

In the Matter of:

THE APPLICATION OF KENTUCKY UTILITIES COMPANY)
FOR CERTIFICATES OF PUBLIC CONVENIENCE AND) CASE NO.
NECESSITY AND APPROVAL OF ITS 2011 COMPLIANCE) 2011-00161
PLAN FOR RECOVERY BY ENVIRONMENTAL SURCHARGE)

In the Matter of:

THE APPLICATION OF LOUISVILLE GAS AND ELECTRIC)
COMPANY FOR CERTIFICATES OF PUBLIC CONVENIENCE) CASE NO.
AND NECESSITY AND APPROVAL OF ITS 2011 COMPLIANCE) 2011-00162
PLAN FOR RECOVERY BY ENVIRONMENTAL SURCHARGE)

One Paper Copy of

Sinclair – Appendix B and Schram – Appendix A

Filed – October 24, 2011

Sinclair - Appendix B and Schram - Appendix A

2011-00161

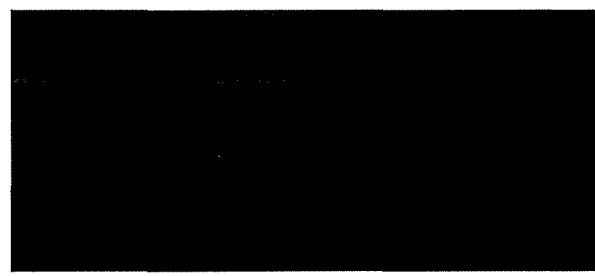
2011-00162

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OCT 24 2011

PUBLIC SERVICE
COMMISSION

Year	BLS Deflator		Recommended Value For KY		REVISID	NPCC 2011			Globebox futures		
	AESC 2011 (2011\$)	AESC 2011 (2010\$)	INCORRECT	AESC + KY Adder		Low	Med	High	From CME Group, Oct of each year	2011	2012
2011	4.37	4.217824	\$0.00	\$5.32	\$5.32	2011	4.25	4.25	4.25	3.75	
2012	4.81	4.739132	\$5.52	\$5.77	\$5.77	2012	4.24	4.34	4.73	4.29	
2013	5.1	4.9255	\$6.09	\$6.09	\$6.09	2013	4.24	4.43	5.20	4.73	
2014	5.29	5.105608	\$6.29	\$6.14	\$6.14	2014	4.13	4.51	5.73	5.00	
2015	5.91	5.704932	\$6.92	\$6.81	\$6.81	2015	4.14	4.60	6.35	5.20	
2016	5.95	5.729592	\$7.11	\$7.11	\$7.11	2016	4.15	4.70	7.28	5.40	
2017	5.93	5.729592	\$7.13	\$7.13	\$7.13	2017	4.16	4.79	7.32	5.61	
2018	5.98	5.74994	\$7.19	\$7.19	\$7.19	2018	4.12	4.91	7.27	5.84	
2019	5.98	5.711655	\$7.27	\$7.27	\$7.27	2019	4.08	5.03	7.55	6.06	
2020	6.06	5.840112	\$7.41	\$7.41	\$7.41	2020	4.06	5.16	7.51	6.30	
2021	6.16	5.945632	\$7.57	\$7.57	\$7.57	2021	4.11	5.29	7.61	6.55	
2022	6.25	6.0325	\$7.73	\$7.73	\$7.73	2022	4.11	5.42	7.68	6.82	
2023	6.32	6.233104	\$8.06	\$8.06	\$8.06	2023	4.19	5.56	7.98	7.09	
2024	6.72	6.498144	\$8.33	\$7.77	\$7.77	2024	4.19	5.68	8.08		
2025	6.78	6.544055	\$8.49	\$7.84	\$7.84	2025	4.20	5.84	8.25		
2026	6.89	6.550228	\$8.59	\$7.96	\$7.96	2026	4.16	5.98	8.25		
2027	7.04	6.795008	\$8.74	\$8.12	\$8.12	2027	4.19	6.13	8.50		
2028	7.2	6.94944	\$8.89	\$8.29	\$8.29	2028	4.24	6.29	8.78		
2029	7.41	7.132132	\$9.09	\$8.52	\$8.52	2029	4.27	6.44	9.12		
2030	7.33	7.074916	\$9.02	\$8.43	\$8.43	2030	4.26	6.60	9.37		
2031	7.34	7.084968	\$9.03	\$8.45	\$8.45	2031					
2032	7.49	7.239348	\$9.17	\$8.51	\$8.51	2032					
2033	7.63	7.394476	\$9.31	\$8.76	\$8.76	2033					
2034	7.66	7.393432	\$9.34	\$8.79	\$8.79	2034					
2035	7.83	7.571516	\$9.50	\$8.96	\$8.96	2035					
2036	7.86	7.682892	\$9.63	\$9.12	\$9.12	2036					
2037	8.1	7.818172	\$9.76	\$9.27	\$9.27	2037					
2038	8.24	7.933248	\$9.90	\$9.45	\$9.45	2038					
2039	8.37	8.078724	\$10.02	\$9.57	\$9.57	2039					
2040	8.52	8.243594	\$10.17	\$9.73	\$9.73	2040					
2041	8.66	8.348632	\$10.30	\$9.86	\$9.86	2041					



EIPCC Fuel and Emission Prices Subtream Review
Graphical reprs.

EIPCC High Scenario	Navigator GHG As-is	Navigator GHG Plus	BLS Indicator	Prop. Source (2011, from EIPCC review)	RGGI (2010, from EIPCC review)
2011 \$4.99	\$5.11	\$5.11	1.0164	2011 \$4.51	\$4.95
2012 \$5.47	\$5.20	\$5.32		2012 \$5.36	\$5.42
2013 \$5.68	\$3.96	\$4.70		2013 \$5.84	\$5.46
2014 \$6.22	\$3.15	\$4.95		2014 \$5.30	\$5.59
2015 \$6.40	\$3.04	\$4.57		2015 \$5.81	\$5.72
2016 \$6.56	\$3.98	\$4.58		2016 \$5.75	\$5.81
2017 \$6.70	\$3.51	\$4.65		2017 \$5.37	\$5.97
2018 \$6.90	\$4.73	\$4.73		2018 \$5.46	\$6.05
2019 \$7.19	\$3.68	\$4.87		2019 \$5.58	\$6.08
2020 \$7.30	\$3.91	\$5.07		2020 \$6.69	\$6.23
2021 \$7.27	\$3.97	\$5.96		2021 \$6.69	\$6.45
2022 \$7.61	\$4.12	\$5.67		2022 \$6.89	\$6.60
2023 \$8.07	\$4.30	\$6.00		2023 \$7.16	\$6.66
2024 \$8.48	\$4.54	\$6.37		2024 \$7.41	\$6.86
2025 \$8.87	\$4.68	\$6.70		2025 \$7.28	\$7.05
2026 \$9.08	\$4.84	\$7.01		2026 \$6.92	\$7.35
2027 \$9.31	\$5.01	\$7.36		2027 \$6.44	\$7.61
2028 \$9.67	\$5.17	\$7.69		2028 \$6.50	\$7.85
2029 \$9.96	\$5.42	\$8.15		2029 \$6.59	\$8.05
2030 \$10.18	\$5.64	\$8.64		2030 \$6.99	\$8.23
	\$5.91	\$9.17			
	\$6.14	\$9.70			
	\$6.48	\$10.35			
	\$6.76	\$11.04			
	\$7.08	\$11.62			

Wood Mackenzie
From Company Supplemental Analysis - September 14th

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EPA (2010, from EPC review)	2011 Compliance Plan	2011 Wood Mackenzie
\$4.27	2011	5.21
\$4.60	2012	5.67
\$4.85	2013	5.69
\$5.09	2014	5.97
\$4.92	2015	6.29
\$4.77	2016	6.39
\$4.69	2017	6.45
\$4.63	2018	6.73
\$4.46	2019	7.1
\$4.66	2020	7.67
\$4.82	2021	7.85
\$4.93	2022	8.05
\$4.99	2023	8.09
\$5.18	2024	8.21
\$5.31	2025	
\$5.50		
\$5.68		
\$5.81		
\$5.92		

Natural Gas Supply, Disposition, and Prices, Reference case
(trillion cubic feet, unless otherwise noted)

Supply, Disposition, and Prices	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Growth Rate [2009-2035]	
Production	20.28	20.96	21.28	21.06	21.27	21.73	22.02	22.43	22.47	22.65	22.82	23.2	23.43	23.53	23.7	23.85	23.86	23.98	24.07	24.29	24.57	24.82	25.1	25.36	25.55	25.75	26	26.32	0.90%	
Dry Gas Production 1/	0.06	0.06	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.00%	
Supplemental Natural Gas 2/	2.98	2.64	2.74	2.75	2.64	2.72	2.71	2.69	2.63	2.55	2.42	2.22	1.9	1.6	1.38	1.23	1.15	1.08	0.98	0.91	0.87	0.77	0.78	0.72	0.64	0.52	0.37	0.18	-9.70%	
Net Imports	2.68	2.23	2.33	2.31	2.17	2.22	2.26	2.33	2.26	2.14	2	1.75	1.4	1.09	0.88	0.78	0.77	0.74	0.71	0.69	0.67	0.63	0.64	0.58	0.5	0.38	0.23	0.04	-14.00%	
Pipeline 3/	0.3	0.41	0.41	0.44	0.47	0.5	0.45	0.36	0.36	0.41	0.43	0.47	0.5	0.52	0.49	0.45	0.39	0.34	0.27	0.22	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	-4.10%	
Liquefied Natural Gas	23.33	23.66	24.08	23.87	23.98	24.51	24.79	25.18	25.16	25.26	25.4	25.49	25.4	25.2	25.14	25.14	25.07	25.12	25.12	25.26	25.44	25.66	25.94	26.14	26.26	26.34	26.43	26.57	0.40%	
Consumption by Sector	4.87	4.75	4.77	4.76	4.78	4.79	4.81	4.81	4.83	4.82	4.83	4.83	4.85	4.83	4.83	4.83	4.85	4.83	4.83	4.83	4.83	4.83	4.82	4.82	4.82	4.8	4.79	4.78	0.00%	
Residential	3.13	3.11	3.1	3.22	3.24	3.28	3.33	3.38	3.41	3.43	3.46	3.49	3.5	3.52	3.53	3.55	3.56	3.58	3.6	3.62	3.65	3.68	3.71	3.73	3.75	3.76	3.79	3.82	0.80%	
Commercial	6.65	6.14	6.35	7.19	7.6	7.83	8.05	8.09	8.11	8.16	8.19	8.24	8.21	8.14	8.13	8.13	8.1	8.08	8.06	8.04	8.06	8.08	8.08	8.06	8.04	8.03	8.03	8.02	1.00%	
Industrial 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	0.00%	
Natural Gas-to-Liquids Heat and Power 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	0.00%	
Natural Gas to Liquids Production 6/	6.67	6.89	7.44	7.01	6.8	6.87	6.87	6.89	6.89	6.95	7	7.02	6.84	6.69	6.68	6.67	6.59	6.66	6.66	6.66	6.66	6.66	6.66	6.66	6.66	6.66	6.66	6.66	6.66	7.50%
Electric Power 7/	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.05	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.09	0.1	0.1	0.11	0.12	0.12	0.12	0.13	0.14	0.14	0.15	0.15	0.16	0.16	0.10%
Transportation 8/	0.65	0.64	0.65	0.64	0.64	0.64	0.65	0.65	0.64	0.64	0.64	0.64	0.64	0.64	0.63	0.63	0.63	0.62	0.62	0.62	0.62	0.63	0.64	0.64	0.64	0.64	0.65	0.65	0.30%	
Pipeline Fuel	1.22	1.16	1.29	1.27	1.24	1.22	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.19	1.19	1.19	1.19	1.19	1.2	1.2	1.22	1.23	1.24	1.25	0.30%	
Lease and Plant Fuel 9/	23.22	22.71	23.83	23.86	23.91	24.44	24.72	25.11	25.1	25.2	25.34	25.43	25.34	25.34	25.09	25.09	25.02	25.07	25.07	25.22	25.4	25.62	25.9	26.11	26.23	26.31	26.41	26.55	0.60%	
Total	0.11	0.95	0.26	0.01	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.02	--	
Discrepancy 10/																														
Natural Gas Prices																														
(2009 dollars per million Btu)	8.94	3.95	4.43	4.48	4.5	4.56	4.57	4.66	4.74	4.76	4.81	4.87	5.05	5.24	5.39	5.58	5.8	5.97	6.1	6.24	6.31	6.35	6.4	6.49	6.62	6.74	6.87	7.07	2.30%	
Henry Hub Spot Price	7.96	3.62	3.98	3.99	3.88	4.04	4.05	4.13	4.2	4.22	4.26	4.31	4.47	4.64	4.77	4.94	5.13	5.29	5.4	5.52	5.59	5.62	5.66	5.75	5.86	5.96	6.09	6.26	2.10%	
Average Lower 48 Wellhead Price 11/	8.18	3.71	4.08	4.09	4.15	4.16	4.24	4.31	4.33	4.37	4.43	4.59	4.76	4.9	5.07	5.27	5.43	5.54	5.67	5.73	5.77	5.81	5.9	6.01	6.12	6.24	6.42	6.42	2.10%	
(Average Lower 48 Wellhead cubic feet)	13.99	12.2	11.31	10.56	10.44	10.39	10.28	10.39	10.5	10.61	10.74	10.9	11.16	11.38	11.55	11.75	11.96	12.15	12.31	12.51	12.63	12.74	12.85	12.99	13.14	13.33	13.52	13.76	0.50%	
Delivered Prices	12.32	9.94	9.15	9.3	9.03	8.8	8.52	8.6	8.68	8.74	8.84	8.96	9.19	9.37	9.51	9.68	9.88	10.03	10.16	10.32	10.43	10.49	10.57	10.67	10.79	10.93	11.08	11.28	0.50%	
Residential	9.32	5.39	4.93	4.99	5.03	5.04	5.1	5.16	5.24	5.29	5.32	5.5	5.67	5.82	5.98	6.17	6.33	6.46	6.6	6.68	6.72	6.76	6.83	6.95	7.07	7.21	7.4	7.4	1.20%	
Commercial	9.35	4.94	5.2	4.84	4.76	4.75	4.71	4.79	4.83	4.87	4.92	4.99	5.13	5.27	5.41	5.57	5.74	5.91	6.02	6.16	6.24	6.3	6.36	6.45	6.55	6.66	6.79	6.97	1.30%	
Industrial 4/	17.67	13.05	12.37	12.35	12.3	12.27	12.29	12.32	12.33	12.37	12.44	12.58	12.71	12.81	12.93	13.07	13.19	13.27	13.38	13.44	13.46	13.49	13.55	13.62	13.7	13.8	13.94	14.04	0.30%	
Electric Power 7/	10.84	7.47	7.02	6.79	6.7	6.64	6.56	6.62	6.7	6.75	6.82	6.92	7.13	7.32	7.47	7.65	7.85	8.01	8.15	8.29	8.38	8.43	8.48	8.56	8.68	8.8	8.95	9.14	0.80%	
Transportation 12/	8.66	3.95	4.47	4.58	4.65	4.79	4.89	5.09	5.27	5.41	5.58	5.77	6.1	6.45	6.76	7.12	7.53	7.9	8.21	8.56	8.82	9.04	9.28	9.59	9.96	10.34	10.76	11.28	4.10%	
Average 13/	7.89	3.62	4.01	4.08	4.12	4.25	4.33	4.51	4.67	4.79	4.94	5.11	5.4	5.71	5.99	6.3	6.67	6.99	7.27	7.58	7.81	8	8.21	8.49	8.82	9.15	9.52	9.99	4.00%	
(nominal dollars per thousand cubic feet)	8.1	3.71	4.12	4.19	4.23	4.36	4.45	4.53	4.79	4.92	5.07	5.24	5.55	5.86	6.14	6.46	6.84	7.18	7.46	7.77	8.01	8.21	8.43	8.71	9.05	9.39	9.77	10.24	4.00%	
Average Lower 48 Wellhead Price 11/	13.86	12.2	11.41	10.8	10.79	10.92	11	11.34	11.69	12.05	12.46	12.9	13.48	14.01	14.49	14.99	15.54	16.08	16.58	17.15	17.65	18.14	18.63	19.18	19.78	20.46	21.15	21.95	2.30%	
Delivered Prices	12.2	9.94	9.23	9.51	9.33	9.25	9.12	9.38	9.66	9.94	10.25	10.61	11.1	11.54	11.93	12.35	12.83	13.27	13.69	14.16	14.57	14.94	15.32	15.76	16.25	16.78	17.34	18	2.30%	
Residential	9.24	5.39	4.97	5.1	5.16	5.28	5.39	5.56	5.75	5.9	6.08	6.3	6.65	6.99	7.29	7.63	8.02	8.38	8.69	9.05	9.33	9.57	9.8	10.09	10.46	10.84	11.28	11.82	3.10%	
Commercial	9.26	4.94	5.24	4.94	4.93	5	5.04	5.23	5.38	5.53	5.71	5.91	6.2	6.5	6.79	7.11	7.45	7.81	8.11	8.45	8.73	8.97	9.22	9.52	9.87	10.23	10.63	11.13	3.20%	
Industrial 4/	17.5	13.05	12.48	12.62	12.79	12.83	13.13	13.42	13.71	14.02	14.36	14.73	15.2	15.65	16.06	16.5	16.98	17.44	17.87	18.35	18.78	19.17	19.56	20.01	20.5	21.03	21.59	22.25	2.10%	
Electric Power 7/	10.74	7.47	7.08	6.94	6.93	6.98	7.02	7.22	7.46	7.67	7.91	8.19	8.61	9.01	9.37	9.76	10.2	10.6	10.97	11.37	11.71	12	12.29	12.64	13.06	13.51	14	14.58	2.60%	
Transportation 12/																														
Average 13/																														

1/ Marketed production (wet) minus extraction losses.

2/ Synthetic natural gas, propane air, coke oven gas, refinery gas, biomass gas, air injected for Btu stabilization, and manufactured gas commingled and distributed with natural gas.

3/ Includes any natural gas regasified in the Bahamas and transported via pipeline to Florida, as well as gas from Canada and Mexico.

4/ Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.

5/ Includes any natural gas used in the process of converting natural gas to liquid fuel that is not actually converted.

6/ Includes any natural gas converted into liquid fuel.

7/ Includes consumption of energy by electricity-only and combined heat and power plants whose primary

business is to sell electricity, or electricity and heat, to the public. Includes small power producers and exempt wholesale generators.

8/ Compressed natural gas used as vehicle fuel.

9/ Represents natural gas used in well, field, and lease operations, and in natural gas processing plant machinery.

10/ Balancing item. Natural gas lost as a result of converting flow data measured at varying temperatures and pressures to a standard temperature and pressure and the merger of different data reporting systems which vary in scope, format, definition, and respondent type. In addition, 2008 and 2009 values include net storage injections.

11/ Represents lower 48 onshore and offshore supplies.

12/ Compressed natural gas used as a vehicle fuel. Price includes estimated motor vehicle fuel taxes and estimated dispensing costs or charges.

13/ Weighted average prices. Weights used are the sectoral consumption values excluding lease, plant, and pipeline fuel.

-- = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2008 and 2009 are model results and may differ slightly from official EIA data reports.

Sources: 2008 supply values; and lease, plant, and pipeline fuel consumption: Energy Information Administration (EIA), Natural Gas Annual 2008, DOE/EIA-0131(2008) (Washington, DC, March 2010).

2009 supply values; and lease, plant, and pipeline fuel consumption; and wellhead price: EIA, Natural Gas Monthly, DOE/EIA-0130(2010/07) (Washington, DC, July 2010).

Other 2008 and 2009 consumption based on: EIA, Annual Energy Review 2009, DOE/EIA-0394(2009) (Washington, DC, August 2010).

2008 wellhead price: Bureau of Energy Management, Regulation and Enforcement; and EIA, Natural Gas Annual 2008, DOE/EIA-0131(2008) (Washington, DC, March 2010).

2008 residential and commercial delivered prices: EIA, Natural Gas Annual 2008, DOE/EIA-0131(2008) (Washington, DC, March 2010).

2009 residential and commercial delivered prices: EIA, Natural Gas Monthly, DOE/EIA-0130(2010/07) (Washington, DC, July 2010).

2008 and 2009 electric power prices: EIA, Electric Power Monthly, DOE/EIA-0226, April 2009 and April 2010, Table 4.13.B. 2008 and 2009 industrial delivered prices are estimated based on: EIA, Manufacturing Energy Consumption Survey and Industrial and wellhead prices from the Natural Gas Annual 2008, DOE/EIA-0131(2008) (Washington, DC, March 2010)

and the Natural Gas Monthly, DOE/EIA-0130(2010/07) (Washington, DC, July 2010). 2008 transportation sector delivered prices are based on: EIA, Natural Gas Annual 2008, DOE/EIA-0131(2008) (Washington, DC, March 2010)

and estimated state taxes, federal taxes, and dispensing costs or charges.

2009 transportation sector delivered prices are model results.

Projections: EIA, AEO2011 National Energy Modeling System.

Natural Gas Supply, Disposition, and Prices, AEO2010 Reference case
(trillion cubic feet, unless otherwise noted)

Supply, Disposition, and Prices	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Growth Rate (2009-2035)	
Production																														
Dry Gas Production 1/	20.56	20.6	20.01	19.46	19.28	18.9	18.91	19.29	19.3	19.42	19.59	19.79	19.98	19.92	20.1	20.53	21.17	21.31	21.65	21.85	22.09	22.26	22.38	22.53	22.71	22.96	23.18	23.27	0.50%	
Supplemental Natural Gas 2/	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.40%	
Net Imports																														
Pipeline 3/	2.95	2.76	2.82	2.78	2.62	2.36	2.38	2.48	2.57	2.58	2.58	2.59	2.57	2.58	2.53	2.34	2.22	2.17	2.1	2.06	2	1.91	1.84	1.79	1.73	1.63	1.53	1.46	-2.40%	
Liquefied Natural Gas	2.65	2.34	2.21	2.08	1.81	1.48	1.29	1.25	1.19	1.14	1.11	1.07	1.07	1.05	0.93	0.88	0.89	0.89	0.92	0.94	0.94	0.94	0.94	0.95	0.92	0.83	0.74	0.64	-4.90%	
	0.3	0.42	0.61	0.7	0.82	0.97	1.09	1.23	1.38	1.45	1.48	1.5	1.51	1.48	1.41	1.34	1.28	1.21	1.14	1.07	0.98	0.89	0.89	0.84	0.81	0.79	0.8	0.83	2.70%	
Total Supply	23.57	23.42	22.88	22.3	21.97	21.32	21.29	21.73	21.85	22.06	22.24	22.44	22.61	22.56	22.69	22.94	23.46	23.54	23.82	23.98	24.16	24.24	24.28	24.38	24.5	24.64	24.78	24.8	0.20%	
Consumption by Sector																														
Residential	4.87	4.77	4.81	4.66	4.66	4.67	4.71	4.74	4.75	4.77	4.79	4.83	4.84	4.85	4.89	4.91	4.91	4.91	4.91	4.91	4.92	4.9	4.89	4.89	4.9	4.88	4.88	4.87	0.10%	
Commercial	3.12	3.07	3.2	3.18	3.19	3.18	3.23	3.25	3.27	3.29	3.32	3.33	3.33	3.37	3.39	3.42	3.45	3.48	3.5	3.52	3.54	3.55	3.57	3.59	3.62	3.65	3.69	3.69	0.70%	
Industrial 4/	6.65	5.95	6.05	6.22	6.52	6.73	6.86	6.88	6.91	6.93	6.98	7.01	7.03	7.01	6.98	6.95	6.96	6.94	6.88	6.88	6.81	6.78	6.74	6.74	6.72	6.72	6.72	6.72	0.50%	
Natural Gas-to-Liquids Heat and Power 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
Natural Gas to Liquids Production 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	0	0	0	0	0	0
Electric Power 7/	6.66	6.86	6.55	6.11	5.68	5.04	4.82	5.18	5.23	5.38	5.46	5.56	5.66	5.6	5.71	5.89	6.23	6.28	6.57	6.7	6.89	6.99	7.04	7.13	7.23	7.34	7.43	7.42	0.30%	
Transportation 8/	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.09	0.09	0.1	0.11	0.11	0.12	0.13	0.14	0.14	0.15	0.16	0.17	0.18	0.18	0.19	6.10%	
Pipeline Fuel	0.63	0.61	0.62	0.6	0.6	0.59	0.59	0.6	0.6	0.61	0.61	0.62	0.62	0.62	0.65	0.69	0.7	0.71	0.71	0.71	0.71	0.71	0.72	0.72	0.72	0.72	0.72	0.72	0.60%	
Lease and Plant Fuel 9/	1.28	1.29	1.25	1.18	1.13	1.07	1.08	1.07	1.08	1.07	1.08	1.09	1.09	1.1	1.14	1.19	1.19	1.19	1.21	1.22	1.22	1.23	1.23	1.23	1.24	1.24	1.24	1.26	1.25	-0.10%
Total	23.25	22.59	22.51	21.99	21.82	21.32	21.29	21.74	21.86	22.07	22.25	22.45	22.63	22.58	22.71	22.96	23.49	23.57	23.86	24.02	24.2	24.29	24.33	24.43	24.56	24.7	24.84	24.86	0.40%	
Discrepancy 10/	0.32	0.83	0.37	0.31	0.15	0	0	-0.01	-0.01	-0.01	-0.02	-0.02	-0.02	-0.02	-0.02	-0.03	-0.03	-0.04	-0.04	-0.04	-0.04	-0.05	-0.05	-0.05	-0.06	-0.06	-0.07	-0.07	-	
Natural Gas Prices																														
(2009 dollars per million Btu)																														
Henry Hub Spot Price	8.99	3.54	4.57	5.77	6.27	6.22	6.18	6.37	6.47	6.48	6.53	6.61	6.74	6.84	7.03	7.06	7.02	7.1	7.26	7.4	7.64	7.89	8.17	8.52	8.63	8.66	8.88	9.01	3.70%	
Average Lower 48 Wellhead Price 11/	7.97	3.29	4	5.1	5.64	5.5	5.46	5.63	5.72	5.73	5.77	5.84	5.96	6.05	6.22	6.24	6.2	6.27	6.41	6.54	6.75	6.97	7.22	7.52	7.62	7.65	7.85	7.96	3.50%	
(2009 dollars per thousand cubic feet)																														
Average Lower 48 Wellhead Price 11/	8.19	3.38	4.11	5.24	5.69	5.65	5.61	5.78	5.88	5.89	5.93	6	6.12	6.22	6.39	6.42	6.38	6.45	6.59	6.72	6.94	7.17	7.42	7.73	7.83	7.86	8.06	8.19	3.50%	
Delivered Prices																														
Residential	14.08	11.9	11.38	12.3	12.4	11.99	11.92	12.07	12.17	12.21	12.28	12.36	12.49	12.61	12.81	12.84	12.74	12.84	13.02	13.22	13.48	13.75	14.04	14.39	14.55	14.66	14.88	15.04	0.90%	
Commercial	12.48	9.45	9.06	10.16	10.52	10.36	10.29	10.44	10.54	10.56	10.62	10.69	10.82	10.83	11.12	11.16	11.1	11.18	11.35	11.53	11.79	12.03	12.31	12.65	12.8	12.87	13.08	13.22	1.30%	
Industrial 4/	9.52	4.39	5.09	6.24	6.69	6.62	6.56	6.73	6.91	6.8	6.94	6.99	7	7.09	7.28	7.33	7.28	7.33	7.47	7.61	7.83	8.07	8.34	8.66	8.77	8.79	9	9.12	2.90%	
Electric Power 7/	9.48	4.31	5.05	6.07	6.43	6.19	6.15	6.34	6.43	6.44	6.48	6.55	6.69	6.79	6.98	7.03	6.98	7.04	7.2	7.35	7.58	7.83	8.06	8.37	8.48	8.52	8.71	8.82	2.80%	
Transportation 12/	16.67	11.87	12.53	13.67	13.96	13.95	13.97	14.01	13.98	13.97	13.98	14.04	14.18	14.15	14	14.03	14.14	14.26	14.44	14.62	14.83	15.1	15.19	15.19	15.19	15.19	15.35	15.44	1.00%	
Average 13/	10.99	6.86	7.17	8.21	8.56	8.4	8.37	8.5	8.58	8.58	8.63	8.69	8.81	8.93	9.11	9.15	9.06	9.13	9.28	9.43	9.67	9.91	10.17	10.49	10.62	10.66	10.86	11	1.80%	
(nominal dollars per million Btu)																														
Henry Hub Spot Price	8.86	3.54	4.64	5.93	6.53	6.6	6.67	6.99	7.23	7.38	7.57	7.8	8.11	8.41	8.84	9.06	9.2	9.49	9.91	10.31	10.88	11.48	12.15	12.94	13.4	13.74	14.4	14.92	5.70%	
Average Lower 48 Wellhead Price 11/	7.85	3.29	4.06	5.24	5.77	5.83	5.89	6.17	6.39	6.52	6.69	6.89	7.17	7.43	7.81	8.01	8.13	8.38	8.75	9.11	9.61	10.14	10.73	11.43	11.84	12.14	12.72	13.18	5.50%	
(nominal dollars per thousand cubic feet)																														
Average Lower 48 Wellhead Price 11/	8.07	3.38	4.17	5.39	5.94	6	6.06	6.35	6.57	6.7	6.88	7.08	7.37	7.64	8.03	8.23	8.35	8.62	9	9.37	9.88	10.43	11.03	11.75	12.17	12.48	13.07	13.55	5.50%	
Delivered Prices																														
Residential	13.87	11.9	11.54	12.65	12.83	12.72	12.87	13.25	13.6	13.9	14.24	14.59	15.03	15.5	16.09	16.47	16.69	17.16	17.76	18.42	19.19	20	20.88	21.87	22.61	23.26	24.12	24.9	2.90%	
Commercial	12.29	9.45	9.19	10.44	10.86	10.99	11.11	11.46	11.77	12.01	12.31	12.62	13.02	13.43	13.97	14.33	14.54	14.95	15.49	16.07	16.78	17.5	18.3	19.23	19.9	20.43	21.21	21.89	3.30%	
Industrial 4/	9.38	4.39	5.17	6.41	6.86	7.02	7.09	7.39	7.6	7.74	7.93	8.14	8.43	8.71	9.14	9.4	9.53	9.8	10.19	10.61	11.17	11.74	12.39	13.16	13.63	13.96	14.59	15.1	4.90%	
Electric Power 7/	9.34	4.31	5.13	6.24	6.71	6.57	6.64	6.96	7.18	7.32	7.52	7.74	8.06	8.35	8.77	9.02	9.15	9.41	9.83	10.24	10.8	11.39	11.98	12.72	13.18	13.52	14.12	14.81	4.80%	
Transportation 12/	18.42	11.87	12.72	14.06	14.69	14.81	14.95	15.33	15.65	15.9	16.19	16.5	16.9	17.29	17.82	18.16	18.35	18.76	19.3	19.87	20.56	21.27	22.04	22.85	23.6	24.12	24.89	25.56	3.00%	
Average 13/	10.83	6.86	7.28	8.44																										

business is to sell electricity, or electricity and heat, to the public. Includes small power producers and exempt wholesale generators.

