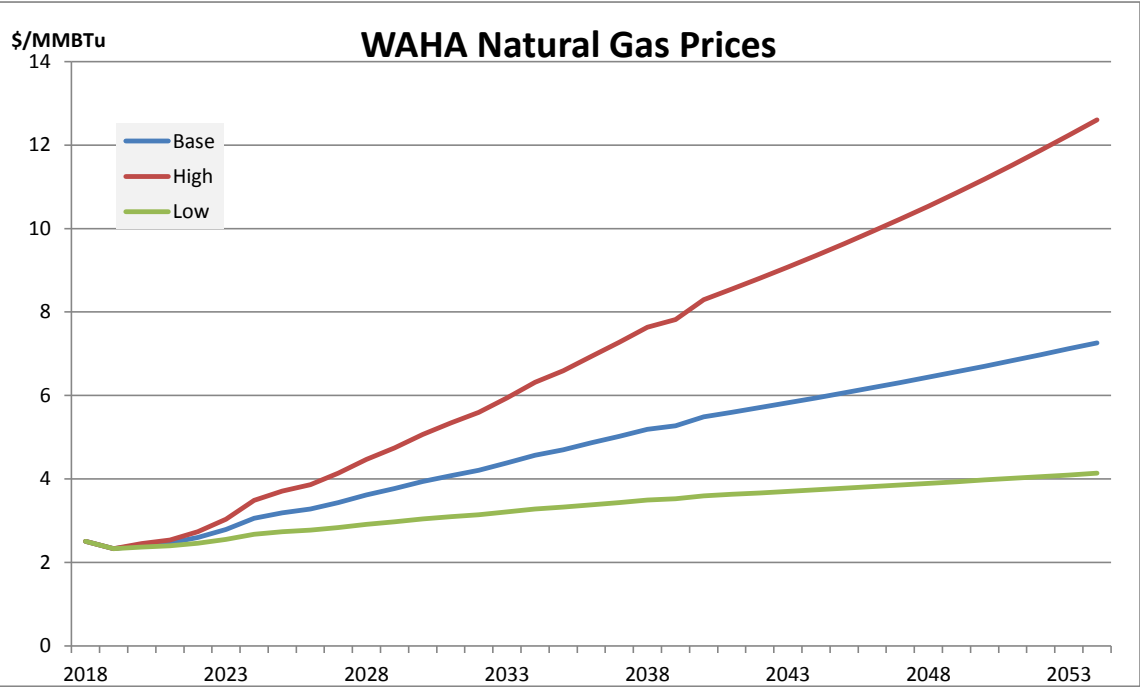


SPS Forecasted Power/Fuel Prices
Base, High, and Low Forecasts

**SPS Forecasted Power/Fuel Prices
Base, High, and Low Forecasts**

	Waha Natural Gas (\$/MMBtu)			Electricity (\$/MWh)		Oil (\$/MMBtu)	Coal (\$/MMBTu)	
	Base	High	Low	SPP-ON	SPP-OFF	TUC	HAR	TOL
2018	2.51	2.51	2.51	26.74	21.30	16.96	1.57	1.78
2019	2.33	2.33	2.33	25.73	20.85	17.06	1.57	1.79
2020	2.41	2.45	2.37	25.60	20.74	17.03	1.62	1.84
2021	2.47	2.53	2.40	25.98	21.05	17.06	1.66	1.89
2022	2.60	2.74	2.46	27.59	22.43	17.31	1.70	1.94
2023	2.79	3.04	2.55	29.63	24.08	17.59	1.75	1.99
2024	3.06	3.48	2.68	32.67	26.55	17.87	1.79	2.04
2025	3.19	3.71	2.73	33.99	27.56	18.16	1.84	2.09
2026	3.28	3.87	2.77	35.13	28.50	18.46	1.89	2.15
2027	3.44	4.14	2.84	36.61	29.69	18.76	1.94	2.21
2028	3.62	4.47	2.91	37.67	30.56	19.07	2.00	2.27
2029	3.77	4.74	2.97	38.91	31.71	19.38	2.06	2.34
2030	3.94	5.07	3.04	40.12	32.75	19.70	2.13	2.42
2031	4.08	5.34	3.10	41.06	33.75	20.02	2.29	2.58
2032	4.21	5.60	3.14	42.19	34.89	20.36	2.35	2.65
2033	4.38	5.94	3.21	43.63	36.33	20.70	2.41	2.72
2034	4.57	6.31	3.28	44.63	37.44	21.04	2.48	2.80
2035	4.70	6.59	3.32	45.61	38.46	21.40	2.55	2.88
2036	4.87	6.94	3.38	46.18	39.24	21.76	2.62	2.96
2037	5.02	7.27	3.44	47.11	40.31	22.13	2.69	3.04
2038	5.19	7.64	3.49	48.26	41.53	22.50	2.77	3.12
2039	5.27	7.82	3.52	48.56	42.09	22.88	2.85	3.21
2040	5.49	8.30	3.59	49.51	43.19	23.27	2.93	3.30
2041	5.60	8.55	3.63	50.51	44.07	23.67	2.96	3.34
2042	5.71	8.81	3.67	51.53	44.96	24.08	3.00	3.37
2043	5.83	9.07	3.70	52.57	45.87	24.49	3.04	3.41
2044	5.94	9.35	3.74	53.64	46.80	24.92	3.07	3.45
2045	6.06	9.63	3.78	54.73	47.75	25.35	3.11	3.49
2046	6.19	9.93	3.82	55.83	48.71	25.79	3.15	3.53
2047	6.31	10.23	3.86	56.97	49.70	26.24	3.19	3.57
2048	6.44	10.54	3.90	58.12	50.71	26.70	3.23	3.61
2049	6.57	10.86	3.93	59.30	51.73	27.17	3.27	3.65
2050	6.70	11.19	3.97	60.50	52.78	27.64	3.31	3.69
2051	6.84	11.52	4.01	61.72	53.85	28.13	3.36	3.74
2052	6.98	11.87	4.06	62.97	54.94	28.63	3.40	3.78
2053	7.12	12.23	4.10	64.25	56.06	29.13	3.45	3.83
2054	7.26	12.61	4.14	65.55	57.19	29.65	3.45	3.84



SPS Generic Unit Cost Data

GREENFIELD CT - OPERATIONAL AND COST MODELING DATA

Costs are in 2018\$

Data Description	Values		
	Summer, 96	Ann Avg, 59	Winter, 20
Ambient Dry Bulb Temperature, F			
Max (100%) Net Capacity MW	200.9	223.5	233.3
75% Net Capacity, MW	150.7	167.6	175.0
50% Net Capacity, MW	100.5	111.8	116.7
Supplemental / Ducts Capacity MW			
Supplemental / Ducts Heat Rate			
HR 100% Loading, BTU/kW-hr (HHV)	10,009	9,846	9,927
HR 75% Loading, BTU/kW-hr (HHV)	10,781	10,349	10,215
HR 50% Loading, BTU/kW-hr (HHV)	12,906	11,986	11,818

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Construction Costs k\$	\$1,770	\$24,664	\$31,350	\$49,008	\$19,725	126,517

Est Annual Capacity Factor, %

9%

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13
Fixed O&M Cost, \$/yr	\$ 212	\$ 212	\$ 212	\$ 212	\$ 212	\$ 212	\$ 212	\$ 1,018	\$ 212	\$ 212	\$ 212	\$ 212	\$ 212
Variable O&M Costs, \$/MWh	\$ 0.76	\$ 0.76	\$ 0.76	\$ 0.76	\$ 0.76	\$ 0.76	\$ 0.76	\$ 0.76	\$ 0.76	\$ 0.76	\$ 0.76	\$ 0.76	\$ 0.76
On-going Capx, \$/yr	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5	\$ 7,288	\$ 5	\$ 5	\$ 5	\$ 104	\$ 104

	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25
Fixed O&M Cost, \$/yr	\$ 212	\$ 1,018	\$ 212	\$ 212	\$ 212	\$ 212	\$ 212	\$ 212	\$ 1,139	\$ 212	\$ 212	\$ 212
Variable O&M Costs, \$/MWh	\$ 0.76	\$ 0.76	\$ 0.76	\$ 0.76	\$ 0.76	\$ 0.76	\$ 0.76	\$ 0.76	\$ 0.76	\$ 0.76	\$ 0.76	\$ 0.76
On-going Capx, \$/yr	\$ 104	\$ 8,427	\$ 104	\$ 182	\$ 182	\$ 182	\$ 182	\$ 182	\$ 7,621	\$ 338	\$ 338	\$ 338

EFOR	3.0%
CO2 Lbs/MMBTu	118
NOX Lbs/MMBTu	0.0302
PM10 Lbs/MWh	0.0144
SOX Lbs/MWh	0.0074
CO Lbs/MWh	0.6362
Wet or dry cooled	Dry
Supplemental firing	No

2x1 GREENFIELD- OPERATIONAL AND COST MODELING DATA

Costs are in 2018\$

Data Description	Values		
	Summer, 96	Ann Avg, 59	Winter, 20
Ambient Dry Bulb Temperature, F			
Max (100%) Net Capacity MW	584.0	645.0	676.4
75% Net Capacity, MW	438.0	483.8	507.3
50% Net Capacity, MW	292.0	322.5	338.2
30% Net Capacity, MW	175.2	193.5	202.9
Supplemental / Ducts Capacity MW	771.0	812.8	844.8
Supplemental / Ducts Heat Rate	7,709	7,319	7,370
HR 100% Loading, BTU/kW-hr (HHV)	6,921	6,856	6,909
HR 75% Loading, BTU/kW-hr (HHV)	7,482	7,336	7,322
HR 50% Loading, BTU/kW-hr (HHV)	7,510	7,383	7,409
HR 30% (Min) Loading, BTU/kW-hr (HHV)	8,751	8,492	8,436

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Construction Costs k\$	\$1,554	\$42,075	\$208,613	\$297,664	\$62,989	\$612,895
Est Annual Capacity Factor, %	60					

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13
Fixed O&M Cost, \$/k/yr	\$ 3,931	\$ 3,931	\$ 5,544	\$ 3,931	\$ 5,786	\$ 3,931	\$ 3,931	\$ 5,786	\$ 3,931	\$ 5,866	\$ 3,931	\$ 5,866	\$ 3,931
Variable O&M Costs, \$/MWh	\$ 1.15	\$ 1.15	\$ 1.15	\$ 1.15	\$ 1.15	\$ 1.15	\$ 1.15	\$ 1.15	\$ 1.15	\$ 1.15	\$ 1.15	\$ 1.15	\$ 1.15
On-going CapX, \$/k/yr	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,283	\$ 7,293	\$ 10	\$ 10	\$ 10	\$ 8,334	\$ 8,531	\$ 208

	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25
Fixed O&M Cost, \$/k/yr	\$ 3,931	\$ 6,028	\$ 4,236	\$ 6,028	\$ 3,931	\$ 3,931	\$ 6,189	\$ 3,931	\$ 6,189	\$ 3,931	\$ 6,189	\$ 3,931
Variable O&M Costs, \$/MWh	\$ 1.15	\$ 1.15	\$ 1.15	\$ 1.15	\$ 1.15	\$ 1.15	\$ 1.15	\$ 1.15	\$ 1.15	\$ 1.15	\$ 1.15	\$ 1.15
On-going CapX, \$/k/yr	\$ 208	\$ 208	\$ 7,491	\$ 7,647	\$ 364	\$ 364	\$ 13,369	\$ 8,687	\$ 8,999	\$ 676	\$ 676	\$ 676

EFOR	3.0%
CO2 Lbs/MMBTu	118
NOX Lbs/MMBTu	0.00727
PM10 Lbs/MWh	0.0059
SOX Lbs/MWh	0.0045
CO Lbs/MWh	1.3496
Wet or dry cooled	Dry
Supplemental firing	Yes

