,939
2078	2,128	0	0	0	811	2,939
2079	2,128	0	0	0	811	2,939
2080	2,133	0	0	0	814	2,947
2081	2,128	0	0	0	811	2,939
2082	2,128	0	0	0	811	2,939
2083	2,128	0	0	0	811	2,939
2084	2,133	0	0	0	814	2,947
2085	2,128	0	0	0	811	2,939
2086	2,128	0	0	0	811	2,939
2087	2,128	0	0	0	811	2,939
2088	2,133	0	0	0	814	2,947
2089	2,128	0	0	0	811	2,939
2090	2,128	0	0	0	811	2,939
2091	2,128	0	0	0	811	2,939
2092	2,133	0	0	0	814	2,947
2093	3,598	4,412	0	0	811	8,822
2094	2,128	0	0	0	811	2,939
2095	4,652	7,574	0	638	875	13,739
2096	3,816	5,049	0	425	856	10,147
2097	3,811	5,049	0	425	854	10,139
2098	2,128	0	0	0	811	2,939

*Prairie Island Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-005, Rev. 0  
 Section 3, Page 50 of 59*

**TABLE 3.5 (continued)**  
**SCENARIO 3**  
**PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 1**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2099	3,811	5,049	0	425	854	10,139
2100	4,652	7,574	0	638	875	13,739
2101	3,811	5,049	0	425	854	10,139
2102	4,652	7,574	0	638	875	13,739
2103	2,128	0	0	0	811	2,939
2104	2,133	0	0	0	814	2,947
2105	4,652	7,574	0	638	875	13,739
2106	3,811	5,049	0	425	854	10,139
2107	3,811	5,049	0	425	854	10,139
2108	2,133	0	0	0	814	2,947
2109	4,652	7,574	0	638	875	13,739
2110	3,811	5,049	0	425	854	10,139
2111	4,652	7,574	0	638	875	13,739
2112	4,658	7,574	0	638	877	13,747
2113	2,128	0	0	0	811	2,939
2114	3,811	5,049	0	425	854	10,139
2115	2,415	863	0	0	811	4,089
2116	4,658	7,574	0	638	877	13,747
2117	3,811	5,049	0	425	854	10,139
2118	2,128	0	0	0	811	2,939
2119	4,652	7,574	0	638	875	13,739
2120	3,816	5,049	0	425	856	10,147
2121	2,128	0	0	0	811	2,939
2122	3,811	5,049	0	425	854	10,139
2123	4,652	7,574	0	638	875	13,739
2124	2,133	0	0	0	814	2,947
2125	3,811	5,049	0	425	854	10,139
2126	4,652	7,574	0	638	875	13,739
2127	2,128	0	0	0	811	2,939
2128	3,816	5,049	0	425	856	10,147
2129	3,811	5,049	0	425	854	10,139
2130	2,128	0	0	0	811	2,939
2131	2,969	2,525	0	213	833	6,539

*Prairie Island Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-005, Rev. 0  
 Section 3, Page 51 of 59*

**TABLE 3.5 (continued)**  
**SCENARIO 3**  
**PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 1**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2132	2,133	0	0	0	814	2,947
2133	2,128	0	0	0	811	2,939
2134	3,811	5,049	0	425	854	10,139
2135	7,177	15,147	0	1,276	939	24,539
2136	2,133	0	0	0	814	2,947
2137	5,494	10,098	0	851	896	17,339
2138	2,128	0	0	0	811	2,939
2139	3,811	5,049	0	425	854	10,139
2140	2,133	0	0	0	814	2,947
2141	5,494	10,098	0	851	896	17,339
2142	2,128	0	0	0	811	2,939
2143	5,494	10,098	0	851	896	17,339
2144	2,133	0	0	0	814	2,947
2145	5,494	10,098	0	851	896	17,339
2146	2,128	0	0	0	811	2,939
2147	5,494	10,098	0	851	896	17,339
2148	2,133	0	0	0	814	2,947
2149	7,177	15,147	0	1,276	939	24,539
2150	2,128	0	0	0	811	2,939
2151	2,128	0	0	0	811	2,939
2152	2,133	0	0	0	814	2,947
2153	2,128	0	0	0	811	2,939
2154	2,128	0	0	0	811	2,939
2155	2,415	863	0	0	811	4,089
2156	2,133	0	0	0	814	2,947
2157	2,128	0	0	0	811	2,939
2158	2,128	0	0	0	811	2,939
2159	2,128	0	0	0	811	2,939
2160	2,133	0	0	0	814	2,947
2161	2,128	0	0	0	811	2,939
2162	2,128	0	0	0	811	2,939
2163	2,128	0	0	0	811	2,939
2164	2,133	0	0	0	814	2,947

*Prairie Island Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-005, Rev. 0  
 Section 3, Page 52 of 59*

**TABLE 3.5 (continued)**  
**SCENARIO 3**  
**PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 1**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2165	2,128	0	0	0	811	2,939
2166	2,128	0	0	0	811	2,939
2167	2,128	0	0	0	811	2,939
2168	2,133	0	0	0	814	2,947
2169	2,128	0	0	0	811	2,939
2170	2,128	0	0	0	811	2,939
2171	2,128	0	0	0	811	2,939
2172	2,133	0	0	0	814	2,947
2173	2,128	0	0	0	811	2,939
2174	2,128	0	0	0	811	2,939
2175	2,128	0	0	0	811	2,939
2176	2,133	0	0	0	814	2,947
2177	2,128	0	0	0	811	2,939
2178	2,128	0	0	0	811	2,939
2179	2,128	0	0	0	811	2,939
2180	2,133	0	0	0	814	2,947
2181	2,128	0	0	0	811	2,939
2182	2,128	0	0	0	811	2,939
2183	2,128	0	0	0	811	2,939
2184	2,133	0	0	0	814	2,947
2185	2,128	0	0	0	811	2,939
2186	2,128	0	0	0	811	2,939
2187	2,128	0	0	0	811	2,939
2188	2,133	0	0	0	814	2,947
2189	2,128	0	0	0	811	2,939
2190	2,128	0	0	0	811	2,939
2191	2,206	236	0	0	914	3,356
2192	2,291	473	0	0	916	3,680
2193	2,285	473	0	0	914	3,671
2194	2,324	591	0	0	914	3,829
2195	2,533	1,217	0	0	914	4,664
2196	2,370	709	0	0	916	3,995
2197	2,246	354	0	0	914	3,514

*Prairie Island Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-005, Rev. 0  
 Section 3, Page 53 of 59*

**TABLE 3.5 (continued)**  
**SCENARIO 3**  
**PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 1**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2198	2,206	236	0	0	914	3,356
2199	2,285	473	0	0	914	3,671
2200	2,246	354	0	0	914	3,514
2201	2,285	473	0	0	914	3,671
2202	2,285	473	0	0	914	3,671
2203	2,285	473	0	0	914	3,671
2204	2,251	354	0	0	916	3,522
2205	2,285	473	0	0	914	3,671
2206	2,285	473	0	0	914	3,671
2207	2,246	354	0	0	914	3,514
2208	2,291	473	0	0	916	3,680
2209	2,285	473	0	0	914	3,671
2210	2,246	354	0	0	914	3,514
2211	2,285	473	0	0	914	3,671
2212	2,291	473	0	0	916	3,680
2213	2,246	354	0	0	914	3,514
2214	2,285	473	0	0	914	3,671
2215	2,285	473	0	0	914	3,671
2216	2,251	354	0	0	916	3,522
2217	2,246	1,560	0	0	11,940	15,746
2218	519	226	0	2	304	1,051
<b>Total</b>	<b>721,146</b>	<b>440,240</b>	<b>23,541</b>	<b>71,304</b>	<b>213,297</b>	<b>1,469,528</b>

Note: Columns may not add due to rounding

*Prairie Island Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-005, Rev. 0  
 Section 3, Page 54 of 59*

**TABLE 3.6**  
**SCENARIO 3**  
**PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 2**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2034	6,873	537	564	9	769	8,753
2035	45,154	20,295	3,779	1,449	4,540	75,218
2036	50,222	28,412	4,173	18,032	6,466	107,305
2037	54,418	32,418	2,815	18,462	6,155	114,269
2038	50,541	8,859	2,412	11,082	4,685	77,578
2039	17,552	6,516	895	1,611	3,050	29,625
2040	10,229	516	645	38	2,786	14,214
2041	13,410	10,140	643	38	2,778	27,009
2042	10,201	515	643	38	2,778	14,175
2043	13,410	10,140	643	38	2,778	27,009
2044	10,229	516	645	38	2,786	14,214
2045	13,410	10,140	643	38	2,778	27,009
2046	10,201	515	643	38	2,778	14,175
2047	13,410	10,140	643	38	2,778	27,009
2048	10,229	516	645	38	2,786	14,214
2049	18,063	15,758	756	768	2,828	38,173
2050	26,563	3,541	1,033	2,561	2,460	36,157
2051	18,528	4,787	435	15	1,109	24,873
2052	15,040	6,799	322	0	875	23,037
2053	8,193	3,195	152	0	840	12,380
2054	2,128	0	0	0	811	2,939
2055	2,128	0	0	0	811	2,939
2056	2,133	0	0	0	814	2,947
2057	2,128	0	0	0	811	2,939
2058	2,128	0	0	0	811	2,939
2059	2,128	0	0	0	811	2,939
2060	2,133	0	0	0	814	2,947
2061	2,128	0	0	0	811	2,939
2062	2,128	0	0	0	811	2,939
2063	2,128	0	0	0	811	2,939
2064	2,133	0	0	0	814	2,947
2065	2,128	0	0	0	811	2,939

*Prairie Island Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-005, Rev. 0  
 Section 3, Page 55 of 59*