8/ Compressed natural gas used as vehicle fuel.

9/ Represents natural gas used in well, field, and lease operations, and in natural gas processing plant machinery.

10/ Balancing item. Natural gas lost as a result of converting flow data measured at varying temperatures and pressures to a standard temperature and pressure and the merger of different data reporting systems which vary in scope, format, definition, and respondent type. In addition, 2008 and 2009 values include net storage injections.

11/ Represents lower 48 onshore and offshore supplies.

12/ Compressed natural gas used as a vehicle fuel. Price includes estimated motor vehicle fuel taxes and estimated dispensing costs or charges.

13/ Weighted average prices. Weights used are the sectoral consumption values excluding lease, plant, and pipeline fuel.

-- = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2008 and 2009 are model results and may differ slightly from official EIA data reports.

Sources: 2008 supply values; and lease, plant, and pipeline fuel consumption: Energy Information Administration (EIA), Natural Gas Annual 2008, DOE/EIA-0131(2008) (Washington, DC, March 2010).

2009 supply values; and lease, plant, and pipeline fuel consumption, and wellhead price: EIA, Natural Gas Monthly, DOE/EIA-0130(2010/07) (Washington, DC, July 2010).

Other 2008 and 2009 consumption based on: EIA, Annual Energy Review 2009, DOE/EIA-0384(2009) (Washington, DC, August 2010).

2008 wellhead price: Bureau of Energy Management, Regulation and Enforcement, and EIA, Natural Gas Annual 2008, DOE/EIA-0131(2008) (Washington, DC, March 2010).

2008 residential and commercial delivered prices: EIA, Natural Gas Annual 2008, DOE/EIA-0131(2008) (Washington, DC, March 2010).

2009 residential and commercial delivered prices: EIA, Natural Gas Monthly, DOE/EIA-0130 (2010/07) (Washington, DC, July 2010). 2008 and 2009 electric power prices: EIA, Electric Power Monthly, DOE/EIA-0226, April 2009 and April 2010, Table 4.13.B. 2008 and 2009 industrial delivered prices are estimated based on: EIA, Manufacturing Energy Consumption Survey and Industrial and wellhead prices from the Natural Gas Annual 2008, DOE/EIA-0131(2008) (Washington, DC, March 2010) and the Natural Gas Monthly, DOE/EIA-0130(2010/07) (Washington, DC, July 2010). 2008 transportation sector delivered prices are based on: EIA, Natural Gas Annual 2008, DOE/EIA-0131(2008) (Washington, DC, March 2010) and estimated state taxes, federal taxes, and dispensing costs or charges.

2009 transportation sector delivered prices are model results.

Projections: EIA, AEO2011 National Energy Modeling System.

Northwest Power and Conservation Council
Aug-11
 Update to Council's Forecast of Fuel Prices (pg. 6-7)

Forecasts in \$2010		Forecasts in Nominal\$			inflation fac		
		Low	Med	High	Low	Med	High
2010	\$4.25	\$4.25	4.2	4.2	2010	4.2	4.2
2011	\$4.24	\$4.34	4.3	4.4	2011	4.3	4.4
2012	\$4.24	\$4.43	4.4	4.6	2012	4.4	4.6
2013	\$4.13	\$4.51	4.4	4.8	2013	4.4	4.8
2014	\$4.14	\$4.60	4.5	5	2014	4.5	5
2015	\$4.15	\$4.70	4.5	5.1	2015	4.5	5.1
2016	\$4.16	\$4.79	4.6	5.3	2016	4.6	5.3
2017	\$4.12	\$4.91	4.7	5.6	2017	4.7	5.6
2018	\$4.08	\$5.03	4.7	5.8	2018	4.7	5.8
2019	\$4.06	\$5.16	4.8	6.1	2019	4.8	6.1
2020	\$4.11	\$5.29	4.9	6.3	2020	4.9	6.3
2021	\$4.11	\$5.42	5	6.6	2021	5	6.6
2022	\$4.11	\$5.56	5.1	6.9	2022	5.1	6.9
2023	\$4.19	\$5.69	5.3	7.2	2023	5.3	7.2
2024	\$4.20	\$5.84	5.4	7.5	2024	5.4	7.5
2025	\$4.16	\$5.98	5.5	7.9	2025	5.5	7.9
2026	\$4.19	\$6.13	5.6	8.2	2026	5.6	8.2
2027	\$4.24	\$6.29	5.8	8.6	2027	5.8	8.6
2028	\$4.27	\$6.44	5.9	8.9	2028	5.9	8.9
2029	\$4.26	\$6.60	6	9.3	2029	6	9.3
2030	\$4.33	\$6.77	6.2	9.7	2030	6.2	9.7

Henry Hub Natural Gas Futures

Daily Settlements for Henry Hub Natural Gas Futures (FINAL) Trade Date: 09/12/2011

http://www.cmegroup.com/trading/energy/natural-gas/natural-gas_oil

Month	Open	High	Low	Last	Change	Settle	Estimated Volume	Prior Day Open Interest
11-Oct	3.9	3.925	3.826	3.905	-0.03	3.885	103,178	150,654
11-Nov	3.979	4.008	3.916	3.984	-0.032	3.966	53,878	199,710
11-Dec	4.151	4.202	4.12	4.191	-0.024	4.172	29,942	85,770
12-Jan	4.264	4.319	4.236	4.308	-0.016	4.292	22,405	162,319
12-Feb	4.3	4.331	4.25	4.325	-0.014	4.31	6,616	37,562
12-Mar	4.27	4.304	4.222	4.298	-0.013	4.285	12,074	43,759
12-Apr	4.239	4.285B	4.2	4.275	-0.014	4.262	9,962	73,906
12-May	4.275	4.312B	4.23	4.304	-0.015	4.29	766	17,992
12-Jun	4.313	4.352B	4.279	4.343	-0.015	4.332	351	14,117
JULY 12	4.378	4.397B	4.349	4.391	-0.015	4.378	271	11,036
12-Aug	4.365	4.424B	4.384	4.416	-0.015	4.406	194	10,256
12-Sep	4.41	4.429B	4.385	4.423	-0.015	4.411	713	9,191
12-Oct	4.444	4.462	4.41	4.455	-0.014	4.442	2,421	45,028
12-Nov	4.57	4.624B	4.57	4.6	-0.011	4.607	250	8,792
12-Dec	4.84	4.883	4.84	4.85	-0.009	4.867	625	12,437
13-Jan	4.985	5.015	4.975	5.015	-0.006	5.002	1,067	21,376
13-Feb	4.95	4.990B	4.943	4.989	-0.006	4.978	99	2,794
13-Mar	5	5	4.923	4.929	-0.004	4.912	1,404	11,452
13-Apr	4.721	4.785	4.721	4.76	-0.009	4.765	947	12,068
13-May	4.8	4.8	4.779	4.79	-0.009	4.784	23	1,961
13-Jun	4.83	4.83	4.808A	4.828	-0.009	4.814	2	1,608
JULY 13	4.861	4.861	4.844A	4.848	-0.009	4.853	5	1,379
13-Aug	4.98	4.98	4.868A	4.869B	-0.009	4.873	1	1,087
13-Sep	4.838	4.870B	4.838	4.870B	-0.009	4.879	3	943
13-Oct	4.868	4.94	4.868	4.94	-0.009	4.905	14	2,824
13-Nov	5.07	5.07	5.041A	5.06	-0.009	5.038	9	980
13-Dec	5.3	5.3	5.265	5.3	-0.006	5.266	17	6,259
14-Jan	5.385	5.385	5.385	5.385	-0.006	5.386	9	3,635
14-Feb	5.355	5.4	5.355	5.4	-0.006	5.354	14	410
14-Mar	5.27	5.315	5.27	5.315	-0.007	5.269	12	965
14-Apr	5.06	5.115	5.06	5.115	-0.012	5.054	9	3,255
14-May	5.07	5.13	5.067A	5.13	-0.013	5.065	8	457
14-Jun	5.1	5.1	5.095A	5.1	-0.013	5.093	2	290
JULY 14	5.135	5.135	5.133A	5.135	-0.013	5.128	1	522
14-Aug	5.15	5.15	5.15	5.15	-0.013	5.15	2	319
14-Sep	5.165	5.165	5.165	5.165	-0.013	5.157	1	424
14-Oct	5.19	5.19	5.19	5.19	-0.013	5.185	3	828
14-Nov	5.315	5.315	5.315	5.315	-0.013	5.31	5	309
14-Dec	-	-	5.535A	5.535A	-0.013	5.53	508	508
15-Jan	-	-	-	-	-0.013	5.645	596	596
15-Feb	-	-	-	-	-0.013	5.612	186	186
15-Mar	-	-	-	-	-0.013	5.527	408	408
15-Apr	-	-	-	-	-0.02	5.255	1,898	1,898
15-May	-	-	-	-	-0.02	5.267	503	503
15-Jun	-	-	-	-	-0.02	5.295	1,200	1,200
JULY 15	-	-	-	-	-0.02	5.33	191	191
15-Aug	-	-	-	-	-0.02	5.352	355	355
15-Sep	-	-	-	-	-0.02	5.359	105	105
15-Oct	-	-	-	-	-0.02	5.387	208	208
15-Nov	-	-	-	-	-0.02	5.517	100	100
15-Dec	-	-	-	-	-0.02	5.739	2,587	2,587
16-Jan	-	-	-	-	-0.02	5.854	42	42
16-Feb	-	-	-	-	-0.02	5.821	33	33
16-Mar	-	-	-	-	-0.02	5.736	138	138
16-Apr	-	-	-	-	-0.027	5.449	176	176

Henry Hub Natural Gas Futures

Daily Settlements for Henry Hub Natural Gas Futures (FINAL) Trade Date: 09/12/2011

http://www.cmegroup.com/trading/energy/natural-gas/natural-gas_ql

Month	Open	High	Low	Last	Change	Settle	Estimated Volume	Prior Day Open Interest
16-May -	-	-	-	-	-0.027	5.459	36	
16-Jun -	-	-	-	-	-0.027	5.489	168	
JULY 16 -	-	-	-	-	-0.027	5.525	35	
16-Aug -	-	-	-	-	-0.027	5.551	22	
16-Sep -	-	-	-	-	-0.027	5.559	15	
16-Oct -	-	-	-	-	-0.027	5.594	31	
16-Nov -	-	-	-	-	-0.027	5.729	8	
16-Dec -	-	-	-	-	-0.027	5.954	336	
17-Jan -	-	-	-	-	-0.027	6.076	21	
17-Feb -	-	-	-	-	-0.027	6.044	4	
17-Mar -	-	-	-	-	-0.027	5.962	9	
17-Apr -	-	-	-	-	-0.027	5.662	10	
17-May -	-	-	-	-	-0.027	5.667	9	
17-Jun -	-	-	-	-	-0.027	5.695	23	
JULY 17 -	-	-	-	-	-0.027	5.73	29	
17-Aug -	-	-	-	-	-0.027	5.766	22	
17-Sep -	-	-	-	-	-0.027	5.776	31	
17-Oct -	-	-	-	-	-0.027	5.816	14	
17-Nov -	-	-	-	-	-0.027	5.951	14	
17-Dec -	-	-	-	-	-0.027	6.181	25	
18-Jan -	-	-	-	-	-0.027	6.306	50	
18-Feb -	-	-	-	-	-0.027	6.276	30	
18-Mar -	-	-	-	-	-0.027	6.196	30	
18-Apr -	-	-	-	-	-0.027	5.886	50	
18-May -	-	-	-	-	-0.027	5.891	65	
18-Jun -	-	-	-	-	-0.027	5.917	45	
JULY 18 -	-	-	-	-	-0.027	5.952	30	
18-Aug -	-	-	-	-	-0.027	5.988	30	
18-Sep -	-	-	-	-	-0.027	5.998	30	
18-Oct -	-	-	-	-	-0.027	6.048	47	
18-Nov -	-	-	-	-	-0.027	6.183	30	
18-Dec -	-	-	-	-	-0.027	6.413	34	
19-Jan -	-	-	-	-	-0.027	6.538	-	
19-Feb -	-	-	-	-	-0.027	6.508	-	
19-Mar -	-	-	-	-	-0.027	6.428	-	
19-Apr -	-	-	-	-	-0.027	6.118	20	
19-May -	-	-	-	-	-0.027	6.123	20	
19-Jun -	-	-	-	-	-0.027	6.148	17	
JULY 19 -	-	-	-	-	-0.027	6.183	10	
19-Aug -	-	-	-	-	-0.027	6.221	11	
19-Sep -	-	-	-	-	-0.027	6.231	10	
19-Oct -	6.38	6.38	6.38	6.38	-0.027	6.281	1	
19-Nov -	-	-	-	-	-0.027	6.416	8	
19-Dec -	-	-	-	-	-0.027	6.646	-	
20-Jan -	-	-	-	-	-0.027	6.771	-	
20-Feb -	-	-	-	-	-0.027	6.741	50	
20-Mar -	-	-	-	-	-0.027	6.661	-	
20-Apr -	-	-	-	-	-0.027	6.351	-	
20-May -	-	-	-	-	-0.027	6.348	-	
20-Jun -	-	-	-	-	-0.027	6.373	-	
JULY 20 -	-	-	-	-	-0.027	6.413	-	
20-Aug -	-	-	-	-	-0.027	6.453	-	
20-Sep -	-	-	-	-	-0.027	6.468	-	
20-Oct -	-	-	-	-	-0.027	6.531	-	
20-Nov -	-	-	-	-	-0.027	6.566	-	

Daily Settlements for Henry Hub Natural Gas Futures (FINAL) Trade Date: 09/12/2011

Henry Hub Natural Gas Futures

Month	Open	High	Low	Last	Change	Settle	Estimated Volume	Prior Day Open Interest
20-Dec -	-	-	-	-	-0.027	6.896 -	246	
21-Jan -	-	-	-	-	-0.027	7.021 -	30	
21-Feb -	-	-	-	-	-0.027	6.991 -	30	
21-Mar -	-	-	-	-	-0.027	6.911 -	30	
21-Apr -	-	-	-	-	-0.027	6.601 -	30	
21-May -	-	-	-	-	-0.027	6.599 -	30	
21-Jun -	-	-	-	-	-0.027	6.619 -	30	
JLY 21 -	-	-	-	-	-0.027	6.664 -	30	
21-Aug -	-	-	-	-	-0.027	6.704 -	30	
21-Sep -	-	-	-	-	-0.027	6.721 -	30	
21-Oct -	-	-	-	-	-0.027	6.781 -	30	
21-Nov -	-	-	-	-	-0.027	6.917 -	30	
21-Dec -	-	-	-	-	-0.027	7.149 -	30	
22-Jan -	-	-	-	-	-0.027	7.281 -	-	
22-Feb -	-	-	-	-	-0.027	7.253 -	-	
22-Mar -	-	-	-	-	-0.027	7.175 -	-	
22-Apr -	-	-	-	-	-0.027	6.865 -	-	
22-May -	-	-	-	-	-0.027	6.85 -	-	
22-Jun -	-	-	-	-	-0.027	6.89 -	-	
JLY 22 -	-	-	-	-	-0.027	6.94 -	-	
22-Aug -	-	-	-	-	-0.027	6.985 -	-	
22-Sep -	-	-	-	-	-0.027	7 -	-	
22-Oct -	-	-	-	-	-0.027	7.065 -	-	
22-Nov -	-	-	-	-	-0.027	7.201 -	-	
22-Dec -	-	-	-	-	-0.027	7.433 -	-	
23-Jan -	-	-	-	-	-0.027	7.565 -	-	
23-Feb -	-	-	-	-	-0.027	7.537 -	-	
23-Mar -	-	-	-	-	-0.027	7.459 -	-	
23-Apr -	-	-	-	-	-0.027	7.149 -	-	
23-May -	-	-	-	-	-0.027	7.134 -	-	
23-Jun -	-	-	-	-	-0.027	7.174 -	-	
JLY 23 -	-	-	-	-	-0.027	7.224 -	-	
23-Aug -	-	-	-	-	-0.027	7.269 -	-	
23-Sep -	-	-	-	-	-0.027	7.284 -	-	
23-Oct -	-	-	-	-	-0.027	7.349 -	-	
23-Nov -	-	-	-	-	-0.027	7.485 -	-	
23-Dec -	-	-	-	-	-0.027	7.717 -	-	
Total						247,304	969,993	

Appendix A, Exhibit 16 - Natural Gas Prices, Base Case - from Bob Fagan - AEO numbers are close to what we have, could use Hi Gas HH Price (column o)
 AEO 2011 Reference Case (early release)

Year	Henry Hub Spot Price (2010\$/MMBtu)	Shift in Price from										Ratio of 20 HI Gas Henry Hub Price (2010\$/tr
		AEO2011 AEO2011	AEO 2010	AEO2010 AEO2011	AEO2010	Composite AEO2010	AEO2010	AEO2010	AEO2010	AEO2010	AEO2010	
2011	\$4.52	4.48	4.52	5.68	5.79	100%	0%	4.52	6.27	1.1034	\$4.99	
2012	\$4.61	4.57	4.61	6.17	6.29	93%	7%	4.73	7.15	1.1584	\$5.47	
2013	\$4.74	4.7	4.74	6.13	6.24	86%	14%	4.96	7.27	1.1862	\$5.88	
2014	\$4.81	4.77	4.81	6.09	6.2	79%	21%	5.11	7.41	1.2175	\$6.22	
2015	\$4.85	4.81	4.85	6.27	6.39	71%	29%	5.29	7.59	1.2104	\$6.40	
2016	\$4.88	4.83	4.88	6.38	6.49	64%	36%	5.45	7.67	1.2028	\$6.56	
2017	\$4.92	4.88	4.92	6.38	6.5	57%	43%	5.6	7.64	1.1966	\$6.70	
2018	\$5.00	4.96	5	6.43	6.55	50%	50%	5.78	7.68	1.1937	\$6.90	
2019	\$5.08	5.04	5.08	6.51	6.62	43%	57%	5.96	7.85	1.2065	\$7.19	
2020	\$5.22	5.18	5.22	6.64	6.76	36%	64%	6.21	7.8	1.1747	\$7.30	
2021	\$5.38	5.33	5.38	6.74	6.86	29%	71%	6.44	7.61	1.1291	\$7.27	
2022	\$5.53	5.48	5.53	6.93	7.06	21%	79%	6.73	7.84	1.1315	\$7.61	
2023	\$5.72	5.67	5.72	6.96	7.08	14%	86%	6.89	8.15	1.1715	\$8.07	
2024	\$5.90	5.85	5.9	6.91	7.04	7%	93%	6.96	8.43	1.2192	\$8.48	
2025	\$6.07	6.01	6.07	6.99	7.12	0%	100%	7.12	8.71	1.2458	\$8.87	
2026	\$6.21	6.15	6.21	7.15	7.28	0%	100%	7.28	8.92	1.2472	\$9.08	
2027	\$6.33	6.28	6.33	7.29	7.42	0%	100%	7.42	9.14	1.2534	\$9.31	
2028	\$6.42	6.36	6.42	7.53	7.67	0%	100%	7.67	9.5	1.2616	\$9.67	
2029	\$6.48	6.43	6.48	7.77	7.92	0%	100%	7.92	9.78	1.258	\$9.96	
2030	\$6.56	6.5	6.56	8.05	8.2	0%	100%	8.2	10	1.2423	\$10.18	
2031	\$6.68	6.62	6.68	8.39	8.54	0%	100%	8.54	9.93	1.1837	\$10.11	
2032	\$6.82	6.76	6.82	8.5	8.65	0%	100%	8.65	10.18	1.1981	\$10.37	
2033	\$6.94	6.88	6.94	8.53	8.69	0%	100%	8.69	10.52	1.2333	\$10.71	
2034	\$7.07	7.01	7.07	8.75	8.91	0%	100%	8.91	10.78	1.2322	\$10.98	
2035	\$7.25	7.19	7.25	8.88	9.04	0%	100%	9.04	10.88	1.2252	\$11.08	

Between 2035 and 2050, CRA proposes to increase gas EIA Case ID
 same rate of increase for the 2030-2035 period. d120810c EIA Case ID
 d111809a

The input assumptions contained herein reflect a joint assumptions development process between EIPC, EIPC stakeholders and CRA for purposes of EIPC capacity expansion modeling.
 As such, these inputs do not necessarily reflect the opinions or views of CRA or any individual EIPC stakeholder.

From AEO2011 Refer	2008	2009	2010
GDP Cha	1.086	1.096	1.106

1mBtu)

Navigant- Appendix D: Henry Hub Price Forecast Comparison Table (2009\$)
 Market Analysis for Sabine Pass LNG Export Project
[http://www.navigant.com/~\(media/Site/Insights/Energy/Cheniere LNG Export Report Energy.ashx](http://www.navigant.com/~(media/Site/Insights/Energy/Cheniere_LNG_Export_Report_Energy.ashx)

only using GHG as-is and GHG Plus cases since the others assume Sabine Pass is included.

	GHG As-is	GHG As-is, moderate export	GHG As-is, high export	GHG Plus	GHG Plus, high export
2011	\$5.03	\$5.03	\$5.03	\$5.03	\$5.03
2012	\$5.12	\$5.12	\$5.12	\$5.23	\$5.23
2013	\$3.50	\$3.50	\$3.50	\$4.62	\$4.62
2014	\$3.10	\$3.12	\$3.14	\$4.49	\$4.55
2015	\$3.29	\$3.49	\$3.64	\$4.50	\$5.02
2016	\$3.33	\$3.54	\$3.69	\$4.51	\$5.04
2017	\$3.45	\$3.65	\$3.80	\$4.58	\$5.10
2018	\$3.50	\$3.70	\$3.85	\$4.65	\$5.14
2019	\$3.62	\$3.79	\$3.95	\$4.79	\$5.26
2020	\$3.85	\$3.98	\$4.10	\$4.99	\$5.44
2021	\$3.91	\$4.04	\$4.17	\$5.27	\$5.72
2022	\$4.05	\$4.19	\$4.30	\$5.58	\$6.05
2023	\$4.23	\$4.35	\$4.47	\$5.90	\$6.39
2024	\$4.47	\$4.60	\$4.72	\$6.27	\$6.77
2025	\$4.60	\$4.72	\$4.87	\$6.59	\$7.09
2026	\$4.76	\$4.89	\$5.06	\$6.90	\$7.42
2027	\$4.93	\$5.08	\$5.28	\$7.24	\$7.81
2028	\$5.09	\$5.28	\$5.49	\$7.56	\$8.16
2029	\$5.33	\$5.52	\$5.73	\$8.02	\$8.69
2030	\$5.55	\$5.74	\$5.94	\$8.50	\$9.24
2031	\$5.81	\$5.99	\$6.21	\$9.02	\$9.83
2032	\$6.04	\$6.26	\$6.49	\$9.54	\$10.39
2033	\$6.38	\$6.60	\$6.83	\$10.18	\$11.01
2034	\$6.65	\$6.88	\$7.12	\$10.86	\$11.67
2035	\$6.97	\$7.20	\$7.46	\$11.43	\$12.33

Graphical representation from EIPC Fuel and Emission Prices Subteam (page 4)
http://www.eipconline.com/uploads/Fuel_and_Emissions_Subteam_January_12_Report_updated_Jan_27.pdf

EIPC Prop Source 2011		EPA	
	RGGI		
2011	4.44	2011	4.87
2012	5.27	2012	5.33
2013	5.75	2013	5.38
2014	6.19	2014	5.50
2015	6.70	2015	5.62
2016	6.67	2016	5.75
2017	6.27	2017	5.87
2018	6.38	2018	5.95
2019	6.47	2019	5.98
2020	6.58	2020	6.13
2021	6.58	2021	6.35
2022	6.78	2022	6.49
2023	7.04	2023	6.55
2024	7.29	2024	6.75
2025	7.17	2025	6.94
2026	6.81	2026	7.23
2027	6.33	2027	7.49
2028	6.40	2028	7.72
2029	6.49	2029	7.92
2030	6.78	2030	8.09
		2012	4.20
		2013	4.53
		2014	4.77
		2015	5.01
		2016	4.84
		2017	4.70
		2018	4.61
		2019	4.56
		2020	4.39
		2021	4.59
		2022	4.74
		2023	4.85
		2024	4.91
		2025	5.10
		2026	5.22
		2027	5.41
		2028	5.59
		2029	5.72
		2030	5.82

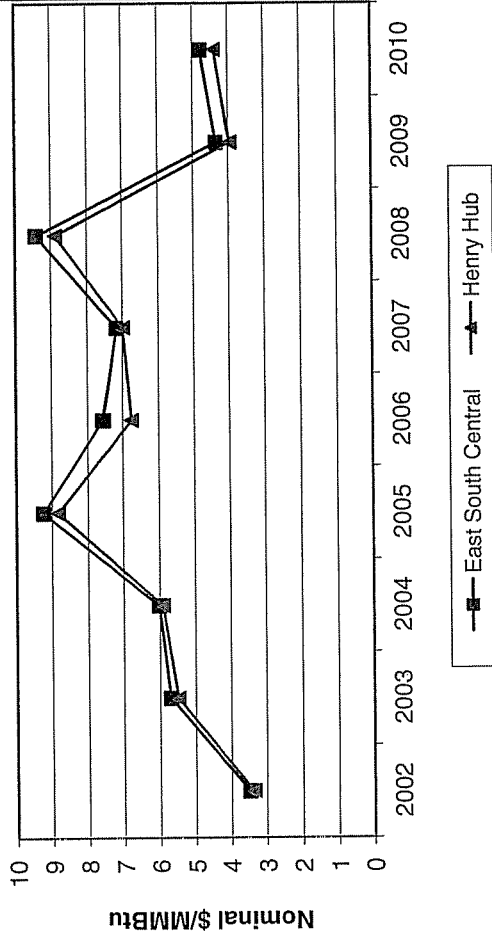
Seasonal Gas Profile Adjustment - Strategist