SPS Model Run Detail

**Summary Sheet - Scenario 11 Base
Case Model Run**

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
System Costs (\$000)													
Capital Revenue Requirements	142,723	142,879	148,541	148,127	144,687	142,765	143,204	139,100	141,597	138,214	133,321	135,696	127,558
Fixed O&M	244,348	218,490	251,255	263,657	255,596	225,655	205,788	180,003	155,709	153,777	146,034	205,151	322,571
Variable O&M	603,282	552,088	505,952	485,392	495,867	516,522	531,999	538,575	530,188	535,723	555,967	577,147	606,452
Emissions	0	0	0	0	0	0	0	0	0	0	0	0	0
Dump	0	0	-829	-2,400	-2,552	-2,775	-3,689	-2,627	-2,631	-2,553	-2,334	-2,605	-1,574
Total System Costs	990,353	913,457	904,918	894,777	893,599	882,167	877,302	855,050	824,862	825,161	832,988	915,390	1,055,008
Fuel Burn (1000 MMBTu)													
Coal	112,185	104,974	87,612	85,157	85,152	85,000	83,714	85,580	84,103	83,931	83,032	82,800	85,658
Natural Gas	57,945	51,670	42,911	39,927	41,091	41,479	41,729	40,888	38,085	37,956	34,978	34,176	34,682
Emission Tons													
CO2	17,435,889	15,865,014	13,510,480	12,795,455	12,807,083	12,760,317	12,605,797	12,788,553	12,534,200	12,448,677	12,351,396	12,294,087	12,578,146
SOX	28,351	26,649	22,638	21,951	21,982	21,916	21,552	22,094	21,659	21,618	21,404	21,304	22,099
NOX	10,733	10,183	8,585	8,234	8,334	8,307	8,220	8,309	7,939	7,918	7,616	7,505	7,745
Energy Mix (GWh)													
Coal	10,763	10,088	8,535	8,278	8,278	8,261	8,129	8,323	8,159	8,150	8,055	8,022	8,333
Natural Gas	7,169	6,279	5,300	4,951	5,073	5,120	5,117	5,042	4,731	4,734	4,390	4,314	4,395
Wind	5,879	7,928	10,523	11,615	11,615	11,615	11,692	11,364	10,970	10,915	10,732	10,703	10,703
Oil	0	0	0	1	1	1	1	1	2	2	2	2	2
Solar	515	557	572	570	570	570	573	571	571	570	572	570	570
Biomass	-	29	36	37	37	38	38	39	39	39	40	40	40
Load Control	1	1	1	1	1	1	1	1	1	1	1	1	1
Market Purchases/Sales	1,761	482	210	(412)	(742)	(784)	(753)	(686)	(173)	(336)	422	632	312
Dump & Emergency Energy	0	0	(44)	(125)	(128)	(136)	(176)	(123)	(120)	(113)	(102)	(111)	(65)

Summary Sheet - Scenario 11 Base
Case Model Run

	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
System Costs (\$000)													
Capital Revenue Requirements	119,958	154,920	251,484	340,341	383,836	365,416	389,338	375,634	401,481	378,331	447,299	473,288	462,471
Fixed O&M	363,561	367,903	352,188	346,051	344,110	354,712	344,275	351,919	362,272	360,007	352,446	349,432	363,103
Variable O&M	648,298	636,514	655,864	669,537	697,268	741,160	789,160	822,097	847,343	896,076	930,331	955,286	978,937
Emissions	0	0	0	0	0	0	0	0	0	0	0	0	0
Dump	-995	-684	-43	-58	-33	-73	-12	0	0	0	0	0	0
Total System Costs	1,130,823	1,158,654	1,259,494	1,355,870	1,425,181	1,461,215	1,522,761	1,549,649	1,611,096	1,634,413	1,730,077	1,778,006	1,804,511
Fuel Burn (1000 MMBTu)													
Coal	83,848	88,328	62,190	62,207	63,754	62,980	44,518	42,637	22,725	19,687	0	0	0
Natural Gas	31,042	35,707	57,481	61,232	65,593	67,395	84,304	87,475	100,063	100,786	118,688	124,980	125,004
Emission Tons													
CO2	12,334,653	12,653,869	10,970,251	10,998,291	11,808,529	11,918,813	10,832,226	10,850,734	9,456,924	9,240,291	7,647,351	7,812,330	7,856,079
SOX	21,657	22,847	16,325	16,321	16,660	16,435	11,868	11,378	6,154	5,336	36	38	38
NOX	7,355	7,431	5,663	5,407	5,197	5,144	3,963	3,819	2,272	2,027	450	463	465
Energy Mix (GWh)													
Coal	8,153	8,611	6,004	6,008	6,157	6,076	4,324	4,144	2,231	1,932	-	-	-
Natural Gas	4,000	4,889	8,036	8,505	9,101	9,348	11,694	12,150	13,757	13,849	16,634	17,585	17,574
Wind	10,701	10,731	10,701	10,602	8,536	8,373	8,238	7,772	7,742	7,722	7,707	7,713	7,721
Oil	2	2	1	1	-	-	-	-	-	-	-	-	-
Solar	554	570	568	567	568	570	568	567	567	569	548	212	214
Biomass	41	42	42	42	42	43	43	44	44	45	45	45	46
Load Control	1	1	1	1	1	1	1	1	1	1	1	1	1
Market Purchases/Sales	1,021	(202)	(656)	(911)	557	746	370	682	1,174	1,596	847	342	482
Dump & Emergency Energy	(36)	(21)	(1)	(2)	(1)	(2)	(0)	0	0	0	0	0	0

**Summary Sheet - Scenario 11 High
Load Model Run**

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
System Costs (\$000)													
Capital Revenue Requirements	142,723	142,879	148,541	148,127	144,687	142,765	143,204	139,100	141,597	138,214	133,321	197,327	217,896
Fixed O&M	244,348	218,490	251,255	263,657	255,596	225,655	205,788	180,003	155,709	154,618	155,719	226,570	352,485
Variable O&M	629,975	586,622	547,532	533,393	550,152	579,492	609,598	624,594	629,367	644,034	683,165	666,702	685,694
Emissions	0	0	0	0	0	0	0	0	0	0	0	0	0
Dump	0	0	-262	-768	-750	-788	-979	-371	-644	-510	-884	-1,067	-700
Total System Costs	1,017,046	947,990	947,065	944,410	949,686	947,124	957,612	943,325	926,030	936,355	971,322	1,089,532	1,255,376
Fuel Burn (1000 MMBTu)													
Coal	112,624	106,288	89,836	88,000	88,235	88,354	87,043	89,404	88,052	87,784	87,483	87,927	91,040
Natural Gas	61,124	56,283	48,162	44,994	47,164	47,629	47,965	47,522	44,526	44,675	43,117	47,929	53,930
Emission Tons													
CO2	17,969,089	16,565,314	14,421,910	13,815,313	13,892,932	13,929,791	13,836,514	14,161,521	14,042,665	13,986,405	14,115,479	14,049,373	14,329,574
SOX	28,468	27,002	23,243	22,732	22,832	22,839	22,468	23,144	22,746	22,674	22,626	22,698	23,537
NOX	10,934	10,534	9,029	8,704	8,897	8,884	8,794	8,935	8,532	8,519	8,305	7,963	8,050
Energy Mix (GWh)													
Coal	10,806	10,219	8,763	8,574	8,599	8,611	8,476	8,721	8,571	8,549	8,517	8,549	8,875
Natural Gas	7,523	6,788	5,884	5,520	5,746	5,806	5,811	5,785	5,458	5,491	5,292	6,246	7,256
Wind	5,879	7,928	10,523	11,615	11,615	11,615	11,692	11,364	10,970	10,915	10,732	10,703	10,703
Oil	0	0	0	1	1	1	2	1	2	2	3	3	2
Solar	515	557	572	570	570	570	573	571	571	570	572	570	570
Biomass	-	29	36	37	37	38	38	39	39	39	40	40	40
Load Control	1	1	1	1	1	1	1	1	1	1	1	1	1
Market Purchases/Sales	2,409	1,266	1,113	671	368	450	667	831	1,572	1,569	2,322	1,600	523
Dump & Emergency Energy	0	0	(14)	(40)	(37)	(38)	(45)	(16)	(27)	(21)	(30)	(41)	(29)

**Summary Sheet - Scenario 11 High
Load Model Run**

	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
System Costs (\$000)													
Capital Revenue Requirements	207,625	174,654	266,731	383,782	434,353	415,669	479,545	482,361	487,596	455,315	526,248	551,420	537,933
Fixed O&M	387,721	388,975	370,376	370,878	369,685	381,615	372,802	385,481	402,932	394,147	393,649	389,438	409,087
Variable O&M	738,250	774,939	817,514	829,183	869,898	926,874	972,817	1,013,503	1,051,097	1,116,215	1,162,469	1,198,202	1,235,783
Emissions	0	0	0	0	0	0	0	0	0	0	0	0	0
Dump	-305	0	0	0	0	0	0	0	0	0	0	0	0
Total System Costs	1,333,291	1,338,567	1,454,621	1,583,843	1,673,936	1,724,158	1,825,165	1,881,345	1,941,624	1,965,677	2,082,366	2,139,061	2,182,803
Fuel Burn (1000 MMBTu)													
Coal	89,785	94,285	63,429	64,013	65,315	64,835	45,450	43,289	22,874	19,808	0	0	0
Natural Gas	48,137	47,857	72,420	80,516	92,792	95,732	116,756	125,260	136,418	138,704	156,548	163,819	165,521
Emission Tons													
CO2	14,151,099	14,559,570	12,689,112	12,810,885	13,744,000	13,935,072	12,766,992	12,879,991	11,458,018	11,287,985	9,774,616	9,969,035	10,108,213
SOX	23,261	24,453	16,656	16,811	17,082	16,935	12,127	11,563	6,208	5,382	48	50	50
NOX	7,746	7,947	5,907	5,693	5,468	5,448	4,161	3,999	2,401	2,159	578	594	604
Energy Mix (GWh)													
Coal	8,756	9,217	6,124	6,186	6,310	6,258	4,415	4,208	2,246	1,945	-	-	-
Natural Gas	6,557	6,602	10,011	11,085	12,752	13,140	16,284	17,587	19,013	19,331	22,096	23,213	23,434
Wind	10,701	10,731	10,701	10,602	8,536	8,373	8,238	7,772	7,742	7,722	7,707	7,713	7,721
Oil	2	2	1	1	-	-	-	-	-	-	-	-	-
Solar	554	570	568	567	568	570	568	567	567	569	548	212	214
Biomass	41	42	42	42	42	43	43	44	44	45	45	45	46
Load Control	1	1	1	1	1	1	1	1	1	1	1	1	1
Market Purchases/Sales	1,657	1,442	1,399	637	1,212	1,432	494	131	1,015	1,381	841	302	386
Dump & Emergency Energy	(10)	8	4	0	1	1	0	0	0	0	0	0	0

**Summary Sheet - Scenario 11 Low
Load Model Run**

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
System Costs (\$000)													
Capital Revenue Requirements	142,723	142,879	148,541	148,127	144,687	142,765	143,204	139,100	141,597	138,214	133,321	135,696	127,558
Fixed O&M	244,348	218,490	251,255	263,657	255,596	225,655	205,788	180,003	155,709	153,777	146,034	205,151	322,571
Variable O&M	574,611	516,175	464,537	438,969	443,114	457,067	462,384	460,031	444,376	441,380	446,709	457,619	477,656
Emissions	0	0	0	0	0	0	0	0	0	0	0	0	0
Dump	0	-27	-2,264	-5,563	-5,656	-7,012	-8,906	-7,925	-8,278	-8,244	-6,958	-7,533	-6,677
Total System Costs	961,682	877,517	862,069	845,191	837,742	818,475	802,470	771,208	733,404	725,127	719,106	790,934	921,109
Fuel Burn (1000 MMBTu)													
Coal	111,731	103,281	84,946	81,827	81,047	80,928	79,612	80,989	80,067	79,418	78,490	78,191	80,247
Natural Gas	54,610	46,833	38,210	35,022	34,895	35,589	35,779	34,763	32,816	31,872	29,459	28,865	29,257
Emission Tons													
CO2	16,929,729	15,104,665	12,620,795	11,816,888	11,696,451	11,638,068	11,433,134	11,517,111	11,285,634	11,099,177	10,914,118	10,828,471	10,981,283
SOX	28,231	26,192	21,904	21,027	20,845	20,786	20,414	20,819	20,537	20,367	20,140	20,021	20,604
NOX	10,525	9,799	8,148	7,735	7,703	7,697	7,603	7,651	7,391	7,296	7,043	6,944	7,129
Energy Mix (GWh)													
Coal	10,720	9,917	8,257	7,927	7,846	7,831	7,695	7,837	7,732	7,673	7,574	7,534	7,764
Natural Gas	6,796	5,741	4,767	4,400	4,380	4,459	4,454	4,357	4,142	4,053	3,768	3,711	3,771
Wind	5,879	7,928	10,523	11,615	11,615	11,615	11,692	11,364	10,970	10,915	10,732	10,703	10,703
Oil	0	1	1	1	1	1	1	1	1	1	1	2	1
Solar	515	557	572	570	570	570	573	571	571	570	572	570	570
Biomass	-	29	36	37	37	38	38	39	39	39	40	40	40
Load Control	1	1	1	1	1	1	1	1	1	1	1	1	1
Market Purchases/Sales	1,044	(332)	(757)	(1,472)	(1,758)	(1,946)	(2,079)	(2,152)	(1,966)	(2,187)	(1,714)	(1,664)	(2,030)
Dump & Emergency Energy	0	(1)	(122)	(290)	(284)	(343)	(425)	(372)	(380)	(368)	(308)	(326)	(283)