**TABLE 3.6 (continued)**  
**SCENARIO 3**  
**PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 2**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2066	2,128	0	0	0	811	2,939
2067	2,128	0	0	0	811	2,939
2068	2,133	0	0	0	814	2,947
2069	2,128	0	0	0	811	2,939
2070	2,128	0	0	0	811	2,939
2071	2,128	0	0	0	811	2,939
2072	2,133	0	0	0	814	2,947
2073	2,128	0	0	0	811	2,939
2074	2,128	0	0	0	811	2,939
2075	2,415	863	0	0	811	4,089
2076	2,133	0	0	0	814	2,947
2077	2,128	0	0	0	811	2,939
2078	2,128	0	0	0	811	2,939
2079	2,128	0	0	0	811	2,939
2080	2,133	0	0	0	814	2,947
2081	2,128	0	0	0	811	2,939
2082	2,128	0	0	0	811	2,939
2083	2,128	0	0	0	811	2,939
2084	2,133	0	0	0	814	2,947
2085	2,128	0	0	0	811	2,939
2086	2,128	0	0	0	811	2,939
2087	2,128	0	0	0	811	2,939
2088	2,133	0	0	0	814	2,947
2089	2,128	0	0	0	811	2,939
2090	2,128	0	0	0	811	2,939
2091	2,128	0	0	0	811	2,939
2092	2,133	0	0	0	814	2,947
2093	3,598	4,412	0	0	811	8,822
2094	2,128	0	0	0	811	2,939
2095	4,652	7,574	0	638	875	13,739
2096	3,816	5,049	0	425	856	10,147
2097	3,811	5,049	0	425	854	10,139
2098	2,128	0	0	0	811	2,939

*Prairie Island Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-005, Rev. 0  
 Section 3, Page 56 of 59*

**TABLE 3.6 (continued)**  
**SCENARIO 3**  
**PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 2**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2099	3,811	5,049	0	425	854	10,139
2100	4,652	7,574	0	638	875	13,739
2101	3,811	5,049	0	425	854	10,139
2102	4,652	7,574	0	638	875	13,739
2103	2,128	0	0	0	811	2,939
2104	2,133	0	0	0	814	2,947
2105	4,652	7,574	0	638	875	13,739
2106	3,811	5,049	0	425	854	10,139
2107	3,811	5,049	0	425	854	10,139
2108	2,133	0	0	0	814	2,947
2109	4,652	7,574	0	638	875	13,739
2110	3,811	5,049	0	425	854	10,139
2111	4,652	7,574	0	638	875	13,739
2112	4,658	7,574	0	638	877	13,747
2113	2,128	0	0	0	811	2,939
2114	3,811	5,049	0	425	854	10,139
2115	2,415	863	0	0	811	4,089
2116	4,658	7,574	0	638	877	13,747
2117	3,811	5,049	0	425	854	10,139
2118	2,128	0	0	0	811	2,939
2119	4,652	7,574	0	638	875	13,739
2120	3,816	5,049	0	425	856	10,147
2121	2,128	0	0	0	811	2,939
2122	3,811	5,049	0	425	854	10,139
2123	4,652	7,574	0	638	875	13,739
2124	2,133	0	0	0	814	2,947
2125	3,811	5,049	0	425	854	10,139
2126	4,652	7,574	0	638	875	13,739
2127	2,128	0	0	0	811	2,939
2128	3,816	5,049	0	425	856	10,147
2129	3,811	5,049	0	425	854	10,139
2130	2,128	0	0	0	811	2,939
2131	2,969	2,525	0	213	833	6,539

*Prairie Island Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-005, Rev. 0  
 Section 3, Page 57 of 59*

**TABLE 3.6 (continued)**  
**SCENARIO 3**  
**PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 2**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2132	2,133	0	0	0	814	2,947
2133	2,128	0	0	0	811	2,939
2134	3,811	5,049	0	425	854	10,139
2135	7,177	15,147	0	1,276	939	24,539
2136	2,133	0	0	0	814	2,947
2137	5,494	10,098	0	851	896	17,339
2138	2,128	0	0	0	811	2,939
2139	3,811	5,049	0	425	854	10,139
2140	2,133	0	0	0	814	2,947
2141	5,494	10,098	0	851	896	17,339
2142	2,128	0	0	0	811	2,939
2143	5,494	10,098	0	851	896	17,339
2144	2,133	0	0	0	814	2,947
2145	5,494	10,098	0	851	896	17,339
2146	2,128	0	0	0	811	2,939
2147	5,494	10,098	0	851	896	17,339
2148	2,133	0	0	0	814	2,947
2149	7,177	15,147	0	1,276	939	24,539
2150	2,128	0	0	0	811	2,939
2151	2,128	0	0	0	811	2,939
2152	2,133	0	0	0	814	2,947
2153	2,128	0	0	0	811	2,939
2154	2,128	0	0	0	811	2,939
2155	2,415	863	0	0	811	4,089
2156	2,133	0	0	0	814	2,947
2157	2,128	0	0	0	811	2,939
2158	2,128	0	0	0	811	2,939
2159	2,128	0	0	0	811	2,939
2160	2,133	0	0	0	814	2,947
2161	2,128	0	0	0	811	2,939
2162	2,128	0	0	0	811	2,939
2163	2,128	0	0	0	811	2,939
2164	2,133	0	0	0	814	2,947

*Prairie Island Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-005, Rev. 0  
 Section 3, Page 58 of 59*

**TABLE 3.6 (continued)**  
**SCENARIO 3**  
**PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 2**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2165	2,128	0	0	0	811	2,939
2166	2,128	0	0	0	811	2,939
2167	2,128	0	0	0	811	2,939
2168	2,133	0	0	0	814	2,947
2169	2,128	0	0	0	811	2,939
2170	2,128	0	0	0	811	2,939
2171	2,128	0	0	0	811	2,939
2172	2,133	0	0	0	814	2,947
2173	2,128	0	0	0	811	2,939
2174	2,128	0	0	0	811	2,939
2175	2,128	0	0	0	811	2,939
2176	2,133	0	0	0	814	2,947
2177	2,128	0	0	0	811	2,939
2178	2,128	0	0	0	811	2,939
2179	2,128	0	0	0	811	2,939
2180	2,133	0	0	0	814	2,947
2181	2,128	0	0	0	811	2,939
2182	2,128	0	0	0	811	2,939
2183	2,128	0	0	0	811	2,939
2184	2,133	0	0	0	814	2,947
2185	2,128	0	0	0	811	2,939
2186	2,128	0	0	0	811	2,939
2187	2,128	0	0	0	811	2,939
2188	2,133	0	0	0	814	2,947
2189	2,128	0	0	0	811	2,939
2190	2,128	0	0	0	811	2,939
2191	2,206	236	0	0	914	3,356
2192	2,291	473	0	0	916	3,680
2193	2,285	473	0	0	914	3,671
2194	2,324	591	0	0	914	3,829
2195	2,533	1,217	0	0	914	4,664
2196	2,370	709	0	0	916	3,995
2197	2,246	354	0	0	914	3,514

*Prairie Island Nuclear Generating Plant  
 Decommissioning Cost Analysis*

*Document X01-1617-005, Rev. 0  
 Section 3, Page 59 of 59*

**TABLE 3.6 (continued)**  
**SCENARIO 3**  
**PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 2**  
**SCHEDULE OF TOTAL ANNUAL EXPENDITURES**  
 (thousands, 2011 dollars)

Year	Labor	Equipment & Materials	Energy	Burial	Other	Total
2198	2,206	236	0	0	914	3,356
2199	2,285	473	0	0	914	3,671
2200	2,246	354	0	0	914	3,514
2201	2,285	473	0	0	914	3,671
2202	2,285	473	0	0	914	3,671
2203	2,285	473	0	0	914	3,671
2204	2,251	354	0	0	916	3,522
2205	2,285	473	0	0	914	3,671
2206	2,285	473	0	0	914	3,671
2207	2,246	354	0	0	914	3,514
2208	2,291	473	0	0	916	3,680
2209	2,285	473	0	0	914	3,671
2210	2,246	354	0	0	914	3,514
2211	2,285	473	0	0	914	3,671
2212	2,291	473	0	0	916	3,680
2213	2,246	354	0	0	914	3,514
2214	2,285	473	0	0	914	3,671
2215	2,285	473	0	0	914	3,671
2216	2,251	354	0	0	916	3,522
2217	2,246	1,259	0	0	10,806	14,311
2218	519	226	0	2	304	1,051
<b>Total</b>	<b>854,480</b>	<b>442,235</b>	<b>23,130</b>	<b>75,181</b>	<b>207,018</b>	<b>1,602,044</b>

Note: Columns may not add due to rounding

The NRC minimum required funding amounts, based upon the new formula from NUREG-1307, Revision 14, and the most recent statistics for comparison to the new cost estimates have been calculated. The remaining part of the section contains the support schedules for the information reported below:

### **NRC Minimum Calculation Supporting Schedules**

---

- B.1 NRC Minimum Historical Escalation
- B.2 NRC Minimum Calculation

January 1986 to April 2011

**1. Determine Most Recent Escalation Component**

	Base Conversion 1986	Value (2005 1Q - 11 base)	(Dec '05 Base)	Base Labor Adjustment Factor	Current Labor Adjustment Factor
	(1)	(2)	(3)	(4)	(5)
Labor (L)	48.1	100.00	112.2	2.08	2.33

Dept of Labor, Bureau of Labor Statistics, Monthly Labor Review, Apr 2011, Employment Cost Index, private industry, by region, Midwest

Industrial Power (P)	114.2			193.0	1.690
Light Fuel Oil (F)	82.0			325.1	3.965

Department of Labor, Bureau of Labor Statistics, Producer Price Index Data for Apr 2011; Industrial Power from Commodity code 0543, 500 kw demand, Midwest Region; Light Fuel Oils from Commodity code 0573

Burial (B)					
PWR - Blended					12.280
PWR - Direct					27.292
BWR - Blended					12.540
BWR - Direct					24.356