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
January	0.993747	0.917993	0.967015	0.995007	0.993115	0.991225	0.965704	0.965588	0.965479	0.965338	0.965228	0.965187	0.965081	0.964985	0.964909	0.964811
February	0.993747	0.913522	0.978893	0.987159	0.986229	0.985251	0.958885	0.958694	0.958564	0.958447	0.958334	0.958217	0.958096	0.957963	0.95788	0.957769
March	0.97451	0.897797	0.954103	0.960056	0.959967	0.958683	0.936117	0.935907	0.935701	0.935513	0.935326	0.935149	0.934958	0.934792	0.934663	0.934462
April	0.854195	0.823258	0.841316	0.84814	0.851251	0.854992	0.842403	0.84389	0.845277	0.84658	0.847782	0.849023	0.850319	0.851498	0.852598	0.853701
May	0.841637	0.826492	0.842058	0.846002	0.847135	0.850354	0.843049	0.84455	0.845936	0.847236	0.848446	0.849689	0.850981	0.852165	0.853259	0.854374
June	0.846813	0.834794	0.84751	0.851988	0.8547	0.85805	0.849735	0.851247	0.852654	0.853971	0.855204	0.856471	0.857781	0.858984	0.860099	0.861224
July	0.853948	0.844184	0.856501	0.860816	0.863636	0.867338	0.85891	0.860454	0.861896	0.863238	0.864498	0.865787	0.867125	0.868352	0.869487	0.870638
August	0.858985	0.85189	0.863865	0.868223	0.871201	0.875689	0.866487	0.868054	0.869524	0.87089	0.872167	0.873479	0.874834	0.876088	0.87724	0.878412
September	0.860664	0.856496	0.868289	0.872774	0.876009	0.88007	0.871074	0.872658	0.874134	0.875519	0.876805	0.878132	0.879506	0.880767	0.881934	0.883112
October	0.867379	0.870968	0.882275	0.886595	0.890446	0.893598	0.885337	0.886966	0.888491	0.889915	0.891242	0.892607	0.894025	0.895331	0.896527	0.897743
November	0.896955	0.955911	0.961624	0.962911	0.964188	0.965184	0.95964	0.959504	0.959366	0.95925	0.959136	0.959024	0.958899	0.958799	0.958697	0.958589
December	0.928516															

Average 0.898279 0.882775 0.906954 0.911639 0.913106 0.915036 0.903108 0.903959 0.904752 0.905495 0.906185 0.906697 0.907634 0.908312 0.908938 0.90957

- 2010 0.898279
- 2011 0.882775
- 2012 0.906954
- 2013 0.911639
- 2014 0.913106
- 2015 0.915036
- 2016 0.903108
- 2017 0.903959
- 2018 0.904752
- 2019 0.905495
- 2020 0.906185
- 2021 0.906697
- 2022 0.907634
- 2023 0.908312
- 2024 0.908938
- 2025 0.90957

Comparative Natural Gas Prices



EIA Electric Power Monthly

Table 4.13.A. Average Cost of Natural Gas Delivered for Electricity Generation by State

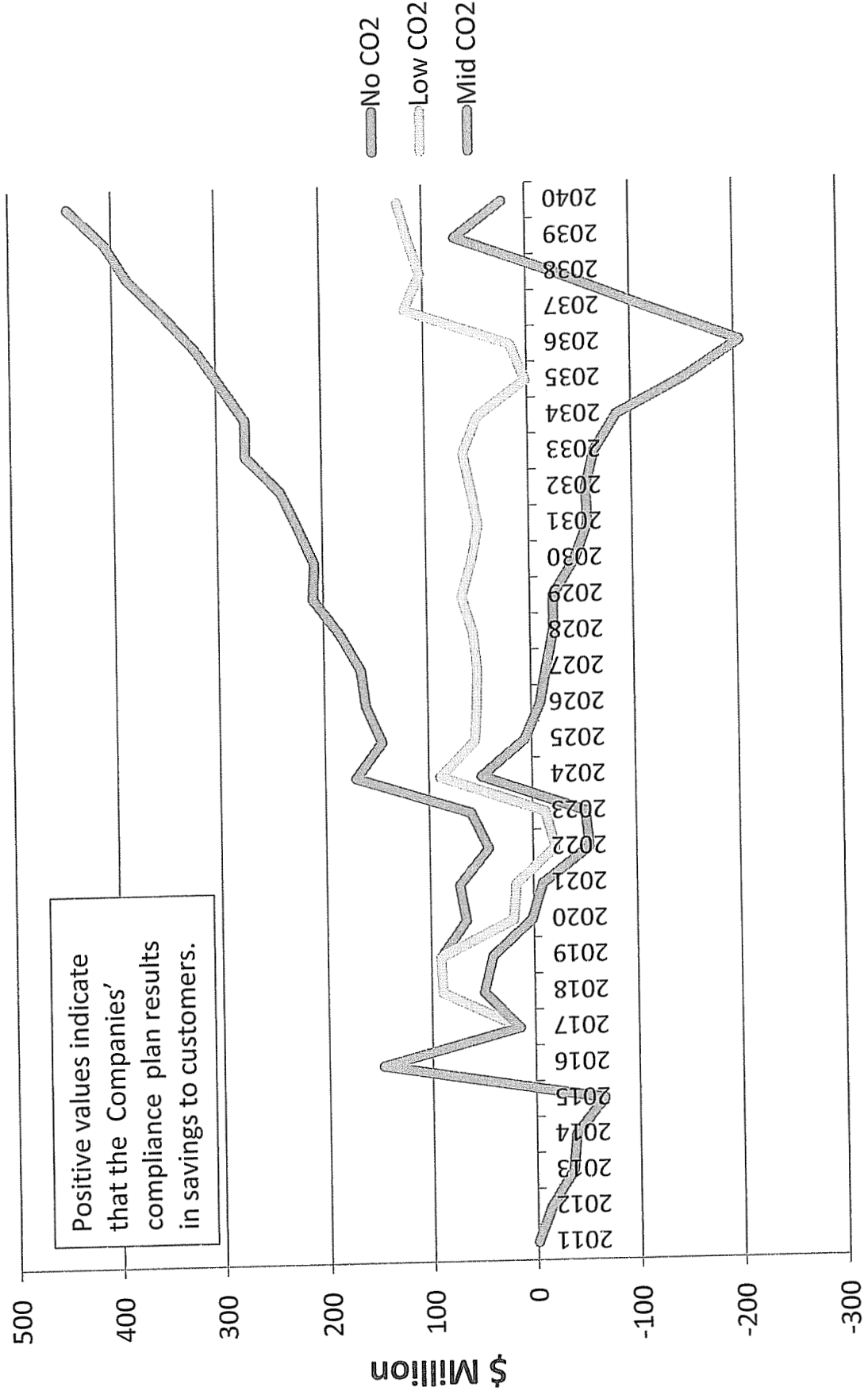
State	2002	2003	2004	2005	2006	2007	2008	2009	2010
Alabama									
Arkansas									
California									
Colorado									
Connecticut									
Delaware									
District of Columbia									
Florida									
Georgia									
Idaho									
Illinois									
Indiana									
Iowa									
Kansas									
Kentucky									
Louisiana									
Maine									
Maryland									
Massachusetts									
Michigan									
Minnesota									
Mississippi									
Missouri									
Montana									
Nebraska									
Nevada									
New Hampshire									
New Jersey									
New Mexico									
New York									
North Carolina									
North Dakota									
Ohio									
Oklahoma									
Oregon									
Pennsylvania									
Rhode Island									
South Carolina									
South Dakota									
Tennessee									
Texas									
Utah									
Vermont									
Virginia									
Washington									
West Virginia									
Wisconsin									
Wyoming									

[1] The electric power sector includes electricity-only plants and combined-heat-and-power (CHP) plants whose primary business is to sell electricity.
 [2] Data shown for electric utilities are collected by the Federal Energy Regulatory Commission on the FERC Form 423.
 W = Withheld to avoid disclosure of individual company data.
 Notes: • See Glossary for definitions. • Data for 2003 and 2004 are preliminary. • Totals may not equal sum of components because of independent sources.
 Sources: Energy Information Administration, Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report," and Federal Energy Regulatory Commission, Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report."

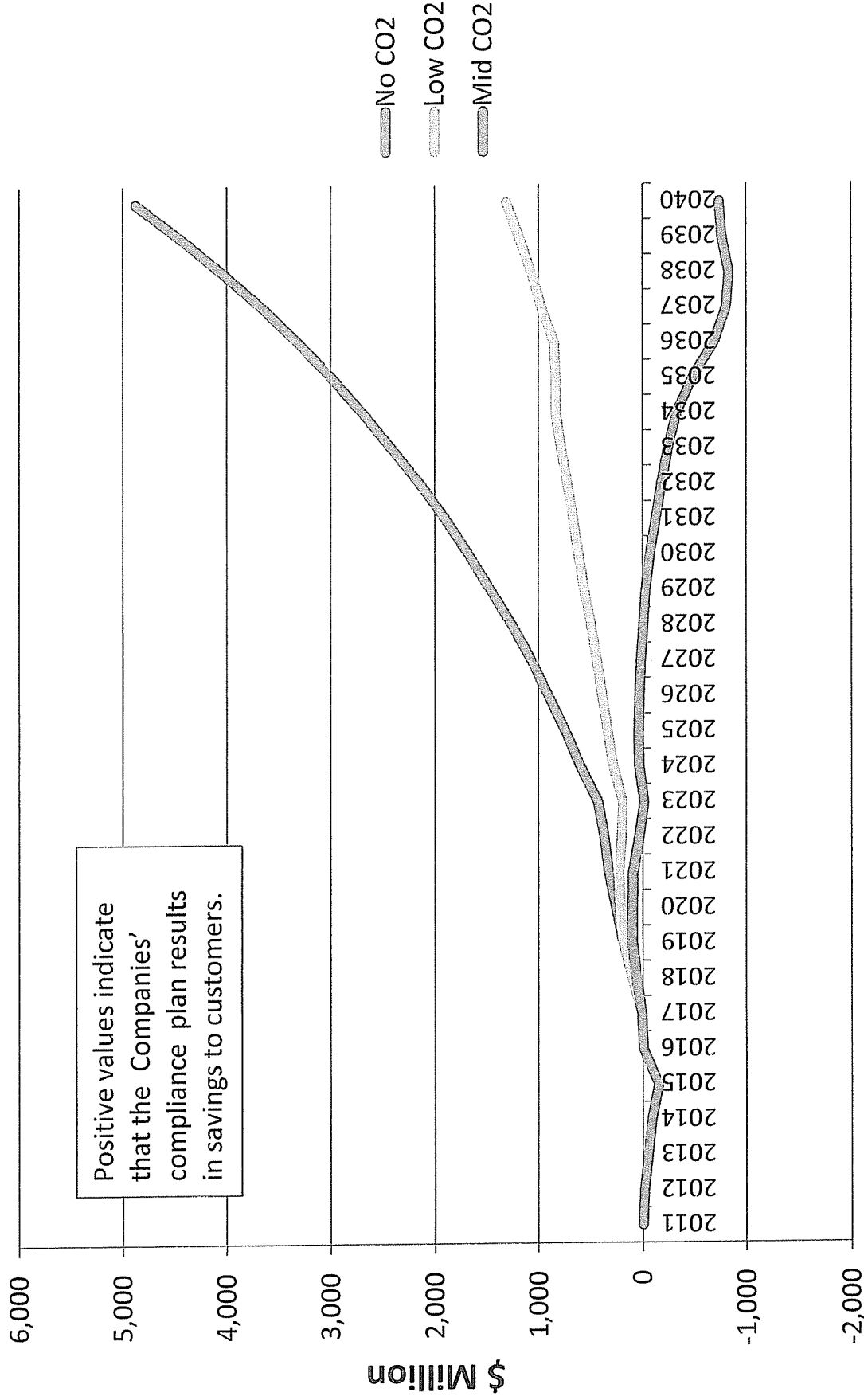
Coal Units in Portfolio												Portfolio PVRR 2011 to 2040 (\$Million)					
Trimble County 2	Trimble County 1	Mill Creek 3	Mill Creek 4	Ghent 1	Ghent 2	Ghent 3	Ghent 4	Brown 3	Mill Creek 1-2	Brown 1-2	Green River 4	Cane Run 5	Cane Run 6	Cane Run 4	Green River 3	Tyrone 3	32,671
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	32,737
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	32,811
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	32,819
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	32,909
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	32,968
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	32,997
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	33,044
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	33,345
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	33,401
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	33,479
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	33,491
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	33,546
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	33,575
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	33,581
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	33,686
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	33,697
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	33,969

Note: The values above reflect the correction of the landfill cost error identified by Dr. Fisher and the error identified by the Companies' in response to Supplemental Requests for Information of Rick Clewett, Raymond Barry, Sierra Club and the Natural Resource Defense Council dated August 18, 2011, Question No. 8(b).

Annual Nominal Savings/(Costs) from the Companies' Compliance Plan vs. Retiring and Replacing Brown Units 1 & 2 and Mill Creek Units 1 & 2



Cumulative Nominal Savings/(Costs) from the Companies' Compliance Plan vs. Retiring and Replacing Brown Units 1 & 2 and Mill Creek Units 1 & 2



10/18/2011

6.71% Discount Rate

* All cases use AESC Gas Prices in Nominal \$

Total Revenue Requirement
2011 \$M Nominal \$000

NPVRR	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	
Retire:																		
TY3, GR3-4, CR4-5, BR1-2, and MC1-2	50,484	1,134,439	1,246,459	1,350,869	1,578,175	1,807,265	2,205,219	2,963,400	3,163,622	3,340,792	3,571,419	3,837,984	4,133,818	4,453,180	4,678,360	4,957,520	5,219,326	
TY3, GR3-4, CR4-5, BR1-2, and MC1-2	43,968	1,134,439	1,246,459	1,350,869	1,578,175	1,807,265	2,205,219	2,951,139	2,422,435	3,099,749	3,269,574	3,475,859	3,692,473	3,919,894	4,078,177	4,292,274	4,456,623	
TY3, GR3-4, CR4-5, BR1-2, and MC1-2	33,969	1,134,439	1,246,459	1,350,869	1,578,175	1,807,265	2,205,219	2,351,139	2,422,435	2,449,694	2,599,510	2,657,044	2,774,318	2,901,471	2,954,294	3,082,731	3,109,568	
TY3, GR3-4, and CR4-5	50,653	1,134,929	1,260,172	1,386,194	1,616,218	1,873,177	2,133,478	2,190,667	2,914,449	3,123,404	3,338,856	3,580,099	3,892,485	4,184,944	4,404,369	4,671,150	4,966,034	5,234,142
TY3, GR3-4, and CR4-5	43,577	1,134,929	1,260,172	1,386,194	1,616,218	1,873,177	2,133,478	2,190,667	2,332,127	3,080,113	3,252,934	3,497,272	3,704,789	3,830,871	4,023,538	4,239,413	4,405,020	
TY3, GR3-4, and CR4-5	32,671	1,134,929	1,260,172	1,386,194	1,616,218	1,873,177	2,133,478	2,262,259	2,332,127	2,384,486	2,468,271	2,614,237	2,714,927	2,730,865	2,809,370	2,922,567	2,945,152	
No CO2	1,298	-489	-13,712	-35,325	-38,043	-65,912	14,552	88,880	90,308	65,207	71,239	42,807	59,391	170,606	144,924	160,163	164,416	
Delta	-489	-14,202	-49,527	-87,570	-153,482	-6,040	8,512	97,392	187,699	252,907	324,145	366,952	426,344	596,949	741,873	902,036	1,066,453	
Cumulative Delta																		
Low CO2	391	-489	-13,712	-35,325	-38,043	-65,912	14,552	88,880	90,308	19,635	16,640	-21,373	-12,316	89,023	54,639	52,860	51,603	
Delta	-489	-14,202	-49,527	-87,570	-153,482	-6,040	8,512	97,392	187,699	207,335	223,974	202,601	190,286	279,308	333,947	386,807	438,411	
Cumulative Delta																		
Mid CO2	-168	-489	-13,712	-35,325	-38,043	-65,912	14,552	48,951	40,218	1,935	-8,680	-54,491	-51,126	48,811	7,210	-8,515	-14,816	
Delta	-489	-14,202	-49,527	-87,570	-153,482	-6,040	8,512	57,463	97,680	99,616	90,935	36,444	-14,681	34,129	41,339	32,824	18,009	
Cumulative Delta																		
Annual Nominal RR Delta \$M																		
No CO2	0	-14	-35	-38	-38	-66	147	89	90	65	71	43	59	171	145	160	164	
Low CO2	0	-14	-35	-38	-38	-66	147	89	90	20	17	-21	-12	89	55	53	52	
Mid CO2	0	-14	-35	-38	-38	-66	147	49	40	2	-9	-54	-51	49	7	-9	-15	
Cumulative Nominal RR Delta \$M																		
No CO2	0	-14	-50	-88	-88	-153	-6	97	188	253	324	367	426	597	742	902	1,066	
Low CO2	0	-14	-50	-88	-88	-153	-6	9	97	207	224	203	190	279	334	387	438	
Mid CO2	0	-14	-50	-88	-88	-153	-6	9	98	100	91	36	-15	34	41	33	18	
Annual PVRR Delta (\$M)																		
No CO2	0	-13	-44	-76	-76	-127	-20	46	100	136	174	195	222	295	354	414	472	
Low CO2	0	-13	-44	-76	-76	-127	-20	46	100	111	120	109	104	142	164	184	202	
Mid CO2	0	-13	-44	-76	-76	-127	-20	21	45	46	41	15	-9	12	15	12	7	
PVRR Delta Through Future Years (2011 \$M)																		
No CO2	136	354	659	1,298														
Low CO2	111	164	257	391														
Mid CO2	46	15	(20)	(168)														

10/18/2011

*All cases use AESC Gas Prices in Nominal \$

	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
CO2 Prices:													
Retire:													
TY3, GR3-4, CR4-6, BR1-2, and MC1-2	5,540,247	5,931,802	6,318,024	6,533,813	6,912,165	7,268,736	7,629,519	8,029,890	8,483,252	8,964,729	9,421,030	9,960,453	10,411,501
TY3, GR3-4, CR4-6, BR1-2, and MC1-2	4,690,960	4,979,073	5,292,612	5,459,512	5,720,075	5,993,147	6,243,633	6,540,172	6,919,752	7,308,428	7,552,617	7,851,573	8,221,707
TY3, GR3-4, CR4-6, BR1-2, and MC1-2	3,236,136	3,373,057	3,548,890	3,580,534	3,686,751	3,866,270	4,004,093	4,236,783	4,323,206	4,451,067	4,562,293	4,630,798	4,858,359
TY3, GR3-4, and CR4-6	5,562,097	5,954,452	6,361,996	6,610,873	6,967,455	7,332,576	7,715,335	8,182,152	8,689,034	9,078,951	9,447,248	9,891,884	10,388,767
TY3, GR3-4, and CR4-6	4,635,656	4,913,023	5,237,017	5,410,329	5,664,292	5,930,291	6,194,946	6,538,549	6,903,940	7,189,946	7,450,044	7,737,275	8,097,868
TY3, GR3-4, and CR4-6	3,052,144	3,163,051	3,340,597	3,356,973	3,447,108	3,593,776	3,731,447	3,941,216	4,003,661	4,100,533	4,177,302	4,223,906	4,415,154
No CO2													
Delta	183,991	210,006	208,293	223,561	239,643	272,494	272,645	295,566	319,545	350,514	384,990	406,892	443,199
Cumulative Delta	1,250,444	1,460,449	1,668,743	1,892,304	2,131,947	2,404,441	2,677,086	2,972,653	3,292,198	3,642,712	4,027,702	4,434,595	4,877,794
Low CO2													
Delta	55,303	66,050	55,595	49,183	55,783	62,856	48,686	1,622	15,812	118,482	102,572	114,298	123,839
Cumulative Delta	493,714	559,763	615,359	664,542	720,325	783,181	831,867	833,490	849,302	967,784	1,070,356	1,184,655	1,308,494
Mid CO2													
Delta	-21,851	-22,650	-43,972	-57,060	-55,290	-63,840	-85,817	-152,263	-205,782	-114,222	-26,219	68,569	22,734
Cumulative Delta	-3,842	-26,493	-70,464	-127,524	-182,814	-246,654	-332,471	-484,733	-690,515	-804,737	-830,956	-762,386	-739,652
Annual Nominal RR Delta \$M													
No CO2	184	210	208	224	240	272	273	296	320	351	385	407	443
Low CO2	55	66	56	49	56	63	49	2	16	118	103	114	124
Mid CO2	-22	-23	-44	-57	-55	-64	-86	-152	-206	-114	-26	69	23
Cumulative Nominal RR Delta \$M													
No CO2	1,250	1,460	1,669	1,892	2,132	2,404	2,677	2,973	3,292	3,643	4,028	4,435	4,878
Low CO2	494	560	615	665	720	783	832	833	849	968	1,070	1,185	1,308
Mid CO2	-4	-26	-70	-128	-183	-247	-332	-485	-691	-805	-831	-762	-740
Annual PVRR Delta (\$M)													
No CO2	533	598	659	720	781	847	908	970	1,033	1,098	1,164	1,230	1,298
Low CO2	220	241	257	271	285	300	311	311	314	336	354	372	391
Mid CO2	0	-8	-20	-36	-50	-65	-85	-117	-157	-178	-183	-172	-168

PVRR Delta Through Future Years (2011 \$M)

No CO2
Low CO2
Mid CO2

	Retire TY3, GR3-4, CR4-6, BR1-2, and MC1-2			Retire TY3, GR3-4, and CR4-6		
	No CO2	Low CO2	Mid CO2	No CO2	Low CO2	Mid CO2
2011						
2012						
2013						
2014						
2015						
2016	3x1C(2)	3x1C(2)	3x1C(2)	3x1C(1)	3x1C(1)	3x1C(1)
2017						
2018						
2019	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)
2020						
2021						
2022						
2023						
2024						
2025	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)
2026						
2027						
2028						
2029						
2030						
2031	2x1C(1)	3x1C(1)	3x1C(1)	2x1C(1)	3x1C(1)	3x1C(1)
2032						
2033						
2034						
2035						
2036	3x1C(1)			3x1C(1)		
2037						
2038		3x1C(1)	SCCT(1)		3x1C(1)	
2039						
2040			3x1C(1)			

3x1C = 3x1 Combined Cycle Combustion Turbine
2x1C = 2x1 Combined Cycle Combustion Turbine
SCCT = Simple Cycle Combustion Turbine

CO2 Emissions Allowance Price Forecast
Synapse Energy - 2011 CO2 Price Forecast (2/11/2011)
Mid Case

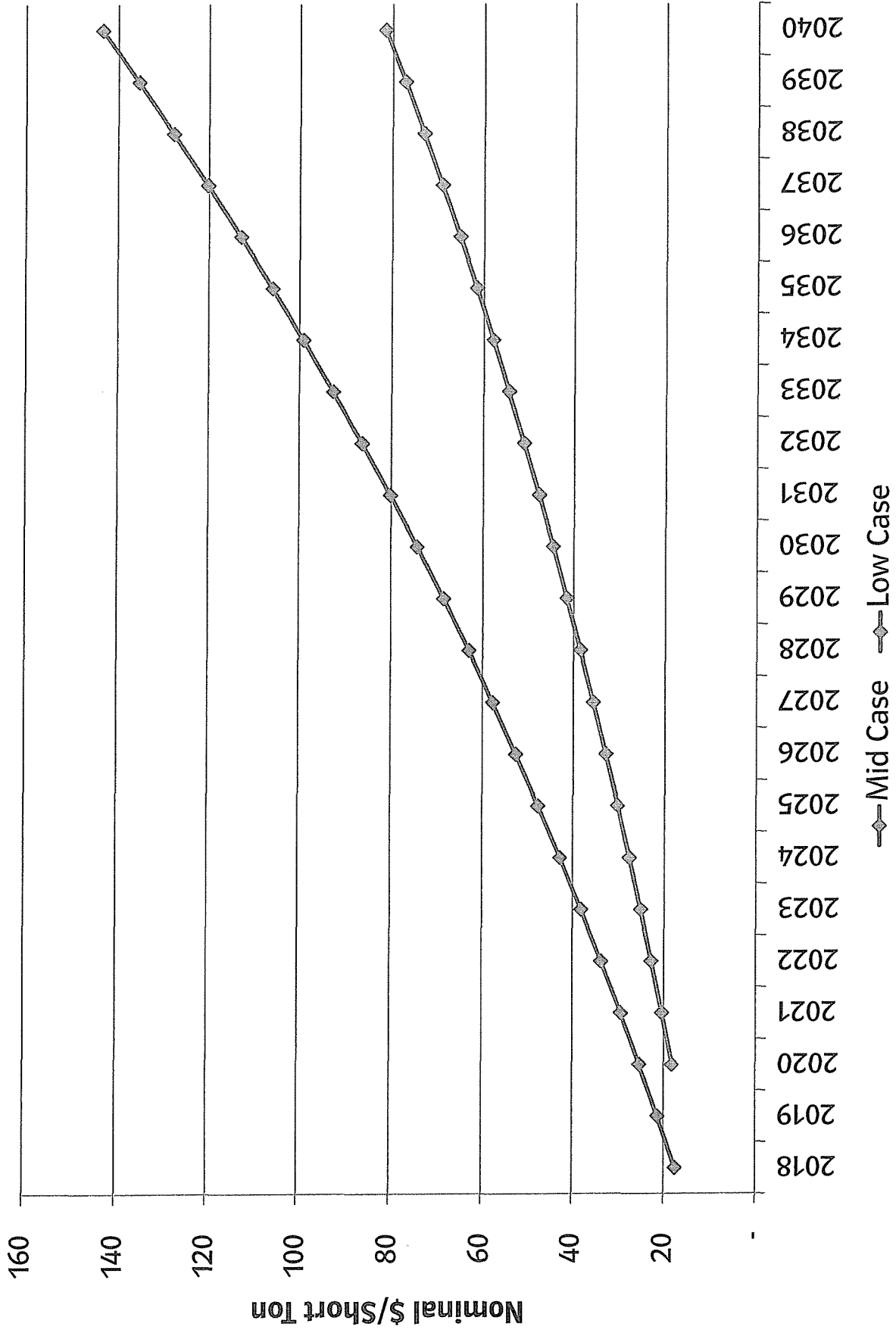
	2010 \$	2% Inflation Rate
	<u>\$/short ton</u>	<u>Nominal \$</u>
2011-2017	-	
2018	15.00	17.57
2019	17.92	21.42
2020	20.83	25.39
2021	23.75	29.53
2022	26.67	33.82
2023	29.58	38.26
2024	32.50	42.88
2025	35.42	47.67
2026	38.33	52.62
2027	41.25	57.76
2028	44.17	63.09
2029	47.08	68.59
2030	50.00	74.30
2031	52.92	80.21
2032	55.84	86.33
2033	58.76	92.66
2034	61.68	99.21
2035	64.60	105.98
2036	67.52	112.99
2037	70.44	120.23
2038	73.36	127.72
2039	76.28	135.46
2040	79.20	143.46

CO2 Emissions Allowance Price Forecast
Synapse Energy - 2011 CO2 Price Forecast (2/11/2011)
Low Case

	2010 \$	2% Inflation Rate	
	<u>\$/short ton</u>	<u>Nominal \$</u>	
2011-2017	-		
2018			
2019			
2020	15.00	18.28	
2021	16.50	20.52	
2022	18.00	22.83	
2023	19.50	25.23	
2024	21.00	27.71	
2025	22.50	30.28	
2026	24.00	32.95	
2027	25.50	35.71	
2028	27.00	38.56	
2029	28.50	41.52	
2030	30.00	44.58	
2031	31.50	47.74	
2032	33.00	51.02	
2033	34.50	54.40	
2034	36.00	57.90	
2035	37.50	61.52	
2036	39.00	65.26	
2037	40.50	69.13	
2038	42.00	73.12	
2039	43.50	77.25	
2040	45.00	81.51	