**Summary Sheet - Scenario 11 Low
Load Model Run**

	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
System Costs (\$000)													
Capital Revenue Requirements	119,958	89,517	155,617	247,308	293,488	277,620	303,971	291,387	361,418	360,756	352,166	342,434	334,211
Fixed O&M	354,653	347,314	324,231	313,283	311,276	318,212	308,706	314,469	331,359	334,296	315,051	303,981	311,293
Variable O&M	499,565	505,209	524,450	520,655	536,148	566,498	602,312	620,528	617,878	646,110	688,653	708,195	718,122
Emissions	0	0	0	0	0	0	0	0	0	0	0	0	0
Dump	-5,757	-3,958	-1,960	-1,781	-93	-104	-85	0	-28	-11	-20	-4	-9
Total System Costs	968,419	938,083	1,002,339	1,079,466	1,140,820	1,162,227	1,214,903	1,226,384	1,310,627	1,341,151	1,355,850	1,354,606	1,363,616
Fuel Burn (1000 MMBTu)													
Coal	78,309	80,241	57,467	59,193	61,549	60,706	42,953	41,186	21,934	18,952	0	0	0
Natural Gas	25,528	22,587	34,663	38,817	39,753	39,648	51,145	52,658	64,639	67,346	79,634	82,422	81,686
Emission Tons													
CO2	10,649,161	10,694,870	9,147,045	9,206,762	9,834,963	9,835,654	8,675,828	8,674,802	7,292,023	7,106,605	5,509,146	5,584,458	5,558,219
SOX	20,117	20,639	15,052	15,504	16,067	15,825	11,439	10,981	5,919	5,117	24	25	25
NOX	6,760	6,745	5,228	5,090	4,934	4,869	3,725	3,585	2,031	1,788	297	309	304
Energy Mix (GWh)													
Coal	7,567	7,773	5,536	5,709	5,941	5,854	4,171	4,003	2,149	1,857	-	-	-
Natural Gas	3,367	3,046	4,776	5,347	5,447	5,422	6,956	7,169	8,906	9,312	11,113	11,511	11,411
Wind	10,701	10,731	10,701	10,602	8,536	8,373	8,238	7,772	7,742	7,722	7,707	7,713	7,721
Oil	1	1	1	1	-	-	-	-	-	-	-	-	-
Solar	554	570	568	567	568	570	568	567	567	569	548	212	214
Biomass	41	42	42	42	42	43	43	44	44	45	45	45	46
Load Control	1	1	1	1	1	1	1	1	1	1	1	1	1
Market Purchases/Sales	(1,496)	(1,486)	(1,115)	(1,822)	(166)	142	343	703	851	797	804	719	772
Dump & Emergency Energy	(239)	(160)	(77)	(69)	(3)	(3)	(3)	0	(1)	(0)	(1)	(0)	(0)

**Summary Sheet - Scenario 11 High
Gas Model Run**

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
System Costs (\$000)													
Capital Revenue Requirements	142,723	142,879	148,541	148,127	144,687	142,765	143,204	139,100	141,597	138,214	133,321	135,696	127,558
Fixed O&M	244,348	218,490	251,255	263,657	255,596	225,655	205,788	180,003	155,709	153,777	146,034	205,151	322,571
Variable O&M	600,543	548,897	505,399	485,962	498,827	523,725	544,231	553,829	546,618	555,352	583,092	609,831	646,922
Emissions	0	0	0	0	0	0	0	0	0	0	0	0	0
Dump	0	0	-1,083	-3,069	-3,191	-3,405	-4,667	-3,192	-3,319	-3,065	-2,483	-2,989	-1,784
Total System Costs	987,614	910,265	904,111	894,678	895,919	888,740	888,556	869,739	840,605	844,278	859,963	947,689	1,095,267
Fuel Burn (1000 MMBTu)													
Coal	112,363	105,209	87,630	85,351	85,554	85,489	84,158	85,966	84,619	84,745	84,335	83,948	86,206
Natural Gas	61,794	53,815	43,467	40,441	41,885	42,267	42,344	41,618	38,889	38,993	36,323	35,522	35,977
Emission Tons													
CO2	17,657,146	16,016,806	13,568,709	12,851,316	12,900,992	12,855,177	12,680,166	12,873,620	12,615,923	12,559,182	12,514,744	12,449,521	12,682,668
SOX	28,396	26,709	22,637	21,999	22,089	22,051	21,674	22,200	21,802	21,844	21,769	21,627	22,253
NOX	11,156	10,340	8,623	8,288	8,408	8,394	8,300	8,424	8,071	8,067	7,868	7,749	7,965
Energy Mix (GWh)													
Coal	10,780	10,110	8,535	8,296	8,318	8,311	8,175	8,363	8,214	8,236	8,195	8,146	8,392
Natural Gas	7,475	6,512	5,356	5,009	5,165	5,211	5,183	5,121	4,817	4,847	4,513	4,435	4,500
Wind	5,879	7,928	10,523	11,615	11,615	11,615	11,692	11,364	10,970	10,915	10,732	10,703	10,703
Oil	0	0	0	1	1	1	2	1	2	2	2	3	2
Solar	515	557	572	570	570	570	573	571	571	570	572	570	570
Biomass	-	29	36	37	37	38	38	39	39	39	40	40	40
Load Control	1	1	1	1	1	1	1	1	1	1	1	1	1
Market Purchases/Sales	1,438	227	157	(485)	(876)	(932)	(871)	(815)	(321)	(550)	135	365	135
Dump & Emergency Energy	0	0	(47)	(127)	(126)	(128)	(170)	(113)	(112)	(100)	(78)	(91)	(52)

**Summary Sheet - Scenario 11 High
Gas Model Run**

	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
System Costs (\$000)													
Capital Revenue Requirements	119,958	154,920	251,484	340,341	383,836	365,416	389,338	375,634	401,481	378,331	447,299	473,288	462,471
Fixed O&M	363,561	367,903	352,188	346,051	344,110	354,712	344,275	351,919	362,272	360,007	352,446	349,432	363,103
Variable O&M	697,746	687,228	739,931	766,162	823,953	886,507	981,402	1,046,093	1,118,283	1,204,540	1,299,880	1,355,003	1,399,416
Emissions	0	0	0	0	0	0	0	0	0	0	0	0	0
Dump	-1,003	-1,025	-22	-47	-20	-42	-8	0	0	0	0	0	0
Total System Costs	1,180,263	1,209,027	1,343,582	1,452,507	1,551,878	1,606,593	1,715,007	1,773,645	1,882,036	1,942,877	2,099,626	2,177,724	2,224,990
Fuel Burn (1000 MMBTu)													
Coal	85,895	89,396	62,394	62,354	63,841	63,078	44,550	42,571	22,723	19,675	0	0	0
Natural Gas	32,733	36,129	55,603	58,054	64,044	66,100	80,901	84,698	98,392	99,203	115,352	121,896	121,945
Emission Tons													
CO2	12,554,582	12,781,542	10,969,993	10,972,696	11,795,650	11,891,392	10,801,422	10,834,462	9,437,495	9,249,860	7,629,638	7,800,706	7,852,010
SOX	22,228	23,134	16,375	16,361	16,686	16,461	11,875	11,358	6,153	5,332	35	37	37
NOX	7,561	7,534	5,682	5,412	5,198	5,146	3,952	3,801	2,262	2,018	436	450	452
Energy Mix (GWh)													
Coal	8,369	8,720	6,022	6,023	6,167	6,086	4,327	4,138	2,230	1,931	-	-	-
Natural Gas	4,198	4,920	7,748	8,035	8,871	9,156	11,201	11,756	13,535	13,633	16,150	17,144	17,134
Wind	10,701	10,731	10,701	10,602	8,536	8,373	8,238	7,772	7,742	7,722	7,707	7,713	7,721
Oil	2	2	1	1	-	-	-	-	-	-	-	-	-
Solar	554	570	568	567	568	570	568	567	567	569	548	212	214
Biomass	41	42	42	42	42	43	43	44	44	45	45	45	46
Load Control	1	1	1	1	1	1	1	1	1	1	1	1	1
Market Purchases/Sales	594	(341)	(388)	(457)	777	927	860	1,083	1,397	1,813	1,331	784	923
Dump & Emergency Energy	(23)	(22)	1	(1)	0	(0)	0	0	0	0	0	0	0

**Summary Sheet - Scenario 11 Low
Gas Model Run**

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
System Costs (\$000)													
Capital Revenue Requirements	142,723	142,879	148,541	148,127	144,687	142,765	143,204	139,100	141,597	138,214	133,321	135,696	127,558
Fixed O&M	244,348	218,490	251,255	263,657	255,596	225,655	205,788	180,003	155,709	153,777	146,034	205,151	322,571
Variable O&M	597,820	546,717	499,932	478,560	486,762	503,878	514,830	519,341	510,521	513,869	530,057	547,990	572,457
Emissions	0	0	0	0	0	0	0	0	0	0	0	0	0
Dump	0	0	-709	-2,036	-2,189	-2,360	-3,009	-2,261	-2,176	-2,248	-2,083	-2,282	-1,363
Total System Costs	984,891	908,086	899,019	888,309	884,856	869,938	860,813	836,182	805,651	803,613	807,329	886,556	1,021,223
Fuel Burn (1000 MMBTu)													
Coal	112,530	105,313	88,148	85,595	85,260	84,928	83,342	85,136	83,281	82,529	81,159	80,825	84,216
Natural Gas	63,964	55,099	46,604	43,474	43,450	43,617	42,940	41,638	38,342	38,008	34,750	33,795	34,555
Emission Tons													
CO2	17,786,878	16,077,631	13,739,319	13,017,113	12,950,462	12,882,001	12,651,534	12,806,309	12,495,214	12,344,925	12,217,756	12,150,733	12,494,631
SOX	28,440	26,735	22,780	22,066	22,010	21,894	21,449	21,972	21,433	21,232	20,891	20,765	21,716
NOX	11,304	10,421	8,833	8,473	8,467	8,430	8,272	8,363	7,939	7,845	7,550	7,434	7,744
Energy Mix (GWh)													
Coal	10,796	10,120	8,588	8,321	8,289	8,253	8,090	8,277	8,073	8,002	7,859	7,816	8,188
Natural Gas	7,690	6,646	5,695	5,338	5,334	5,350	5,248	5,125	4,763	4,739	4,349	4,253	4,359
Wind	5,879	7,928	10,523	11,615	11,615	11,615	11,692	11,364	10,970	10,915	10,732	10,703	10,703
Oil	0	1	1	1	1	1	2	1	2	2	2	2	2
Solar	515	557	572	570	570	570	573	571	571	570	572	570	570
Biomass	-	29	36	37	37	38	38	39	39	39	40	40	40
Load Control	1	1	1	1	1	1	1	1	1	1	1	1	1
Market Purchases/Sales	1,207	83	(235)	(832)	(999)	(990)	(830)	(703)	(102)	(169)	685	926	509
Dump & Emergency Energy	0	0	(48)	(135)	(142)	(152)	(191)	(143)	(136)	(139)	(128)	(139)	(82)