NUREG 1307, Report on Waste Burial, Revision 14 (Table 2.1 in November 2010)

**2. Calculate Energy Component (E)**

Equation	Industrial Power	Light Fuel Oil	Energy Component
Energy (PWR) = .58(P) + .42(F)	1.690	3.965	2.645
Energy (BWR) = .54(P) + .46(F)	1.690	3.965	2.736

**3. Calculate NRC Escalation Factor as of April 2011**

	Labor (L)	Energy (E)	Burial (B)	NRC Escalation Factor (6)
PWR - Blended	2.333	2.645	12.280	4.5617
PWR - Direct	2.333	2.645	27.292	7.8644
BWR - Blended	2.333	2.736	12.540	4.6307
BWR - Direct	2.333	2.736	24.356	7.2303

**Notes:**

- (1) = Base values from NRC Proposed Guidelines
- (2) = Conversion factor to convert from 1986 base to 2005 base.
- (3) = The most recent published value:
- (4) = (3) / (1), Labor only
- (5) = (4) \* (3) for Labor, Industrial Power, and Light Fuel Oil
- (6) = (.65 x L) + (.13 x E) + (.22 x B)

January 1986 to April 2011

**1. NRC Minimum Calculation in 1986 Dollars**

	Equation	MWt	1986 Minimum Calculation
Monticello (BWR)	= \$104 million + (0.009 * MWt)	1775	119,975,000
Prairie Island (PWR), per unit	= \$75 million + (0.0088 * MWt)	1677	89,757,600

**2. NRC Minimum Calculation in 2011 Dollars - Blended Burial Option**

	1986 Minimum Calculation	Escalation Rate	2011 Minimum Calculation (Blended)
Monticello (BWR)	119,975,000	4.6307	555,573,100
Prairie Island (PWR), per unit	89,757,600	4.5617	409,448,371

**3. NRC Minimum Calculation in 2011 Dollars - Direct Burial Option**

	1986 Minimum Calculation	Escalation Rate	2011 Minimum Calculation (Direct)
Monticello (BWR)	119,975,000	7.2303	867,450,512
Prairie Island (PWR), per unit	89,757,600	7.8644	705,885,411

## **Introduction**

The escalation rate for decommissioning costs is an important element in determining the appropriate investment strategy, funding contributions and the computation of the annual nuclear decommissioning external sinking fund accrual. This rate is used to inflate the 2011 decommissioning cost estimate out to the time that expenditures are predicted to occur. Since the decommissioning costs were provided by TLG Services, Inc. (“TLG”) in 2011 dollars (i.e., they are “real” costs), the escalation rate considers only the projected increases in costs from 2011 out to the estimated years of the final decommissioning expenditures. This study utilizes long-range inflation and escalation assumptions provided by Pacific Global Advisors LLC (“PGA”).

## **Economic Forecast**

The trend projection used for escalation is a baseline scenario based on a steady long-term real GNP growth of 2.5%. It assumes that the economy suffers no major long-term mishaps, but grows smoothly, in the sense that actual output follows potential output relatively closely. This projection is best described as depicting the mean of all possible paths that the economy could follow in the absence of major long-term disruptions. Such disruptions include large oil price shocks, untoward and persistent swings in macroeconomic policy, or excessively rapid increases in demand. The trend projection can be considered as an unbiased reflection of the future performance of the economy. The real GNP forecast of 2.5% is slightly below the 3.5% average since 1929 and the 3.3% average since World War II.

The 2011 decommissioning cost estimates (60-Year Schedule) for example for Monticello and Prairie Island generating plants (see Schedule A (A.2 and A.7)) depict an overall expenditure period from 2033 to 2078 for the Prairie Island plant and from 2030 to 2091 for the Monticello plant. The expenditure pattern requires the estimation of an escalation rate to 2091.

## **Inflation Factors**

Inflation is the decrease in the purchasing power of money or the increase in the prices of goods and services. A general rate of inflation has little to no direct relationship in escalating a decommissioning cost estimate and is generally lower than more specific methods of estimation. Decommissioning is a unique combination of functions with many operations that are not

performed often in industry, and it may be more consistent to use a decommissioning-specific inflation factor.

PGA has refined the analysis surrounding the calculation of an appropriate escalation rate and believes its methodology provides an appropriate estimate of the escalation rate. TLG provides a detailed decommissioning cost estimate that is largely site specific for the Monticello and Prairie Island plants. These site-specific decommissioning cost components need only be linked with appropriate escalation.

PGA breaks escalation down into two components: inflation and non-inflation escalation. Non-inflation escalation reflects idiosyncratic costs for decommissioning nuclear power plants, above and beyond the escalation associated with inflation. During the period of 'active' decommissioning, labor is the dominant cost, comprising about 60% of total (Source: TLG).

The long-term escalation rates used in this analysis are as follows

<b>Escalation Component</b>	<b>Trend Projection</b>
Inflation	1.63%
Non-inflation escalation (Operations/Radiological)	2.00%
<b>Total escalation (Operations/Radiological)</b>	<b>3.63%</b>
Non-inflation escalation (ISFSI/Site Restoration)	1.00%
<b>Total escalation (ISFSI/Site Restoration)</b>	<b>2.63%</b>

Long-term expected inflation is assumed to be 1.63%, which is estimated from the expected inflation implied in long-term US swap rates. The long-term risk-free (swap) rate is observed to be 2.63% and assuming the long-term real rate of interest is 1.00%, implies an expected inflation of 1.63%.

Non-inflation escalation is assumed to be 2.00% until plant operations and radiological decommissioning activities are completed and then 1.00% thereafter.

The overall escalation rates in the above table should be compared with the 2.89% escalation rate in the 2008 study and the approved escalation rate of 3.61% from the 2005 study.

### **Decommissioning Cost Breakdown and Escalation**

PGA related the calculation of the escalation rate to the detailed cost categories provided by the site specific decommissioning cost analysis performed by TLG.

The TLG cost estimates are divided into five components or categories: labor, materials and equipment, energy, burial, and other. PGA begins its forecast by separating inflation and other costs, and separating labor from the other four sources.

Inflation is the general increase in all prices across the economy. If all costs in every industry were analyzed, in aggregate they must increase by inflation. Therefore, an assumption of costs growing by more than inflation requires that other costs somewhere are growing less. We assume that the non-labor parts of the costs grow at 1% more than inflation. In general, this increase would constitute a 'conservative' assumption. However, given regulatory uncertainty and the complexities of forecasting technical change, the assumption that other costs grow faster than inflation seems reasonable.

According to economic theory, labor costs increase by inflation plus productivity (merit). We have assumed merit increases are 1.7% per year, consistent with a 2.50% long-term real GNP growth and that labor productivity is 70% of GNP (meaning that capital and other components are 30%). For example, GNP growth was 3.3% from 1947 to 2010, while labor productivity growth was 2.2%, 69% of GNP growth.

Approximately 60% of decommissioning costs are labor in the earlier years. Therefore, approximately half (1% of an assumed 2%) non-inflation escalation comes from labor productivity increases and the other half comes from other non-labor factors. Since labor ceases to be a major expense after some future time, the non-inflation escalation is reduced to 1% subsequently.

### **How the Escalation Rate is Applied**

A critical aspect of the valuation procedure is to ensure that assumptions are consistent between asset and liability growth. The PGA model assumes that:

Expected cost (liability) growth = inflation + non-inflation escalation

Expected pre-tax asset returns = inflation + real interest rate  
+ risk premium + liquidity and other  
premiums

Note that inflation increases both pre-tax asset returns and decommissioning costs (i.e., the liability) equally. Furthermore, in the absence of taxes, inflation would be 'neutral' to the valuation, which is consistent with economic theory based on 'real' liability cash flows. The introduction of taxes, however, changes the analysis somewhat. Taxation means that lower inflation helps improve funded status, as the reduction in liability escalation will exceed the reduction in the after-tax asset return.