For Extrapolation:
 2020 15.00
 2030 30.00

Synapse's CO₂ Price Forecasts



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Retire:	TY	TY GR3	TY GR3 BR3	TY GR3 CR4	TY GR3 CR4	TY GR3 CR4	TY GR3 CR4	TY GR3 CR4	TY GR3 CR4	TY GR3 CR4	TY GR3 CR4	TY GR3 CR4	TY GR3 CR4	TY GR3 CR4	TY GR3 CR4	TY GR3 CR4	TY GR3 CR4	TY GR3 CR4
No	TY	TY GR3	TY GR3 BR3	TY GR3 CR4	TY GR3 CR4	TY GR3 CR4	TY GR3 CR4	TY GR3 CR4	TY GR3 CR4	TY GR3 CR4	TY GR3 CR4	TY GR3 CR4	TY GR3 CR4	TY GR3 CR4	TY GR3 CR4	TY GR3 CR4	TY GR3 CR4	TY GR3 CR4
2010																		
2011																		
2012																		
2013																		
2014																		
2015																		
2016	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(2)	3x1C(2)	3x1C(1)	3x1C(2)	3x1C(2)	3x1C(2)	3x1C(2)	3x1C(2)	3x1C(2)	3x1C(2)	3x1C(2)
2017	3x1C(1)																	
2018						3x1C(1)												
2019						3x1C(1)												
2020						3x1C(1)												
2021																		
2022																		
2023																		
2024																		
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2034																		
2035																		
2036																		
2037																		
2038																		
2039																		
2040																		

New Unit Capital and Production Cost

Retire Unit	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	
Retire TY	23.798	913.464	1,046.587	1,139.284	1,267.485	1,420.359	1,604.881	1,810.245	1,994.471	1,647.902	1,737.346	1,887.501	1,982.870	1,995.752	2,049.695	2,155.103	2,294.107	2,391.499	2,424.611	2,517.978	2,566.031	2,571.931	2,571.931	2,571.931	
Retire TY and GR3	23.881	913.464	1,051.778	1,172.334	1,302.885	1,473.356	1,674.130	1,904.372	1,950.513	1,648.063	1,739.721	1,892.802	1,993.459	1,997.688	2,047.266	2,151.916	2,291.109	2,388.729	2,421.839	2,517.978	2,564.837	2,571.931	2,571.931	2,571.931	2,571.931
Retire TY GR3 and BR3	24.004	913.464	1,051.778	1,169.483	1,300.358	1,473.356	1,674.130	1,904.372	1,950.513	1,648.063	1,739.721	1,892.802	1,993.459	1,997.688	2,047.266	2,151.916	2,291.109	2,388.729	2,421.839	2,517.978	2,564.837	2,571.931	2,571.931	2,571.931	2,571.931
Retire TY GR3 and CH4	24.387	913.464	1,051.778	1,169.483	1,400.986	1,480.546	1,659.997	1,751.835	1,796.425	1,639.335	1,951.697	2,007.843	2,083.335	2,220.115	2,322.247	2,378.382	2,411.885	2,463.097	2,485.207	2,541.138	2,595.207	2,600.422	2,600.422	2,600.422	2,600.422
Retire TY GR3 CH4 and BR1-2	25.048	913.464	1,051.778	1,169.483	1,490.367	1,480.546	1,659.997	1,751.835	1,796.425	1,639.335	1,951.697	2,007.843	2,083.335	2,220.115	2,322.247	2,378.382	2,411.885	2,463.097	2,485.207	2,541.138	2,595.207	2,600.422	2,600.422	2,600.422	2,600.422
Retire TY GR3 CH4 and GR6	25.048	913.464	1,051.778	1,169.483	1,490.367	1,480.546	1,659.997	1,751.835	1,796.425	1,639.335	1,951.697	2,007.843	2,083.335	2,220.115	2,322.247	2,378.382	2,411.885	2,463.097	2,485.207	2,541.138	2,595.207	2,600.422	2,600.422	2,600.422	2,600.422
Retire TY GR3 CH4 and GR6 and BR1-2	25.727	913.464	1,051.778	1,169.483	1,490.367	1,480.546	1,659.997	1,751.835	1,796.425	1,639.335	1,951.697	2,007.843	2,083.335	2,220.115	2,322.247	2,378.382	2,411.885	2,463.097	2,485.207	2,541.138	2,595.207	2,600.422	2,600.422	2,600.422	2,600.422
Retire TY GR3 CH4 and GR6 and BR1-2 and GR	25.539	913.464	1,051.778	1,169.483	1,490.367	1,480.546	1,659.997	1,751.835	1,796.425	1,639.335	1,951.697	2,007.843	2,083.335	2,220.115	2,322.247	2,378.382	2,411.885	2,463.097	2,485.207	2,541.138	2,595.207	2,600.422	2,600.422	2,600.422	2,600.422
Retire TY GR3 CH4 and GR6 and BR1-2 and GR and GH1	26.881	913.464	1,051.778	1,169.483	1,490.367	1,480.546	1,659.997	1,751.835	1,796.425	1,639.335	1,951.697	2,007.843	2,083.335	2,220.115	2,322.247	2,378.382	2,411.885	2,463.097	2,485.207	2,541.138	2,595.207	2,600.422	2,600.422	2,600.422	2,600.422
Retire TY GR3 CH4 and GR6 and BR1-2 and GR and MCL1	27.024	913.464	1,051.778	1,169.483	1,490.367	1,480.546	1,659.997	1,751.835	1,796.425	1,639.335	1,951.697	2,007.843	2,083.335	2,220.115	2,322.247	2,378.382	2,411.885	2,463.097	2,485.207	2,541.138	2,595.207	2,600.422	2,600.422	2,600.422	2,600.422
Retire TY GR3 CH4 and GR6 and BR1-2 and GR and MCL2	27.271	913.464	1,051.778	1,169.483	1,490.367	1,480.546	1,659.997	1,751.835	1,796.425	1,639.335	1,951.697	2,007.843	2,083.335	2,220.115	2,322.247	2,378.382	2,411.885	2,463.097	2,485.207	2,541.138	2,595.207	2,600.422	2,600.422	2,600.422	2,600.422
Retire TY GR3 CH4 and GR6 and BR1-2 and GR and MCL2 and MCL1	27.749	913.464	1,051.778	1,169.483	1,490.367	1,480.546	1,659.997	1,751.835	1,796.425	1,639.335	1,951.697	2,007.843	2,083.335	2,220.115	2,322.247	2,378.382	2,411.885	2,463.097	2,485.207	2,541.138	2,595.207	2,600.422	2,600.422	2,600.422	2,600.422
Retire TY GR3 CH4 and GR6 and BR1-2 and GR and MCL2 and MCL1 and MCL2	28.617	913.464	1,051.778	1,169.483	1,490.367	1,480.546	1,659.997	1,751.835	1,796.425	1,639.335	1,951.697	2,007.843	2,083.335	2,220.115	2,322.247	2,378.382	2,411.885	2,463.097	2,485.207	2,541.138	2,595.207	2,600.422	2,600.422	2,600.422	2,600.422
Retire TY GR3 CH4 and GR6 and BR1-2 and GR and MCL2 and MCL1 and MCL2 and MCL1	28.597	913.464	1,051.778	1,169.483	1,490.367	1,480.546	1,659.997	1,751.835	1,796.425	1,639.335	1,951.697	2,007.843	2,083.335	2,220.115	2,322.247	2,378.382	2,411.885	2,463.097	2,485.207	2,541.138	2,595.207	2,600.422	2,600.422	2,600.422	2,600.422

Production Cost

Retire Unit	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	
Retire TY	21.858	913.464	1,046.587	1,133.974	1,274.875	1,437.871	1,628.334	1,798.202	1,790.000	1,774.183	1,822.022	1,938.424	1,950.772	2,050.414	2,111.866	2,183.778	2,264.363	2,283.778	2,409.946	2,424.611	2,517.978	2,566.031	2,571.931	2,571.931	2,571.931
Retire TY and GR3	21.882	913.464	1,046.587	1,130.796	1,272.609	1,437.871	1,628.334	1,798.202	1,790.000	1,774.183	1,822.022	1,938.424	1,950.772	2,050.414	2,111.866	2,183.778	2,264.363	2,283.778	2,409.946	2,424.611	2,517.978	2,566.031	2,571.931	2,571.931	2,571.931
Retire TY GR3 and BR3	22.488	913.464	1,046.587	1,127.945	1,215.648	1,328.277	1,443.349	1,490.588	1,551.887	1,645.949	1,750.594	1,833.348	1,928.409	2,002.336	2,008.512	2,106.293	2,171.243	2,281.058	2,350.513	2,438.037	2,509.460	2,566.031	2,571.931	2,571.931	2,571.931
Retire TY GR3 CH4 and GR6	22.167	913.464	1,046.587	1,127.945	1,215.648	1,328.277	1,443.349	1,490.588	1,551.887	1,645.949	1,750.594	1,833.348	1,928.409	2,002.336	2,008.512	2,106.293	2,171.243	2,281.058	2,350.513	2,438.037	2,509.460	2,566.031	2,571.931	2,571.931	2,571.931
Retire TY GR3 CH4 and GR6 and BR1-2	22.997	913.464	1,046.587	1,127.945	1,215.648	1,328.277	1,443.349	1,490.588	1,551.887	1,645.949	1,750.594	1,833.348	1,928.409	2,002.336	2,008.512	2,106.293	2,171.243	2,281.058	2,350.513	2,438.037	2,509.460	2,566.031	2,571.931	2,571.931	2,571.931
Retire TY GR3 CH4 and GR6 and BR1-2 and GR	22.595	913.464	1,046.587	1,127.945	1,215.648	1,328.277	1,443.349	1,490.588	1,551.887	1,645.949	1,750.594	1,833.348	1,928.409	2,002.336	2,008.512	2,106.293	2,171.243	2,281.058	2,350.513	2,438.037	2,509.460	2,566.031	2,571.931	2,571.931	2,571.931
Retire TY GR3 CH4 and GR6 and BR1-2 and GR and GH1	23.849	913.464	1,046.587	1,128.961	1,221.482	1,369.151	1,493.552	1,599.154	1,685.070	1,681.350	1,797.702	1,880.728	1,984.689	2,055.473	2,083.041	2,196.547	2,272.051	2,394.008	2,446.628	2,531.659	2,571.931	2,571.931	2,571.931	2,571.931	2,571.931
Retire TY GR3 CH4 and GR6 and BR1-2 and GR and MCL1	23.715	913.464	1,046.587	1,128.961	1,221.482	1,369.151	1,493.552	1,599.154	1,685.070	1,681.350	1,797.702	1,880.728	1,984.689	2,055.473	2,083.041	2,196.547	2,272.051	2,394.008	2,446.628	2,531.659	2,571.931	2,571.931	2,571.931	2,571.931	2,571.931
Retire TY GR3 CH4 and GR6 and BR1-2 and GR and MCL2	23.935	913.464	1,046.587	1,128.961	1,221.482	1,369.151	1,493.552	1,599.154	1,685.070	1,681.350	1,797.702	1,880.728	1,984.689	2,055.473	2,083.041	2,196.547	2,272.051	2,394.008	2,446.628	2,531.659	2,571.931	2,571.931	2,571.931	2,571.931	2,571.931
Retire TY GR3 CH4 and GR6 and BR1-2 and GR and MCL2 and MCL1	24.044	913.464	1,046.587	1,128.961	1,221.482	1,369.151	1,493.552	1,599.154	1,685.070	1,681.350	1,797.702	1,880.728	1,984.689	2,055.473	2,083.041	2,196.547	2,272.051	2,394.008	2,446.628	2,531.659	2,571.931	2,571.931	2,571.931	2,571.931	2,571.931
Retire TY GR3 CH4 and GR6 and BR1-2 and GR and MCL2 and MCL1 and MCL2	24.908	913.464	1,046.587	1,128.961	1,221.482	1,369.151	1,493.552	1,599.154	1,685.070	1,681.350	1,797.702	1,880.728	1,984.689	2,055.473	2,083.041	2,196.547	2,272.051	2,394.008	2,446.628	2,531.659	2,571.931	2,571.931	2,571.931	2,571.931	2,571.931
Retire TY GR3 CH4 and GR6 and BR1-2 and GR and MCL2 and MCL1 and MCL2 and MCL1	24.662	913.464	1,046.587	1,128.961	1,221.482	1,369.151	1,493.552	1,599.154	1,685.070	1,681.350	1,797.702	1,880.728	1,984.689	2,055.473	2,083.041	2,196.547	2,272.051	2,394.008	2,446.628	2,531.659	2,571.931	2,571.931	2,571.931	2,571.931	2,571.931
Retire TY GR3 CH4 and GR6 and BR1-2 and GR and MCL2 and MCL1 and MCL2 and MCL1 and MCL2	25.074	913.464	1,046.587	1,128.961	1,221.482	1,369.151	1,493.552	1,599.154	1,685.070	1,681.350	1,797.702	1,880.728	1,984.689	2,055.473	2,083.041	2,196.547	2,272.051	2,394.008	2,446.628	2,531.659	2,571.931	2,571.931	2,571.931	2,571.931	2,571.931
Retire TY GR3 CH4 and GR6 and BR1-2 and GR and MCL2 and MCL1 and MCL2 and MCL1 and MCL2 and MCL1	23.990	913.464	1,046.587	1,128.961	1,221.482	1,369.151	1,493.552	1,599.154	1,685.070	1,681.350	1,797.702	1,880.728	1,984.689	2,055.473	2,083.041	2,196.547	2,272.051	2,394.008	2,446.628	2,531.659	2,571.931	2,571.931	2,571.931	2,571.931	2,571.931

Production Cost Delta

AESC Gas Prices (Nominal \$)

Discount Rate: 6.71%

Table with columns for MTR Capital, No Retirements, and years 2011-2033. Rows include Retire TY, Retire TY GR3 and GR4, Retire TY GR3 and GR4 and MCL-2, etc.

Table with columns for Landfill Capital, No Retirements, and years 2011-2033. Rows include Retire TY, Retire TY GR3 and GR4, Retire TY GR3 and GR4 and MCL-2, etc.

Table with columns for Landfill Capital, No Retirements, and years 2011-2033. Rows include Retire TY, Retire TY GR3 and GR4, Retire TY GR3 and GR4 and MCL-2, etc.

Table with columns for Landfill Capital, No Retirements, and years 2011-2033. Rows include Retire TY, Retire TY GR3 and GR4, Retire TY GR3 and GR4 and MCL-2, etc.

Table with columns for Landfill Capital, No Retirements, and years 2011-2033. Rows include Retire TY, Retire TY GR3 and GR4, Retire TY GR3 and GR4 and MCL-2, etc.

Discount Rate: 6.71%

AESC Gas Prices (Nominal \$)

SM	MPYR	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
No Retirements																								
Retire TY	-8	0	-1,323	1,043	29,924	31,664	29,554	-14,601	-13,669	-13,386	-12,841	-12,330	-11,960	-11,716	-11,473	-11,229	-11,005	-9,138	4,629	19,786	30,699	34,208	25,236	-28,357
Retire TY GR3 and GR3	61	0	-1,323	-4,148	-6,293	-6,236	-5,981	828	5,764	5,553	5,288	4,921	4,015	26,607	-531	-13,498	-5,746	37,564	40,378	24,762	-6,750	-21,829	21,044	-18,016
Retire TY GR3 and BR3	104	0	-204	-2,854	-9,874	-16,498	-14,787	25,208	68,451	93,239	57,075	5,826	-26,829	8,159	56,518	89,023	47,448	-11,949	-56,488	-62,009	-4,260	59,470	95,347	95,347
Retire TY GR3 and CR4	-251	-1,322	-11,751	-24,695	-46,496	-44,737	-43,785	-41,689	-39,449	-31,803	-24,631	-17,703	-10,722	-26,431	-37,318	-27,807	15,158	18,795	4,435	-25,476	-39,237	-21,229	-12,238	38,542
Retire TY GR3 CR4 and BR1-2	-283	-2,432	-11,751	-33,887	-60,564	-58,976	-57,128	-54,789	-51,728	-40,494	-30,984	-21,165	-14,765	-49,722	-52,468	-44,033	33,035	-10,048	-53,012	-65,572	2,874	56,179	63,553	63,553
Retire TY GR3 CR4 and CR	1	-489	-6,506	-15,605	-28,043	-24,361	-21,829	3,800	-31,970	-36,045	-40,421	-37,623	-35,045	-41,771	-512	-42,166	-54,904	-47,875	-8,023	26,446	7,317	47,993	-85,799	-85,799
Retire TY GR3 CR and BR1-2	-220	-1,326	-8,764	-26,412	-49,993	-48,098	-41,883	-35,799	-22,236	-15,584	-9,981	-36,126	-39,628	-37,623	-38,727	-48,539	-72,190	-17,610	40,475	93,607	48,656	-15,669	-57,035	-57,035
Retire TY GR3 CR and GH3	104	-115	-565	42	29,321	58,378	68,218	35,242	-11,627	-8,197	-7,942	39,580	68,702	43,733	1,908	-23,445	13,448	43,701	-4,328	52,196	-60,721	60,721	50,498	2,259
Retire TY GR3 CR and GH1	149	-185	-4,894	-5,973	57,247	71,751	38,759	17,151	38,759	-8,197	-7,942	39,580	68,702	43,733	1,908	-23,445	13,448	43,701	-4,328	52,196	-60,721	60,721	50,498	2,259
Retire TY GR CR and MCA	62	0	-1,885	-5,910	-9,574	-3,989	28,676	68,218	35,242	-11,627	-8,197	-7,942	39,580	68,702	43,733	1,908	-23,445	13,448	43,701	-4,328	52,196	-60,721	60,721	50,498
Retire TY GR CR and TCI	-111	-862	-12,710	-21,482	1,617	20,964	9,176	-23,630	19,033	-4,800	-16,046	46,479	46,121	28,004	16,800	6,641	-38,095	55,394	-55,394	55,394	-55,394	55,394	-55,394	-55,394
Retire TY GR CR and GH4	67	0	0	7,991	35,022	67,043	45,576	11,131	-22,867	-27,283	16,230	56,346	46,089	6,436	-33,017	-57,941	12,633	66,413	100,059	67,794	17,843	-16,527	-31,511	29,882
Retire TY GR CR and MCA	190	0	0	7,991	35,022	67,043	45,576	11,131	-22,867	-27,283	16,230	56,346	46,089	6,436	-33,017	-57,941	12,633	66,413	100,059	67,794	17,843	-16,527	-31,511	29,882
Retire TY GR CR and GH4	67	-112	0	7,991	35,022	67,043	45,576	11,131	-22,867	-27,283	16,230	56,346	46,089	6,436	-33,017	-57,941	12,633	66,413	100,059	67,794	17,843	-16,527	-31,511	29,882
Retire TY GR CR and MCA	59	0	-1,379	-4,139	22,229	47,135	35,233	-3,799	-37,956	-41,493	2,340	42,784	32,815	-6,442	-45,943	-68,106	19,374	33,456	66,929	36,402	-11,572	-22,889	8,046	60,696
Retire TY GR CR and GH2	78	-11	-3,511	-10,774	24,097	53,842	35,233	-3,799	-37,956	-41,493	2,340	42,784	32,815	-6,442	-45,943	-68,106	19,374	33,456	66,929	36,402	-11,572	-22,889	8,046	60,696
Retire TY GR CR and MCA	-242	0	-7,206	-19,719	-5,250	-12,212	-33,309	57,273	-28,656	761	45,132	71,170	34,064	-18,807	-59,143	-65,657	-17,006	35,241	68,378	37,757	-10,310	-37,408	9,124	61,679
Retire TY GR CR and MCA-2	-282	-489	-13,712	-35,324	-33,293	-48,461	-48,948	-48,948	-48,948	-48,948	-48,948	-48,948	-48,948	-48,948	-48,948	-48,948	-48,948	-48,948	-48,948	-48,948	-48,948	-48,948	-48,948	-48,948
Retire TY GR CR BR1-2 and MCA-2	-489	-489	-13,712	-35,324	-33,293	-48,461	-48,948	-48,948	-48,948	-48,948	-48,948	-48,948	-48,948	-48,948	-48,948	-48,948	-48,948	-48,948	-48,948	-48,948	-48,948	-48,948	-48,948	-48,948
Retire TY GR CR BR1-2	-19	-489	-6,506	-10,414	13,494	45,308	34,445	701	-33,247	-43,168	-35,573	3,105	6,719	-6,330	-32,524	-45,595	-37,395	13,676	62,785	64,195	-31,973	-2,587	-10,495	-9,517

Retirement O&M Cost

SM	MPYR	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
No Retirements																								
Retire TY	2	0	0	0	0	0	2,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 and BR3	3	0	0	0	0	0	4,200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 and CR4	5	0	0	0	0	0	6,300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR4 and CR6	6	0	0	0	0	0	8,400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR4 and BR1-2	9	0	0	0	0	0	12,600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR and CR	9	0	0	0	0	0	10,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR and GH3	9	0	0	0	0	0	12,600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR and GH1	9	0	0	0	0	0	12,600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and MCA	9	0	0	0	0	0	12,600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and TCI	11	0	0	0	0	0	14,700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and GH4	11	0	0	0	0	0	14,700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and MCA	11	0	0	0	0	0	14,700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and GH2	12	0	0	0	0	0	16,800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and MCA-2	12	0	0	0	0	0	16,800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR BR1-2 and MCA-2	15	0	0	0	0	0	21,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR BR1-2	12	0	0	0	0	0	16,800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Retirement O&M Cost Delta

SM	MPYR	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
No Retirements																								
Retire TY	2	0	0	0	0	0	2,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 and BR3	2	0	0	0	0	0	2,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 and CR4	2	0	0	0	0	0	2,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR4 and CR6	2	0	0	0	0	0	2,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR4 and BR1-2	3	0	0	0	0	0	2,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR and CR	2	0	0	0	0	0	2,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR and GH3	2	0	0	0	0	0	2,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR and GH1	2	0	0	0	0	0	2,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and MCA	2	0	0	0	0	0	2,100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and TCI	2	0																						

Discount Rate: 6.71%

AESC Gas Prices (Nominal \$)

SM	NEWBR	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Retire TY GR CR and MC4	2,650	214,901	219,007	210,243	214,448	218,737	153,445	156,514	159,644	162,837	166,094	169,416	172,804	176,266	179,786	183,341	186,931	190,550	194,201	197,884	201,591	205,321	209,074	212,850
Retire TY GR CR and TC1	2,648	214,901	219,007	210,243	214,448	218,737	153,445	156,514	159,644	162,837	166,094	169,416	172,804	176,266	179,786	183,341	186,931	190,550	194,201	197,884	201,591	205,321	209,074	212,850
Retire TY GR CR and G4	2,710	214,901	219,007	210,243	214,448	218,737	156,900	159,979	163,076	166,193	169,338	172,511	175,711	178,937	182,189	185,466	188,768	192,095	195,447	198,824	202,226	205,654	209,107	212,584
Retire TY GR CR and MC3	2,695	214,901	219,007	210,243	214,448	218,737	157,494	160,644	163,817	167,014	170,234	173,477	176,744	180,034	183,346	186,681	190,039	193,421	196,827	200,258	203,714	207,195	210,700	214,228
Retire TY GR CR and GH2	2,525	214,901	219,007	210,243	214,448	218,737	147,170	150,313	153,481	156,674	159,892	163,134	166,401	169,693	173,010	176,352	179,729	183,141	186,588	190,070	193,587	197,130	200,700	204,300
Retire TY GR CR and MCI-2	2,993	214,901	219,007	210,243	214,448	218,737	130,261	133,866	137,503	141,174	144,880	148,621	152,397	156,209	160,057	163,941	167,860	171,814	175,803	179,826	183,884	187,975	192,098	196,254
Retire TY GR CR and BR1-2	2,720	214,901	219,007	210,243	214,448	218,737	159,837	163,033	166,294	169,620	173,012	176,473	180,002	183,500	187,067	190,702	194,405	198,177	202,018	205,928	209,907	213,954	218,068	222,250
No Retirements	-5	0	0	0	0	0	-444	-453	-462	-471	-480	-489	-500	-510	-520	-530	-541	-552	-563	-574	-586	-597	-609	-622
Retire TY	-51	0	0	0	0	0	-4,627	-4,719	-4,813	-4,910	-5,008	-5,108	-5,210	-5,314	-5,421	-5,529	-5,640	-5,753	-5,868	-5,985	-6,105	-6,227	-6,351	-6,478
Retire TY and GR3	-375	0	0	0	0	0	-16,132	-16,132	-16,132	-16,132	-16,132	-16,132	-16,132	-16,132	-16,132	-16,132	-16,132	-16,132	-16,132	-16,132	-16,132	-16,132	-16,132	
Retire TY GR3 and BR3	-340	0	0	0	0	0	-14,765	-14,765	-14,765	-14,765	-14,765	-14,765	-14,765	-14,765	-14,765	-14,765	-14,765	-14,765	-14,765	-14,765	-14,765	-14,765	-14,765	
Retire TY GR3 and G4	-341	0	0	0	0	0	-14,765	-14,765	-14,765	-14,765	-14,765	-14,765	-14,765	-14,765	-14,765	-14,765	-14,765	-14,765	-14,765	-14,765	-14,765	-14,765	-14,765	
Retire TY GR3 CR and G6	-320	0	0	0	0	0	-13,909	-13,909	-13,909	-13,909	-13,909	-13,909	-13,909	-13,909	-13,909	-13,909	-13,909	-13,909	-13,909	-13,909	-13,909	-13,909	-13,909	
Retire TY GR3 CR and BR1-2	-332	0	0	0	0	0	-14,009	-14,009	-14,009	-14,009	-14,009	-14,009	-14,009	-14,009	-14,009	-14,009	-14,009	-14,009	-14,009	-14,009	-14,009	-14,009	-14,009	
Retire TY GR3 and CR	-450	0	0	0	0	0	-13,374	-13,374	-13,374	-13,374	-13,374	-13,374	-13,374	-13,374	-13,374	-13,374	-13,374	-13,374	-13,374	-13,374	-13,374	-13,374	-13,374	
Retire TY GR3 CR and G4	-347	0	0	0	0	0	-13,238	-13,238	-13,238	-13,238	-13,238	-13,238	-13,238	-13,238	-13,238	-13,238	-13,238	-13,238	-13,238	-13,238	-13,238	-13,238	-13,238	
Retire TY GR3 CR and GH1	-311	0	0	0	0	0	-12,065	-12,065	-12,065	-12,065	-12,065	-12,065	-12,065	-12,065	-12,065	-12,065	-12,065	-12,065	-12,065	-12,065	-12,065	-12,065	-12,065	
Retire TY GR3 CR and MC4	-203	0	0	0	0	0	-9,161	-9,161	-9,161	-9,161	-9,161	-9,161	-9,161	-9,161	-9,161	-9,161	-9,161	-9,161	-9,161	-9,161	-9,161	-9,161	-9,161	
Retire TY GR CR and TC1	-205	0	0	0	0	0	-18,300	-18,300	-18,300	-18,300	-18,300	-18,300	-18,300	-18,300	-18,300	-18,300	-18,300	-18,300	-18,300	-18,300	-18,300	-18,300	-18,300	
Retire TY GR CR and G4	-142	0	0	0	0	0	-12,846	-12,846	-12,846	-12,846	-12,846	-12,846	-12,846	-12,846	-12,846	-12,846	-12,846	-12,846	-12,846	-12,846	-12,846	-12,846	-12,846	
Retire TY GR CR and MC3	-202	0	0	0	0	0	-18,275	-18,275	-18,275	-18,275	-18,275	-18,275	-18,275	-18,275	-18,275	-18,275	-18,275	-18,275	-18,275	-18,275	-18,275	-18,275	-18,275	
Retire TY GR CR and GH2	-358	0	0	0	0	0	-14,351	-14,351	-14,351	-14,351	-14,351	-14,351	-14,351	-14,351	-14,351	-14,351	-14,351	-14,351	-14,351	-14,351	-14,351	-14,351	-14,351	
Retire TY GR CR and MCI-2	-328	0	0	0	0	0	-14,376	-14,376	-14,376	-14,376	-14,376	-14,376	-14,376	-14,376	-14,376	-14,376	-14,376	-14,376	-14,376	-14,376	-14,376	-14,376	-14,376	
Retire TY GR CR BR1-2 and MCI-2	-460	0	0	0	0	0	-14,746	-14,746	-14,746	-14,746	-14,746	-14,746	-14,746	-14,746	-14,746	-14,746	-14,746	-14,746	-14,746	-14,746	-14,746	-14,746	-14,746	
Retire TY GR CR BR1-2 and BR1-2	-332	0	0	0	0	0	-11,959	-11,959	-11,959	-11,959	-11,959	-11,959	-11,959	-11,959	-11,959	-11,959	-11,959	-11,959	-11,959	-11,959	-11,959	-11,959	-11,959	
No Retirements	426	0	8	123	4,486	12,567	37,131	37,913	38,710	39,524	40,353	41,199	42,023	42,864	43,721	44,595	45,487	46,397	47,325	48,271	49,237	50,222	51,226	52,251
Retire TY	383	0	8	123	4,486	12,567	38,231	39,935	41,663	43,416	45,194	46,997	48,825	50,678	52,556	54,459	56,388	58,343	60,325	62,335	64,374	66,442	68,539	70,666
Retire TY and GR3	340	0	8	123	4,486	12,567	37,332	39,036	40,764	42,517	44,294	46,097	47,925	49,778	51,656	53,559	55,488	57,443	59,425	61,435	63,474	65,542	67,639	69,766
Retire TY GR3 and BR3	297	0	8	123	4,486	12,567	37,332	39,036	40,764	42,517	44,294	46,097	47,925	49,778	51,656	53,559	55,488	57,443	59,425	61,435	63,474	65,542	67,639	
Retire TY GR3 and G4	328	0	8	123	4,486	12,567	37,332	39,036	40,764	42,517	44,294	46,097	47,925	49,778	51,656	53,559	55,488	57,443	59,425	61,435	63,474	65,542	67,639	
Retire TY GR3 CR and G6	242	0	8	123	4,486	12,567	37,332	39,036	40,764	42,517	44,294	46,097	47,925	49,778	51,656	53,559	55,488	57,443	59,425	61,435	63,474	65,542	67,639	
Retire TY GR3 CR and BR1-2	222	0	8	123	4,486	12,567	37,332	39,036	40,764	42,517	44,294	46,097	47,925	49,778	51,656	53,559	55,488	57,443	59,425	61,435	63,474	65,542	67,639	
Retire TY GR3 CR and G4	198	0	8	123	4,486	12,567	37,332	39,036	40,764	42,517	44,294	46,097	47,925	49,778	51,656	53,559	55,488	57,443	59,425	61,435	63,474	65,542	67,639	
Retire TY GR3 CR and GH3	182	0	8	123	4,486	12,567	37,332	39,036	40,764	42,517	44,294	46,097	47,925	49,778	51,656	53,559	55,488	57,443	59,425	61,435	63,474	65,542	67,639	
Retire TY GR3 CR and GH1	181	0	8	123	4,486	12,567	37,332	39,036	40,764	42,517	44,294	46,097	47,925	49,778	51,656	53,559	55,488	57,443	59,425	61,435	63,474	65,542	67,639	
Retire TY GR CR and G4	142	0	8	123	4,486	12,567	37,332	39,036	40,764	42,517	44,294	46,097	47,925	49,778	51,656	53,559	55,488	57,443	59,425	61,435	63,474	65,542	67,639	
Retire TY GR CR and MC4	142	0	8	123	4,486	12,567	37,332	39,036	40,764	42,517	44,294	46,097	47,925	49,778	51,656	53,559	55,488	57,443	59,425	61,435	63,474	65,542	67,639	
Retire TY GR CR and TC1	131	0	8	123	4,486	12,567	37,332	39,036	40,764	42,517	44,294	46,097	47,925	49,778	51,656	53,559	55,488	57,443	59,425	61,435	63,474	65,542	67,639	
Retire TY GR CR and G4	127	0	8	123	4,486	12,567	37,332	39,036	40,764	42,517	44,294	46,097	47,925	49,778	51,656	53,559	55,488	57,443	59,425	61,435	63,474	65,542	67,639	
Retire TY GR CR and MC3	126	0	8	99	4,449	11,882	10,102	10,343	10,589	10,839	11,095	11,356	11,621	11,891	12,165	12,444	12,728	13,017	13,311	13,610	13,914	14,223	14,537	14,856
Retire TY GR CR and GH2	121	0	8	24	3,608	10,878	9,737	9,970	10,209	10,452	10,700	10,953	11,211	11,474	11,741	12,013	12,289	12,569	12,853	13,141	13,434	13,731	14,033	14,340
Retire TY GR CR and MCI-2	105	0	8	123	4,486	9,706	8,474	8,643	8,816	8,992	9,172	9,356	9,543	9,734	9,928	10,127	10,330	10,537	10,748	10,963	11,181	11,403	11,631	11,865
Retire TY GR CR BR1-2 and MCI-2	84	0																						