**Summary Sheet - Scenario 11 Low
Gas Model Run**

	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
System Costs (\$000)													
Capital Revenue Requirements	119,958	154,920	251,484	340,341	383,836	365,416	389,338	375,634	401,481	378,331	447,299	473,288	462,471
Fixed O&M	363,561	367,903	352,188	346,051	344,110	354,712	344,275	351,919	362,272	360,007	352,446	349,432	363,103
Variable O&M	606,472	596,153	590,070	595,807	604,393	636,678	650,972	662,994	664,898	688,286	687,220	693,376	704,671
Emissions	0	0	0	0	0	0	0	0	0	0	0	0	0
Dump	-1,171	-864	-78	-105	-53	-101	-10	-2	0	0	0	0	0
Total System Costs	1,088,821	1,118,112	1,193,664	1,282,094	1,332,285	1,356,705	1,384,575	1,390,544	1,428,651	1,426,623	1,486,965	1,516,096	1,530,245
Fuel Burn (1000 MMBTu)													
Coal	79,542	81,150	54,485	53,219	53,816	52,235	37,397	35,527	19,192	16,281	0	0	0
Natural Gas	29,954	36,655	57,811	63,791	70,716	74,590	88,843	92,770	102,631	103,709	118,912	124,782	125,502
Emission Tons													
CO2	11,951,492	12,093,321	10,322,449	10,325,017	11,095,772	11,137,861	10,269,595	10,286,132	9,136,465	8,930,891	7,671,977	7,837,733	7,909,041
SOX	20,477	20,929	14,286	13,938	14,031	13,595	9,966	9,469	5,156	4,371	36	38	38
NOX	6,990	6,884	5,066	4,706	4,429	4,316	3,390	3,248	1,978	1,744	454	464	469
Energy Mix (GWh)													
Coal	7,703	7,881	5,249	5,127	5,182	5,023	3,629	3,447	1,867	1,581	-	-	-
Natural Gas	3,888	5,053	8,117	8,909	9,869	10,425	12,392	12,967	14,154	14,310	16,644	17,529	17,618
Wind	10,701	10,731	10,701	10,602	8,536	8,373	8,238	7,772	7,742	7,722	7,707	7,713	7,721
Oil	2	2	1	1	-	-	-	-	-	-	-	-	-
Solar	554	570	568	567	568	570	568	567	567	569	548	212	214
Biomass	41	42	42	42	42	43	43	44	44	45	45	45	46
Load Control	1	1	1	1	1	1	1	1	1	1	1	1	1
Market Purchases/Sales	1,611	387	21	(431)	766	724	368	563	1,142	1,486	837	398	438
Dump & Emergency Energy	(65)	(45)	(4)	(6)	(2)	(5)	(0)	0	0	0	0	0	0

**Summary Sheet - Scenario 11 High
CO2 Model Run**

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
System Costs (\$000)													
Capital Revenue Requirements	142,723	142,879	148,541	148,127	144,687	142,765	143,204	139,100	141,597	138,214	133,321	135,696	127,558
Fixed O&M	244,348	218,490	251,255	263,657	255,596	225,655	205,788	180,003	155,709	153,777	146,034	205,151	322,571
Variable O&M	737,909	654,521	584,616	539,855	550,930	575,970	604,125	616,638	616,700	622,471	658,611	684,640	729,039
Emissions	686,054	632,126	546,771	537,640	546,992	559,055	566,096	587,548	602,754	610,389	626,038	642,179	649,228
Dump	0	0	-875	-2,389	-3,235	-3,617	-7,386	-4,526	-5,759	-6,274	-4,667	-4,482	-2,699
Total System Costs	1,811,034	1,648,015	1,530,307	1,486,891	1,494,971	1,499,828	1,511,827	1,518,762	1,511,001	1,518,577	1,559,337	1,663,185	1,825,697
Fuel Burn (1000 MMBTu)													
Coal	73,298	68,930	54,866	54,709	54,585	54,770	54,657	55,838	57,026	56,626	58,322	59,342	58,632
Natural Gas	86,116	74,220	65,365	59,258	58,238	57,603	56,046	55,297	53,055	51,958	49,150	47,491	46,733
Emission Tons													
CO2	14,909,125	13,345,080	11,353,922	10,737,009	10,635,546	10,595,292	10,493,426	10,622,631	10,641,267	10,493,620	10,605,848	10,629,459	10,575,551
SOX	17,457	16,501	13,390	13,348	13,341	13,373	13,354	13,687	13,990	13,894	14,393	14,643	14,464
NOX	8,561	8,232	6,917	6,570	6,538	6,504	6,485	6,533	6,306	6,195	6,082	5,960	5,888
Energy Mix (GWh)													
Coal	6,608	6,217	5,003	4,990	4,981	5,001	5,001	5,120	5,242	5,211	5,401	5,504	5,441
Natural Gas	10,602	8,810	7,816	7,129	7,024	6,953	6,707	6,656	6,386	6,299	5,980	5,843	5,785
Wind	5,879	7,928	10,523	11,615	11,615	11,615	11,692	11,364	10,970	10,915	10,732	10,703	10,703
Oil	0	0	0	1	1	1	1	1	1	1	2	2	1
Solar	515	557	572	570	570	570	573	571	571	570	572	570	570
Biomass	-	29	36	37	37	38	38	39	39	39	40	40	40
Load Control	1	1	1	1	1	1	1	1	1	1	1	1	1
Market Purchases/Sales	2,484	1,822	1,205	633	555	594	781	884	1,098	1,060	1,484	1,603	1,803
Dump & Emergency Energy	0	0	(22)	(60)	(79)	(86)	(172)	(103)	(128)	(137)	(99)	(93)	(55)

**Summary Sheet - Scenario 11 Med
CO2 Model Run**

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
System Costs (\$000)													
Capital Revenue Requirements	142,723	142,879	148,541	148,127	144,687	142,765	143,204	139,100	141,597	138,214	133,321	135,696	127,558
Fixed O&M	244,348	218,490	251,255	263,657	255,596	225,655	205,788	180,003	155,709	153,777	146,034	205,151	322,571
Variable O&M	670,047	603,071	549,597	519,739	525,936	545,436	555,650	566,942	559,262	565,156	593,129	617,121	653,136
Emissions	359,968	331,498	283,229	275,009	286,379	295,207	309,735	318,643	327,293	331,084	337,521	344,667	351,987
Dump	-1	0	-1,194	-3,402	-4,128	-4,380	-6,801	-4,716	-5,052	-5,484	-4,042	-4,043	-2,419
Total System Costs	1,417,085	1,295,937	1,231,427	1,203,130	1,208,471	1,204,683	1,207,575	1,199,972	1,178,808	1,182,747	1,205,963	1,298,593	1,452,832
Fuel Burn (1000 MMBTu)													
Coal	86,168	78,041	62,887	61,363	62,525	64,409	67,516	68,456	69,962	69,027	69,828	69,653	69,644
Natural Gas	72,270	65,841	55,699	49,928	50,084	47,605	45,530	43,932	41,373	40,990	38,690	38,612	38,002
Emission Tons													
CO2	15,739,807	13,861,324	11,716,271	11,015,298	11,028,650	11,083,605	11,236,519	11,319,884	11,354,374	11,189,153	11,253,151	11,230,899	11,216,766
SOX	21,118	19,116	15,693	15,263	15,621	16,129	17,000	17,269	17,653	17,397	17,645	17,555	17,578
NOX	8,911	8,611	7,133	6,660	6,820	6,755	6,855	6,828	6,681	6,559	6,460	6,360	6,321
Energy Mix (GWh)													
Coal	8,030	7,244	5,910	5,744	5,878	6,077	6,413	6,500	6,645	6,549	6,635	6,605	6,623
Natural Gas	9,097	7,924	6,795	6,162	6,162	5,932	5,696	5,559	5,280	5,266	4,999	5,023	4,991
Wind	5,879	7,928	10,523	11,615	11,615	11,615	11,692	11,364	10,970	10,915	10,732	10,703	10,703
Oil	0	1	0	1	1	1	1	1	2	2	2	2	1
Solar	515	557	572	570	570	570	573	571	571	570	572	570	570
Biomass	-	29	36	37	37	38	38	39	39	39	40	40	40
Load Control	1	1	1	1	1	1	1	1	1	1	1	1	1
Market Purchases/Sales	2,567	1,682	1,337	901	577	593	421	643	824	779	1,247	1,342	1,426
Dump & Emergency Energy	(0)	0	(41)	(115)	(135)	(140)	(213)	(145)	(151)	(160)	(116)	(113)	(66)

**Summary Sheet - Scenario 11 Med
CO2 Model Run**

	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
System Costs (\$000)													
Capital Revenue Requirements	119,958	154,920	251,484	340,341	383,836	365,416	389,338	375,634	401,481	378,331	447,299	473,288	462,471
Fixed O&M	363,561	367,903	352,188	346,051	344,110	354,712	344,275	351,919	362,272	360,007	352,446	349,432	363,103
Variable O&M	706,740	672,103	646,931	632,735	686,503	735,964	775,686	815,025	861,252	915,391	911,225	910,708	938,818
Emissions	346,351	359,925	342,494	366,011	388,405	398,173	382,625	393,135	354,704	355,817	334,876	367,996	376,343
Dump	-2,806	-1,994	-10	-30	-30	-47	-10	0	0	0	0	0	0
Total System Costs	1,533,804	1,552,857	1,593,087	1,685,107	1,802,824	1,854,218	1,891,914	1,935,711	1,979,709	2,009,546	2,045,847	2,101,424	2,140,735
Fuel Burn (1000 MMBTu)													
Coal	67,633	62,546	41,133	41,024	41,420	40,952	28,896	27,575	15,598	13,577	0	0	0
Natural Gas	35,485	50,400	76,944	88,004	94,995	95,998	106,136	108,938	113,005	114,110	130,273	139,387	139,102
Emission Tons													
CO2	11,027,567	10,698,401	9,491,770	9,622,504	10,252,718	10,341,820	9,679,717	9,722,533	8,914,273	8,773,049	7,863,637	8,163,791	8,180,419
SOX	17,041	15,566	10,490	10,443	10,469	10,349	7,528	7,187	4,109	3,584	40	43	42
NOX	6,000	5,367	3,990	3,731	3,445	3,418	2,695	2,600	1,702	1,544	499	519	519
Energy Mix (GWh)													
Coal	6,406	5,845	3,842	3,833	3,864	3,821	2,737	2,612	1,484	1,293	-	-	-
Natural Gas	4,714	7,029	10,872	12,390	13,402	13,538	14,936	15,359	15,642	15,805	18,315	19,716	19,668
Wind	10,701	10,731	10,701	10,602	8,536	8,373	8,238	7,772	7,742	7,722	7,707	7,713	7,721
Oil	2	1	1	0	-	-	-	-	-	-	-	-	-
Solar	554	570	568	567	568	570	568	567	567	569	548	212	214
Biomass	41	42	42	42	42	43	43	44	44	45	45	45	46
Load Control	1	1	1	1	1	1	1	1	1	1	1	1	1
Market Purchases/Sales	2,090	450	(1,332)	(2,622)	(1,452)	(1,190)	(1,285)	(994)	36	280	(834)	(1,788)	(1,612)
Dump & Emergency Energy	(71)	(47)	1	(0)	(0)	(1)	(0)	0	0	0	0	0	0

**Summary Sheet - Scenario 11 Low
CO2 Model Run**

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
System Costs (\$000)													
Capital Revenue Requirements	142,723	142,879	148,541	148,127	144,687	142,765	143,204	139,100	141,597	138,214	133,321	135,696	127,558
Fixed O&M	244,348	218,490	251,255	263,657	255,596	225,655	205,788	180,003	155,709	153,777	146,034	205,151	322,571
Variable O&M	619,606	560,770	514,091	490,298	498,469	518,565	532,854	540,416	535,883	540,594	565,384	587,511	613,157
Emissions	158,176	147,625	125,767	123,008	127,851	131,658	136,073	141,460	140,837	143,861	144,916	148,160	158,435
Dump	-6	-12	-1,135	-3,595	-4,085	-4,113	-5,134	-3,913	-3,745	-4,018	-3,212	-3,396	-1,985
Total System Costs	1,164,847	1,069,751	1,038,518	1,021,495	1,022,519	1,014,531	1,012,785	997,066	970,281	972,429	986,443	1,073,124	1,219,736
Fuel Burn (1000 MMBTu)													
Coal	104,110	95,308	77,284	74,355	75,414	75,517	76,721	78,422	77,143	77,428	77,804	78,169	82,096
Natural Gas	61,289	55,417	46,412	43,572	43,833	44,500	43,836	42,761	39,963	38,871	35,318	34,490	34,536
Emission Tons													
CO2	16,864,250	15,034,643	12,670,609	11,915,007	11,990,507	11,972,692	12,003,371	12,177,818	11,949,892	11,883,732	11,877,979	11,876,646	12,246,859
SOX	26,110	23,948	19,728	18,904	19,238	19,257	19,608	20,113	19,724	19,817	19,939	20,006	21,116
NOX	9,984	9,279	7,612	7,207	7,384	7,395	7,541	7,634	7,291	7,289	7,123	7,064	7,379
Energy Mix (GWh)													
Coal	9,917	9,071	7,439	7,127	7,247	7,262	7,401	7,584	7,436	7,477	7,513	7,543	7,975
Natural Gas	7,725	6,889	5,881	5,562	5,557	5,642	5,483	5,381	5,059	4,927	4,489	4,407	4,434
Wind	5,879	7,928	10,523	11,615	11,615	11,615	11,692	11,364	10,970	10,915	10,732	10,703	10,703
Oil	0	0	0	1	1	1	1	1	2	2	2	2	1
Solar	515	557	572	570	570	570	573	571	571	570	572	570	570
Biomass	-	29	36	37	37	38	38	39	39	39	40	40	40
Load Control	1	1	1	1	1	1	1	1	1	1	1	1	1
Market Purchases/Sales	2,052	890	730	157	(153)	(276)	(365)	(257)	244	177	880	1,026	634
Dump & Emergency Energy	(0)	(1)	(50)	(154)	(169)	(166)	(202)	(151)	(141)	(148)	(116)	(120)	(68)