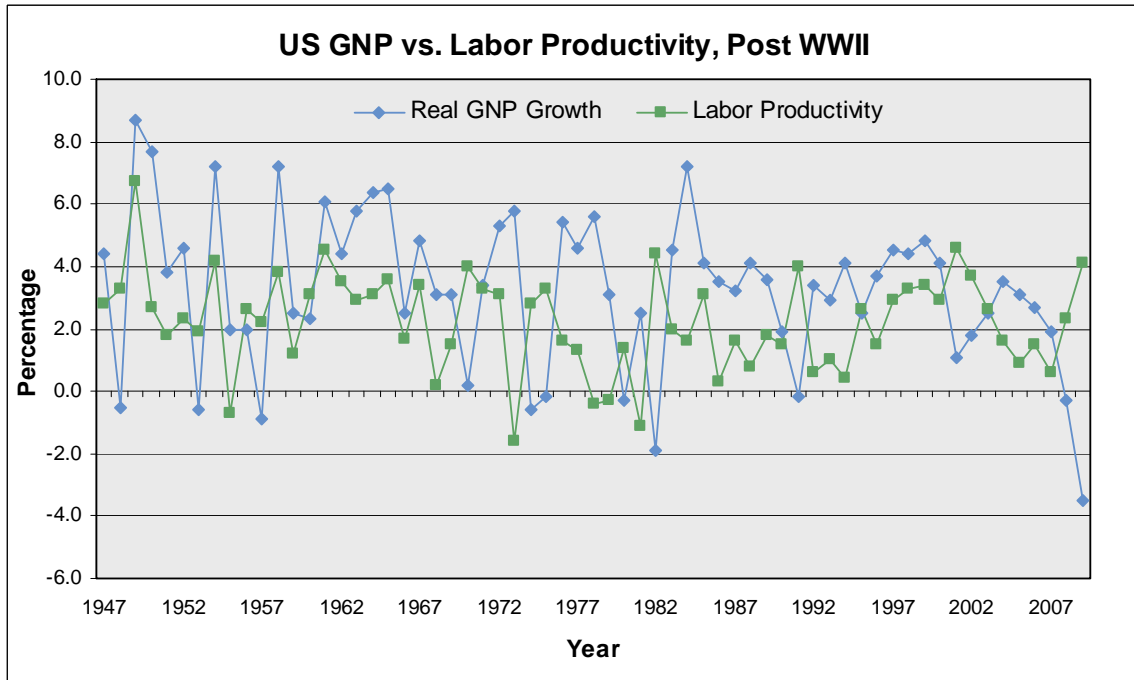
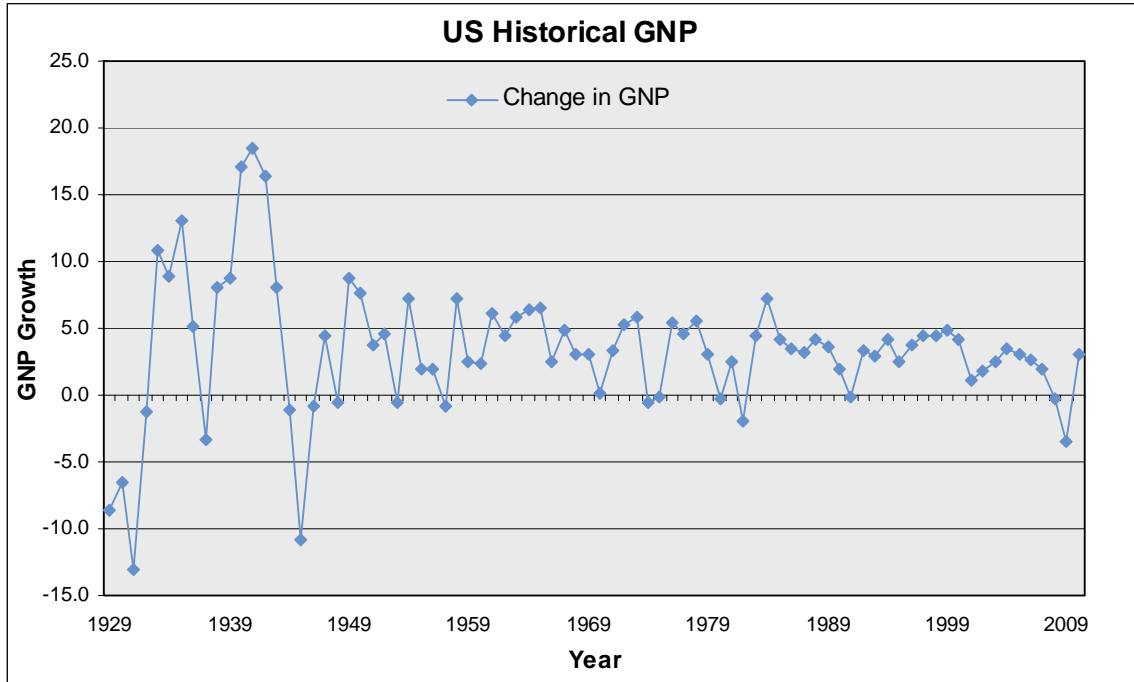
The other variables, however, have major implications for the analysis, since they aren't 'offset' in the same way as inflation. In general, the most important variables are non-inflation escalation, the real rate of interest, and the risk premium associated with the growth portfolio assets.

The escalation rate is likely the most volatile aspect of estimating the decommissioning cost recovery. However, a triennial review with revised economic forecasts will continually provide the opportunity to adjust for the long-term effects of inflation on an ongoing basis.

### **Historical Real GNP and Labor Productivity**

In order to provide some context for the escalation assumptions presented above, below we present charts of historical real GNP and labor productivity for the US economy.

Analysis indicates that real GNP growth and Labor productivity have poor year-on-year correlation, but the correlation is strong over longer time periods. The assumption used in the current analysis is that the shares of labor and capital stay the same as the historical share, meaning that the country neither shifts in 'favor' of capital or labor in terms of its percentage of economic growth (i.e., real GNP growth).



## Background

In its order dated March 23, 2006, in Docket No. E002/D-05-1648, the Commission specified amounts the Company should place in an external fund for eventual decommissioning of our nuclear plants. The Company was ordered to fund, on a monthly basis, both a tax qualified trust (“qualified”) and a non-tax qualified (“non-qualified”) fund.

In a supplemental order to the above docket, dated July 20, 2006, the Commission authorized the Company to set up an escrow fund due to the life extension initiatives taking place at the nuclear plants. The 2006 Company contributions were made to an escrow fund, which is not technically a nuclear decommissioning account as defined by the NRC; however, the funds in the escrow account are to be ready to be placed into the qualified fund (i.e., “poured-over”).

The Company is required to review the financial parameters, the funding methodology, and cost estimate every three years. In between triennial filings, the Company submits an Informational Letter annually discussing fund performance.

BNY Mellon is the trustee for the Company's external nuclear decommissioning funds (the “Funds”). The primary duty of the trustee for the Funds is the safe custody of the assets of the Funds including handling the settlement of all purchases and sales whether placed by the trustee or by an independent investment manager. No cash is ever sent to the managers. The trustee has limited investment duties other than the responsibility for keeping cash balances temporarily invested. The trustee can also screen certain investment transactions of the independent managers to verify that the transactions do not violate any applicable investment restrictions. Other duties include paying income taxes on the earnings of the qualified trust (taxes on a non-qualified escrow fund are paid by the Company), paying invoices for services for the trust and investment managers, and keeping accurate records of all of its activities with respect to the Funds.

The Company currently has ten investment managers to manage the assets of the qualified trust as follows:

- *Parametric manages the developed equity component, both US and EAFE*
- *Eaton Vance, an affiliate of Parametric, manages the emerging market equity component*

- *Delaware Investment Advisors manages the core fixed income component*
- *Shenkman Capital Management manages a portfolio of high yield debt*
- *Wellington Management Company manages a portfolio of emerging market debt*
- *Aurora Investment Management manage a hedge fund of funds*
- *Archstone Partners manage a hedge fund of funds*
- *The Townsend Group manages a portfolio of real estate*
- *Gresham Investment Management manages a portfolio of commodities*
- *Stepstone manages a portfolio of private equity*

The assets of the non-qualified escrow fund are managed by Pacific Global Advisors LLC (“PGA”), a subsidiary of Pacific Life Insurance Company.

These independent managers are considered fiduciaries for the Funds and have complete authority to invest as long as the chosen investment meets the guidelines as included in each of the managers’ investment advisory contracts or other written agreement.

To review investment performance there are two basic comparisons to be made: (1) performance of similar investments over time, and (2) comparison of market value to the original cost (book value). When making these comparisons, the current market value of the fund is used because it represents the value of the securities if they were sold today. For financial accounting (book) purposes, the Company records the actual purchase price (original cost) of the investments. Quarterly, a market value adjustment journal entry is made to book any unrealized gain or losses to special regulatory accounts per SFAS No. 115. The basic difference between the market and book values is that book value does not recognize any unrealized gains or losses. In addition it should be noted that trustee fees, investment management fees and income taxes also are paid from these Funds, thereby impacting overall fund performance.

The trustee statements for the qualified fund are a part of Schedule E and the trustee statements for the escrow fund are a part of Schedule F and show the current holdings for each respective fund by operating unit and fund manager.

## Historical Fund Earnings

The pre-tax time weighted annual return for the qualified trust fund is 4.5% for the period 03/15/91 - 06/30/11. As of 6/30/2011 the qualified trust fund has an unrealized loss of approximately \$14 million. The tax impact of this unrealized loss would have little impact on the returns to date.

Another item that should be noted is that the year-to-year returns can fluctuate significantly and that the long-term nature of these Funds should be emphasized. For example, the qualified trust fund earned 10.4% in 1993, (4.1)% in 1994, 12.7% in 1995, 3.0% in 1996, 7.2% in 1997, 6.2% in 1998, (3.2)% in 1999, 10.1% in 2000, 5.5% in 2001, 10.0% in 2002, 2.9% in 2003, 3.2% in 2004, 1.4% in 2005, 6.2% in 2006, 4.9% in 2007, (18.4)% for 2008, 20.9% for 2009 and 11.8% for 2010.

The time weighted annual return for the escrow fund is 3.3% for the period 10/01/06 - 06/30/11, 4.6% for the calendar year 2007, 0.2% in 2008, 8.1% in 2009 and 1.4% in 2010. Therefore, it is very important to concentrate on long-term returns and not the year-by-year results.

Schedules E and F show the historical results of the qualified trust funds and escrow trust funds (for the Minnesota jurisdiction only), including interest earned, realized gains and losses, and expenses incurred from 2008 through August 31, 2011. The qualified trust fund is invested by operating unit per current IRS rules; thus, the earnings are shown accordingly. The rates stated in an earlier section for the time-weighted average were before taxes and fees.

## Analytical Method

The three objectives of this study are to determine recommendations for the following:

1. Investment strategy, i.e., the composition of the investment portfolio
2. Contributions strategy, i.e., the annual annuity payment amount required to fund the decommissioning costs
3. Escrow strategy, i.e., the decision about whether to pour-over escrow assets into the qualified trust and potentially to invest escrow assets with a longer term focus.

This study uses the PGA's NDT model, a robust analytical tool that models decommissioning costs (liabilities) and investments (assets) to address the above objectives.

PGA's NDT model involves two components. The first is a liability model, which captures the projected decommissioning costs along with the uncertain escalation of these costs through time. The calculation of the NDT liability involves the following steps: (i) obtaining the current decommissioning costs from TLG Services, Inc. ("TLG"), the consulting engineer; TLG's estimates are in 'real' dollars (ii) escalation of the real decommissioning cash flows to account for realized and expected future inflation and non-inflation escalation, and (iii) calculation of the present value of the escalated cash flows back to the valuation date, using the expected return on assets as the discount rate.