Discount Rate:

2054 2055 2056 2057 2058 2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072

New Unit Capital and Production Cost

	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072
No Retirements																			
Retire TY	2,876,210	2,951,491	3,039,086	3,104,128	3,256,820	3,275,435	3,458,283												
Retire TY and GR3	2,812,292	2,959,109	3,032,348	3,106,973	3,263,923	3,284,072	3,472,480												
Retire TY GR3 and GR3	2,830,625	3,009,099	3,073,920	3,148,994	3,301,037	3,319,893	3,499,493												
Retire TY GR3 and GR4	2,983,362	3,094,807	3,166,397	3,258,523	3,449,037	3,507,421	3,675,948												
Retire TY GR3 and GR5	2,949,579	3,059,379	3,116,503	3,190,894	3,353,966	3,371,667	3,573,931												
Retire TY GR3 and GR6	2,996,424	3,105,999	3,184,178	3,265,821	3,439,596	3,511,888	3,711,143												
Retire TY GR3 GR4 and BR1-2	3,066,980	3,267,661	3,371,032	3,451,885	3,614,901	3,659,986	3,865,244												
Retire TY GR3 GR4 and GR1	3,061,713	3,146,305	3,205,963	3,281,829	3,556,802	3,609,872	3,814,890												
Retire TY GR3 GR4 and GR2	3,337,513	3,461,281	3,548,275	3,633,953	3,782,168	3,876,862	4,088,336												
Retire TY GR3 GR4 and GR3	3,322,816	3,428,026	3,511,249	3,578,267	3,808,631	3,861,572	4,092,436												
Retire TY GR3 GR4 and GR4	3,091,395	3,293,818	3,360,317	3,445,886	3,605,434	3,657,860	3,857,025												
Retire TY GR and CR	3,365,723	3,497,385	3,567,911	3,663,006	3,815,629	3,973,978	4,130,615												
Retire TY GR and MC4	3,341,798	3,457,354	3,553,320	3,653,331	3,810,107	3,867,935	4,106,236												
Retire TY GR and MC3	3,351,223	3,468,127	3,545,614	3,678,691	3,864,614	3,923,502	4,141,389												
Retire TY GR and MC2	3,325,614	3,428,994	3,528,794	3,625,169	3,804,995	3,856,773	4,089,315												
Retire TY GR and MC1	3,353,614	3,493,795	3,590,093	3,672,189	3,850,842	3,916,052	4,110,606												
Retire TY GR CR and MC1-2	3,393,373	3,525,625	3,613,384	3,734,486	3,927,336	4,022,879	4,244,341												
Retire TY GR CR and MC1-2	3,505,061	3,730,268	3,809,878	3,931,754	4,116,529	4,183,823	4,414,066												
Retire TY GR CR and BR1-2	3,188,312	3,399,149	3,469,140	3,565,643	3,731,273	3,780,272	3,960,078												

Production Cost

	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072
No Retirements																			
Retire TY	2,489,682	2,559,933	2,618,019	2,700,944	2,870,995	2,905,118	3,101,669												
Retire TY and GR3	2,469,001	2,591,022	2,631,946	2,710,919	2,885,224	2,920,957	3,123,216												
Retire TY GR3 and BR3	2,484,718	2,610,725	2,640,427	2,716,924	2,886,870	2,921,746	3,116,883												
Retire TY GR3 and BR4	2,573,508	2,702,088	2,788,665	2,895,329	3,091,237	3,144,090	3,314,116												
Retire TY GR3 and BR5	2,586,970	2,714,280	2,806,446	2,902,627	3,081,786	3,148,054	3,349,311												
Retire TY GR3 GR4 and BR1-2	2,705,118	2,854,259	2,933,158	2,975,948	3,158,728	3,221,659	3,443,901												
Retire TY GR3 GR4 and GR1	2,673,668	2,814,261	2,863,101	2,962,812	3,135,637	3,206,167	3,427,261												
Retire TY GR3 GR4 and GR2	2,881,853	2,973,074	3,063,672	3,168,032	3,333,592	3,445,159	3,673,081												
Retire TY GR3 GR4 and GR3	2,873,561	2,948,095	3,044,293	3,170,365	3,367,946	3,437,632	3,684,816												
Retire TY GR and CR	2,693,533	2,850,616	2,892,443	2,979,949	3,149,261	3,219,533	3,434,682												
Retire TY GR and MC4	2,924,783	3,023,661	3,095,774	3,238,566	3,378,361	3,503,411	3,726,325												
Retire TY GR and MC3	2,894,543	2,977,423	3,076,364	3,175,029	3,379,422	3,443,595	3,698,616												
Retire TY GR and MC2	2,869,202	3,009,210	3,085,487	3,233,561	3,419,021	3,513,032	3,746,845												
Retire TY GR and MC1	2,879,326	2,949,063	3,061,889	3,167,267	3,364,249	3,432,833	3,681,695												
Retire TY GR CR and MC1-2	2,817,193	3,014,878	3,119,966	3,229,059	3,430,249	3,505,582	3,716,062												
Retire TY GR CR and MC1-2	2,833,238	3,067,191	3,171,969	3,309,778	3,510,157	3,601,559	3,836,684												
Retire TY GR CR and BR1-2	3,047,088	3,222,461	3,269,305	3,394,825	3,601,069	3,689,226	3,988,574												
Retire TY GR CR and BR1-2	2,786,658	2,946,576	2,982,997	3,082,473	3,267,556	3,342,124	3,567,016												

Production Cost Delta

	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072
No Retirements																			
Retire TY	-20,681	31,089	13,927	9,975	14,229	15,840	21,548												
Retire TY and GR3	15,718	19,703	8,481	6,004	1,646	789	-6,333												
Retire TY GR3 and BR3	89,189	91,364	148,239	178,405	204,367	222,344	197,233												
Retire TY GR3 and BR4	73,353	22,922	51,770	67,169	75,961	73,581	95,880												
Retire TY GR3 and BR5	28,898	80,634	114,250	118,535	118,964	152,726	136,548												
Retire TY GR3 GR4 and BR1-2	118,149	139,979	86,712	73,321	76,932	73,605	94,590												
Retire TY GR3 GR4 and GR1	85,998	99,981	56,655	60,185	53,842	58,113	77,950												
Retire TY GR3 GR4 and GR2	307,886	158,813	200,571	205,220	197,954	238,991	245,820												
Retire TY GR3 GR4 and GR3	701,593	133,834	201,193	207,554	232,309	231,465	257,555												
Retire TY GR and CR	225,366	36,155	19,342	17,137	13,623	13,366	7,421												
Retire TY GR and MC4	225,749	173,245	213,331	246,617	228,101	233,878	291,643												
Retire TY GR and MC3	195,069	127,067	193,921	195,480	230,162	224,462	263,934												
Retire TY GR and MC2	169,669	198,794	203,044	255,612	269,760	293,499	312,164												
Retire TY GR and MC1	179,792	98,647	179,356	187,318	215,050	213,300	247,013												
Retire TY GR CR and MC1-2	233,705	216,775	289,226	299,829	300,897	382,005	392,012												
Retire TY GR CR and BR1-2	347,555	372,045	386,862	414,876	451,809	469,763	503,892												
Retire TY GR CR and BR1-2	87,124	96,160	100,554	102,524	118,235	121,591	131,335												

New Unit Capital

	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072
No Retirements																			
Retire TY	386,529	421,558	421,067	403,184	385,825	370,318	356,614												
Retire TY and GR3	343,291	378,087	400,402	396,054	378,699	363,115	349,264												
Retire TY GR3 and BR3	345,907	398,374	433,493	432,071	414,167	398,147	382,610												
Retire TY GR3 and BR4	409,454	392,719	377,732	363,194	357,800	363,831	361,688												
Retire TY GR3 and BR5	391,508	425,733	424,306	406,802	391,135	375,939	361,688												
Retire TY GR3 GR4 and BR1-2	409,454	392,719	377,732	363,194	357,800	363,831	361,688												
Retire TY GR3 GR4 and GR1	391,862	443,402	477,674	475,937	456,173	438,237	422,843												
Retire TY GR3 GR4 and GR2	387,745	422,044	403,862	439,017	421,165	403,705	387,629												
Retire TY GR3 GR4 and GR3	455,660	488,207	485,103	465,921	448,576	431,703	415,255												

Discount Rate:

Retiree TY GR3 CR and GH1
Retiree TY GR and CR
Retiree TY GR and MCA
Retiree TY GR CR and TCI
Retiree TY GR CR and GH4
Retiree TY GR CR and GH3
Retiree TY GR CR and GH2
Retiree TY GR CR and MCL-2
Retiree TY GR CR BR1-2 and MCL-2
Retiree TY GR CR and BR1-2

New Controls Capital Delta

No Retirements

Table with 12 columns representing years 2004 to 2057. Rows list various retiree categories and their corresponding values for each year.

New Controls Cash

No Retirements

Table with 12 columns representing years 2004 to 2057. Rows list various retiree categories and their corresponding values for each year.

New Controls Capital Delta

No Retirements

Table with 12 columns representing years 2004 to 2057. Rows list various retiree categories and their corresponding values for each year.

Discount Rate:

2038

2039

2040

2041

2042

2043

2044

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2077

Retire TY GR and CR
Retire TY GR and MCA
Retire TY GR and TCI
Retire TY GR and G4
Retire TY GR and M3
Retire TY GR and M2
Retire TY GR and M1-2
Retire TY GR and MCL-2
Retire TY GR and BR1-2

Total Capital

No Retirements
Retire TY
Retire TY and BR3
Retire TY and BR3
Retire TY GR and CR
Retire TY GR CR and CR6
Retire TY GR CR and CR7
Retire TY GR CR and CR8
Retire TY GR CR and CR9
Retire TY GR CR and CR10
Retire TY GR CR and M3
Retire TY GR CR and M2
Retire TY GR CR and M1-2
Retire TY GR CR and BR1-2

Water Capital

No Retirements
Retire TY
Retire TY and BR3
Retire TY and BR3
Retire TY GR and CR
Retire TY GR CR and CR6
Retire TY GR CR and CR7
Retire TY GR CR and CR8
Retire TY GR CR and CR9
Retire TY GR CR and CR10
Retire TY GR CR and M3
Retire TY GR CR and M2
Retire TY GR CR and M1-2
Retire TY GR CR and BR1-2

Total Capital

No Retirements
Retire TY
Retire TY and BR3
Retire TY and BR3
Retire TY GR and CR
Retire TY GR CR and CR6
Retire TY GR CR and CR7
Retire TY GR CR and CR8
Retire TY GR CR and CR9
Retire TY GR CR and CR10
Retire TY GR CR and M3
Retire TY GR CR and M2
Retire TY GR CR and M1-2
Retire TY GR CR and BR1-2

Total Capital

No Retirements
Retire TY
Retire TY and BR3
Retire TY and BR3
Retire TY GR and CR
Retire TY GR CR and CR6
Retire TY GR CR and CR7
Retire TY GR CR and CR8
Retire TY GR CR and CR9
Retire TY GR CR and CR10
Retire TY GR CR and M3
Retire TY GR CR and M2
Retire TY GR CR and M1-2
Retire TY GR CR and BR1-2

Discount Rate:

2052 2050 2051 2052 2053 2054 2055 2056 2057 2058 2059 2070 2071 2072 2073 2074 2075 2076 2077 2078

New Unit Capital and Production Cost

- No Retirements
- Retire TY
- Retire TY and GR3
- Retire TY GR3 and BR3
- Retire TY GR3 and CR4
- Retire TY GR3 CR4 and CR6
- Retire TY GR3 CR4 CR6 and BR1-2
- Retire TY GR3 and CR
- Retire TY GR3 CR and GH3
- Retire TY GR3 CR and GH1
- Retire TY CR and CR
- Retire TY CR CR and MC4
- Retire TY CR CR and TCL
- Retire TY CR CR and GH4
- Retire TY CR CR and MC3
- Retire TY CR CR and GH2
- Retire TY CR CR and MC1-2
- Retire TY CR CR BR1-2 and MC1-2
- Retire TY CR CR and BR1-2

Production Cost

- No Retirements
- Retire TY
- Retire TY and GR3
- Retire TY GR3 and BR3
- Retire TY GR3 and CR4
- Retire TY GR3 CR4 and CR6
- Retire TY GR3 CR4 CR6 and BR1-2
- Retire TY GR3 and CR
- Retire TY GR3 CR and GH3
- Retire TY GR3 CR and GH1
- Retire TY CR and CR
- Retire TY CR CR and MC4
- Retire TY CR CR and TCL
- Retire TY CR CR and GH4
- Retire TY CR CR and MC3
- Retire TY CR CR and GH2
- Retire TY CR CR and MC1-2
- Retire TY CR CR BR1-2 and MC1-2
- Retire TY CR CR and BR1-2

Production Cost Delta

- No Retirements
- Retire TY
- Retire TY and GR3
- Retire TY GR3 and BR3
- Retire TY GR3 and CR4
- Retire TY GR3 CR4 and CR6
- Retire TY GR3 CR4 CR6 and BR1-2
- Retire TY GR3 and CR
- Retire TY GR3 CR and GH3
- Retire TY GR3 CR and GH1
- Retire TY CR and CR
- Retire TY CR CR and MC4
- Retire TY CR CR and TCL
- Retire TY CR CR and GH4
- Retire TY CR CR and MC3
- Retire TY CR CR and GH2
- Retire TY CR CR and MC1-2
- Retire TY CR CR BR1-2 and MC1-2
- Retire TY CR CR and BR1-2

New Unit Capital

- No Retirements
- Retire TY
- Retire TY and GR3
- Retire TY GR3 and BR3
- Retire TY GR3 and CR4
- Retire TY GR3 CR4 and CR6
- Retire TY GR3 CR4 CR6 and BR1-2
- Retire TY GR3 and CR
- Retire TY GR3 CR and GH3

Discount Rate:

	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	
Retire TY GR3 CR and GH1																					
Retire TY GR and CR																					
Retire TY GR CR and MC4																					
Retire TY GR CR and TCI																					
Retire TY GR CR and GH4																					
Retire TY GR CR and MC3																					
Retire TY GR CR and GH2																					
Retire TY GR CR and MCL2																					
Retire TY GR CR BR1-2 and MCL-2																					
Retire TY GR CR and BR1-2																					

New Unit Capital Delta

No Retirements

Retire TY

Retire TY and GR3

Retire TY GR3 and BR3

Retire TY GR3 and GR4

Retire TY GR3 CR and CR6

Retire TY GR3 CR4 CR6 and BR1-2

Retire TY GR3 and CR

Retire TY GR3 CR and GH1

Retire TY GR and CR

Retire TY GR CR and MC4

Retire TY GR CR and TCI

Retire TY GR CR and GH4

Retire TY GR CR and MC3

Retire TY GR CR and GH2

Retire TY GR CR and MCL-2

Retire TY GR CR BR1-2 and MCL-2

Retire TY GR CR and BR1-2

New Control Capital

No Retirements

Retire TY

Retire TY and GR3

Retire TY GR3 and BR3

Retire TY GR3 and CR4

Retire TY GR3 CR4 and CR6

Retire TY GR3 CR4 CR6 and BR1-2

Retire TY GR3 and CR

Retire TY GR3 CR and GH3

Retire TY GR3 CR and GH1

Retire TY GR and CR

Retire TY GR CR and MC4

Retire TY GR CR and TCI

Retire TY GR CR and GH4

Retire TY GR CR and MC3

Retire TY GR CR and GH2

Retire TY GR CR and MCL-2

Retire TY GR CR BR1-2 and MCL-2

Retire TY GR CR and BR1-2

New Control Capital Delta

No Retirements

Retire TY

Retire TY and GR3

Retire TY GR3 and BR3

Retire TY GR3 and CR4

Retire TY GR3 CR4 and CR6

Retire TY GR3 CR4 CR6 and BR1-2

Retire TY GR3 and CR

Retire TY GR3 CR and GH3

Retire TY GR3 CR and GH1

Retire TY GR and CR

Retire TY GR CR and MC4

Retire TY GR CR and TCI

Retire TY GR CR and GH4

Retire TY GR CR and MC3

Retire TY GR CR and GH2

Retire TY GR CR and MCL-2

Retire TY GR CR BR1-2 and MCL-2

Retire TY GR CR and BR1-2

Discount Rate:

2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078

MTP Capital

No Retirements

- Retire TY
- Retire TY and GR3
- Retire TY GR3 and BR3
- Retire TY GR3 and CR4
- Retire TY GR3 CR4 and CR6
- Retire TY GR3 CR4 CR6 and BR1-2
- Retire TY GR3 and CR
- Retire TY GR3 CR and GH3
- Retire TY GR3 CR and GH1
- Retire TY GR and CR
- Retire TY GR CR and MC4
- Retire TY GR CR and TCL
- Retire TY GR CR and GH4
- Retire TY GR CR and MC3
- Retire TY GR CR and GH2
- Retire TY GR CR and MCL-2
- Retire TY GR CR BR1-2 and MCL-2
- Retire TY GR CR and BR1-2

MTP Capital Delta

No Retirements

- Retire TY
- Retire TY and GR3
- Retire TY GR3 and BR3
- Retire TY GR3 and CR4
- Retire TY GR3 CR4 and CR6
- Retire TY GR3 CR4 CR6 and BR1-2
- Retire TY GR3 and CR
- Retire TY GR3 CR and GH3
- Retire TY GR3 CR and GH1
- Retire TY GR and CR
- Retire TY GR CR and MC4
- Retire TY GR CR and TCL
- Retire TY GR CR and GH4
- Retire TY GR CR and MC3
- Retire TY GR CR and GH2
- Retire TY GR CR and MCL-2
- Retire TY GR CR BR1-2 and MCL-2
- Retire TY GR CR and BR1-2

Landfill Capital

No Retirements

- Retire TY
- Retire TY and GR3
- Retire TY GR3 and BR3
- Retire TY GR3 and CR4
- Retire TY GR3 CR4 and CR6
- Retire TY GR3 CR4 CR6 and BR1-2
- Retire TY GR3 and CR
- Retire TY GR3 CR and GH3
- Retire TY GR3 CR and GH1
- Retire TY GR and CR
- Retire TY GR CR and MC4
- Retire TY GR CR and TCL
- Retire TY GR CR and GH4
- Retire TY GR CR and MC3
- Retire TY GR CR and GH2
- Retire TY GR CR and MCL-2
- Retire TY GR CR BR1-2 and MCL-2
- Retire TY GR CR and BR1-2

Landfill Capital Delta

No Retirements

- Retire TY
- Retire TY and GR3
- Retire TY GR3 and BR3
- Retire TY GR3 and CR4
- Retire TY GR3 CR4 and CR6
- Retire TY GR3 CR4 CR6 and BR1-2
- Retire TY GR3 and CR
- Retire TY GR3 CR and GH3
- Retire TY GR3 CR and GH1

Discount Rate:

2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078

Retire TY GR and CR
Retire TY GR CR and MC4
Retire TY GR CR and TCL
Retire TY GR CR and GH4
Retire TY GR CR and MC3
Retire TY GR CR and GH2
Retire TY GR CR and MCL-2
Retire TY GR CR BR1-2 and MCL-2
Retire TY GR CR and BR1-2

Water Capital

No Retirements

Retire TY
Retire TY and GB3
Retire TY GR3 and BR3
Retire TY GR3 and GM4
Retire TY GR3 CR and CR6
Retire TY GR3 CR and BR1-2
Retire TY GR3 CR and CR
Retire TY GR3 CR and GH1
Retire TY GR and CR
Retire TY GR CR and MC4
Retire TY GR CR and TCL
Retire TY GR CR and GH4
Retire TY GR CR and MC3
Retire TY GR CR and GH2
Retire TY GR CR and MCL-2
Retire TY GR CR BR1-2 and MCL-2
Retire TY GR CR and BR1-2

Water Capital Delta

No Retirements

Retire TY
Retire TY and GR3
Retire TY GR3 and BR3
Retire TY GR3 and CH4
Retire TY GR3 CR and CR6
Retire TY GR3 CR and BR1-2
Retire TY GR3 CR and CR
Retire TY GR3 CR and GH1
Retire TY GR and CR
Retire TY GR CR and MC4
Retire TY GR CR and TCL
Retire TY GR CR and GH4
Retire TY GR CR and MC3
Retire TY GR CR and GH2
Retire TY GR CR and MCL-2
Retire TY GR CR BR1-2 and MCL-2
Retire TY GR CR and BR1-2

Total Capital

No Retirements

Retire TY
Retire TY and GR3
Retire TY GR3 and BR3
Retire TY GR3 and CH4
Retire TY GR3 CR and CR6
Retire TY GR3 CR and BR1-2
Retire TY GR3 CR and CR
Retire TY GR3 CR and GH3
Retire TY GR3 CR and GH1
Retire TY GR and CR
Retire TY GR CR and MC4
Retire TY GR CR and TCL
Retire TY GR CR and GH4
Retire TY GR CR and MC3
Retire TY GR CR and GH2
Retire TY GR CR and MCL-2
Retire TY GR CR BR1-2 and MCL-2
Retire TY GR CR and BR1-2

Total Capital Delta

Discount Rate:

2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078

Retire TY GR CR and MC4
 Retire TY GR CR and TC1
 Retire TY GR CR and GH4
 Retire TY GR CR and MC3
 Retire TY GR CR and GH2
 Retire TY GR CR and MC1-2
 Retire TY GR CR BR1-2 and MC1-2
 Retire TY GR CR and BR1-2

Existing Unit Fixed O&M Data

No Retirements
 Retire TY
 Retire TY and GR3
 Retire TY GR3 and BR3
 Retire TY GR3 and CR4
 Retire TY GR3 CR4 and CR6
 Retire TY GR3 CR4 CR6 and BR1-2
 Retire TY GR3 and CR
 Retire TY GR3 CR and GH3
 Retire TY GR3 CR and GH1
 Retire TY GR and CR
 Retire TY GR CR and MC4
 Retire TY GR CR and TC1
 Retire TY GR CR and GH4
 Retire TY GR CR and MC3
 Retire TY GR CR and GH2
 Retire TY GR CR and MC1-2
 Retire TY GR CR BR1-2 and MC1-2
 Retire TY GR CR and BR1-2

New Controls Fixed O&M

No Retirements
 Retire TY
 Retire TY and GR3
 Retire TY GR3 and BR3
 Retire TY GR3 and CR4
 Retire TY GR3 CR4 and CR6
 Retire TY GR3 CR4 CR6 and BR1-2
 Retire TY GR3 and CR
 Retire TY GR3 CR and GH3
 Retire TY GR3 CR and GH1
 Retire TY GR and CR
 Retire TY GR CR and MC4
 Retire TY GR CR and TC1
 Retire TY GR CR and GH4
 Retire TY GR CR and MC3
 Retire TY GR CR and GH2
 Retire TY GR CR and MC1-2
 Retire TY GR CR BR1-2 and MC1-2
 Retire TY GR CR and BR1-2

New Controls Fixed O&M Data

No Retirements
 Retire TY
 Retire TY and GR3
 Retire TY GR3 and BR3
 Retire TY GR3 and CR4
 Retire TY GR3 CR4 and CR6
 Retire TY GR3 CR4 CR6 and BR1-2
 Retire TY GR3 and CR
 Retire TY GR3 CR and GH3
 Retire TY GR3 CR and GH1
 Retire TY GR and CR
 Retire TY GR CR and MC4
 Retire TY GR CR and TC1
 Retire TY GR CR and GH4
 Retire TY GR CR and MC3
 Retire TY GR CR and GH2
 Retire TY GR CR and MC1-2
 Retire TY GR CR BR1-2 and MC1-2
 Retire TY GR CR and BR1-2