**Summary Sheet - Scenario 11 Low
CO2 Model Run**

	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
System Costs (\$000)													
Capital Revenue Requirements	119,958	154,920	251,484	340,341	383,836	365,416	389,338	375,634	401,481	378,331	447,299	473,288	462,471
Fixed O&M	363,561	367,903	352,188	346,051	344,110	354,712	344,275	351,919	362,272	360,007	352,446	349,432	363,103
Variable O&M	665,205	645,759	654,654	665,509	699,709	746,116	788,526	822,501	856,902	908,886	931,046	947,582	974,180
Emissions	150,717	159,319	144,230	147,781	160,080	163,828	157,305	162,519	142,092	141,770	127,142	138,801	141,392
Dump	-1,991	-1,474	-110	-130	-61	-104	-16	0	0	0	0	0	0
Total System Costs	1,297,452	1,326,427	1,402,447	1,499,551	1,587,674	1,629,968	1,679,428	1,712,572	1,762,747	1,788,993	1,857,934	1,909,103	1,941,146
Fuel Burn (1000 MMBTu)													
Coal	77,085	75,597	49,163	47,457	48,643	48,071	34,789	33,859	18,206	16,173	0	0	0
Natural Gas	31,104	41,657	68,170	75,105	84,123	85,006	97,300	100,206	107,104	107,540	123,957	131,843	131,110
Emission Tons													
CO2	11,736,969	11,646,710	10,009,796	9,940,591	10,779,534	10,895,037	10,118,210	10,215,561	9,086,682	8,953,568	7,730,019	7,965,873	7,977,076
SOX	19,766	19,335	12,773	12,274	12,534	12,384	9,202	8,983	4,864	4,338	38	40	40
NOX	6,763	6,415	4,640	4,243	4,024	3,989	3,187	3,125	1,908	1,749	471	488	486
Energy Mix (GWh)													
Coal	7,449	7,294	4,690	4,514	4,632	4,578	3,349	3,268	1,760	1,568	-	-	-
Natural Gas	4,067	5,800	9,650	10,570	11,869	11,989	13,682	14,120	14,836	14,882	17,399	18,605	18,487
Wind	10,701	10,731	10,701	10,602	8,536	8,373	8,238	7,772	7,742	7,722	7,707	7,713	7,721
Oil	2	2	1	1	-	-	-	-	-	-	-	-	-
Solar	554	570	568	567	568	570	568	567	567	569	548	212	214
Biomass	41	42	42	42	42	43	43	44	44	45	45	45	46
Load Control	1	1	1	1	1	1	1	1	1	1	1	1	1
Market Purchases/Sales	1,685	227	(955)	(1,480)	(685)	(396)	(643)	(411)	566	927	82	(677)	(430)
Dump & Emergency Energy	(63)	(43)	(3)	(4)	(1)	(3)	(0)	0	0	0	0	0	0

SPS Forecasted Operational Detail

Summary Sheet - Scenario 11

Base Case Capacity Factors

THERMAL UNIT	Unit	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
HARRING 1	COAL	69.0%	55.9%	64.5%	62.6%	57.2%	62.9%	62.7%	57.1%	62.4%	62.7%	55.4%	62.2%	64.3%	56.0%	66.2%	70.8%	62.3%	71.2%
HARRING 2	COAL	66.6%	63.9%	55.6%	59.1%	59.9%	53.1%	59.8%	60.0%	54.0%	59.8%	59.3%	53.7%	60.7%	59.6%	56.1%	68.5%	68.5%	63.1%
HARRING 3	COAL	63.9%	68.1%	65.5%	57.9%	64.0%	64.1%	53.3%	64.2%	63.6%	55.6%	63.5%	63.3%	56.8%	64.1%	67.1%	62.7%	71.3%	72.8%
TOLK 1	COAL	51.1%	43.9%	32.1%	31.5%	31.1%	31.1%	30.9%	31.4%	30.1%	30.6%	29.3%	28.8%	31.4%	30.0%	31.6%	0.0%	0.0%	0.0%
TOLK 2	COAL	54.5%	54.4%	33.3%	32.7%	32.2%	32.4%	32.0%	32.7%	31.3%	31.8%	30.5%	30.1%	32.7%	31.4%	33.0%	0.0%	0.0%	0.0%
CUNNING 1	G_ST	1.9%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CUNNING 2	G_ST	38.3%	43.1%	35.3%	26.9%	32.7%	31.4%	24.0%	25.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
JONES 1	G_ST	7.8%	10.2%	6.2%	8.5%	6.5%	8.5%	8.3%	10.1%	10.9%	9.8%	12.6%	10.9%	11.5%	11.8%	0.0%	0.0%	0.0%	0.0%
JONES 2	G_ST	18.3%	16.4%	12.8%	10.8%	12.5%	12.4%	13.8%	15.4%	17.6%	15.7%	23.5%	23.1%	22.2%	21.1%	11.0%	6.5%	5.0%	0.0%
MADDOX 1	G_ST	2.8%	4.0%	2.9%	2.9%	1.9%	3.2%	5.5%	5.0%	6.9%	6.5%	7.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NICHOLS 1	G_ST	13.0%	14.4%	10.1%	9.0%	9.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NICHOLS 2	G_ST	4.0%	5.6%	3.8%	4.0%	3.8%	4.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NICHOLS 3	G_ST	6.3%	8.9%	5.3%	5.7%	6.4%	6.4%	9.6%	9.1%	11.5%	13.2%	13.1%	14.0%	14.2%	0.0%	0.0%	0.0%	0.0%	0.0%
PLANT X 1	G_ST	1.0%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PLANT X 2	G_ST	1.5%	2.0%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PLANT X 3	G_ST	18.9%	26.3%	20.2%	17.0%	19.3%	19.2%	18.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PLANT X 4	G_ST	37.9%	25.7%	23.1%	22.6%	19.7%	22.6%	27.4%	25.9%	29.5%	29.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
HOBBS 1	G_CC	48.1%	45.0%	36.8%	33.7%	34.3%	35.1%	34.1%	34.9%	31.6%	32.6%	31.2%	31.5%	32.8%	30.7%	21.1%	12.1%	0.0%	0.0%
BLKHAWK 1	G_CC	87.7%	88.9%	82.7%	89.3%	87.6%	89.2%	82.4%	89.2%	87.3%	88.9%	82.0%	88.8%	87.0%	88.5%	81.5%	88.5%	42.0%	0.0%
BLKHAWK 2	G_CC	85.2%	82.5%	83.4%	76.3%	82.7%	81.1%	82.6%	76.2%	82.0%	80.3%	81.5%	75.1%	81.6%	79.3%	80.2%	74.8%	39.5%	0.0%
CALP 200	G_CC	19.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CALP 400	G_CC	25.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CUNNING 3	G_CT	0.2%	0.3%	0.2%	0.4%	0.4%	0.5%	0.5%	0.8%	1.2%	1.1%	1.4%	1.1%	1.0%	1.2%	1.0%	0.6%	0.5%	1.0%
CUNNING 4	G_CT	0.2%	0.3%	0.3%	0.5%	0.5%	0.4%	1.1%	1.1%	1.6%	1.5%	1.3%	1.9%	1.4%	1.8%	1.5%	0.7%	1.0%	1.3%
JONES 3	G_CT	0.5%	0.6%	0.6%	0.9%	0.9%	0.9%	2.0%	1.9%	2.4%	2.3%	2.6%	2.9%	2.3%	3.0%	2.7%	1.3%	1.6%	1.9%
JONES 4	G_CT	0.8%	1.1%	1.1%	1.5%	1.4%	1.7%	2.8%	3.0%	3.8%	3.6%	4.2%	4.8%	4.1%	5.3%	4.9%	2.7%	2.5%	3.2%
CRLSBD 1	G_CT	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
MADDOX 2	G_CT	0.3%	0.4%	0.4%	0.3%	0.5%	0.6%	1.2%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
MADDOX 3	G_CT	0.1%	0.2%	0.2%	0.4%	0.4%	0.5%	0.6%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
COOK_GT 2	G_CT	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
COOK_GT 3	G_CT	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
SD_RCH 1	G_CT	26.5%	26.5%	26.5%	15.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
ORION 1	G_CT	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%
QUAYCTY 1	OIL_	0.1%	0.2%	0.2%	0.3%	0.3%	0.4%	0.7%	0.6%	1.0%	0.9%	1.0%	1.2%	0.7%	0.9%	0.8%	0.4%	0.6%	0.0%
BIOMASS 1	BIO_	0.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%
GEN_CC 592	G_CC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GEN_CT 593	G_CT	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GEN_CT 594	G_CT	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GEN_CT 595	G_CT	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GEN_CT 596	G_CT	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
GEN_CT 597	G_CT	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%
GEN_CC 598	G_CC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	31.7%	49.0%
GEN_CC 599	G_CC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	33.3%	40.0%	39.0%
GEN_CC 600	G_CC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.4%	42.8%	29.2%	31.1%

Summary Sheet - Scenario 11

Base Case Capacity Factors

THERMAL UNIT	Unit	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
HARRING 1	COAL	71.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
HARRING 2	COAL	70.0%	71.7%	65.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
HARRING 3	COAL	62.7%	73.7%	74.2%	74.9%	64.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
TOLK 1	COAL	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
TOLK 2	COAL	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CUNNING 1	G_ST	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CUNNING 2	G_ST	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
JONES 1	G_ST	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
JONES 2	G_ST	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
MADDOX 1	G_ST	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NICHOLS 1	G_ST	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NICHOLS 2	G_ST	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NICHOLS 3	G_ST	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PLANT X 1	G_ST	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PLANT X 2	G_ST	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PLANT X 3	G_ST	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PLANT X 4	G_ST	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
HOBBS 1	G_CC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
BLKHAWK 1	G_CC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
BLKHAWK 2	G_CC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CALP 200	G_CC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CALP 400	G_CC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CUNNING 3	G_CT	0.8%	0.2%	0.2%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CUNNING 4	G_CT	1.1%	0.4%	0.3%	0.5%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
JONES 3	G_CT	1.7%	0.7%	0.5%	0.7%	0.5%	0.1%	0.1%	0.2%	0.1%	0.2%	0.1%	0.2%	0.3%	0.4%	0.4%	0.3%	0.3%	0.3%	0.3%
JONES 4	G_CT	2.9%	1.4%	1.0%	1.2%	0.9%	0.2%	0.3%	0.3%	0.2%	0.3%	0.3%	0.3%	0.5%	0.6%	0.6%	0.5%	0.5%	0.5%	0.6%
CRLSBD 1	G_CT	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
MADDOX 2	G_CT	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
MADDOX 3	G_CT	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
COOK_GT 2	G_CT	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
COOK_GT 3	G_CT	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
SD_RCH 1	G_CT	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
ORION 1	G_CT	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%
QUAYCTY 1	OIL_	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
BIOMASS 1	BIO_	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%
GEN_CC 592	G_CC	0.0%	0.0%	0.0%	0.0%	0.0%	44.3%	67.0%	66.8%	68.7%	71.2%	72.8%	70.9%	73.0%	73.4%	73.7%	73.7%	74.0%	73.9%	74.0%
GEN_CT 593	G_CT	0.0%	0.0%	0.0%	10.3%	13.6%	8.5%	6.5%	6.7%	6.0%	6.9%	8.0%	8.1%	8.7%	10.0%	10.2%	10.1%	10.4%	10.3%	10.7%
GEN_CT 594	G_CT	0.0%	0.0%	0.0%	6.9%	8.2%	4.3%	3.4%	3.5%	3.0%	3.7%	4.3%	4.4%	4.8%	5.8%	5.8%	5.7%	5.8%	5.7%	6.0%
GEN_CT 595	G_CT	0.0%	7.3%	8.5%	7.2%	4.8%	2.1%	1.8%	1.9%	1.5%	2.0%	2.2%	2.3%	2.7%	3.3%	3.2%	3.1%	3.3%	3.2%	3.3%
GEN_CT 596	G_CT	0.0%	4.0%	4.3%	4.0%	2.8%	1.0%	0.9%	1.0%	0.7%	1.1%	1.1%	1.2%	1.5%	1.8%	1.8%	1.6%	1.8%	1.7%	1.8%
GEN_CT 597	G_CT	5.4%	3.5%	2.3%	2.4%	1.6%	0.5%	0.5%	0.6%	0.4%	0.6%	0.6%	0.6%	0.8%	1.1%	1.1%	0.9%	1.0%	1.0%	1.0%
GEN_CC 598	G_CC	49.5%	58.7%	60.5%	66.2%	66.1%	65.4%	62.5%	62.3%	63.3%	68.3%	69.8%	70.0%	69.6%	71.0%	71.5%	71.4%	71.4%	71.7%	71.7%
GEN_CC 599	G_CC	40.4%	52.1%	53.2%	59.9%	59.4%	59.0%	55.4%	55.5%	56.5%	62.5%	63.8%	64.2%	62.7%	64.5%	65.0%	64.8%	66.1%	65.4%	65.5%
GEN_CC 600	G_CC	32.0%	41.2%	44.6%	49.4%	50.8%	50.1%	47.6%	47.7%	48.8%	53.0%	54.6%	55.1%	54.3%	55.7%	56.1%	56.3%	56.5%	57.1%	57.3%