The second component is an asset model, which captures the NDT investments and which includes: (i) the escrow account (or other non-qualified fund), (ii) the qualified NDT fund and (iii) a 'pour-over' rule for moving funds from the escrow to the qualified fund.

The study includes an analysis of the expected evolution of the assets and liabilities, along with a stochastic analysis of the risks involved.

### **Method – Determining Investment Strategy**

In light of the benefits of the Energy Policy Act of 1992 for nuclear decommissioning trust investment management, the Company has established a nuclear decommissioning investment policy with the goal to maximize after-tax portfolio returns and minimize aggregate portfolio risk for external fund investing. This policy was approved in the 1993 filing. Accomplishing this goal requires finding the combination of assets that optimizes the after-tax risk/return characteristics of the fund.

PGA was engaged by the Company to conduct an asset allocation study to determine an appropriate investment strategy for trust assets intended for the eventual decommissioning of the Prairie Island and Monticello nuclear generating plants.

This process is called asset allocation optimization. Different mixes of assets can produce hundreds, or even thousands, of alternative combinations of risk and returns. As a result asset allocation computer models have been developed to evaluate the various possible asset mixes and determine those combinations that are likely to deliver optimal performance in terms of risk and return.

Such a model has been used in this study to perform a long-term optimization of the asset allocation for the Company's investments. In any investment there is always a trade-off between risk and the rate of return on that investment. Typically, strategies with high expected returns also come with high risk and vice versa. The model used in this study optimizes the trade-off between risk and return over the long term. If on the one hand too little risk is taken, then there is a significant chance that the trust remains underfunded, necessitating very large contributions into the trust (annuities) in later years. If on the other hand too much risk is taken, there is a risk of significant underfunding of the trust in the future, or of significant overfunding of the trust (which because of the difficulty of removing assets from the qualified trust is also highly undesirable and value destroying).

### **Method – Determining Contributions**

Contributions are calculated in terms of the annual annuity payment amounts required to fund the difference between liabilities (the present value of decommissioning cash flows) and the projected asset level at the start of decommissioning. These annual required payment amounts are re-calculated every three years.

The projected asset level in the future is calculated by applying the expected asset returns at any point in time to the pool of assets.

In the study, the 'liabilities' are calculated as the present value of all the decommissioning costs. The present value is calculated in a two-stage process by:

1. Escalating the real decommissioning cash flows by the escalation factors discussed in Schedule C.
2. Discounting the escalated cash flows using the expected return on the asset portfolio.

As a result, the present value of the liabilities will depend on the escalation of the decommissioning costs and the expected return of the chosen investment portfolio. Because inflation impacts both the escalation of cash flows and the pre-tax discount rate, it only has a small impact on the value of the liabilities from the tax effects of changed inflation assumptions.

A measure of the degree to which assets will be able to meet the decommissioning cost liabilities is the funded status which is the ratio of the value of assets to the value of liabilities, expressed as a percentage.

### **Assumptions – Overview**

The assumption set that goes into the PGA model involves three different types of assumptions which are developed in a consistent manner:

- *Investment assumptions:* These include long-term expected returns, volatilities (standard deviations of returns) and correlations for different types of assets.
- *Other economic assumptions:* These include assumptions for long-term inflation rate and the long-term escalation of decommissioning costs.
- *Tax assumptions:* These include assumptions for state and federal tax rates and deductibility.

### **Investment and Economic Assumptions**

The development of consistent investment assumptions for this model goes hand-in-hand with the development of other economic assumptions about inflation, interest rates, GNP growth, etc.

The return assumptions for each type of asset represent expected market returns for that asset class on a forward-looking basis. The assumptions reflect a blend of rigorous analysis of historical performance and the forward looking views of the financial markets, as revealed through the yields on long term bonds, the price-earnings ratios of the major stock market indices, implied inflation expectations in TIPS (Treasury Inflation Protected Securities), etc.

This methodology will produce more conservative expected rates of return than an analysis that looks simply at historical averages. The important distinction is that, in using this methodology, the asset return is tied to the inflation rate, so at lower inflation rates investors require lower rates of return. Current markets indicate

much lower expected inflation over even long-term horizons than historical averages.

The inflation rate used for expected returns is matched to the inflation rate used for liability growth, enforcing the consistency of asset and liability assumptions.

Expected asset returns (on a pre-tax basis) are developed via a building-block approach that starts with the expected long-term *real* interest rate and expected long-term inflation. Together these two define the expected long-term *nominal* risk-free interest rate. Expected returns for different assets are then determined by adding appropriate risk premiums to this. In other words, we have the following relationship:

$$\begin{aligned} \text{Expected pre-tax asset return} &= \text{inflation} + \text{real interest rate} \\ &+ \text{risk premium} + \text{liquidity premium} \end{aligned}$$

The next step in the assumption setting process involves an analysis of historical risks and correlations of asset class returns to which subjective judgment is applied. The result of this analysis is incorporated into a risk matrix from which expected long-term risk premiums are estimated for each asset class.

The long-term nominal return expectations are then determined by combining the asset class risk premiums with expected inflation and real risk-free rate assumptions. As a final consideration, the nominal return assumptions are blended with current market conditions to develop long-term equilibrium expectations. The return and risk expectations for each asset class incorporate assumptions about historical return relationships, current financial market conditions and the degree of global capital market integration.

The assumptions pertaining to the volatility of investment returns are based on observed experience and calculated in terms of the standard deviation of historical asset returns.

The following table shows the expected return and volatility assumption inputs:

### Long-term Investment Assumptions for 2011

<b>Asset Class</b>	<b>Expected Returns*</b> Before tax, fees and alpha**	<b>Expected Returns*</b> After tax, fees and alpha**	<b>Volatility of Returns</b> After-tax, fees and alpha**
Cash	2.63%	1.83%	0.36%
<b><u>Equities</u></b>			
US equity - Large cap	8.39%	6.02%	11.91%
US equity - Small cap	9.98%	7.89%	18.04%
Non-US equity - EAFE	8.95%	7.11%	15.51%
Non-US equity - Emerging Markets	11.92%	9.14%	20.57%
<b><u>Alternatives</u></b>			
Alternatives - Hedge fund of funds	6.63%	5.14%	5.23%
Alternatives - Private equity	11.87%	9.65%	17.86%
Alternatives - Real estate	6.99%	5.40%	6.31%
Alternatives - Commodities	7.60%	5.84%	12.81%
<b><u>Fixed income</u></b>			
Fixed income - BarCap Aggregate	3.45%	2.81%	3.79%
Fixed income - High yield	7.50%	5.59%	9.38%
Fixed income - Emerging Markets debt	6.82%	6.01%	9.92%
LDFI (Long Duration Fixed Income)	5.08%	3.85%	8.48%
Treasury Strips	4.15%	3.32%	10.20%
Intermediate Municipal bonds	2.40%	2.39%	4.28%
Long Municipal bonds	3.91%	3.75%	7.78%

\* Returns in this table are arithmetic returns, rather than geometric returns.

\*\* "Alpha" refers to the incremental investment returns generated by investment managers; "fees" refers to investment manager fees; "tax" refers to state and federal taxes.

These expected return assumptions are based on an assumed long-term risk-free rate of 2.63%, consisting of a 1.00% real asset return and expected inflation of 1.63%.

The correlations between the investment returns of different asset classes are important characteristics of the asset model, in addition to the expected returns and the volatility of returns. Recent and long-term histories are used as a guide to setting these parameters. The table below shows the correlations between asset returns used in the PGA model.

### Long-term Investment Return Correlations for 2011

	Cash	US equity - Large cap	US equity - Small cap	Non-US equity - EAFE	Non-US equity - EM	Fixed income - Lehman Agg	Fixed income - High yield	Fixed income - EM debt	Alternatives - HFoF	Alternatives - Private equity	Alternatives - Real estate	Comodities	LDFI - Lehman	Long govt/corp	Treasury strips	Intermediate Municipal bonds	Long Municipal bonds
Cash	1.00																
US equity - Large cap	(0.08)	1.00															
US equity - Small cap	(0.07)	0.89	1.00														
Non-US equity - EAFE	(0.06)	0.89	0.82	1.00													
Non-US equity - EM	0.05	0.83	0.79	0.89	1.00												
Fixed income - Lehman Agg	0.03	(0.09)	(0.11)	0.03	0.01	1.00											
Fixed income - High yield	(0.16)	0.67	0.67	0.70	0.71	0.19	1.00										
Fixed income - EM debt	(0.10)	0.54	0.52	0.59	0.62	0.50	0.71	1.00									
Alternatives - Hedge fund of funds	0.07	0.60	0.61	0.72	0.78	(0.01)	0.62	0.49	1.00								
Alternatives - Private equity	(0.12)	0.84	0.92	0.78	0.79	(0.10)	0.71	0.49	0.67	1.00							
Alternatives - Real estate	(0.02)	0.35	0.41	0.35	0.30	0.13	0.35	0.30	0.19	0.36	1.00						
Alternatives - Commodities	(0.03)	0.34	0.30	0.50	0.51	0.06	0.36	0.32	0.56	0.29	0.15	1.00					
LDFI	(0.09)	0.15	0.14	0.26	0.25	0.82	0.55	0.70	0.19	0.16	0.23	0.22	1.00				
Treasury Strips	0.02	(0.15)	(0.14)	(0.07)	(0.09)	0.83	(0.14)	0.25	(0.16)	(0.17)	0.01	(0.10)	0.63	1.00			
Intermediate Municipal bonds	(0.02)	(0.10)	(0.07)	(0.04)	(0.04)	0.70	0.23	0.39	0.06	(0.04)	0.11	(0.09)	0.58	0.47	1.00		
Long Municipal bonds	(0.02)	(0.10)	(0.07)	(0.04)	(0.04)	0.70	0.23	0.39	0.06	(0.04)	0.11	(0.09)	0.58	0.47	0.82	1.00	

### Taxation Assumptions

The taxation assumptions along with the investment and other economic assumptions are important inputs for the asset allocation model and the analysis performed. The following table shows the applicable tax rates for the qualified trust assets and the escrow account assets.