Total Revenue Requirements

No Retirements 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Discount Rate:

	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
Retire TY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY and GR3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 and BR3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 and CR4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR4 and CR6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR4 CR6 and BR1-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 and CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR and GH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR and GH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR and CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and MC4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and TC1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and GH4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and MC3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and GH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and MCL-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR BR1-2 and MCL-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY CR and BR1-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Revenue Requirements Delta																				
No Retirements																				
Retire TY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY and GR3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 and BR3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 and CR4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR4 and CR6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR4 CR6 and BR1-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 and CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR and GH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR and GH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR and CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and MC4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and TC1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and GH4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and MC3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and GH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and MCL-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR BR1-2 and MCL-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY CR and BR1-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total Revenue Requirements Cumulative D

	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
No Retirements																				
Retire TY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY and GR3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 and BR3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 and CR4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR4 and CR6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR4 CR6 and BR1-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 and CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR and GH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR and GH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR and CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and MC4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and TC1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and GH4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and MC3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and GH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and MCL-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR BR1-2 and MCL-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY CR and BR1-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Station	Unit	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
BR	BR1	0	238	3,127	7,278	12,105	12,775	12,123	11,534	10,999	10,472	9,946	9,420	8,894	8,368	7,842	7,483	7,291	7,099
BR	BR1SAM	0	0	0	231	521	550	522	497	474	452	429	407	384	362	339	324	315	307
BR	BR2	0	252	3,379	7,865	13,414	13,866	13,156	12,514	11,931	11,357	10,783	10,210	9,636	9,062	8,488	8,095	7,881	7,668
BR	BR2SAM	0	0	0	231	534	553	525	499	476	453	431	408	385	362	340	324	315	307
BR	BR3	0	0	204	2,854	7,595	13,437	14,120	13,404	12,757	12,171	11,595	11,019	10,443	9,867	9,290	8,714	8,325	8,122
GH	GH1	0	64	4,332	10,157	17,736	19,154	18,156	17,246	16,412	15,591	14,769	13,948	13,127	12,305	11,484	10,897	10,545	10,193
GH	GH1SAM	0	122	562	1,006	1,964	2,121	2,010	1,909	1,817	1,726	1,635	1,544	1,453	1,362	1,271	1,206	1,167	1,128
GH	GH2	0	0	2,787	7,280	15,016	18,298	17,569	16,772	16,056	15,369	14,684	13,998	13,313	12,627	11,942	11,257	10,791	10,556
GH	GH2SAM	0	11	724	984	935	891	851	814	779	744	709	674	639	605	570	546	535	523
GH	GH3	0	0	0	3,571	8,804	18,270	21,813	20,853	19,901	19,030	18,199	17,369	16,538	15,708	14,877	14,047	13,216	12,647
GH	GH3SAM	0	115	565	1,578	1,935	1,853	1,769	1,691	1,618	1,544	1,471	1,397	1,324	1,250	1,177	1,109	1,073	1,050
GH	GH4	0	0	0	2,843	7,668	14,952	21,319	20,238	19,257	18,361	17,541	16,757	15,973	15,188	14,404	13,619	12,835	12,050
GH	GH4SAM	0	122	527	974	1,948	1,967	1,872	1,786	1,707	1,631	1,555	1,479	1,403	1,328	1,252	1,176	1,124	1,096
MC	MC1	0	0	2,360	7,268	12,372	21,934	23,856	22,601	21,453	20,399	19,360	18,320	17,281	16,242	15,203	14,164	13,412	12,949
MC	MC1SAM	0	0	1,271	5,238	9,364	17,796	19,361	18,343	17,414	16,559	15,717	14,875	14,032	13,190	12,348	11,506	10,896	10,520
MC	MC2	0	0	0	42	560	1,197	1,279	1,211	1,149	1,092	1,035	978	922	865	808	752	710	682
MC	MC2SAM	0	0	646	3,668	6,975	9,472	9,135	8,699	8,295	7,908	7,522	7,135	6,748	6,362	5,975	5,589	5,303	5,124
MC	MC3	0	0	0	0	39	175	207	197	187	179	170	162	154	145	137	128	121	115
MC	MC3SAM	0	0	0	3,730	8,326	13,896	18,276	17,601	16,757	15,977	15,228	14,480	13,732	12,985	12,237	11,489	10,742	10,190
MC	MC4	0	0	734	1,992	2,100	1,997	1,901	1,813	1,728	1,642	1,557	1,472	1,387	1,302	1,217	1,155	1,116	1,077
MC	MC4SAM	0	379	6,987	15,193	21,072	28,573	27,555	26,231	25,008	23,834	22,662	21,491	20,319	19,147	17,976	16,804	15,940	15,402
MC	MC4SCR	0	105	667	724	688	655	625	596	566	537	508	479	449	420	399	386	372	359
MC	MC4SFF	0	377	5,055	10,178	14,629	19,836	19,129	18,210	17,361	16,546	15,733	14,919	14,106	13,293	12,479	11,666	11,066	10,692
MC	MC4SAM	0	0	0	0	1,620	2,201	2,123	2,022	1,929	1,839	1,749	1,660	1,570	1,480	1,391	1,301	1,235	1,193
TC	TC1	0	0	0	578	2,000	5,745	15,967	15,834	15,223	14,502	13,838	13,200	12,564	11,927	11,291	10,654	10,018	9,381
CR	CR4	0	394	3,222	13,574	27,295	25,773	24,370	23,071	21,861	20,666	19,471	18,276	17,081	15,886	14,691	13,773	13,130	12,488
CR	CR4SCR	0	64	2,395	6,163	10,786	10,183	9,627	9,112	8,633	8,160	7,687	7,214	6,740	6,267	5,794	5,431	5,177	4,924
CR	CR4SFF	0	280	1,715	3,329	5,526	5,216	4,930	4,666	4,421	4,178	3,935	3,692	3,450	3,207	2,964	2,778	2,648	2,519
CR	CR4PAC	0	0	0	235	386	365	345	327	310	293	276	259	242	225	208	195	186	177
CR	CR4LIME	0	0	0	259	427	403	381	361	342	323	305	286	267	249	230	216	206	195
CR	CR5	0	359	3,311	14,658	29,304	27,663	26,148	24,742	23,429	22,132	20,835	19,538	18,241	16,944	15,647	14,641	13,924	13,207
CR	CR5SAM	0	63	2,719	6,475	11,557	10,908	10,308	9,752	9,234	8,721	8,208	7,696	7,183	6,670	6,158	5,760	5,478	5,196
CR	CR5SCR	0	300	1,823	3,531	5,992	5,654	5,343	5,054	4,785	4,519	4,253	3,987	3,721	3,455	3,189	2,983	2,837	2,691
CR	CR5SFF	0	0	0	251	423	399	378	357	338	320	301	282	263	245	226	212	201	191
CR	CR5PAC	0	0	0	278	468	441	417	395	374	353	333	312	291	271	250	234	222	211
CR	CR5LIME	0	0	0	3,887	18,407	35,115	33,170	31,385	29,739	28,213	26,706	25,199	23,692	22,185	20,678	19,171	18,033	17,265
CR	CR6	0	346	4,201	8,457	14,206	13,414	12,689	12,019	11,399	10,787	10,175	9,563	8,951	8,339	7,727	7,266	6,956	6,646
CR	CR6SCR	0	79	1,294	2,364	4,540	6,848	6,477	6,136	5,819	5,507	5,194	4,882	4,569	4,257	3,944	3,709	3,551	3,393
CR	CR6SFF	0	0	0	352	558	527	499	473	448	424	401	377	353	329	305	287	275	262
CR	CR6PAC	0	0	0	391	619	585	553	525	498	471	445	418	391	365	338	318	305	291
GR	GR3	0	0	1,323	4,035	5,553	5,254	4,983	4,739	4,516	4,297	4,078	3,859	3,640	3,421	3,202	3,050	2,967	2,884
GR	GR3SFF	0	0	0	112	154	145	138	131	125	119	113	107	101	95	89	85	82	80
GR	GR3PAC	0	0	0	1,885	5,750	8,517	8,050	7,626	7,237	6,881	6,529	6,177	5,825	5,473	4,770	4,515	4,356	4,198
GR	GR4	0	0	0	160	235	223	211	200	190	181	171	161	152	142	132	125	121	116
GR	GR4PAC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Station	Unit	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
BR	BR1FFP 0	6,908	6,716	6,525	6,333	6,141	5,950	5,758	5,566	5,375	5,183	4,991	4,800	4,608	4,417	4,225	4,033	3,842	3,650
BR	BR1SAM 0	299	291	282	274	266	257	249	241	232	224	216	208	199	191	183	174	166	158
BR	BR2FFP 0	7,455	7,242	7,028	6,815	6,602	6,388	6,175	5,962	5,749	5,535	5,322	5,109	4,895	4,682	4,469	4,256	4,042	3,829
BR	BR2SAM 0	298	290	282	273	264	256	247	239	230	222	213	205	196	187	179	170	162	153
BR	BR3FFP 0	7,920	7,717	7,514	7,311	7,109	6,906	6,703	6,501	6,298	6,095	5,893	5,690	5,487	5,284	5,082	4,879	4,676	4,474
GH	GH1FFP 0	9,841	9,489	9,137	8,785	8,433	8,081	7,729	7,377	7,025	6,673	6,321	5,969	5,617	5,265	4,913	4,561	4,209	3,857
GH	GH1SAM 0	1,089	1,050	1,011	972	933	894	855	816	777	738	699	661	622	583	544	505	466	427
GH	GH2FFP 0	10,330	10,104	9,878	9,652	9,426	9,200	8,974	8,748	8,522	8,296	8,070	7,844	7,618	7,392	7,166	6,940	6,714	6,488
GH	GH2SAM 0	511	500	488	476	464	453	441	429	418	406	394	383	371	359	348	336	324	312
GH	GH3FFP 0	12,344	12,047	11,750	11,452	11,155	10,858	10,561	10,263	9,966	9,669	9,372	9,075	8,777	8,480	8,183	7,886	7,589	7,291
GH	GH3SAM 0	1,047	1,020	994	967	941	915	888	862	835	809	782	756	730	703	677	650	624	598
GH	GH4FFP 0	11,513	11,223	10,932	10,642	10,352	10,061	9,771	9,481	9,190	8,900	8,610	8,319	8,029	7,739	7,448	7,158	6,867	6,577
GH	GH4SAM 0	1,068	1,039	1,011	983	955	927	899	870	842	814	786	758	730	701	673	645	617	589
MC	MC1FFD 0	12,485	12,022	11,558	11,095	10,631	10,167	9,704	9,240	8,777	8,313	7,850	7,387	6,924	6,461	6,000	5,537	5,074	4,611
MC	MC1FFP 0	10,143	9,767	9,390	9,013	8,637	8,260	7,884	7,507	7,130	6,754	6,377	5,999	5,622	5,245	4,868	4,491	4,114	3,737
MC	MC1SAM 0	648	624	600	576	552	528	504	480	455	431	407	383	359	335	311	287	263	239
MC	MC2FFD 0	12,618	12,088	11,558	11,028	10,499	9,969	9,439	8,909	8,379	7,849	7,319	6,789	6,259	5,729	5,199	4,669	4,139	3,609
MC	MC2FFP 0	10,029	9,608	9,187	8,766	8,344	7,923	7,502	7,081	6,660	6,239	5,818	5,397	4,976	4,555	4,134	3,713	3,292	2,871
MC	MC2SAM 0	655	627	600	572	545	517	490	462	435	408	381	354	327	300	273	246	219	192
MC	MC3FFD 0	4,950	4,777	4,603	4,429	4,256	4,082	3,909	3,735	3,561	3,388	3,214	3,040	2,867	2,693	2,519	2,345	2,171	1,997
MC	MC3FFP 0	111	107	104	100	96	92	88	85	81	77	73	69	64	60	56	52	48	44
MC	MC3SAM 0	9,844	9,510	9,175	8,841	8,506	8,172	7,837	7,503	7,168	6,834	6,499	6,165	5,830	5,495	5,160	4,825	4,490	4,155
MC	MC4FFD 0	14,880	14,358	13,836	13,314	12,792	12,270	11,748	11,226	10,705	10,183	9,661	9,139	8,617	8,095	7,573	7,051	6,529	6,007
MC	MC4FFP 0	346	332	319	306	292	279	266	252	239	226	213	200	187	174	161	148	135	122
MC	MC4SAM 0	10,330	9,968	9,605	9,243	8,881	8,518	8,156	7,794	7,431	7,069	6,707	6,344	5,982	5,620	5,258	4,896	4,534	4,172
MC	MC4SAM 0	1,153	1,112	1,072	1,031	991	951	910	870	829	789	748	708	668	628	588	548	508	468
TC	TC1FFP 0	8,637	8,363	8,089	7,815	7,541	7,267	6,993	6,719	6,445	6,171	5,897	5,623	5,349	5,075	4,801	4,527	4,253	3,979
CR	CR4FFD 0	11,845	11,203	10,560	9,918	9,276	8,634	7,992	7,350	6,708	6,066	5,424	4,782	4,140	3,498	2,856	2,214	1,572	930
CR	CR4FFP 0	4,671	4,417	4,164	3,910	3,657	3,404	3,151	2,898	2,645	2,392	2,139	1,886	1,633	1,380	1,127	874	621	368
CR	CR4FFD 0	2,389	2,260	2,130	2,000	1,870	1,740	1,610	1,480	1,350	1,220	1,090	960	830	700	570	440	310	180
CR	CR4FFP 0	168	159	150	141	132	123	114	105	96	87	78	69	60	51	42	33	24	15
CR	CR4LIME 0	185	175	165	155	145	135	125	115	105	95	85	75	65	55	45	35	25	15
CR	CR5FFD 0	12,490	11,774	11,058	10,342	9,626	8,910	8,194	7,478	6,762	6,046	5,330	4,614	3,898	3,182	2,466	1,750	1,034	318
CR	CR5FFP 0	4,914	4,632	4,350	4,068	3,786	3,504	3,222	2,940	2,658	2,376	2,094	1,812	1,530	1,248	966	684	402	120
CR	CR5FFD 0	2,545	2,399	2,253	2,107	1,961	1,815	1,669	1,523	1,377	1,231	1,085	939	793	647	501	355	209	63
CR	CR5FFP 0	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10
CR	CR5PAC 0	199	188	178	167	156	145	134	123	112	101	90	79	68	57	46	35	24	13
CR	CR6FFD 0	15,727	14,959	14,190	13,421	12,653	11,884	11,116	10,347	9,578	8,809	8,040	7,271	6,502	5,733	4,964	4,195	3,426	2,657
CR	CR6FFP 0	6,337	6,027	5,717	5,408	5,098	4,788	4,479	4,169	3,859	3,549	3,239	2,929	2,619	2,309	1,999	1,689	1,379	1,069
CR	CR6FFD 0	3,235	3,077	2,919	2,761	2,602	2,444	2,286	2,128	1,970	1,812	1,654	1,496	1,338	1,180	1,022	864	706	548
CR	CR6PAC 0	250	238	226	213	201	189	177	165	153	141	129	117	105	93	81	69	57	45
CR	CR6LIME 0	278	264	250	237	223	210	196	182	169	155	142	128	115	101	88	74	61	48
GR	GR3SFF 0	2,800	2,717	2,634	2,550	2,467	2,384	2,300	2,217	2,134	2,050	1,967	1,884	1,800	1,717	1,634	1,550	1,467	1,384
GR	GR3PAC 0	78	75	73	71	68	66	64	62	59	57	55	52	50	48	45	43	41	38
GR	GR4SFF 0	4,040	3,881	3,723	3,565	3,407	3,248	3,090	2,932	2,773	2,615	2,457	2,299	2,141	1,983	1,825	1,667	1,509	1,351
GR	GR4PAC 0	112	108	103	99	94	90	86	81	77	73	69	65	61	57	53	49	45	41

Station	Unit	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
BR	BR1	3,458	3,267	1,327	0	0	0	0	0	0	0	0	0	0	0
BR	BR1SAMP	150	141	57	0	0	0	0	0	0	0	0	0	0	0
BR	BR2	3,616	1,180	0	0	0	0	0	0	0	0	0	0	0	0
BR	BR2SAMP	145	47	0	0	0	0	0	0	0	0	0	0	0	0
BR	BR3	4,271	4,068	3,865	3,663	3,460	1,405	0	0	0	0	0	0	0	0
GH	GH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GH	GH1SAMP	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GH	GH2	6,260	6,034	5,808	5,582	5,356	5,130	4,904	4,678	4,452	4,226	4,000	3,489	253	0
GH	GH2SAMP	301	289	277	266	254	242	231	219	207	196	0	0	0	0
GH	GH3	6,994	6,697	6,400	6,102	5,805	5,508	5,211	4,152	214	0	0	0	0	0
GH	GH3SAMP	571	545	518	492	465	405	21	0	0	0	0	0	0	0
GH	GH4	6,287	5,996	5,706	5,416	5,125	4,835	0	0	0	0	0	0	0	0
GH	GH4SAMP	561	532	504	476	117	0	0	0	0	0	0	0	0	0
MC	MC1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC1LFGD	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC1LFFP	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC1SAMP	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC2FGD	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC2FFP	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC2SAMP	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC3FGDU	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC3FGDR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC3FFP	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC3SAMP	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC4FGD	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC4SCR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC4FFP	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC4SAMP	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TC	TC1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR4FGD	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR4SCR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR4FF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR4PAC	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR4LIME	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5FGD	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5SCR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5FF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5PAC	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5LIME	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6FGD	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6SCR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6FF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6PAC	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6LIME	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR	GR3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR	GR3SFF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR	GR3PAC	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR	GR4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR	GR4SFF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR	GR4PAC	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Retirement Cost											
All Units	0	0	0	0	0	0	2100	0	0	0	0
2% Escalation Rate											
Unit Costs (\$000)											
BR											
BR1		3,816	4,811	3,969	4,049	4,130	4,212	4,296	4,382	4,470	4,559
BR2		6,633	7,160	7,253	7,398	7,546	7,697	7,851	8,008	8,168	8,331
BR3		15,885	20,876	14,904	15,202	15,506	15,816	16,132	16,455	16,784	17,120
CR		14,372	9,218	12,029	12,269	12,515	12,765	13,020	13,281	13,546	13,817
CR4		11,842	9,889	12,791	13,047	13,308	13,574	13,845	14,122	14,405	14,693
CR5		10,666	11,619	10,173	10,376	10,584	10,795	11,011	11,231	11,456	11,685
CR6		17,829	19,141	17,966	18,325	18,691	19,065	19,447	19,835	20,232	20,637
GH		12,225	18,498	13,429	13,698	13,972	14,251	14,536	14,827	15,124	15,426
GH1		17,961	13,501	12,475	12,724	12,979	13,238	13,503	13,773	14,049	14,330
GH2		11,533	13,496	12,105	12,347	12,594	12,846	13,103	13,365	13,632	13,905
GH3		4,270	5,792	4,360	4,447	4,536	4,627	4,719	4,813	4,910	5,008
GH4		7,338	6,924	8,633	8,805	8,982	9,161	9,344	9,531	9,722	9,916
GR		11,892	17,333	12,669	12,923	13,181	13,445	13,714	13,988	14,268	14,553
GR3		16,179	11,941	15,201	15,505	15,815	16,131	16,454	16,783	17,118	17,461
GR4		18,313	14,238	17,221	17,566	17,917	18,275	18,641	19,014	19,394	19,782
MC		16,531	18,981	17,245	17,590	17,942	18,300	18,666	19,040	19,421	19,809
MC1		17,205	15,170	17,403	17,751	18,106	18,468	18,837	19,214	19,598	19,990
MC2		410	416	418	427	435	444	453	462	471	480
MC3											
MC4											
TC											
TC1											
TY											

2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031

Retirement Cost

All Units 0 0 0 0 0 0 0 0 0 0 0

2% Escalation Rate

Unit Costs (\$000)

BR	4,651	4,744	4,838	4,935	5,034	5,135	5,237	5,342	5,449	5,558	5,669
BR1	8,498	8,668	8,841	9,018	9,199	9,383	9,570	9,762	9,957	10,156	10,359
BR2	17,462	17,811	18,167	18,531	18,901	19,279	19,665	20,058	20,460	20,869	21,286
BR3	14,094	14,375	14,663	14,956	15,255	15,560	15,872	16,189	16,513	16,843	17,180
CR	14,987	15,286	15,592	15,904	16,222	16,546	16,877	17,215	17,559	17,910	18,269
CR1	11,919	12,157	12,400	12,648	12,901	13,159	13,423	13,691	13,965	14,244	14,529
CR2	21,050	21,471	21,900	22,338	22,785	23,240	23,705	24,179	24,663	25,156	25,659
CR3	15,735	16,049	16,370	16,698	17,032	17,372	17,720	18,074	18,436	18,804	19,181
CR4	14,616	14,909	15,207	15,511	15,821	16,138	16,460	16,790	17,125	17,468	17,817
CR5	14,183	14,467	14,756	15,051	15,352	15,659	15,973	16,292	16,618	16,950	17,289
CR6	5,108	5,210	5,314	5,421	5,529	5,640	5,753	5,868	5,985	6,105	6,227
GR	10,115	10,317	10,523	10,734	10,949	11,167	11,391	11,619	11,851	12,088	12,330
GR1	14,844	15,141	15,444	15,753	16,068	16,389	16,717	17,051	17,392	17,740	18,095
GR2	17,810	18,166	18,530	18,900	19,278	19,664	20,057	20,458	20,867	21,285	21,710
GR3	20,177	20,581	20,993	21,412	21,841	22,278	22,723	23,178	23,641	24,114	24,596
GR4	20,205	20,609	21,021	21,442	21,871	22,308	22,754	23,209	23,674	24,147	24,630
MC	20,390	20,798	21,214	21,638	22,071	22,512	22,962	23,422	23,890	24,368	24,855
MC1	490	500	510	520	530	541	552	563	574	586	597
MC2											
MC3											
MC4											
TC											
TC1											
TY											

Retirement Cost		2032	2033	2034	2035	2036	2037	2038	2039	2040
All Units		0	0	0	0	0	0	0	0	0

2% Escalation Rate

Unit Costs (\$000)		2032	2033	2034	2035	2036	2037	2038	2039	2040
BR	BR1	5,782	5,898	6,016	6,136	6,259	6,384	6,512	6,642	6,775
BR	BR2	10,566	10,778	10,993	11,213	11,437	11,666	11,899	12,137	12,380
BR	BR3	21,712	22,146	22,589	23,041	23,502	23,972	24,451	24,940	25,439
CR	CR4	17,524	17,874	18,232	18,596	18,968	19,347	19,734	20,129	20,532
CR	CR5	18,634	19,007	19,387	19,775	20,170	20,573	20,985	21,405	21,833
CR	CR6	14,820	15,116	15,418	15,727	16,041	16,362	16,689	17,023	17,364
GH	GH1	26,172	26,696	27,230	27,774	28,330	28,897	29,474	30,064	30,665
GH	GH2	19,564	19,955	20,355	20,762	21,177	21,600	22,032	22,473	22,923
GH	GH3	18,174	18,537	18,908	19,286	19,672	20,065	20,466	20,876	21,293
GH	GH4	17,635	17,988	18,347	18,714	19,089	19,470	19,860	20,257	20,662
GR	GR3	6,351	6,478	6,608	6,740	6,875	7,012	7,153	7,296	7,442
GR	GR4	12,576	12,828	13,084	13,346	13,613	13,885	14,163	14,446	14,735
MC	MC1	18,457	18,826	19,202	19,586	19,978	20,378	20,785	21,201	21,625
MC	MC2	22,145	22,587	23,039	23,500	23,970	24,449	24,938	25,437	25,946
MC	MC3	25,088	25,590	26,102	26,624	27,156	27,699	28,253	28,818	29,395
MC	MC4	25,123	25,625	26,138	26,660	27,194	27,737	28,292	28,858	29,435
TC	TC1	25,352	25,859	26,377	26,904	27,442	27,991	28,551	29,122	29,704
TY	TY3	609	622	634	647	660	673	686	700	714

Escalation Rate: 2% Year \$: 2010 Fixed O&M \$/yr

	Month	Year Equipment	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
BR	BR1	2014 PJFF/PAC	0	0	0	598,882	610,860	623,077	635,538	648,249	661,214	674,439	687,927	701,686
BR	BR1	2014 SAM Mitigation	0	0	0	78,540	137,333	140,079	142,881	145,739	148,653	151,627	154,659	157,752
BR	BR2	2014 PJFF/PAC	0	0	0	714,168	728,451	743,020	757,880	773,038	788,499	804,269	820,354	836,761
BR	BR2	2014 SAM Mitigation	0	0	0	134,640	137,333	140,079	142,881	145,739	148,653	151,627	154,659	157,752
BR	BR3	2015 PJFF/PAC	0	0	0	1,067,560	1,088,911	1,110,689	1,132,903	1,155,561	1,178,672	1,202,245	1,226,290	1,251,052
GH	GH1	2014 PJFF/PAC	0	0	0	1,293,082	1,318,944	1,345,322	1,372,229	1,399,673	1,427,667	1,456,220	1,485,345	1,515,052
GH	GH1	2014 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	0
GH	GH1	2013 SAM Mitigation	0	0	0	4,899	0	0	0	0	0	0	0	0
GH	GH2	2014 PJFF/PAC	0	0	0	777,600	1,586,304	1,618,030	1,650,391	1,683,399	1,717,067	1,751,408	1,786,436	1,822,165
GH	GH2	2012 Sorbent Injection	0	8,064	98,700	100,674	102,687	104,741	106,836	108,973	111,152	113,375	115,643	117,956
GH	GH3	2015 PJFF/PAC	0	0	0	0	652,436	1,330,969	1,357,589	1,384,741	1,412,435	1,440,684	1,469,498	1,498,888
GH	GH3	2013 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	0
GH	GH3	2013 SAM Mitigation	0	0	0	0	0	0	0	0	0	0	0	0
GH	GH4	2015 PJFF/PAC	0	0	0	0	631,870	1,289,014	1,314,795	1,341,091	1,367,912	1,395,271	1,423,176	1,451,640
GH	GH4	2014 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	0
GH	GH4	2013 SAM Mitigation	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC1	2015 Combined 1&2 FGD	0	0	0	0	-238,642	-219,636	-200,250	-180,476	-160,306	-139,733	-118,749	-121,124
MC	MC1	2015 PJFF/PAC	0	0	0	0	1,446,222	1,475,147	1,504,650	1,534,743	1,565,438	1,596,746	1,628,681	1,661,255
MC	MC1	2015 SAM Mitigation	0	0	0	0	22,100	38,643	39,416	40,204	41,008	41,828	42,665	43,518
MC	MC2	2015 Combined 1&2 FGD	0	0	0	0	186,506	205,512	224,899	244,673	264,842	285,415	306,400	312,528
MC	MC2	2015 PJFF/PAC	0	0	0	0	1,418,867	1,447,245	1,476,189	1,505,713	1,535,828	1,566,544	1,597,875	1,629,832
MC	MC2	2015 SAM Mitigation	0	0	0	0	25,257	38,643	39,416	40,204	41,008	41,828	42,665	43,518
MC	MC3	2014 FGD	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC3	2015 PJFF/PAC	0	0	0	0	646,753	1,319,377	1,345,764	1,372,679	1,400,133	1,428,136	1,456,698	1,485,832
MC	MC3	2013 SAM Mitigation	0	0	24,068	36,824	37,560	38,312	39,078	39,859	40,657	41,470	42,299	43,145
MC	MC3	2013 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC4	2014 FGD	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC4	2014 PJFF/PAC	0	0	0	0	743,376	1,546,817	1,577,754	1,609,309	1,641,495	1,674,325	1,707,811	1,741,967
MC	MC4	2014 SAM Mitigation	0	0	0	0	3,095	38,643	39,416	40,204	41,008	41,828	42,665	43,518
MC	MC4	2014 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	0
TC	TC1	2015 PJFF/PAC	0	0	0	0	493,761	1,007,273	1,027,418	1,047,966	1,068,926	1,090,304	1,112,110	1,134,353
CR	CR4	2016 SCR	0	0	0	0	0	2,107,050	2,149,191	2,192,175	2,236,018	2,280,739	2,326,353	2,372,880
CR	CR4	2016 WFGD	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR4	2016 PJFF	0	0	0	0	0	1,341,259	1,368,085	1,395,446	1,423,355	1,451,822	1,480,859	1,510,476
CR	CR4	2016 SAM Mitigation	0	0	0	0	0	195,952	199,871	203,869	207,946	212,105	216,347	220,674
CR	CR4	2016 PAC Injection	0	0	0	0	0	190,321	194,128	198,010	201,971	206,010	210,130	214,333
CR	CR5	2016 SCR	0	0	0	0	0	2,244,442	2,289,331	2,335,117	2,381,819	2,429,456	2,478,045	2,527,606
CR	CR5	2016 WFGD	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5	2016 PJFF	0	0	0	0	0	1,408,829	1,437,006	1,465,746	1,495,061	1,524,962	1,555,461	1,586,570
CR	CR5	2016 SAM Mitigation	0	0	0	0	0	199,331	203,317	207,384	211,531	215,762	220,077	224,479
CR	CR5	2016 PAC Injection	0	0	0	0	0	193,700	197,574	201,525	205,556	209,667	213,860	218,138
CR	CR6	2016 SCR	0	0	0	0	0	2,693,781	2,747,656	2,802,609	2,858,661	2,915,835	2,974,151	3,033,634
CR	CR6	2016 WFGD	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6	2016 PJFF	0	0	0	0	0	1,837,897	1,874,655	1,912,148	1,950,391	1,989,399	2,029,187	2,069,771
CR	CR6	2016 SAM Mitigation	0	0	0	0	0	222,980	227,440	231,989	236,628	241,361	246,188	251,112
CR	CR6	2016 PAC Injection	0	0	0	0	0	215,097	219,399	223,787	228,263	232,828	237,484	242,234
GR	GR3	2016 SCR	0	0	0	0	0	0	0	0	0	0	0	0