Summary Sheet - Scenario 11

Base Case Heat Rates

THERMAL UNIT	Unit	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
HARRING 1	COAL	10.49	10.49	10.52	10.55	10.54	10.55	10.55	10.55	10.56	10.56	10.55	10.56	10.54	10.53	10.50	10.48	10.49	10.48
HARRING 2	COAL	10.38	10.37	10.37	10.39	10.39	10.39	10.40	10.40	10.40	10.40	10.40	10.40	10.39	10.38	10.36	10.38	10.38	10.39
HARRING 3	COAL	10.21	10.23	10.26	10.28	10.27	10.28	10.28	10.27	10.29	10.28	10.29	10.29	10.26	10.28	10.24	10.20	10.21	10.20
TOLK 1	COAL	10.49	10.42	10.12	10.14	10.16	10.15	10.16	10.14	10.18	10.16	10.19	10.21	10.13	10.16	10.12	0.00	0.00	0.00
TOLK 2	COAL	10.50	10.50	9.97	9.99	10.00	10.00	10.01	9.99	10.03	10.01	10.04	10.06	9.98	10.01	9.97	0.00	0.00	0.00
CUNNING 1	G_ST	11.33	11.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CUNNING 2	G_ST	10.29	10.33	10.34	10.33	10.34	10.34	10.30	10.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JONES 1	G_ST	10.46	10.46	10.47	10.46	10.47	10.46	10.49	10.48	10.48	10.49	10.50	10.50	10.51	10.52	0.00	0.00	0.00	0.00
JONES 2	G_ST	10.31	10.31	10.32	10.32	10.32	10.32	10.33	10.33	10.33	10.32	10.54	10.55	10.60	10.65	10.59	10.60	10.55	0.00
MADDOX 1	G_ST	10.47	10.47	10.47	10.47	10.47	10.47	10.47	10.46	10.47	10.47	10.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NICHOLS 1	G_ST	10.06	10.05	10.06	10.07	10.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NICHOLS 2	G_ST	10.08	10.09	10.08	10.08	10.09	10.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NICHOLS 3	G_ST	10.25	10.24	10.24	10.25	10.24	10.25	10.24	10.25	10.25	10.24	10.26	10.27	10.28	0.00	0.00	0.00	0.00	0.00
PLANT X 1	G_ST	13.72	13.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT X 2	G_ST	11.75	11.76	11.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT X 3	G_ST	10.43	10.44	10.44	10.44	10.44	10.43	10.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT X 4	G_ST	10.11	10.06	10.07	10.10	10.07	10.07	10.11	10.13	10.16	10.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HOBBS 1	G_CC	7.21	7.24	7.25	7.26	7.26	7.26	7.25	7.26	7.27	7.27	7.28	7.28	7.28	7.31	7.32	7.28	0.00	0.00
BLKHAWK 1	G_CC	7.04	7.04	7.03	7.03	7.03	7.04	7.04	7.04	7.04	7.04	7.04	7.04	7.04	7.04	7.03	7.01	7.01	0.00
BLKHAWK 2	G_CC	7.10	7.08	7.08	7.07	7.08	7.08	7.09	7.09	7.09	7.09	7.09	7.09	7.09	7.08	7.07	7.05	7.05	0.00
CALP 200	G_CC	7.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CALP 400	G_CC	7.43	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CUNNING 3	G_CT	11.44	11.46	11.46	11.47	11.47	11.47	11.47	11.47	11.48	11.48	11.48	11.46	11.49	11.48	11.48	11.48	11.47	11.46
CUNNING 4	G_CT	11.40	11.42	11.42	11.43	11.42	11.41	11.43	11.43	11.43	11.43	11.41	11.43	11.44	11.43	11.43	11.42	11.43	11.41
JONES 3	G_CT	10.97	10.95	10.95	10.94	10.93	10.93	10.93	10.93	10.93	10.93	10.94	10.94	10.95	10.95	10.95	10.97	10.95	10.96
JONES 4	G_CT	10.79	10.78	10.78	10.76	10.76	10.76	10.75	10.75	10.76	10.76	10.76	10.77	10.77	10.77	10.77	10.79	10.78	10.78
CRLSBD 1	G_CT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MADDOX 2	G_CT	13.45	13.44	13.44	13.44	13.43	13.43	13.43	13.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MADDOX 3	G_CT	17.87	17.87	17.87	17.87	17.87	17.87	17.87	17.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COOK_GT 2	G_CT	14.53	14.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COOK_GT 3	G_CT	15.88	15.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SD_RCH 1	G_CT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ORION 1	G_CT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
QUAYCTY 1	OIL_	17.04	16.44	16.62	16.36	16.36	16.38	16.30	16.34	16.35	16.39	16.44	16.46	16.33	16.49	16.38	16.61	16.41	0.00
BIOMASS 1	BIO_	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GEN_CC 592	G_CC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GEN_CT 593	G_CT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GEN_CT 594	G_CT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GEN_CT 595	G_CT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GEN_CT 596	G_CT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GEN_CT 597	G_CT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.30
GEN_CC 598	G_CC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.14	7.16
GEN_CC 599	G_CC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.11	7.24	7.21
GEN_CC 600	G_CC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.18	7.19	7.29	7.27

Summary Sheet - Scenario 11

Base Case Heat Rates

THERMAL UNIT	Unit	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
HARRING 1	COAL	10.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARRING 2	COAL	10.39	10.40	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARRING 3	COAL	10.20	10.20	10.19	10.19	10.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOLK 1	COAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOLK 2	COAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CUNNING 1	G_ST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CUNNING 2	G_ST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JONES 1	G_ST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JONES 2	G_ST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MADDOX 1	G_ST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NICHOLS 1	G_ST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NICHOLS 2	G_ST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NICHOLS 3	G_ST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT X 1	G_ST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT X 2	G_ST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT X 3	G_ST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PLANT X 4	G_ST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HOBBS 1	G_CC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BLKHAWK 1	G_CC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BLKHAWK 2	G_CC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CALP 200	G_CC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CALP 400	G_CC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CUNNING 3	G_CT	11.45	11.49	11.46	11.44	11.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CUNNING 4	G_CT	11.41	11.44	11.41	11.40	11.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
JONES 3	G_CT	10.96	10.98	11.00	10.97	10.97	10.99	10.98	10.98	10.99	10.98	10.99	10.98	10.97	10.97	10.96	10.97	10.97	10.97	10.97
JONES 4	G_CT	10.78	10.81	10.82	10.79	10.79	10.81	10.80	10.81	10.82	10.81	10.81	10.81	10.80	10.79	10.79	10.80	10.80	10.80	10.79
CRLSBD 1	G_CT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MADDOX 2	G_CT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MADDOX 3	G_CT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COOK_GT 2	G_CT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COOK_GT 3	G_CT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SD_RCH 1	G_CT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ORION 1	G_CT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
QUAYCTY 1	OIL_	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BIOMASS 1	BIO_	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GEN_CC 592	G_CC	0.00	0.00	0.00	0.00	0.00	7.02	7.02	7.02	7.01	6.99	6.99	7.00	7.00	6.99	6.99	7.00	7.00	7.00	7.00
GEN_CT 593	G_CT	0.00	0.00	0.00	11.25	11.41	11.78	11.78	11.75	11.92	11.73	11.70	11.66	11.59	11.49	11.52	11.53	11.52	11.52	11.49
GEN_CT 594	G_CT	0.00	0.00	0.00	11.22	11.42	11.78	11.78	11.72	11.90	11.68	11.75	11.73	11.65	11.56	11.60	11.63	11.56	11.66	11.63
GEN_CT 595	G_CT	0.00	11.57	11.78	11.61	11.53	11.93	11.84	11.80	11.95	11.78	11.88	11.84	11.71	11.66	11.71	11.78	11.67	11.76	11.75
GEN_CT 596	G_CT	0.00	11.65	11.81	11.62	11.61	12.01	11.79	11.80	12.01	11.88	11.93	11.86	11.71	11.68	11.70	11.79	11.73	11.74	11.73
GEN_CT 597	G_CT	11.37	11.67	11.61	11.38	11.40	11.70	11.54	11.55	11.78	11.64	11.67	11.60	11.43	11.39	11.41	11.48	11.48	11.44	11.42
GEN_CC 598	G_CC	7.16	7.11	7.10	7.09	7.08	7.06	7.04	7.05	7.03	6.99	6.99	7.00	7.00	7.00	7.00	7.00	6.98	6.99	7.00
GEN_CC 599	G_CC	7.20	7.13	7.12	7.11	7.12	7.09	7.09	7.10	7.08	7.03	7.03	7.03	7.04	7.04	7.04	7.03	7.03	7.03	7.03
GEN_CC 600	G_CC	7.26	7.20	7.18	7.17	7.17	7.15	7.17	7.17	7.15	7.13	7.12	7.12	7.13	7.12	7.12	7.11	7.12	7.11	7.11

Summary Sheet - Scenario 11

Base Case FOM (\$000)