Municipal bonds are assumed to be free of federal taxes; therefore, only state taxes are imposed. In practice, some municipal bonds will be exempt from state taxes also, specifically municipal bonds issued by Minnesota, but these are assumed to be a small percentage of the portfolio.

Treasury bonds are exempt from state taxes. Therefore, treasuries are taxed only at the federal rate and not at the state tax rate.

The Company's view is that US stocks in Qualified Fund do not earn a dividends' received deduction, therefore stock returns s are assumed to be fully taxed.

<b>Tax Element</b>	<b>Tax Rate</b>
Federal tax rate for the qualified trust	20%
Federal tax rate for the escrow account	35%
State tax on both the qualified trust and escrow account	9.8%
<i>Note: State taxes are deductible from federal taxes.</i>	

As a result, the total tax rates are (assuming that investments are fully taxed – this is modified for munis and Treasuries):

<b>Portfolio</b>	<b>Effective Tax Rate</b>
Qualified trust	27.84%
Escrow account	41.37%

These tax assumptions are incorporated into the after-tax expected returns in the table of investment assumptions above.

### **Results – Investment Strategy**

The recommended investment strategy is based on a particular application of what is called the “separation theorem” in portfolio theory. In the context of identifying an optimal investment strategy for the decommissioning assets, the separation theorem can be interpreted as stating that every portfolio on the efficient frontier can be constructed from a combination of the most efficient “growth portfolio” and an efficient low-risk portfolio.

As a result of applying the separation theorem and running PGA’s portfolio optimization model, the recommended investment strategy involves a mix between a portfolio invested in growth assets and a portfolio invested in bonds. The mix is determined by the following rule:

*Seven years prior to each decommissioning cash flow, the portion of the growth assets that are required to make that payment is reallocated into bonds.*

This strategy is “efficient” from an asset-liability management (ALM) perspective in order to reduce the risk that market volatility significantly reduces the value of this portion of the assets just when they are needed to make payments.

A period of seven years is needed for assets to earn their ‘long-term’ rate of return with some degree of confidence. As discussed above, year to year variation can be very large for high returning assets, and seven years, the time between two long economic cycles, is needed to justify long-term assumptions. Therefore, as decommissioning payments come due at less than seven years, the assumption is that the funds are switched to bonds.

Note that the portion of the portfolio assigned to growth assets changes over time based on how large expected decommissioning payments will be over the next seven years. The recommended asset allocation for the growth assets are shown in the table below:

### **Composition of the Growth Portion of the Portfolio**

<b>Asset Class</b>	<b>Weight</b>
Cash	<b>0.00%</b>
<b><u>Equities</u></b>	
US equity - Large cap	<b>13.73%</b>
US equity - Small cap	<b>4.12%</b>
Non-US equity – EAFE	<b>10.05%</b>
Non-US equity – Emerging Markets	<b>5.02%</b>
<b><u>Alternatives</u></b>	
Alternatives - Hedge fund of funds	<b>10.00%</b>
Alternatives - Private equity	<b>10.00%</b>
Alternatives - Real estate	<b>10.00%</b>
Alternatives - Commodities	<b>10.00%</b>
<b><u>Fixed income</u></b>	
Fixed income - BarCap Aggregate	<b>0.00%</b>
Fixed income - High yield	<b>5.00%</b>
Fixed income - Emerging Markets debt	<b>5.00%</b>
LDFI (Long Duration Fixed Income)	<b>17.08%</b>
Treasury Strips	<b>0.00%</b>
Intermediate Municipal bonds	<b>0.00%</b>
Long Municipal bonds	<b>0.00%</b>
<b><u>Total</u></b>	<b>100.00%</b>

Please note even the Growth Portion of the portfolio includes some bonds to provide diversification and efficiency. The ‘Growth Portion’ is not the same as the investment in equities.

In order to summarize expected investment returns and the volatility of returns we make the following assumptions regarding the escrow account:

- *Escrow asset association:* The assets in the escrow account are associated with each of the trusts in such a way to make the initial funded status of each trust as close as possible. This involves associating \$101 MM of escrow assets to Monticello, \$0 to Prairie Island 1 and \$13 MM to Prairie Island 2.
- *Pour-over base-case assumption:* The assets in the escrow account are kept separate and only poured into the associated qualified trust at the start of decommissioning for each plan.
- *Escrow base-case investment assumption:* Assume the escrow assets have the same asset allocation as the above portfolio.

The overall expected portfolio returns and volatilities for each plant’s NDT (qualified trust and escrow investments combined) are given in the table below.

### Expected Returns and Volatilities for the Recommended Strategy

<b>Nuclear Plant</b>	<b>Average Expected Investment Return*</b>	<b>Average Volatility of Returns</b>
<b>Monticello</b>		
Pre-decommissioning start	5.35%	7.75%
Post-decommissioning start	4.82%	6.96%
<b>Prairie Island I</b>		
Pre-decommissioning start	5.50%	8.03%
Post-decommissioning start	4.66%	7.03%
<b>Prairie Island II</b>		
Pre-decommissioning start	5.53%	8.09%
Post-decommissioning start	4.57%	6.94%

\* Returns in this table are geometric returns.

### Results – Contribution Strategy

The results of the contribution strategy are shown in the table below, which also shows the current values of the liabilities and assets (with and without the escrow association assumption above).

The results of this base-case expected analysis are annual contributions of \$9 MM for Monticello, \$2 MM for Prairie Island 1 and \$5 MM for Prairie Island 2, leading to a total annual contribution of \$16 MM.

The sinking fund calculations showing a year-by-year roll forward are given at the end of this Schedule.

**Contribution (Annuity) Amounts for each Plant  
with Current Values of Assets and Liabilities**

<b>Plant</b>	
<b><u>Monticello</u></b>	
Assets excluding escrow, \$ MM	463
Liability, \$ MM	675
Funded status excluding escrow, %	68%
Funded status excluding escrow, \$ MM	(213)
Escrow assets assigned to trust \$MM	101
Total assets including escrow, \$MM	564
Funded status with escrow, %	83%
Contribution p.a. (annuity), \$ MM	9
<b><u>Prairie Island 1</u></b>	
Assets excluding escrow, \$ MM	373
Liability, \$ MM	419
Funded status excluding escrow, %	89%
Funded status excluding escrow, \$ MM	(46)
Escrow assets assigned to trust \$MM	-
Total assets including escrow, \$MM	373
Funded status with escrow, %	89%
Contribution p.a. (annuity), \$ MM	2

<b>Plant</b>	
<b><u>Prairie Island 2</u></b>	
Assets excluding escrow, \$ MM	398
Liability, \$ MM	492
Funded status excluding escrow, %	81%
Funded status excluding escrow, \$ MM	(94)
Escrow assets assigned to trust \$MM	13
Total assets including escrow, \$MM	411
Funded status with escrow, %	83%
Contribution p.a. (annuity), \$ MM	5

### **Results – Escrow Strategy**

The above analysis assumed a base-case escrow strategy in which escrow assets are kept separate from qualified trust assets and only poured into the qualified trust at the start of decommissioning.

To analyze the pros and cons of this pour-over strategy, as well as other potential pour-over strategies, requires a stochastic analysis that takes account of the risks of overfunding alongside the risks of underfunding for different investment strategies.

PGA’s stochastic model allows the estimate of the best pour-over strategy (as well as the optimal investment strategy). The model produces a probability distribution of outcomes; many cases are estimated, whose median results are similar to the base case discussed above. However, in some cases the funds will be substantially overfunded and in some badly underfunded.

The benefit of immediate pour-over of the escrow into the qualified fund is that the Federal tax rate on qualified fund is 20%, lower than the 35% tax rate for the escrow account. However, because these assets become trapped in the qualified fund, the model imposes a cost of illiquidity of assets held in the qualified trust in excess of likely decommissioning needs. Therefore, the stochastic model can determine the best point at which the tax benefits and the potential for trapped cash are equivalent.

The model results indicate that the ‘optimal’ pour over is for a funded status of 75% to 85% based on the current time to decommissioning, approximately 20 years. That is, based on the model output, if the qualified trust is less than 75% funded, the escrow assets should be poured-over, because at such low funded levels, the potential for cash being trapped is low, so the tax benefits should be optimized. At funded status levels above 85%, the potential for overfunding should be avoided. At 75% - 85%, the two opposing benefits are roughly equal.

To analyze the total cost of decommissioning in present value terms we examine the Net Funding Cost (“NFC”), which is similar to the “Present Value (“PV”) of cumulative contributions plus shortfall” as discussed in the 2008 Triennial Filing.

NFC is defined as the present value of the cumulative contributions required to fully fund the liability prior to decommissioning discounted to present day’s dollars, plus the illiquidity ‘costs’ of having surplus cash trapped in the qualified trust, and plus the excess costs assigned to very large contribution requirements. It includes the contributions made in each year, plus the amount of any deficit (or less any usable surplus after tax adjustments) prevailing at the start of decommissioning. So, NFC represents the total costs in today’s dollars of funding the decommissioning process and its associated economic costs.

Net Funding Cost at Risk (“NFC-at-Risk”) is the corresponding measure of risk. It represents the difference between the 5% worst case outcome for NFC above its expected level. Strategies that minimize NFC and NFC-at-Risk are efficient strategies..

NFC-at-Risk is evaluated for different strategies via a stochastic simulation model that uses a very large number of scenarios based on stochastic projections of economic factors, such as equity returns, bond yields and returns, inflation, and non-inflation escalation.