Escalation Rate:		2%	Year \$:	2010	Fixed O&M											
	Month	Year	Equipment	\$/yr	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
GR	1	2016	CDS-FF	3,322,000	0	0	0	0	0	3,741,112	3,815,934	3,892,252	3,970,098	4,048,499	4,130,489	4,213,099
GR	1	2016	PAC Injection	141,000	0	0	0	0	0	158,789	161,965	165,204	168,508	171,878	175,316	178,822
GR	1	2016	SCR	0	0	0	0	0	0	0	0	0	0	0	0	0
GR	1	2016	CDS-FF	4,309,000	0	0	0	0	0	4,852,634	4,949,687	5,048,680	5,149,654	5,252,647	5,357,700	5,464,854
GR	1	2016	PAC Injection	150,000	0	0	0	0	0	168,924	172,303	175,749	179,264	182,849	186,506	190,236

Escalation Rate: 2% Year \$: 2010
Fixed O&M

	Month	Year Equipment	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
BR	BR1	2014 PJFF/PAC	715,720	730,034	744,635	759,527	774,718	790,212	806,016	822,137	838,580	855,351	872,458	889,907
BR	BR1	2014 SAM Mitigation	160,907	164,125	167,408	170,756	174,171	177,655	181,208	184,832	188,529	192,299	196,145	200,068
BR	BR2	2014 PJFF/PAC	853,496	870,566	887,978	905,737	923,852	942,329	961,175	980,399	1,000,007	1,020,007	1,040,407	1,061,215
BR	BR2	2014 SAM Mitigation	160,907	164,125	167,408	170,756	174,171	177,655	181,208	184,832	188,529	192,299	196,145	200,068
BR	BR3	2015 PJFF/PAC	1,250,816	1,275,832	1,301,349	1,327,376	1,353,924	1,381,002	1,408,622	1,436,795	1,465,530	1,494,841	1,524,738	1,555,233
GH	GH1	2014 PJFF/PAC	1,545,353	1,576,260	1,607,785	1,639,941	1,672,739	1,706,194	1,740,318	1,775,124	1,810,627	1,846,839	1,883,776	1,921,452
GH	GH1	2014 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	0
GH	GH1	2013 SAM Mitigation	0	0	0	0	0	0	0	0	0	0	0	0
GH	GH2	2014 PJFF/PAC	1,858,608	1,895,781	1,933,696	1,972,370	2,011,817	2,052,054	2,093,095	2,134,957	2,177,656	2,221,209	2,265,633	2,310,946
GH	GH2	2012 Sorbent Injection	120,315	122,771	125,175	127,679	130,232	132,837	135,494	138,204	140,968	143,787	146,663	149,596
GH	GH3	2015 PJFF/PAC	1,528,865	1,559,443	1,590,632	1,622,444	1,654,893	1,687,991	1,721,751	1,756,186	1,791,310	1,827,136	1,863,678	1,900,952
GH	GH3	2013 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	0
GH	GH3	2013 SAM Mitigation	0	0	0	0	0	0	0	0	0	0	0	0
GH	GH4	2015 PJFF/PAC	1,480,672	1,510,286	1,540,491	1,571,301	1,602,727	1,634,782	1,667,477	1,700,827	1,734,844	1,769,540	1,804,931	1,841,030
GH	GH4	2014 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	0
GH	GH4	2013 SAM Mitigation	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC1	2015 Combined 1&2 FGD	-123,546	-126,017	-128,537	-131,108	-133,730	-136,405	-139,133	-141,916	-144,754	-147,649	-150,602	-153,614
MC	MC1	2015 PJFF/PAC	1,694,480	1,728,370	1,762,937	1,798,196	1,834,160	1,870,843	1,908,260	1,946,425	1,985,354	2,025,061	2,065,562	2,106,873
MC	MC1	2015 SAM Mitigation	44,388	45,276	46,182	47,105	48,047	49,008	49,989	50,988	52,008	53,048	54,109	55,191
MC	MC2	2015 Combined 1&2 FGD	313,778	325,154	331,657	338,290	345,056	351,957	358,996	366,176	373,499	380,969	388,589	396,361
MC	MC2	2015 PJFF/PAC	1,662,429	1,695,678	1,729,591	1,764,183	1,799,467	1,835,456	1,872,165	1,909,608	1,947,801	1,986,757	2,026,492	2,067,022
MC	MC2	2015 SAM Mitigation	44,388	45,276	46,182	47,105	48,047	49,008	49,989	50,988	52,008	53,048	54,109	55,191
MC	MC3	2014 FGD	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC3	2015 PJFF/PAC	1,515,549	1,545,860	1,576,777	1,608,313	1,640,479	1,673,288	1,706,754	1,740,889	1,775,707	1,811,221	1,847,446	1,884,395
MC	MC3	2013 SAM Mitigation	44,008	44,888	45,786	46,702	47,636	48,588	49,560	50,551	51,562	52,594	53,645	54,718
MC	MC3	2013 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC4	2014 FGD	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC4	2014 PJFF/PAC	1,776,807	1,812,343	1,848,590	1,885,562	1,923,273	1,961,738	2,000,973	2,040,992	2,081,812	2,123,449	2,165,918	2,209,236
MC	MC4	2014 SAM Mitigation	44,388	45,276	46,182	47,105	48,047	49,008	49,989	50,988	52,008	53,048	54,109	55,191
MC	MC4	2014 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	0
TC	TC1	2015 PJFF/PAC	1,157,040	1,180,180	1,203,784	1,227,860	1,252,417	1,277,465	1,303,015	1,329,075	1,355,656	1,382,769	1,410,425	1,438,633
CR	CR4	2016 SCR	2,420,338	2,468,745	2,518,120	2,568,482	2,619,852	2,672,249	2,725,694	2,780,208	2,835,812	2,892,528	2,950,379	3,009,386
CR	CR4	2016 WFGD	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR4	2016 PJFF	1,540,685	1,571,499	1,602,929	1,634,988	1,667,688	1,701,041	1,735,062	1,769,763	1,805,159	1,841,262	1,878,087	1,915,649
CR	CR4	2016 SAM Mitigation	174,000	225,088	229,589	234,181	238,865	243,642	248,515	253,485	258,555	263,726	269,000	274,380
CR	CR4	2016 PAC Injection	169,000	218,620	222,992	227,452	232,001	236,641	241,374	246,201	251,125	256,148	261,271	266,496
CR	CR5	2016 SCR	1,993,000	2,578,158	2,629,771	2,682,316	2,735,962	2,790,681	2,846,495	2,903,425	2,961,493	3,020,723	3,081,137	3,142,760
CR	CR5	2016 WFGD	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5	2016 PJFF	1,251,000	1,618,302	1,650,668	1,683,681	1,717,355	1,751,702	1,786,736	1,822,471	1,858,920	1,896,099	1,934,021	1,972,701
CR	CR5	2016 SAM Mitigation	177,000	228,968	233,548	238,219	242,983	247,843	252,800	257,856	263,013	268,273	273,638	279,111
CR	CR5	2016 PAC Injection	172,000	222,500	226,950	231,489	236,119	240,842	245,658	250,572	255,583	260,695	265,909	271,227
CR	CR6	2016 SCR	2,392,000	3,094,307	3,156,193	3,219,317	3,283,703	3,349,377	3,416,365	3,484,692	3,554,386	3,625,474	3,697,983	3,771,943
CR	CR6	2016 WFGD	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6	2016 PJFF	1,632,000	2,111,166	2,153,389	2,196,457	2,240,386	2,285,194	2,330,898	2,377,516	2,425,066	2,473,567	2,523,039	2,624,970
CR	CR6	2016 SAM Mitigation	198,000	256,134	261,257	266,482	271,812	277,248	282,793	288,449	294,218	300,102	306,104	312,226
CR	CR6	2016 PAC Injection	191,000	247,079	252,020	257,061	262,202	267,446	272,795	278,251	283,816	289,492	295,282	301,188
GR	GR3	2016 SCR	0	0	0	0	0	0	0	0	0	0	0	0

Escalation Rate:		2%	Year \$: 2010																			
			Fixed O&M																			
GR	Month	Year Equipment	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	
			\$/yr																			
GR	1	2016 CDS-FF	3,322,000	4,297,361	4,383,308	4,470,975	4,560,394	4,651,602	4,744,634	4,839,527	4,936,317	5,035,044	5,135,744	5,238,459	5,343,229	5,448,066	5,552,966	5,657,929	5,762,954	5,868,041	5,973,189	6,078,400
GR	1	2016 PAC Injection	141,000	182,399	186,047	189,767	193,563	197,434	201,383	205,410	209,519	213,709	217,983	222,343	226,790	231,329	235,959	240,679	245,490	250,392	255,285	260,169
GR	1	2016 SCR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR	1	2016 CDS-FF	4,309,000	5,574,151	5,685,634	5,799,347	5,915,334	6,033,640	6,154,313	6,277,399	6,402,947	6,531,006	6,661,626	6,794,859	6,930,756	7,067,319	7,205,559	7,345,486	7,487,010	7,630,141	7,774,879	7,921,234
GR	1	2016 PAC Injection	150,000	194,041	197,922	201,880	205,918	210,036	214,237	218,522	222,892	227,350	231,897	236,535	241,266	246,086	250,999	255,904	260,811	265,720	270,631	275,544

Escalation Rate: 2% Year \$: 2010 Fixed O&M \$/yr

	Month	Year Equipment	2035	2036	2037	2038	2039	2040
BR	BR1	5 2014 PJFF/PAC	907,705	925,860	944,377	963,264	982,530	1,002,180
BR	BR1	5 2014 SAM Mitigation	204,069	208,151	212,314	216,560	220,891	225,309
BR	BR2	4 2014 PJFF/PAC	1,082,440	1,104,088	1,126,170	1,148,694	1,171,668	1,195,101
BR	BR2	4 2014 SAM Mitigation	204,069	208,151	212,314	216,560	220,891	225,309
BR	BR3	5 2015 PJFF/PAC	1,586,337	1,618,064	1,650,425	1,683,434	1,717,103	1,751,445
GH	GH1	5 2014 PJFF/PAC	1,959,881	1,999,078	2,039,060	2,079,841	2,121,438	2,163,867
GH	GH1	5 2014 SCR Turn-Down	0	0	0	0	0	0
GH	GH1	2 2013 SAM Mitigation	0	0	0	0	0	0
GH	GH2	11 2014 PJFF/PAC	2,357,165	2,404,308	2,452,394	2,501,442	2,551,471	2,602,500
GH	GH2	12 2012 Sorbent Injection	152,588	155,640	158,753	161,928	165,166	168,470
GH	GH3	10 2015 PJFF/PAC	1,938,971	1,977,751	2,017,306	2,057,652	2,098,805	2,140,781
GH	GH3	11 2013 SCR Turn-Down	0	0	0	0	0	0
GH	GH3	2 2013 SAM Mitigation	0	0	0	0	0	0
GH	GH4	12 2015 PJFF/PAC	1,877,850	1,915,407	1,953,716	1,992,790	2,032,646	2,073,299
GH	GH4	3 2014 SCR Turn-Down	0	0	0	0	0	0
GH	GH4	2 2013 SAM Mitigation	0	0	0	0	0	0
MC	MC1	5 2015 Combined 1&2 FGD	-156,686	-159,820	-163,017	-166,277	-169,602	-172,994
MC	MC1	5 2015 PJFF/PAC	2,149,010	2,191,991	2,235,831	2,280,547	2,326,158	2,372,681
MC	MC1	5 2015 SAM Mitigation	56,295	57,421	58,570	59,741	60,936	62,155
MC	MC2	4 2015 Combined 1&2 FGD	404,288	412,374	420,621	429,033	437,614	446,366
MC	MC2	4 2015 PJFF/PAC	2,108,362	2,150,529	2,193,411	2,237,411	2,282,159	2,327,802
MC	MC2	4 2015 SAM Mitigation	56,295	57,421	58,570	59,741	60,936	62,155
MC	MC3	11 2014 FGD	0	0	0	0	0	0
MC	MC3	10 2015 PJFF/PAC	1,922,083	1,960,524	1,999,735	2,039,729	2,080,524	2,122,134
MC	MC3	4 2013 SAM Mitigation	55,813	56,929	58,068	59,229	60,414	61,622
MC	MC3	4 2013 SCR Turn-Down	0	0	0	0	0	0
MC	MC4	11 2014 FGD	0	0	0	0	0	0
MC	MC4	11 2014 PJFF/PAC	2,253,421	2,298,489	2,344,459	2,391,348	2,439,175	2,487,958
MC	MC4	11 2014 SAM Mitigation	56,295	57,421	58,570	59,741	60,936	62,155
MC	MC4	11 2014 SCR Turn-Down	0	0	0	0	0	0
TC	TC1	11 2015 PJFF/PAC	1,467,406	1,496,754	1,526,689	1,557,223	1,588,367	1,620,135
CR	CR4	1 2016 SCR	3,069,574	3,130,965	3,193,585	3,257,456	3,322,605	3,389,058
CR	CR4	1 2016 WFGD	0	0	0	0	0	0
CR	CR4	1 2016 PJFF	1,191,000	1,953,962	1,993,041	2,032,902	2,073,560	2,115,031
CR	CR4	1 2016 SAM Mitigation	174,000	285,465	291,175	296,998	302,938	308,997
CR	CR4	1 2016 PAC Injection	169,000	277,262	282,808	288,464	294,233	300,118
CR	CR5	1 2016 SCR	1,993,000	3,269,728	3,335,122	3,401,825	3,469,861	3,539,258
CR	CR5	1 2016 WFGD	0	0	0	0	0	0
CR	CR5	1 2016 PJFF	1,251,000	2,052,398	2,093,446	2,135,315	2,178,021	2,221,582
CR	CR5	1 2016 SAM Mitigation	177,000	290,387	296,195	302,119	308,161	314,325
CR	CR5	1 2016 PAC Injection	172,000	282,184	287,828	293,584	299,456	305,445
CR	CR6	1 2016 SCR	2,392,000	3,924,330	4,002,816	4,082,872	4,164,530	4,247,820
CR	CR6	1 2016 WFGD	0	0	0	0	0	0
CR	CR6	1 2016 PJFF	1,632,000	2,677,469	2,731,018	2,785,639	2,841,352	2,898,179
CR	CR6	1 2016 SAM Mitigation	198,000	324,840	331,337	337,964	344,723	351,617
CR	CR6	1 2016 PAC Injection	191,000	313,356	319,623	326,015	332,536	339,186
GR	GR3	1 2016 SCR	0	0	0	0	0	0

GR	Month	Year Equipment	Year \$: 2010													
			Fixed O&M													
			2016	2016	2016	2016	2016	2016	2016	2016	2016	2016	2016	2016	2016	2016
			CDS-FF	PAC Injection	SCR	CDS-FF	PAC Injection	SCR	CDS-FF	PAC Injection	SCR	CDS-FF	PAC Injection	SCR	CDS-FF	PAC Injection
			\$/Yr													
GR3	1	2016	3,322,000	5,450,093	0	5,559,095	5,670,277	0	5,783,682	5,899,356	0	6,017,343	6,133,017	0	6,250,000	6,367,000
GR3	1	2016	141,000	231,325	0	235,952	240,671	0	245,484	250,394	0	255,402	260,312	0	265,320	270,230
GR4	1	2016	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR4	1	2016	4,309,000	7,069,371	0	7,210,759	7,354,974	0	7,502,073	7,652,115	0	7,805,157	7,955,200	0	8,105,243	8,255,286
GR4	1	2016	150,000	246,091	0	251,013	256,033	0	261,154	266,377	0	271,704	277,000	0	282,300	287,600

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
BR	BR1	101	69	164	256	346	434	520	605	689	771	852	931	1,008	1,085	1,163	1,241	1,320	1,399	1,479
BR	BR2	167	114	271	423	571	717	860	1,001	1,139	1,275	1,408	1,539	1,667	1,794	1,922	2,052	2,182	2,313	2,446
BR	BR3	416	285	675	1,053	1,423	1,786	2,143	2,493	2,838	3,176	3,508	3,834	4,153	4,469	4,789	5,111	5,435	5,762	6,092
CR	CR4	155	77	204	327	447	564	678	790	899	1,006	1,109	1,210	1,308	1,405	1,501	1,596	1,691	1,786	1,880
CR	CR5	168	84	221	355	485	611	735	856	975	1,090	1,202	1,312	1,418	1,522	1,626	1,730	1,833	1,936	2,038
CR	CR6	240	120	316	507	692	873	1,050	1,223	1,392	1,557	1,718	1,874	2,026	2,175	2,324	2,471	2,619	2,765	2,911
GH	GH1	475	510	1,206	1,884	2,548	3,200	3,843	4,477	5,101	5,717	6,322	6,918	7,504	8,080	8,653	9,231	9,814	10,402	10,995
GH	GH2	484	520	1,228	1,920	2,596	3,261	3,916	4,562	5,198	5,825	6,442	7,049	7,646	8,233	8,817	9,405	9,999	10,599	11,204
GH	GH3	480	516	1,218	1,904	2,575	3,234	3,883	4,524	5,155	5,777	6,389	6,991	7,583	8,165	8,744	9,328	9,917	10,511	11,111
GH	GH4	479	515	1,216	1,900	2,570	3,227	3,875	4,514	5,144	5,765	6,376	6,977	7,567	8,148	8,726	9,308	9,896	10,489	11,088
GR	GR3	68	39	96	151	205	258	309	360	410	458	506	553	598	643	689	734	780	825	871
GR	GR4	95	55	134	211	286	360	432	503	572	640	707	772	836	899	962	1,026	1,089	1,153	1,217
MC	MC1	303	309	767	1,213	1,649	2,077	2,497	2,910	3,315	3,714	4,104	4,487	4,862	5,229	5,592	5,956	6,320	6,686	7,053
MC	MC2	301	307	762	1,205	1,639	2,063	2,480	2,891	3,294	3,689	4,077	4,458	4,830	5,194	5,555	5,916	6,279	6,642	7,007
MC	MC3	391	398	989	1,565	2,128	2,680	3,222	3,755	4,278	4,792	5,296	5,790	6,274	6,747	7,216	7,685	8,156	8,628	9,102
MC	MC4	477	486	1,207	1,910	2,597	3,270	3,931	4,581	5,219	5,846	6,461	7,064	7,654	8,231	8,803	9,376	9,950	10,526	11,103
TC	TC1	383	115	270	420	567	712	855	996	1,135	1,272	1,407	1,539	1,670	1,799	1,927	2,057	2,188	2,320	2,453
TC	TC2	549	166	386	602	813	1,021	1,225	1,427	1,626	1,823	2,016	2,207	2,394	2,579	2,762	2,948	3,136	3,325	3,517
TY	TY3	71	94	233	368	499	628	754	878	999	1,118	1,234	1,347	1,458	1,568	1,677	1,787	1,898	2,008	2,119

2.50% Capital Escalation Rate

2011 CR	281	454	428	405	384	364	344	325	305	285	266	246	231	221	211	200	190	180		
2012 CR		288	465	439	415	394	373	353	333	313	293	272	252	237	226	216	205	195		
2013 CR			295	477	450	426	403	382	362	341	321	300	279	259	243	232	221	210		
2014 CR				303	489	461	436	413	392	371	350	329	307	286	265	249	238	227		
2015 CR					310	501	473	447	424	402	380	358	337	315	293	272	255	244		
2016 CR						318	513	485	459	434	412	390	367	345	323	301	279	262		
2017 CR							326	526	497	470	445	422	399	377	354	331	308	286		
2018 CR								334	539	509	482	456	433	409	386	363	339	316		
2019 CR									342	553	522	494	468	444	420	396	372	348		
2020 CR										351	567	535	506	479	455	430	406	381		
2021 CR											360	581	548	519	491	466	441	416		
2022 CR												369	595	562	532	504	478	452		
2023 CR													378	610	576	545	516	490		
2024 CR														387	625	591	559	529		
2025 CR															397	641	605	573		
2026 CR																407	657	621		
2027 CR																	673	641		
2028 CR																		417		
2029 CR																			428	
2030 CR																				
2031 CR																				
2032 CR																				
2033 CR																				
2034 CR																				
2035 CR																				
2036 CR																				
2037 CR																				
2038 CR																				

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	2039 CR																			
	2040 CR																			
	2011 MC		1,499	2,188	2,076	1,972	1,877	1,788	1,703	1,617	1,532	1,447	1,361	1,276	1,191	1,128	1,089	1,049	1,010	970
	2012 MC			1,536	2,243	2,128	2,021	1,923	1,833	1,745	1,658	1,570	1,483	1,395	1,308	1,221	1,157	1,116	1,075	1,035
	2013 MC				1,575	2,299	2,181	2,072	1,972	1,878	1,789	1,699	1,610	1,520	1,430	1,341	1,251	1,185	1,144	1,102
	2014 MC					1,614	2,357	2,235	2,124	2,021	1,925	1,834	1,742	1,650	1,558	1,466	1,374	1,282	1,215	1,173
	2015 MC						1,655	2,416	2,291	2,177	2,071	1,974	1,879	1,785	1,691	1,597	1,503	1,409	1,314	1,245
	2016 MC							1,696	2,476	2,348	2,231	2,123	2,023	1,926	1,830	1,733	1,637	1,540	1,444	1,347
	2017 MC								1,738	2,538	2,407	2,287	2,176	2,073	1,975	1,876	1,777	1,678	1,579	1,480
	2018 MC									1,782	2,601	2,467	2,344	2,231	2,125	2,024	1,922	1,821	1,720	1,618
	2019 MC										1,826	2,666	2,529	2,403	2,286	2,178	2,075	1,971	1,867	1,763
	2020 MC											1,872	2,733	2,592	2,463	2,344	2,233	2,126	2,020	1,913
	2021 MC												1,919	2,801	2,657	2,524	2,402	2,289	2,180	2,070
	2022 MC													1,967	2,871	2,723	2,588	2,462	2,346	2,234
	2023 MC														2,016	2,943	2,792	2,652	2,524	2,405
	2024 MC															2,066	3,017	2,861	2,719	2,587
	2025 MC																2,118	3,092	2,933	2,787
	2026 MC																	2,171	3,170	3,006
	2027 MC																		2,225	3,249
	2028 MC																			3,249
	2029 MC																			2,281
	2030 MC																			
	2031 MC																			
	2032 MC																			
	2033 MC																			
	2034 MC																			
	2035 MC																			
	2036 MC																			
	2037 MC																			
	2038 MC																			
	2039 MC																			
	2040 MC																			
	2011 TC		281	368	350	333	318	304	291	278	264	251	238	225	211	203	198	193	189	184
	2012 TC			288	377	358	341	326	312	298	284	271	257	244	230	217	208	203	198	193
	2013 TC				295	387	367	350	334	319	305	292	278	264	250	236	222	213	208	203
	2014 TC					303	396	376	359	342	327	313	299	285	270	256	242	228	218	213
	2015 TC						310	406	386	368	351	336	321	306	292	277	263	248	233	224
	2016 TC							318	416	396	377	360	344	329	314	299	284	269	254	239
	2017 TC								326	427	405	386	369	353	337	322	307	291	276	261
	2018 TC									334	437	416	396	378	361	346	330	314	298	283
	2019 TC										342	448	426	406	387	370	354	338	322	306
	2020 TC											351	460	437	416	397	380	363	347	330
	2021 TC												360	471	447	426	407	389	372	355
	2022 TC													369	483	459	437	417	399	381
	2023 TC														378	495	470	448	427	409
	2024 TC															387	482	459	438	420
	2025 TC																507	482	459	438
	2026 TC																397	520	494	470
	2027 TC																	407	494	470
	2028 TC																		533	506
	2029 TC																			546
																				417
																				428

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
2030 TC																					
2031 TC																					
2032 TC																					
2033 TC																					
2034 TC																					
2035 TC																					
2036 TC																					
2037 TC																					
2038 TC																					
2039 TC																					
2040 TC																					
2011 GH		2,061	2,756	2,617	2,492	2,377	2,272	2,171	2,070	1,970	1,869	1,768	1,667	1,567	1,498	1,460	1,422	1,384	1,346		
2012 GH			2,113	2,825	2,683	2,554	2,436	2,328	2,225	2,122	2,019	1,916	1,812	1,709	1,606	1,535	1,496	1,458	1,419		
2013 GH				2,165	2,895	2,750	2,618	2,497	2,387	2,281	2,175	2,069	1,963	1,858	1,752	1,646	1,573	1,534	1,494		
2014 GH					2,219	2,968	2,819	2,683	2,560	2,446	2,338	2,229	2,121	2,013	1,904	1,796	1,687	1,613	1,572		
2015 GH						2,275	3,042	2,889	2,750	2,623	2,507	2,396	2,285	2,174	2,063	1,952	1,841	1,729	1,653		
2016 GH							2,332	3,118	2,961	2,819	2,689	2,570	2,456	2,342	2,228	2,114	2,001	1,887	1,773		
2017 GH								2,390	3,196	3,035	2,889	2,756	2,634	2,518	2,401	2,284	2,167	2,051	1,934		
2018 GH									2,450	3,276	3,111	2,962	2,825	2,700	2,581	2,461	2,341	2,221	2,102		
2019 GH										2,511	3,358	3,189	3,036	2,896	2,768	2,645	2,522	2,400	2,277		
2020 GH											2,574	3,442	3,269	3,112	2,968	2,837	2,711	2,585	2,460		
2021 GH												2,638	3,528	3,350	3,189	3,042	2,908	2,779	2,650		
2022 GH													2,704	3,528	3,350	3,189	3,042	2,908	2,779	2,650	
2023 GH														2,772	3,616	3,434	3,269	3,119	2,981	2,848	
2024 GH															3,616	3,434	3,269	3,119	2,981	2,848	
2025 GH																3,706	3,520	3,351	3,196	3,055	
2026 GH																	3,799	3,608	3,435	3,276	
2027 GH																		3,894	3,698	3,521	
2028 GH																			3,991	3,791	
2029 GH																				4,091	
2030 GH																				3,060	
2031 GH																				3,136	
2032 GH																					
2033 GH																					
2034 GH																					
2035 GH																					
2036 GH																					
2037 GH																					
2038 GH																					
2039 GH																					
2040 GH																					
2011 BR		468	629	595	565	538	513	489	464	440	415	391	367	350	341	332	323	315	306		
2012 BR			480	645	610	579	551	526	501	476	451	426	401	376	359	350	341	332	323		
2013 BR				492	661	625	594	565	539	513	488	462	436	411	385	368	358	349	340		
2014 BR					504	677	641	609	579	552	526	500	474	447	421	395	377	367	358		
2015 BR						517	694	657	624	594	566	539	512	485	458	432	405	386	377		
2016 BR							530	712	674	639	608	580	553	525	498	470	442	415	396		
2017 BR								543	729	690	655	624	595	567	538	510	482	453	425		
2018 BR									557	748	708	672	639	610	581	552	523	494	465		
2019 BR										571	766	725	688	655	625	595	566	536	506		
2020 BR											585	785	743	706	672	641	610	580	549		