THERMAL UNIT	Unit	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
HARRING 1	COAL	13,127	13,330	13,538	13,748	13,962	14,180	14,402	14,627	14,857	15,090	15,327	15,569	15,814	16,064	16,318	16,577	16,840	17,108
HARRING 2	COAL	12,741	12,936	13,136	13,338	13,544	13,754	13,967	14,184	14,404	14,628	14,856	15,088	15,324	15,564	15,809	16,057	16,310	16,567
HARRING 3	COAL	12,905	13,104	13,306	13,512	13,722	13,935	14,151	14,372	14,596	14,824	15,056	15,292	15,532	15,776	16,025	16,278	16,535	16,796
TOLK 1	COAL	18,418	16,559	12,265	12,258	12,453	12,651	12,853	13,058	13,267	13,480	13,696	13,916	14,140	14,368	14,600	0	0	0
TOLK 2	COAL	25,660	22,878	16,980	16,962	17,251	17,545	17,845	18,150	18,461	18,777	19,100	19,428	19,762	20,103	20,449	0	0	0
CUNNING 1	G_ST	1,654	1,673	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CUNNING 2	G_ST	3,951	3,994	4,038	4,082	4,128	4,175	4,222	4,271	0	0	0	0	0	0	0	0	0	0
JONES 1	G_ST	4,529	4,567	4,606	4,646	4,687	4,728	4,771	4,814	4,858	4,903	4,948	4,995	5,043	5,091	0	0	0	0
JONES 2	G_ST	4,646	4,686	4,728	4,770	4,813	4,857	4,902	4,948	4,994	5,042	5,091	5,140	5,191	5,242	5,295	5,348	5,403	0
MADDOX 1	G_ST	2,915	2,951	2,988	3,026	3,064	3,103	3,143	3,183	3,225	3,267	3,310	0	0	0	0	0	0	0
NICHOLS 1	G_ST	2,085	2,119	2,154	2,189	2,225	0	0	0	0	0	0	0	0	0	0	0	0	0
NICHOLS 2	G_ST	2,266	2,304	2,342	2,381	2,421	2,462	0	0	0	0	0	0	0	0	0	0	0	0
NICHOLS 3	G_ST	5,102	5,186	5,272	5,360	5,449	5,540	5,633	5,728	5,824	5,923	6,023	6,126	6,231	0	0	0	0	0
PLANT X 1	G_ST	786	799	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PLANT X 2	G_ST	1,668	1,694	1,721	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PLANT X 3	G_ST	1,703	1,729	1,756	1,784	1,812	1,840	1,870	0	0	0	0	0	0	0	0	0	0	0
PLANT X 4	G_ST	3,083	3,129	3,177	3,225	3,274	3,324	3,375	3,427	3,480	3,534	0	0	0	0	0	0	0	0
HOBBS 1	G_CC	54,452	54,452	54,452	54,452	54,452	54,452	54,452	54,452	54,452	54,452	54,452	54,452	54,452	54,452	54,452	40,727	0	0
BLKHAWK 1	G_CC	10,650	7,864	5,612	5,756	5,899	6,051	6,167	6,286	6,407	6,531	6,656	6,785	6,915	7,049	7,184	7,323	3,701	0
BLKHAWK 2	G_CC	11,599	8,565	6,112	6,269	6,425	6,590	6,717	6,846	6,978	7,112	7,249	7,389	7,532	7,677	7,825	7,975	4,031	0
CALP 200	G_CC	15,542	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CALP 400	G_CC	19,266	2,979	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CUNNING 3	G_CT	2,697	2,731	2,764	2,799	2,834	2,870	2,907	2,944	2,982	3,021	3,060	3,101	3,142	3,184	3,227	3,271	3,315	3,361
CUNNING 4	G_CT	2,697	2,731	2,764	2,799	2,834	2,870	2,907	2,944	2,982	3,021	3,060	3,101	3,142	3,184	3,227	3,271	3,315	3,361
JONES 3	G_CT	4,309	4,356	4,404	4,452	4,502	4,553	4,604	4,657	4,711	4,766	4,821	4,879	4,937	4,996	5,057	5,118	5,181	5,246
JONES 4	G_CT	4,309	4,356	4,404	4,452	4,502	4,553	4,604	4,657	4,711	4,766	4,821	4,879	4,937	4,996	5,057	5,118	5,181	5,246
CRLSBD 1	G_CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MADDOX 2	G_CT	1,993	2,020	2,048	2,076	2,104	2,133	2,163	2,193	0	0	0	0	0	0	0	0	0	0
MADDOX 3	G_CT	320	324	329	334	338	343	348	353	0	0	0	0	0	0	0	0	0	0
COOK_GT 2	G_CT	407	202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COOK_GT 3	G_CT	432	214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SD_RCH 1	G_CT	96	96	96	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ORION 1	G_CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
QUAYCTY 1	OIL_	261	266	272	277	283	288	294	300	306	312	318	325	331	338	344	351	358	0
BIOMASS 1	BIO_	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GEN_CC 592	G_CC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GEN_CT 593	G_CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GEN_CT 594	G_CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GEN_CT 595	G_CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GEN_CT 596	G_CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GEN_CT 597	G_CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,228
GEN_CC 598	G_CC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23,166	32,515
GEN_CC 599	G_CC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20,936	34,513	32,515
GEN_CC 600	G_CC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20,589	31,191	34,513	32,515

Summary Sheet - Scenario 11

Base Case FOM (\$000)

THERMAL UNIT	Unit	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
HARRING 1	COAL	17,380	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HARRING 2	COAL	16,828	21,247	21,565	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HARRING 3	COAL	17,062	21,485	21,809	34,881	35,362	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOLK 1	COAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOLK 2	COAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CUNNING 1	G_ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CUNNING 2	G_ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JONES 1	G_ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JONES 2	G_ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MADDOX 1	G_ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NICHOLS 1	G_ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NICHOLS 2	G_ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NICHOLS 3	G_ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PLANT X 1	G_ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PLANT X 2	G_ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PLANT X 3	G_ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PLANT X 4	G_ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HOBBS 1	G_CC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BLKHAWK 1	G_CC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BLKHAWK 2	G_CC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CALP 200	G_CC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CALP 400	G_CC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CUNNING 3	G_CT	3,407	3,455	3,503	3,552	3,602	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CUNNING 4	G_CT	3,407	3,455	3,503	3,552	3,602	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JONES 3	G_CT	5,311	5,378	5,446	5,516	5,587	5,659	5,733	5,808	5,885	5,963	6,043	6,124	6,208	6,292	6,379	6,467	6,557	6,649	6,742
JONES 4	G_CT	5,311	5,378	5,446	5,516	5,587	5,659	5,733	5,808	5,885	5,963	6,043	6,124	6,208	6,292	6,379	6,467	6,557	6,649	6,742
CRLSBD 1	G_CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MADDOX 2	G_CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MADDOX 3	G_CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COOK_GT 2	G_CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COOK_GT 3	G_CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SD_RCH 1	G_CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ORION 1	G_CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
QUAYCTY 1	OIL_	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BIOMASS 1	BIO_	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GEN_CC 592	G_CC	0	0	0	0	0	25,887	35,527	39,764	36,594	37,148	41,644	38,289	42,957	39,467	44,949	40,699	41,331	46,499	42,639
GEN_CT 593	G_CT	0	0	0	5,657	8,598	10,232	8,945	9,125	9,307	9,493	9,682	9,876	11,752	10,274	10,480	10,689	10,904	11,121	11,343
GEN_CT 594	G_CT	0	0	0	5,657	8,598	10,232	8,945	9,125	9,307	9,493	9,682	9,876	11,752	10,274	10,480	10,689	10,904	11,121	11,343
GEN_CT 595	G_CT	0	5,438	8,264	8,428	8,598	10,232	8,945	9,125	9,307	9,493	9,682	9,876	11,752	10,274	10,480	10,689	10,904	11,121	11,343
GEN_CT 596	G_CT	0	5,438	8,264	8,428	8,598	10,232	8,945	9,125	9,307	9,493	9,682	9,876	11,752	10,274	10,480	10,689	10,904	11,121	11,343
GEN_CT 597	G_CT	7,944	8,101	8,264	8,428	8,598	10,232	8,945	9,125	9,307	9,493	9,682	9,876	11,752	10,274	10,480	10,689	10,904	11,121	11,343
GEN_CC 598	G_CC	35,548	33,021	33,508	37,418	34,496	38,566	35,527	39,764	36,594	37,148	41,644	38,289	42,957	39,467	44,949	40,699	41,331	46,499	42,639
GEN_CC 599	G_CC	35,548	33,021	33,508	37,418	34,496	38,566	35,527	39,764	36,594	37,148	41,644	38,289	42,957	39,467	44,949	40,699	41,331	46,499	42,639
GEN_CC 600	G_CC	35,548	33,021	33,508	37,418	34,496	38,566	35,527	39,764	36,594	37,148	41,644	38,289	42,957	39,467	44,949	40,699	41,331	46,499	42,639

Summary Sheet - Scenario 11

Base Case VOM (\$000)

THERMAL UNIT	Unit	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
HARRING 1	COAL	37,529	30,518	36,453	36,243	33,838	38,323	39,184	36,541	41,023	42,282	38,576	44,468	47,329	44,107	53,508	58,345	52,838	61,989
HARRING 2	COAL	35,909	34,497	31,014	33,728	34,998	31,926	36,905	37,889	35,014	39,738	40,687	37,809	44,140	46,353	44,793	55,955	57,557	54,564
HARRING 3	COAL	34,054	36,406	36,307	32,848	37,133	38,232	32,631	40,259	40,975	36,708	43,319	44,330	40,935	49,490	53,168	50,584	59,195	62,031
TOLK 1	COAL	44,261	38,192	27,979	28,167	28,569	29,378	29,988	31,096	30,752	32,144	31,760	32,188	35,995	36,774	39,754	0	0	0
TOLK 2	COAL	47,475	47,903	28,735	28,977	29,356	30,267	30,794	32,052	31,698	33,053	32,815	33,333	37,143	38,158	41,112	0	0	0
CUNNING 1	G_ST	357	533	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CUNNING 2	G_ST	16,904	18,760	16,050	12,475	15,988	16,434	13,521	14,983	0	0	0	0	0	0	0	0	0	0
JONES 1	G_ST	4,768	6,159	3,959	5,512	4,404	6,251	6,612	8,317	9,247	8,699	11,719	10,623	11,586	12,387	0	0	0	0
JONES 2	G_ST	11,293	9,825	8,048	6,959	8,449	8,948	10,863	12,657	14,752	13,739	21,948	22,338	22,438	22,251	11,908	7,334	5,841	0
MADDOX 1	G_ST	798	1,158	866	900	601	1,126	2,089	1,989	2,759	2,729	3,219	0	0	0	0	0	0	0
NICHOLS 1	G_ST	3,597	3,832	2,810	2,585	2,730	0	0	0	0	0	0	0	0	0	0	0	0	0
NICHOLS 2	G_ST	1,103	1,529	1,092	1,160	1,159	1,511	0	0	0	0	0	0	0	0	0	0	0	0
NICHOLS 3	G_ST	3,980	5,512	3,356	3,757	4,410	4,728	7,738	7,643	9,834	11,663	12,262	13,563	14,285	0	0	0	0	0
PLANT X 1	G_ST	118	171	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PLANT X 2	G_ST	368	489	489	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PLANT X 3	G_ST	4,456	5,954	4,763	4,131	4,879	5,198	5,520	0	0	0	0	0	0	0	0	0	0	0
PLANT X 4	G_ST	18,326	11,649	10,956	11,047	10,003	12,338	16,378	15,985	18,699	19,370	0	0	0	0	0	0	0	0
HOBBS 1	G_CC	51,514	45,507	38,975	36,322	38,866	42,367	44,865	47,621	44,413	47,712	48,199	50,477	54,779	53,269	37,952	22,187	0	0
BLKHAWK 1	G_CC	15,886	15,110	14,651	16,063	16,557	18,028	18,213	20,415	20,558	21,786	21,279	23,760	24,300	25,562	24,317	27,282	13,357	0
BLKHAWK 2	G_CC	16,864	15,362	16,082	15,100	17,082	17,948	19,900	19,184	21,128	21,575	23,084	22,137	24,955	25,136	26,178	25,285	13,700	0
CALP 200	G_CC	10,389	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CALP 400	G_CC	12,611	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CUNNING 3	G_CT	73	106	105	172	190	245	250	448	675	634	804	685	616	812	710	417	392	712
CUNNING 4	G_CT	101	140	144	228	241	175	570	587	880	835	768	1,142	871	1,157	1,027	470	697	944
JONES 3	G_CT	293	393	405	589	609	687	1,532	1,552	2,020	1,935	2,334	2,696	2,242	2,965	2,740	1,417	1,747	2,154
JONES 4	G_CT	486	680	688	948	947	1,191	2,131	2,393	3,097	3,010	3,753	4,363	3,886	5,191	4,954	2,794	2,677	3,536
CRLSBD 1	G_CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MADDOX 2	G_CT	62	84	87	85	141	177	352	361	0	0	0	0	0	0	0	0	0	0
MADDOX 3	G_CT	10	17	17	29	32	40	61	73	0	0	0	0	0	0	0	0	0	0
COOK_GT 2	G_CT	22	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COOK_GT 3	G_CT	20	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SD_RCH 1	G_CT	404	379	392	231	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ORION 1	G_CT	3,164	3,344	3,489	3,621	3,768	3,921	4,091	4,246	4,418	4,598	4,798	4,978	5,181	5,392	5,626	5,838	6,075	6,322
QUAYCTY 1	OIL_	74	129	116	200	227	253	502	445	703	634	754	871	560	703	611	351	513	0
BIOMASS 1	BIO_	0	2,726	3,537	3,649	3,787	3,936	4,118	4,248	4,390	4,546	4,738	4,883	5,051	5,229	5,440	5,594	5,781	5,992
GEN_CC 592	G_CC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GEN_CT 593	G_CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GEN_CT 594	G_CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GEN_CT 595	G_CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GEN_CT 596	G_CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GEN_CT 597	G_CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,620
GEN_CC 598	G_CC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84,103	134,273
GEN_CC 599	G_CC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84,354	107,715	107,771
GEN_CC 600	G_CC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63,158	110,538	79,459	86,798