## **Conclusion**

The analysis presented herein addresses the decisions relating to investment strategy, contribution strategy and escrow strategy.

In terms of investment strategy, PGA’s analysis has led to a recommended asset allocation for the growth portion of the assets that involves equities, fixed income and alternative assets. Furthermore, the portion of the assets required to meet each

decommissioning payment is switched from growth assets into bonds seven years prior to that payment.

The net result is expected after-tax returns of 5.35% to 5.53% for the funds for the three nuclear plants prior to the start of decommissioning and 4.57% to 4.82% after the start of decommissioning.

In terms of contribution strategy, PGA's analysis suggests a total annual contribution (i.e., annuity) of \$16 MM, corresponding to \$9 MM p.a. for Monticello, \$2 MM p.a. for Prairie Island 1 and \$5 MM p.a. for Prairie Island 2. These contribution levels assume that the escrow account is used in full and they are required to make up an aggregate underfunding amount of \$240 MM in present value terms (\$350 MM without the escrow, which would clearly require a higher contribution).

In terms of escrow strategy, the analysis shows that the optimal "pour-over" point for transferring assets from the escrow account and into the qualified fund corresponds to a funded status of approximately 75% - 85%.

MONTICELLO

Year	Decom Cash flows	Initial			QT			Escrow Return	Escrow contribution	Pour Over	Ending QT	Ending QT Growth Portfolio
		Initial Assets, QT	Escrow Assets	Bonds	Growth Portfolio	QT returns	QT Return					
2011		463	101	0	463	27	4.8	8.5	-	498	498	
2012		498	106	0	498	29	5.1	8.5	-	536	536	
2013		536	111	0	536	31	5.3	8.5	-	576	576	
2014		576	116	0	576	34	5.5	8.5	-	618	618	
2015		618	122	0	618	36	5.8	8.5	-	662	662	
2016		662	128	0	662	39	6.1	8.5	-	710	710	
2017		710	134	0	710	41	6.4	8.5	-	760	760	
2018		760	140	0	760	44	6.7	8.5	-	812	812	
2019		812	147	0	812	47	7.0	8.5	-	868	868	
2020		868	154	0	868	51	7.3	8.5	-	927	927	
2021		927	161	0	927	54	7.7	8.5	-	990	990	
2022		990	169	0	990	58	8.0	8.5	-	1056	1056	
2023		1056	177	72	984	60	8.4	8.5	-	1124	1053	
2024		1124	185	196	928	61	8.8	8.5	-	1194	998	
2025		1194	194	427	767	60	9.3	8.5	-	1262	835	
2026		1262	203	599	663	60	9.7	8.5	-	1330	731	
2027		1330	213	727	603	61	10.2	8.5	-	1399	672	
2028		1399	223	884	515	61	10.6	8.5	-	1469	585	
2029		1469	234	915	554	64	11.1	8.5	245	1787	872	
2030	91	1787	0	1022	765	80	-	-	-	1776	754	
2031	158	1776	0	998	778	80	-	-	-	1697	700	
2032	294	1697	0	907	790	78	-	-	-	1481	574	
2033	219	1481	0	679	802	70	-	-	-	1333	653	
2034	162	1333	0	519	813	65	-	-	-	1236	716	
2035	200	1236	0	411	824	62	-	-	-	1098	687	
2036	39	1098	0	264	834	58	-	-	-	1117	853	
2037	40	1117	0	273	843	58	-	-	-	1135	862	
2038	42	1135	0	283	852	59	-	-	-	1152	869	
2039	43	1152	0	427	726	57	-	-	-	1166	740	
2040	45	1166	0	516	650	56	-	-	-	1177	661	
2041	46	1177	0	564	614	55	-	-	-	1186	623	
2042	48	1186	0	610	576	55	-	-	-	1193	582	
2043	50	1193	0	601	592	55	-	-	-	1198	598	
2044	52	1198	0	615	583	55	-	-	-	1202	587	
2045	223	1202	0	644	558	55	-	-	-	1034	390	
2046	150	1034	0	480	554	49	-	-	-	933	453	
2047	94	933	0	405	528	45	-	-	-	883	479	
2048	94	883	0	401	483	42	-	-	-	832	431	
2049	21	832	0	341	490	40	-	-	-	851	509	
2050	55	851	0	353	498	41	-	-	-	837	485	
2051	75	837	0	331	506	41	-	-	-	803	471	
2052	46	803	0	290	513	40	-	-	-	797	507	
2053	74	797	0	276	521	40	-	-	-	762	486	
2054	97	762	0	234	528	39	-	-	-	704	470	
2055	26	704	0	169	535	37	-	-	-	716	546	
2056	26	716	0	174	542	38	-	-	-	727	553	
2057	27	727	0	178	548	38	-	-	-	738	559	
2058	28	738	0	183	555	39	-	-	-	748	565	
2059	28	748	0	188	561	39	-	-	-	759	571	
2060	29	759	0	193	566	40	-	-	-	769	577	
2061	30	769	0	198	572	40	-	-	-	779	582	
2062	31	779	0	203	576	41	-	-	-	789	586	
2063	32	789	0	208	581	41	-	-	-	799	590	
2064	33	799	0	214	585	41	-	-	-	808	594	
2065	33	808	0	220	588	42	-	-	-	816	597	
2066	34	816	0	225	591	42	-	-	-	824	599	
2067	35	824	0	231	593	42	-	-	-	831	600	
2068	36	831	0	237	594	43	-	-	-	838	601	
2069	37	838	0	244	595	43	-	-	-	844	601	
2070	38	844	0	250	594	43	-	-	-	850	600	
2071	39	850	0	267	583	43	-	-	-	854	587	
2072	40	854	0	293	561	43	-	-	-	857	563	
2073	41	857	0	319	538	42	-	-	-	858	540	
2074	42	858	0	345	513	42	-	-	-	858	513	
2075	43	858	0	373	484	41	-	-	-	856	482	
2076	44	856	0	405	451	40	-	-	-	852	447	
2077	59	852	0	436	416	39	-	-	-	833	397	
2078	71	833	0	455	377	38	-	-	-	799	344	
2079	70	799	0	465	335	36	-	-	-	765	300	
2080	72	765	0	480	285	33	-	-	-	726	247	
2081	74	726	0	492	234	31	-	-	-	683	191	
2082	79	683	0	525	158	28	-	-	-	632	107	
2083	78	632	0	536	96	24	-	-	-	579	42	
2084	80	579	0	542	37	21	-	-	-	520	0	
2085	82	520	0	520	0	18	-	-	-	456	0	
2086	87	456	0	456	0	16	-	-	-	385	0	
2087	86	385	0	385	0	13	-	-	-	312	0	
2088	114	312	0	312	0	11	-	-	-	209	0	
2089	91	209	0	209	0	7	-	-	-	126	0	
2090	82	126	0	126	0	4	-	-	-	48	0	
2091	49	48	0	48	0	2	-	-	-	0	0	
2092	0	0	0	0	0	0	-	-	-	0	0	
2093	0	0	0	0	0	0	-	-	-	0	0	
2094	0	0	0	0	0	0	-	-	-	0	0	
2095	0	0	0	0	0	0	-	-	-	0	0	
2096	0	0	0	0	0	0	-	-	-	0	0	
2097	0	0	0	0	0	0	-	-	-	0	0	
2098	0	0	0	0	0	0	-	-	-	0	0	
2099	0	0	0	0	0	0	-	-	-	0	0	
2100	0	0	0	0	0	0	-	-	-	0	0	