Summary Sheet - Scenario 11

Base Case VOM (\$000)

THERMAL UNIT	Unit	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
HARRING 1	COAL	63,831	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HARRING 2	COAL	62,268	65,291	61,046	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HARRING 3	COAL	55,025	66,163	68,496	71,045	63,232	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOLK 1	COAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOLK 2	COAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CUNNING 1	G_ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CUNNING 2	G_ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JONES 1	G_ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JONES 2	G_ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MADDOX 1	G_ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NICHOLS 1	G_ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NICHOLS 2	G_ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NICHOLS 3	G_ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PLANT X 1	G_ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PLANT X 2	G_ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PLANT X 3	G_ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PLANT X 4	G_ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HOBBS 1	G_CC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BLKHAWK 1	G_CC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BLKHAWK 2	G_CC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CALP 200	G_CC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CALP 400	G_CC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CUNNING 3	G_CT	631	185	136	307	206	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CUNNING 4	G_CT	851	288	208	414	295	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JONES 3	G_CT	1,968	805	574	920	670	151	201	211	116	219	213	258	428	557	563	460	497	530	596
JONES 4	G_CT	3,266	1,652	1,179	1,524	1,124	292	355	379	215	388	400	471	714	914	912	777	858	889	980
CRLSBD 1	G_CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MADDOX 2	G_CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MADDOX 3	G_CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COOK_GT 2	G_CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COOK_GT 3	G_CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SD_RCH 1	G_CT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ORION 1	G_CT	6,597	6,846	7,124	7,414	7,736	8,028	8,355	8,694	9,072	9,414	9,797	10,194	10,638	11,039	11,487	11,954	12,474	12,945	13,471
QUAYCTY 1	OIL_	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BIOMASS 1	BIO_	6,241	6,425	6,638	6,874	7,158	7,366	7,602	7,864	8,179	8,414	8,625	8,842	9,088	9,291	9,524	9,763	10,035	10,259	10,517
GEN_CC 592	G_CC	0	0	0	0	0	139,752	216,907	220,589	232,711	243,222	253,991	252,724	266,849	272,255	278,658	285,725	294,690	297,816	304,226
GEN_CT 593	G_CT	0	0	0	13,298	18,665	12,252	9,553	10,027	9,405	10,795	12,747	13,162	14,266	16,601	17,262	17,498	18,330	18,551	19,532
GEN_CT 594	G_CT	0	0	0	8,955	11,283	6,210	5,001	5,269	4,642	5,786	6,785	7,151	7,914	9,699	9,940	9,894	10,349	10,421	11,063
GEN_CT 595	G_CT	0	9,261	11,420	9,684	6,726	3,113	2,644	2,878	2,332	3,167	3,550	3,782	4,495	5,533	5,593	5,412	5,887	5,830	6,244
GEN_CT 596	G_CT	0	5,116	5,767	5,341	3,892	1,522	1,391	1,511	1,141	1,674	1,826	1,987	2,439	2,973	3,064	2,839	3,263	3,132	3,377
GEN_CT 597	G_CT	6,615	4,545	2,998	3,118	2,270	735	770	832	578	892	938	1,052	1,385	1,808	1,775	1,609	1,816	1,729	1,871
GEN_CC 598	G_CC	140,832	169,923	181,266	200,444	209,583	209,670	204,576	208,154	214,121	235,554	244,967	250,955	254,911	265,202	272,365	276,978	281,313	289,430	295,473
GEN_CC 599	G_CC	115,109	151,871	160,158	182,566	188,321	190,012	181,927	185,853	193,751	215,881	224,550	230,513	229,783	241,704	248,110	251,519	263,020	263,884	269,621
GEN_CC 600	G_CC	92,283	121,253	135,506	152,007	162,654	163,256	158,267	161,776	169,269	186,164	195,452	201,114	202,915	211,906	217,551	222,315	228,357	234,510	239,835

Summary Sheet - Scenario 11

Base Case VOM (\$000)

TRANSACTION	Desc	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
CAPROCK	WPPA	9,791	10,035	10,314	10,543	10,807	11,078	11,383	0	0	0	0	0	0	0	0	0	0	0
MAMMOTH	WPPA	18,320	18,689	19,114	19,445	19,833	20,229	20,685	21,048	21,471	21,894	22,390	22,785	23,235	23,704	24,241	24,658	25,153	0
PALODURO	WPPA	25,165	25,618	26,145	25,097	25,550	26,013	26,542	26,952	27,438	27,935	28,503	28,953	29,473	30,004	30,611	31,089	29,253	0
ROOSEVEL	WPPA	22,417	22,866	23,395	23,797	24,267	24,759	25,326	25,754	26,267	26,791	27,417	27,882	28,439	29,005	29,670	30,171	30,781	28,822
SPINSPUR	WPPA	26,861	26,861	26,928	26,861	26,861	31,314	31,392	31,314	31,314	31,314	0	0	0	0	0	0	0	0
SAN JUAN	WPPA	13,015	13,341	13,716	14,018	14,368	14,726	15,141	15,470	0	0	0	0	0	0	0	0	0	0
WILDRADO	WPPA	24,149	24,750	25,428	26,008	26,658	27,321	28,072	28,708	29,426	9,830	0	0	0	0	0	0	0	0
AEOLUS	WPPA	162	157	157	159	168	180	78	0	0	0	0	0	0	0	0	0	0	0
CIRRUS	WPPA	4,776	4,620	4,603	4,656	4,955	5,320	5,879	6,087	6,290	6,550	6,755	6,974	7,198	7,383	7,631	7,899	8,105	8,307
FRISCO	WPPA	1,060	1,027	1,025	1,037	1,103	1,184	1,308	1,356	1,402	1,460	1,507	1,555	1,604	1,647	1,702	1,761	1,807	1,852
MESALAND	WPPA	81	78	78	79	84	90	99	103	107	111	115	118	122	125	130	134	0	0
NATIONAL	WPPA	36	34	34	35	37	40	44	45	47	49	50	52	54	0	0	0	0	0
NOVUS1	WPPA	5,023	4,902	4,897	4,957	5,276	5,661	6,271	6,494	6,713	6,994	7,232	7,461	7,701	7,907	8,170	8,445	8,684	8,887
NOVUS2	WPPA	2,512	2,451	2,449	2,478	2,638	2,831	3,135	3,247	3,356	3,497	3,616	3,730	3,851	3,953	4,085	4,223	4,342	4,444
PRINGLE1	WPPA	604	586	584	591	628	675	745	772	798	831	857	884	913	937	968	1,002	1,028	747
PRINGLE2	WPPA	538	523	523	529	560	601	663	688	711	741	764	789	814	835	863	894	917	763
PANTEX	WPPA	888	861	859	869	925	992	1,097	1,136	1,174	1,223	1,262	1,302	1,344	1,379	1,425	1,475	1,514	1,551
PLSTHILL	WPPA	1,173	1,128	1,123	1,135	1,205	1,293	1,427	1,479	1,526	1,591	1,637	1,693	1,746	1,790	1,849	1,917	1,963	2,015
RALLS	WPPA	628	604	601	607	646	694	767	794	820	854	879	908	937	961	993	1,028	1,054	1,081
SUNRAY	WPPA	738	717	715	723	770	826	913	946	978	1,019	1,051	1,084	1,119	1,149	1,187	1,228	862	0
SUZLON	WPPA	260	251	251	254	269	289	319	331	342	356	367	379	392	402	415	429	441	452
WTX AM	WPPA	108	105	105	106	112	120	133	138	142	148	153	158	163	167	173	179	183	188
SUNEDSN1	SOLR	2,779	2,870	2,972	3,063	3,164	3,268	3,384	3,488	3,603	3,722	3,853	3,971	4,102	3,423	0	0	0	0
SUNEDSN2	SOLR	2,801	2,894	2,998	3,088	3,189	3,295	3,413	3,516	3,632	3,752	3,887	4,003	4,136	3,191	0	0	0	0
SUNEDSN3	SOLR	2,820	2,913	3,017	3,108	3,211	3,317	3,435	3,539	3,656	3,777	3,911	4,030	4,163	4,076	0	0	0	0
SUNEDSN4	SOLR	2,908	3,004	3,111	3,206	3,312	3,421	3,543	3,650	3,771	3,895	4,034	4,157	4,294	4,217	0	0	0	0
SUNEDSN5	SOLR	2,771	2,863	2,965	3,055	3,156	3,260	3,376	3,479	3,593	3,712	3,844	3,961	4,092	3,472	0	0	0	0
CHAVES	SOLR	7,249	7,357	7,486	7,577	7,690	7,802	7,938	8,035	8,152	8,273	8,413	8,516	8,639	8,766	8,913	9,021	9,152	9,285
ROSWELL	SOLR	7,158	7,265	7,389	7,481	7,591	7,704	7,836	7,932	8,049	8,167	8,305	8,407	8,529	8,653	8,800	8,907	9,035	9,165
NM SOLAR	SOLR	0	0	103	134	178	228	295	334	371	417	482	524	572	627	4,533	4,638	4,770	4,919
DG	SOLR	0	1,714	2,230	2,308	2,403	2,505	2,627	2,720	2,819	2,928	3,060	3,165	3,283	3,409	3,556	3,669	3,803	3,954
NM WIND	WPPA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TX WIND	WPPA	0	0	0	0	0	0	2,093	2,130	2,173	18,485	50,583	51,458	52,506	53,564	54,750	55,702	56,826	57,971
HALE	WOWN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SAGAMORE	WOWN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BONITA1	WPPA	0	6,469	6,615	6,730	6,866	7,002	7,159	7,284	7,431	7,581	7,750	7,884	8,045	8,206	8,388	8,535	8,706	8,882
BONITA2	WPPA	0	12,130	12,406	12,619	12,873	13,128	13,427	13,657	13,932	14,214	14,536	14,783	15,085	15,386	15,732	16,003	16,325	16,653

Summary Sheet - Scenario 11

Base Case VOM (\$000)

TRANSACTION	Desc	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
CAPROCK	WPPA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MAMMOTH	WPPA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PALODURO	WPPA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROOSEVEL	WPPA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SPINSPUR	WPPA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SAN JUAN	WPPA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WILDRADO	WPPA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AEOLUS	WPPA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CIRRUS	WPPA	8,471	8,640	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FRISCO	WPPA	1,888	201	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MESALAND	WPPA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NATIONAL	WPPA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOVUS1	WPPA	9,054	7,577	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOVUS2	WPPA	4,527	4,242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PRINGLE1	WPPA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PRINGLE2	WPPA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PANTEX	WPPA	1,582	1,614	1,658	858	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PLSTHILL	WPPA	2,055	2,099	2,153	1,415	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RALLS	WPPA	701	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUNRAY	WPPA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUZLON	WPPA	446	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WTX AM	WPPA	192	196	198	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUNEDSN1	SOLR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUNEDSN2	SOLR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUNEDSN3	SOLR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUNEDSN4	SOLR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUNEDSN5	SOLR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CHAVES	SOLR	9,440	9,553	9,690	9,827	9,992	9,557	0	0	0	0	0	0	0	0	0	0	0	0	0
ROSWELL	SOLR	9,320	9,431	9,565	9,703	9,864	9,434	0	0	0	0	0	0	0	0	0	0	0	0	0
NM SOLAR	SOLR	5,098	5,223	5,368	5,531	5,731	5,869	6,027	6,204	6,419	6,571	6,703	6,837	6,991	7,113	7,255	7,400	7,568	7,699	7,853
DG	SOLR	4,129	4,265	4,420	4,590	4,793	4,949	5,123	5,316	5,544	5,722	5,883	6,049	6,235	6,396	6,576	6,761	6,969	7,148	7,350
NM WIND	WPPA	45,675	46,812	48,125	49,587	51,353	52,602	54,020	55,604	57,528	58,905	60,069	61,278	62,666	63,752	65,025	66,326	67,826	69,009	70,391
TX WIND	WPPA	59,256	60,306	61,516	62,749	64,151	65,282	66,598	67,936	69,473	70,700	72,097	73,549	75,214	76,518	78,046	79,607	81,408	82,827	84,487
HALE	WOWN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SAGAMORE	WOWN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BONITA1	WPPA	9,080	9,239	9,425	9,614	9,829	10,000	10,200	10,404	10,639	10,826	11,040	11,262	11,516	0	0	0	0	0	0
BONITA2	WPPA	17,029	17,323	17,672	18,027	18,434	18,751	19,126	19,508	19,952	20,299	20,701	21,116	21,599	0	0	0	0	0	0