PRAIRIE ISLAND 1

Year	Decom Cash flows	Initial Assets QT	Initial Escrow		QT		Escrow Return	Escrow contribution	Pour Over	Ending QT	Ending QT Growth Portfolio
			Assets	Bonds	Growth Portfolio	QT returns					
2011		373	0	0	373	22	-	2.2	-	397	397
2012		397	0	0	397	23	-	2.2	-	422	422
2013		422	0	0	422	25	-	2.2	-	449	449
2014		449	0	0	449	26	-	2.2	-	477	477
2015		477	0	0	477	28	-	2.2	-	507	507
2016		507	0	0	507	29	-	2.2	-	539	539
2017		539	0	0	539	31	-	2.2	-	573	573
2018		573	0	0	573	33	-	2.2	-	608	608
2019		608	0	0	608	35	-	2.2	-	646	646
2020		646	0	0	646	38	-	2.2	-	685	685
2021		685	0	0	685	40	-	2.2	-	727	727
2022		727	0	0	727	42	-	2.2	-	772	772
2023		772	0	0	772	45	-	2.2	-	819	819
2024		819	0	0	819	48	-	2.2	-	869	869
2025		869	0	0	869	50	-	2.2	-	922	922
2026		922	0	37	885	53	-	2.2	-	976	939
2027		976	0	158	818	53	-	2.2	-	1032	873
2028		1032	0	396	636	51	-	2.2	-	1085	689
2029		1085	0	563	522	50	-	2.2	-	1137	574
2030		1137	0	674	463	51	-	2.2	-	1190	516
2031		1190	0	687	503	53	-	2.2	-	1245	559
2032		1245	0	713	532	56	-	2.2	-	1303	590
2033	47	1303	0	806	497	57	-	-	-	1313	507
2034	154	1313	0	801	513	58	-	-	-	1217	416
2035	302	1217	0	718	499	54	-	-	-	969	251
2036	213	969	0	456	513	46	-	-	-	802	346
2037	141	802	0	305	496	39	-	-	-	700	395
2038	16	700	0	191	509	36	-	-	-	720	530
2039	34	720	0	231	489	36	-	-	-	723	491
2040	17	723	0	222	500	37	-	-	-	742	520
2041	55	742	0	267	476	37	-	-	-	724	457
2042	19	724	0	239	485	36	-	-	-	742	503
2043	59	742	0	321	421	36	-	-	-	718	397
2044	20	718	0	363	355	33	-	-	-	731	368
2045	64	731	0	419	312	33	-	-	-	700	281
2046	21	700	0	434	267	31	-	-	-	710	276
2047	68	710	0	466	244	30	-	-	-	672	206
2048	23	672	0	427	244	29	-	-	-	678	250
2049	117	678	0	433	245	29	-	-	-	590	157
2050	115	590	0	346	244	26	-	-	-	501	155
2051	80	501	0	257	244	23	-	-	-	444	187
2052	81	444	0	200	244	21	-	-	-	383	184
2053	48	383	0	140	243	19	-	-	-	354	214
2054	18	354	0	112	242	18	-	-	-	354	242
2055	17	354	0	115	240	18	-	-	-	355	241
2056	20	355	0	119	237	18	-	-	-	353	235
2057	18	353	0	120	233	18	-	-	-	353	233
2058	18	353	0	123	230	18	-	-	-	353	230
2059	20	353	0	128	225	18	-	-	-	351	223
2060	19	351	0	132	220	17	-	-	-	349	218
2061	21	349	0	135	214	17	-	-	-	346	211
2062	21	346	0	139	207	17	-	-	-	341	202
2063	22	341	0	142	199	17	-	-	-	336	194
2064	22	336	0	145	191	16	-	-	-	331	185
2065	23	331	0	150	181	16	-	-	-	323	173
2066	24	323	0	154	169	15	-	-	-	315	161
2067	23	315	0	157	158	15	-	-	-	306	149
2068	25	306	0	162	144	14	-	-	-	295	133
2069	26	295	0	174	122	13	-	-	-	283	109
2070	25	283	0	177	106	12	-	-	-	270	93
2071	27	270	0	265	6	10	-	-	-	253	0
2072	28	253	0	253	0	9	-	-	-	234	0
2073	27	234	0	234	0	8	-	-	-	215	0
2074	29	215	0	215	0	8	-	-	-	194	0
2075	39	194	0	194	0	7	-	-	-	161	0
2076	29	161	0	161	0	6	-	-	-	138	0
2077	135	138	0	138	0	5	-	-	-	7	0
2078	8	7	0	7	0	0	-	-	-	0	0
2079	0	0	0	0	0	0	-	-	-	0	0
2080	0	0	0	0	0	0	-	-	-	0	0
2081	0	0	0	0	0	0	-	-	-	0	0
2082	0	0	0	0	0	0	-	-	-	0	0
2083	0	0	0	0	0	0	-	-	-	0	0
2084	0	0	0	0	0	0	-	-	-	0	0
2085	0	0	0	0	0	0	-	-	-	0	0
2086	0	0	0	0	0	0	-	-	-	0	0
2087	0	0	0	0	0	0	-	-	-	0	0
2088	0	0	0	0	0	0	-	-	-	0	0
2089	0	0	0	0	0	0	-	-	-	0	0
2090	0	0	0	0	0	0	-	-	-	0	0
2091	0	0	0	0	0	0	-	-	-	0	0
2092	0	0	0	0	0	0	-	-	-	0	0
2093	0	0	0	0	0	0	-	-	-	0	0
2094	0	0	0	0	0	0	-	-	-	0	0
2095	0	0	0	0	0	0	-	-	-	0	0
2096	0	0	0	0	0	0	-	-	-	0	0
2097	0	0	0	0	0	0	-	-	-	0	0
2098	0	0	0	0	0	0	-	-	-	0	0
2099	0	0	0	0	0	0	-	-	-	0	0
2100	0	0	0	0	0	0	-	-	-	0	0

PRAIRIE ISLAND 2

Year	Decom Cash flows	Initial Assets, Escrow QT	Initial		QT			Escrow Return	contribution	Pour Over	Ending QT	Ending QT Growth Portfolio
			Assets	Bonds	Growth Portfolio	returns	Return					
2011		398	13	0	398	23	0.6	4.8	-	426	426	
2012		426	14	0	426	25	0.7	4.8	-	456	456	
2013		456	14	0	456	27	0.7	4.8	-	487	487	
2014		487	15	0	487	28	0.7	4.8	-	520	520	
2015		520	16	0	520	30	0.8	4.8	-	556	556	
2016		556	17	0	556	32	0.8	4.8	-	593	593	
2017		593	17	0	593	35	0.8	4.8	-	632	632	
2018		632	18	0	632	37	0.9	4.8	-	674	674	
2019		674	19	0	674	39	0.9	4.8	-	718	718	
2020		718	20	0	718	42	1.0	4.8	-	765	765	
2021		765	21	0	765	44	1.0	4.8	-	814	814	
2022		814	22	0	814	47	1.0	4.8	-	866	866	
2023		866	23	0	866	50	1.1	4.8	-	921	921	
2024		921	24	0	921	54	1.1	4.8	-	980	980	
2025		980	25	0	980	57	1.2	4.8	-	1042	1042	
2026		1042	26	0	1042	61	1.3	4.8	-	1107	1107	
2027		1107	28	16	1091	64	1.3	4.8	-	1176	1160	
2028		1176	29	155	1021	65	1.4	4.8	-	1245	1091	
2029		1245	30	360	885	64	1.4	4.8	-	1314	954	
2030		1314	32	587	727	63	1.5	4.8	-	1382	795	
2031		1382	33	747	635	63	1.6	4.8	-	1450	703	
2032		1450	35	810	640	66	1.7	4.8	-	1520	710	
2033		1520	37	842	679	69	1.7	4.8	38	1633	791	
2034	20	1633	0	940	693	73	-	-	-	1686	746	
2035	177	1686	0	1015	671	74	-	-	-	1583	568	
2036	262	1583	0	907	676	71	-	-	-	1393	485	
2037	289	1393	0	744	649	64	-	-	-	1167	424	
2038	203	1167	0	517	650	56	-	-	-	1020	503	
2039	80	1020	0	403	617	50	-	-	-	990	586	
2040	40	990	0	376	614	49	-	-	-	998	622	
2041	79	998	0	426	573	48	-	-	-	968	542	
2042	43	968	0	404	564	47	-	-	-	972	568	
2043	85	972	0	491	480	45	-	-	-	932	441	
2044	46	932	0	538	394	42	-	-	-	928	390	
2045	91	928	0	593	335	40	-	-	-	877	284	
2046	49	877	0	604	274	37	-	-	-	865	261	
2047	97	865	0	621	243	36	-	-	-	803	182	
2048	53	803	0	560	244	34	-	-	-	784	224	
2049	148	784	0	539	245	33	-	-	-	669	130	
2050	145	669	0	426	243	29	-	-	-	553	127	
2051	105	553	0	309	243	25	-	-	-	473	163	
2052	102	473	0	229	243	22	-	-	-	392	163	
2053	58	392	0	151	242	19	-	-	-	353	203	
2054	18	353	0	113	240	18	-	-	-	353	241	
2055	17	353	0	116	238	18	-	-	-	354	239	
2056	20	354	0	120	235	18	-	-	-	352	233	
2057	18	352	0	121	231	18	-	-	-	352	231	
2058	18	352	0	125	227	18	-	-	-	352	227	
2059	20	352	0	130	222	17	-	-	-	349	220	
2060	20	349	0	133	216	17	-	-	-	347	214	
2061	21	347	0	136	211	17	-	-	-	343	207	
2062	21	343	0	140	203	17	-	-	-	338	198	
2063	22	338	0	144	195	16	-	-	-	333	189	
2064	22	333	0	147	186	16	-	-	-	327	180	
2065	23	327	0	151	175	15	-	-	-	319	168	
2066	24	319	0	155	164	15	-	-	-	310	155	
2067	23	310	0	159	152	14	-	-	-	301	143	
2068	25	301	0	164	137	14	-	-	-	290	126	
2069	26	290	0	175	114	13	-	-	-	277	101	
2070	25	277	0	179	98	12	-	-	-	263	84	
2071	27	263	0	257	6	9	-	-	-	245	0	
2072	28	245	0	245	0	9	-	-	-	226	0	
2073	27	226	0	226	0	8	-	-	-	207	0	
2074	29	207	0	207	0	7	-	-	-	184	0	
2075	40	184	0	184	0	6	-	-	-	151	0	
2076	30	151	0	151	0	5	-	-	-	127	0	
2077	124	127	0	127	0	4	-	-	-	8	0	
2078	8	8	0	8	0	0	-	-	-	0	0	
2079	0	0	0	0	0	0	-	-	-	0	0	
2080	0	0	0	0	0	0	-	-	-	0	0	
2081	0	0	0	0	0	0	-	-	-	0	0	
2082	0	0	0	0	0	0	-	-	-	0	0	
2083	0	0	0	0	0	0	-	-	-	0	0	
2084	0	0	0	0	0	0	-	-	-	0	0	
2085	0	0	0	0	0	0	-	-	-	0	0	
2086	0	0	0	0	0	0	-	-	-	0	0	
2087	0	0	0	0	0	0	-	-	-	0	0	
2088	0	0	0	0	0	0	-	-	-	0	0	
2089	0	0	0	0	0	0	-	-	-	0	0	
2090	0	0	0	0	0	0	-	-	-	0	0	
2091	0	0	0	0	0	0	-	-	-	0	0	
2092	0	0	0	0	0	0	-	-	-	0	0	
2093	0	0	0	0	0	0	-	-	-	0	0	
2094	0	0	0	0	0	0	-	-	-	0	0	
2095	0	0	0	0	0	0	-	-	-	0	0	
2096	0	0	0	0	0	0	-	-	-	0	0	
2097	0	0	0	0	0	0	-	-	-	0	0	
2098	0	0	0	0	0	0	-	-	-	0	0	
2099	0	0	0	0	0	0	-	-	-	0	0	
2100	0	0	0	0	0	0	-	-	-	0	0	