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
2021 BR													600	805	762	723	688	657	625	594	
2022 BR				96	137	130	123	117	111	106	100	95	89	83	825	781	741	706	673	641	
2023 BR					98	141	133	126	120	114	108	103	97	91	825	781	741	706	673	641	
2024 BR						101	144	136	129	123	117	111	105	99	630	846	801	760	723	690	
2025 BR							103	148	140	132	126	120	114	108	630	646	601	567	530	498	
2026 BR																					
2027 BR																					
2028 BR																					
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2030 BR																					
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2034 BR																					
2035 BR																					
2036 BR																					
2037 BR																					
2038 BR																					
2039 BR																					
2040 BR																					
2011 GR			94	134	127	120	114	108	103	98	92	87	81	76	72	70	68	65	63	61	
2012 GR				96	137	130	123	117	111	106	100	95	89	83	78	74	72	69	67	65	
2013 GR					98	141	133	126	120	114	108	103	97	91	86	80	76	73	71	69	
2014 GR						101	144	136	129	123	117	111	105	99	94	88	82	78	75	73	
2015 GR							103	148	140	132	126	120	114	108	102	96	90	84	80	77	
2016 GR																					
2017 GR																					
2018 GR																					
2019 GR																					
2020 GR																					
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2034 GR																					
2035 GR																					
2036 GR																					
2037 GR																					
2038 GR																					
2039 GR																					
2040 GR			94	137	129	122	116	111	105	99	94	88	83	77	73	71	68	66	63	61	
2011 TY																					

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
	2012 TY		96		140	132	125	119	113	108	102	96	90	85	79	75	72	70	67	65	
	2013 TY			98	143	143	136	129	122	116	110	104	99	93	87	81	77	74	71	69	
	2014 TY				101	147	147	139	132	125	119	113	107	101	95	89	83	79	76	73	
	2015 TY					103	103	151	143	135	128	122	116	110	104	97	91	85	81	78	
	2016 TY						106	106	154	146	138	131	125	119	112	106	100	93	87	83	
	2017 TY							109	109	158	150	142	135	128	122	115	109	102	96	89	
	2018 TY									111	162	153	145	138	131	125	118	111	105	98	
	2019 TY									114	114	166	157	149	142	135	128	121	114	107	
	2020 TY										117	166	157	149	142	135	128	121	114	107	
	2021 TY											117	171	161	153	145	138	131	124	117	
	2022 TY												120	175	165	157	149	141	134	127	
	2023 TY													123	179	169	161	152	145	138	
	2024 TY														126	184	174	165	156	149	
	2025 TY															129	188	178	169	160	
	2026 TY																132	193	182	173	
	2027 TY																	136	198	187	
	2028 TY																		139	203	
	2029 TY																			203	143
	2030 TY																				
	2031 TY																				
	2032 TY																				
	2033 TY																				
	2034 TY																				
	2035 TY																				
	2036 TY																				
	2037 TY																				
	2038 TY																				
	2039 TY																				
	2040 TY																				

Station	Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
BR	BR1	101	1,560	1,642	1,724	1,807	1,891	1,975	2,061	2,147	2,234	2,322	2,411	2,501	2,446	2,340	2,239	2,145	2,055	1,969
BR	BR2	167	2,579	2,714	2,850	2,988	3,126	3,266	3,407	3,550	3,694	3,839	3,986	4,135	4,045	3,868	3,703	3,546	3,397	3,255
BR	BR3	416	6,425	6,761	7,100	7,442	7,787	8,136	8,488	8,843	9,202	9,564	9,930	10,300	10,076	9,636	9,223	8,833	8,463	8,109
CR	CR4	155	1,974	2,023	2,073	2,125	2,178	2,233	2,289	2,346	2,405	2,465	2,526	2,589	2,492	2,292	2,102	1,921	1,747	1,580
CR	CR5	168	2,439	2,493	2,547	2,604	2,661	2,720	2,781	2,843	2,906	2,971	3,038	3,106	2,701	2,484	2,278	2,082	1,893	1,713
CR	CR6	240	3,056	3,132	3,210	3,291	3,373	3,457	3,544	3,632	3,723	3,816	3,912	4,009	3,858	3,549	3,255	2,974	2,705	2,447
GH	GH1	475	11,594	12,199	12,809	13,425	14,048	14,676	15,311	15,953	16,603	17,256	17,918	18,587	18,193	17,419	16,688	15,994	15,334	14,702
GH	GH2	484	11,814	12,430	13,052	13,680	14,314	14,954	15,601	16,255	16,915	17,583	18,257	18,939	18,537	17,749	17,004	16,297	15,624	14,981
GH	GH3	480	11,716	12,327	12,944	13,567	14,196	14,831	15,472	16,121	16,775	17,437	18,106	18,782	18,384	17,602	16,863	16,163	15,495	14,857
GH	GH4	479	11,692	12,302	12,917	13,538	14,166	14,800	15,440	16,087	16,741	17,401	18,069	18,743	18,346	17,565	16,828	16,129	15,463	14,826
GR	GR3	68	918	964	1,011	1,057	1,104	1,152	1,199	1,247	1,295	1,343	1,377	1,411	1,364	1,281	1,203	1,128	1,056	988
GR	GR4	95	1,282	1,347	1,412	1,477	1,543	1,609	1,675	1,742	1,809	1,876	1,923	1,971	1,906	1,790	1,680	1,575	1,476	1,380
MC	MC1	303	7,421	7,790	8,160	8,531	8,903	9,277	9,651	10,027	10,408	10,791	11,176	11,563	11,068	10,200	9,375	8,758	8,166	7,598
MC	MC2	301	7,372	7,739	8,106	8,475	8,845	9,216	9,588	9,961	10,336	10,713	11,092	11,472	10,995	10,027	9,195	8,700	8,112	7,548
MC	MC3	391	9,576	10,052	10,530	11,009	11,489	11,971	12,455	12,940	13,426	13,914	14,404	14,894	14,283	13,205	12,097	11,301	10,538	9,805
MC	MC4	477	11,683	12,263	12,846	13,430	14,016	14,604	15,194	15,786	16,380	16,975	17,571	18,168	17,424	16,841	15,775	14,758	13,787	12,856
TC	TC1	383	2,588	2,725	2,863	3,002	3,144	3,286	3,431	3,577	3,725	3,875	4,026	4,180	4,093	3,927	3,771	3,623	3,483	3,349
TC	TC2	549	3,710	3,906	4,104	4,304	4,506	4,711	4,918	5,127	5,339	5,554	5,771	5,991	5,866	5,629	5,405	5,193	4,992	4,801
TY	TY3	71	2,230	2,341	2,453	2,565	2,678	2,790	2,904	3,017	3,092	3,170	3,249	3,330	3,217	3,011	2,815	2,629	2,451	2,281

2.50%

2011 CR	169	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2012 CR	184	174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2013 CR	200	189	178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2014 CR	216	205	194	182	170	158	146	134	122	110	98	86	74	62	50	38	26	14	2	0
2015 CR	232	221	210	198	187	175	163	151	139	127	115	103	91	79	67	55	43	31	19	7
2016 CR	250	238	227	215	203	192	180	168	156	144	132	120	108	96	84	72	60	48	36	24
2017 CR	268	256	244	232	220	208	196	184	172	160	148	136	124	112	100	88	76	64	52	40
2018 CR	293	275	263	250	238	226	214	201	189	177	165	153	141	129	117	105	93	81	69	57
2019 CR	324	300	282	269	257	244	232	219	206	194	182	170	158	146	134	122	110	98	86	74
2020 CR	357	332	307	289	276	263	250	237	224	212	200	188	176	164	152	140	128	116	104	92
2021 CR	391	365	340	315	296	283	270	256	243	230	217	204	191	178	165	152	140	128	116	104
2022 CR	426	400	375	349	323	303	290	276	263	249	236	222	209	196	183	170	157	144	131	118
2023 CR	463	437	410	384	358	331	311	297	283	269	256	242	228	214	200	187	174	160	147	134
2024 CR	502	475	448	421	394	366	339	311	297	283	269	256	242	228	214	200	187	174	160	147
2025 CR	542	514	487	459	431	403	376	348	312	298	283	268	254	239	225	210	195	180	165	150
2026 CR	587	556	527	499	470	442	413	385	357	329	305	290	275	260	245	230	215	200	185	170
2027 CR	636	602	570	540	511	482	453	424	395	365	335	305	290	275	260	245	230	215	200	185
2028 CR	690	652	617	584	554	524	494	464	434	404	375	336	320	305	289	273	257	241	225	209
2029 CR	438	708	668	632	599	568	537	506	475	445	415	384	361	345	329	312	296	280	264	248
2030 CR	449	725	685	648	614	582	551	519	488	456	425	394	370	353	337	320	304	288	272	256
2031 CR	461	743	702	664	629	596	564	532	500	468	436	404	379	362	345	328	312	296	280	264
2032 CR	472	762	720	681	645	611	578	545	512	479	446	414	388	371	354	338	322	306	290	274
2033 CR	484	781	738	698	661	625	589	553	517	481	445	409	382	365	348	332	316	300	284	268
2034 CR	496	800	756	715	675	635	595	555	515	475	435	395	368	351	334	318	302	286	270	254
2035 CR	508	820	775	733	693	653	613	573	533	493	453	413	386	369	352	336	320	304	288	272
2036 CR	521	841	794	751	712	672	632	592	552	512	472	432	405	388	371	354	338	322	306	290
2037 CR	534	862	814	770	730	690	650	610	570	530	490	450	423	406	389	372	355	339	323	307
2038 CR	547	884	835	789	748	707	666	625	584	543	502	461	434	417	400	383	366	350	334	318

Station	Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
	2039 CR																			
	2040 CR																			
	2011 MC		931	891	851	812	772	733	693	654	0	0	0	0	0	0	0	0	0	0
	2012 MC		994	954	913	873	832	792	751	711	670	687	0	0	0	0	0	0	0	0
	2013 MC		1,061	1,019	978	936	895	853	811	770	728	687	0	0	0	0	0	0	0	0
	2014 MC		1,130	1,087	1,045	1,002	960	917	874	832	789	747	704	663	621	579	537	495	453	411
	2015 MC		1,202	1,158	1,115	1,071	1,027	984	940	896	853	809	765	722	679	636	593	550	507	464
	2016 MC		1,277	1,232	1,187	1,142	1,098	1,053	1,008	963	919	874	829	784	740	695	650	605	560	515
	2017 MC		1,381	1,309	1,263	1,217	1,171	1,125	1,079	1,033	987	942	896	850	804	758	712	666	620	574
	2018 MC		1,517	1,415	1,341	1,294	1,247	1,200	1,153	1,106	1,059	1,012	965	918	871	824	777	730	683	636
	2019 MC		1,659	1,555	1,451	1,375	1,327	1,278	1,230	1,182	1,134	1,086	1,037	989	941	893	845	797	750	702
	2020 MC		1,807	1,700	1,594	1,487	1,360	1,261	1,181	1,106	1,034	962	890	818	746	674	602	530	458	386
	2021 MC		1,961	1,852	1,743	1,634	1,444	1,343	1,261	1,182	1,106	1,034	962	890	818	746	674	602	530	458
	2022 MC		2,122	2,010	1,898	1,786	1,674	1,562	1,480	1,429	1,377	1,325	1,273	1,221	1,169	1,117	1,065	1,013	962	910
	2023 MC		2,290	2,175	2,060	1,946	1,831	1,716	1,601	1,518	1,464	1,411	1,358	1,305	1,252	1,198	1,145	1,092	1,039	986
	2024 MC		2,465	2,347	2,230	2,112	1,994	1,877	1,759	1,642	1,555	1,501	1,446	1,392	1,337	1,283	1,228	1,174	1,119	1,065
	2025 MC		2,651	2,526	2,406	2,285	2,165	2,044	1,924	1,803	1,683	1,594	1,538	1,483	1,427	1,371	1,315	1,259	1,203	1,147
	2026 MC		2,856	2,718	2,589	2,466	2,342	2,219	2,095	1,972	1,848	1,725	1,634	1,577	1,520	1,462	1,405	1,348	1,290	1,233
	2027 MC		3,081	2,928	2,786	2,654	2,528	2,401	2,274	2,148	2,021	1,894	1,768	1,675	1,616	1,558	1,499	1,440	1,381	1,323
	2028 MC		3,330	3,158	3,001	2,855	2,721	2,591	2,461	2,331	2,201	2,072	1,942	1,812	1,717	1,657	1,597	1,536	1,476	1,416
	2029 MC		3,338	3,413	3,237	3,076	2,927	2,789	2,656	2,522	2,386	2,256	2,123	1,990	1,857	1,760	1,698	1,636	1,575	1,513
	2030 MC		2,396																	
	2031 MC				2,456															
	2032 MC				3,499															
	2033 MC				3,001															
	2034 MC				3,413															
	2035 MC				2,996															
	2036 MC				3,499															
	2037 MC				2,456															
	2038 MC				3,499															
	2039 MC				3,001															
	2040 MC				3,413															
	2011 TC		179	175	170	165	161	156	152	147	142	138	133	128	124	119	114	110	105	101
	2012 TC		189	184	179	174	170	165	160	155	151	146	141	136	132	127	122	117	113	108
	2013 TC		198	193	188	184	179	174	169	164	159	154	149	145	140	135	130	125	120	115
	2014 TC		208	203	198	193	188	183	178	173	168	163	158	153	148	143	138	133	128	123
	2015 TC		218	213	208	203	198	193	188	183	178	172	167	162	157	152	147	142	137	131
	2016 TC		229	224	219	213	208	203	198	192	187	182	177	171	166	161	156	150	145	140
	2017 TC		245	235	230	224	219	213	208	203	197	192	187	181	176	170	165	160	154	149
	2018 TC		267	251	241	235	230	224	219	213	208	202	197	191	186	180	175	169	164	158
	2019 TC		290	274	258	247	241	235	230	224	219	213	207	202	196	190	185	179	173	168
	2020 TC		314	297	281	264	253	247	241	236	230	224	218	212	206	201	195	189	183	178
	2021 TC		338	321	305	288	271	259	253	247	241	236	230	224	218	212	206	200	194	188
	2022 TC		364	347	329	312	295	277	266	260	254	248	241	235	229	223	217	211	205	199
	2023 TC		391	373	355	338	320	302	284	272	266	260	254	247	241	235	229	223	216	210
	2024 TC		419	401	383	364	346	328	310	292	279	273	266	260	254	247	241	234	228	222
	2025 TC		449	429	411	392	373	355	336	317	299	286	280	273	267	260	253	247	240	234
	2026 TC		482	460	440	421	402	383	364	345	325	306	293	287	280	273	266	260	253	246
	2027 TC		519	494	472	451	432	412	392	373	353	334	314	301	294	287	280	273	266	259
	2028 TC		560	532	507	484	463	442	422	402	382	362	342	322	308	301	294	287	280	273
	2029 TC		438	574	545	519	496	474	453	433	412	392	371	350	330	316	309	301	294	287

Station	Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
2030 TC																				
2031 TC																				
2032 TC																				
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2034 TC																				
2035 TC																				
2036 TC																				
2037 TC																				
2038 TC																				
2039 TC																				
2040 TC																				
2011 GH			1,309	1,271	1,233	1,195	1,158	1,120	1,082	1,044	1,007	969	931	893	856	818	780	742	704	667
2012 GH			1,380	1,341	1,303	1,264	1,225	1,187	1,148	1,109	1,070	1,032	993	954	916	877	838	800	761	722
2013 GH			1,454	1,415	1,375	1,335	1,296	1,256	1,216	1,177	1,137	1,097	1,058	1,018	978	939	899	859	819	780
2014 GH			1,531	1,491	1,450	1,409	1,369	1,328	1,287	1,247	1,206	1,165	1,125	1,084	1,043	1,003	962	921	881	840
2015 GH			1,611	1,570	1,528	1,486	1,445	1,403	1,361	1,320	1,278	1,236	1,194	1,153	1,111	1,069	1,028	986	944	903
2016 GH			1,694	1,652	1,609	1,566	1,523	1,481	1,438	1,395	1,353	1,310	1,267	1,224	1,182	1,139	1,096	1,053	1,011	968
2017 GH			1,817	1,737	1,693	1,649	1,605	1,562	1,518	1,474	1,430	1,386	1,343	1,299	1,255	1,211	1,167	1,124	1,080	1,036
2018 GH			1,982	1,862	1,780	1,735	1,690	1,645	1,601	1,556	1,511	1,466	1,421	1,376	1,331	1,286	1,241	1,197	1,152	1,107
2019 GH			2,154	2,032	1,909	1,825	1,779	1,733	1,687	1,641	1,595	1,549	1,503	1,457	1,410	1,364	1,318	1,272	1,226	1,180
2020 GH			2,334	2,208	2,082	1,957	1,870	1,823	1,776	1,729	1,682	1,634	1,587	1,540	1,493	1,446	1,399	1,351	1,304	1,257
2021 GH			2,521	2,392	2,263	2,134	2,006	1,917	1,869	1,820	1,772	1,724	1,675	1,627	1,579	1,530	1,482	1,434	1,385	1,337
2022 GH			2,716	2,584	2,452	2,320	2,188	2,056	1,965	1,915	1,866	1,816	1,767	1,717	1,668	1,618	1,569	1,519	1,469	1,420
2023 GH			2,920	2,784	2,649	2,513	2,378	2,243	2,107	2,014	1,963	1,912	1,862	1,811	1,760	1,709	1,659	1,608	1,557	1,506
2024 GH			3,131	2,993	2,854	2,715	2,576	2,437	2,299	2,160	2,064	2,012	1,960	1,908	1,856	1,804	1,752	1,700	1,648	1,596
2025 GH			3,358	3,210	3,067	2,925	2,783	2,641	2,498	2,356	2,214	2,116	2,063	2,009	1,956	1,903	1,849	1,796	1,742	1,689
2026 GH			3,609	3,442	3,290	3,144	2,998	2,852	2,707	2,561	2,415	2,269	2,169	2,114	2,060	2,005	1,950	1,895	1,841	1,786
2027 GH			3,886	3,699	3,528	3,372	3,223	3,073	2,924	2,774	2,625	2,475	2,326	2,223	2,167	2,111	2,055	1,999	1,943	1,887
2028 GH			4,193	3,983	3,791	3,617	3,456	3,303	3,150	2,997	2,844	2,690	2,537	2,384	2,279	2,221	2,164	2,106	2,049	1,991
2029 GH			3,214	4,298	4,082	3,886	3,707	3,543	3,386	3,229	3,072	2,915	2,758	2,601	2,444	2,336	2,277	2,218	2,159	2,100
2030 GH			3,295	4,516	4,406	4,184	3,983	3,800	3,631	3,470	3,310	3,149	2,988	2,827	2,666	2,505	2,394	2,334	2,273	2,213
2031 GH					3,377	4,516	4,289	4,083	3,895	3,722	3,557	3,392	3,227	3,062	2,897	2,732	2,567	2,454	2,392	2,330
2032 GH						3,462	4,629	4,396	4,185	3,992	3,815	3,646	3,477	3,308	3,139	2,970	2,801	2,632	2,515	2,452
2033 GH							3,548	4,744	4,506	4,289	4,092	3,911	3,737	3,564	3,391	3,217	3,044	2,871	2,697	2,578
2034 GH								3,637	4,863	4,619	4,397	4,194	4,008	3,831	3,653	3,475	3,298	3,120	2,942	2,765
2035 GH									3,728	4,984	4,734	4,507	4,299	4,109	3,927	3,744	3,562	3,380	3,198	3,016
2036 GH										3,821	5,109	4,852	4,619	4,406	4,211	4,025	3,838	3,651	3,465	3,278
2037 GH											3,917	5,237	4,974	4,735	4,517	4,317	4,125	3,934	3,743	3,551
2038 GH												4,014	5,368	5,098	4,853	4,629	4,425	4,228	4,032	3,836
2039 GH													4,115	5,502	5,226	4,974	4,745	4,535	4,334	4,133
2040 GH														4,218	5,639	5,356	5,099	4,864	4,649	4,443
2011 BR			297	288	279	271	262	253	244	235	226	218	209	200	191	182	173	165	156	147
2012 BR			313	304	295	286	277	268	259	250	241	232	223	214	205	196	187	178	169	160
2013 BR			331	321	312	303	293	284	275	266	256	247	238	229	219	210	201	191	182	173
2014 BR			348	339	329	320	310	301	291	282	272	263	253	244	234	225	215	206	196	187
2015 BR			367	357	347	338	328	318	308	299	289	279	269	260	250	240	230	221	211	201
2016 BR			386	376	366	356	346	336	326	316	306	296	286	276	266	256	246	236	226	216
2017 BR			406	396	385	375	365	355	344	334	324	314	303	293	283	273	263	252	242	232
2018 BR			436	416	406	395	385	374	364	353	343	332	322	311	301	290	280	269	259	248
2019 BR			476	447	426	416	405	394	383	373	362	351	340	330	319	308	297	287	276	265
2020 BR			519	488	458	437	426	415	404	393	382	371	360	349	338	327	316	305	294	283

Station	Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
2021 BR			563	532	500	469	448	437	425	414	403	391	380	369	358	346	335	324	312	301
2022 BR			609	577	545	513	481	459	448	436	424	413	401	390	378	367	355	343	332	320
2023 BR			657	624	591	559	526	493	471	459	447	435	423	411	399	388	376	364	352	340
2024 BR			707	673	640	606	573	539	505	482	470	458	446	434	422	409	397	385	373	361
2025 BR			760	725	690	656	621	587	552	518	495	482	470	457	445	432	420	407	395	382
2026 BR			818	779	743	708	672	637	602	566	531	507	494	481	469	456	443	430	417	405
2027 BR			884	839	798	761	725	689	653	617	580	544	520	506	493	480	467	454	441	428
2028 BR			957	906	860	818	781	743	706	669	632	595	558	533	519	506	492	479	465	452
2029 BR			731	981	928	881	839	800	762	724	686	648	610	572	546	532	518	505	491	477
2030 BR			1,005	749	1,005	952	903	860	820	781	742	703	664	625	586	559	545	531	517	503
2031 BR			768			1,031	975	926	881	841	801	761	721	681	641	601	573	559	545	530
2032 BR						787	1,056	1,000	949	903	862	821	780	739	698	657	616	588	573	558
2033 BR							806	1,083	1,025	973	926	883	841	799	757	715	673	631	603	587
2034 BR								827	1,110	1,050	997	949	905	862	819	776	733	690	647	618
2035 BR									847	1,138	1,077	1,022	973	928	884	840	795	751	707	663
2036 BR										868	1,166	1,104	1,048	997	951	906	861	815	770	725
2037 BR											890	1,195	1,131	1,074	1,022	975	928	882	836	789
2038 BR												912	1,225	1,160	1,101	1,047	999	952	904	857
2039 BR													935	1,256	1,189	1,128	1,074	1,024	975	927
2040 BR														959	1,287	1,218	1,156	1,100	1,050	1,000
2011 GR			58	56	54	52	49	47	45	42	40	38	0	0	0	0	0	0	0	0
2012 GR			62	60	58	55	53	51	48	46	44	41	39	0	0	0	0	0	0	0
2013 GR			66	64	61	59	57	54	52	49	47	45	42	40	0	0	0	0	0	0
2014 GR			70	68	65	63	61	58	56	53	51	48	46	43	41	0	0	0	0	0
2015 GR			75	72	70	67	65	62	60	57	54	52	49	47	44	42	0	0	0	0
2016 GR			79	77	74	71	69	66	64	61	58	56	53	51	48	45	43	0	0	0
2017 GR			84	81	78	76	73	70	68	65	63	60	57	55	52	49	47	44	0	0
2018 GR			90	86	83	80	78	75	72	70	67	64	61	59	56	53	50	48	45	0
2019 GR			99	93	88	85	82	80	77	74	71	68	66	63	60	57	55	52	49	46
2020 GR			108	102	95	90	87	84	82	79	76	73	70	67	64	62	59	56	53	50
2021 GR			118	111	104	97	92	88	84	81	78	75	72	70	69	66	63	60	57	54
2022 GR			128	121	114	107	100	95	92	89	86	83	80	77	74	71	68	65	62	59
2023 GR			139	131	124	117	110	102	97	94	91	88	85	82	79	76	72	69	66	63
2024 GR			150	142	135	127	120	112	105	100	96	93	90	87	84	81	77	74	71	68
2025 GR			161	153	146	138	130	123	115	107	102	99	96	92	89	86	83	79	76	73
2026 GR			174	165	157	149	141	134	126	118	110	105	101	98	95	91	88	85	81	78
2027 GR			188	178	169	161	153	145	137	129	121	113	107	104	100	97	94	90	87	83
2028 GR			204	193	183	173	165	157	149	140	132	124	116	110	106	103	99	96	92	89
2029 GR			146	209	197	187	178	169	161	152	144	135	127	119	113	109	105	102	98	95
2030 GR			150	150	214	202	192	182	173	165	156	148	139	130	122	115	112	108	104	101
2031 GR					154	219	207	197	187	178	169	160	151	142	133	125	118	115	111	107
2032 GR						157	225	212	201	191	182	173	164	155	146	137	128	121	117	114
2033 GR							161	230	218	206	196	187	177	168	159	150	140	131	124	120
2034 GR								165	236	223	212	201	191	182	172	163	153	144	134	127
2035 GR									169	242	229	217	206	196	186	177	167	157	147	138
2036 GR										174	248	235	222	211	201	191	181	171	161	151
2037 GR											178	254	240	228	217	206	196	186	175	165
2038 GR												182	261	246	234	222	211	201	190	180
2039 GR													187	267	253	239	228	217	206	195
2040 GR														192	274	259	245	233	222	211
2011 TY			58	56	53	51	48	46	43	41	0	0	0	0	0	0	0	0	0	0

Station	Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
	2012 TY		62	60	57	55	52	49	47	44	42	0	0	0	0	0	0	0	0	0
	2013 TY		66	64	61	59	56	53	51	48	46	43	0	0	0	0	0	0	0	0
	2014 TY		71	68	65	63	60	57	55	52	49	47	44	0	0	0	0	0	0	0
	2015 TY		75	72	70	67	64	61	59	56	53	51	48	45	0	0	0	0	0	0
	2016 TY		80	77	74	71	69	66	63	60	57	55	52	49	46	0	0	0	0	0
	2017 TY		85	82	79	76	73	70	67	65	62	59	56	53	50	47	0	0	0	0
	2018 TY		92	87	84	81	78	75	72	69	66	63	60	57	54	52	49	0	0	0
	2019 TY		101	94	89	86	83	80	77	74	71	68	65	62	59	56	53	50	0	0
	2020 TY		110	103	96	91	88	85	82	79	76	73	70	66	63	60	57	54	51	0
	2021 TY		120	113	106	99	93	90	87	84	81	78	74	71	68	65	62	59	55	52
	2022 TY		130	123	116	108	101	96	93	89	86	83	80	76	73	70	67	63	60	57
	2023 TY		141	134	126	119	111	104	98	95	92	88	85	82	78	75	72	68	65	62
	2024 TY		152	145	137	129	122	114	106	101	97	94	90	87	84	80	77	73	70	67
	2025 TY		164	156	148	140	133	125	117	109	103	100	96	93	89	86	82	79	75	72
	2026 TY		177	168	160	152	144	136	128	120	112	106	102	99	95	91	88	84	81	77
	2027 TY		192	182	172	164	156	148	139	131	123	114	108	105	101	97	94	90	86	83
	2028 TY		208	196	186	177	168	160	151	143	134	126	117	111	107	104	100	96	92	89
	2029 TY		146	213	201	191	181	172	164	155	146	138	129	120	114	110	106	102	98	95
	2030 TY		150	150	218	206	196	186	177	168	159	150	141	132	123	117	113	109	105	101
	2031 TY			154	154	224	212	201	190	181	172	163	154	145	135	126	120	116	112	107
	2032 TY				157	157	229	217	206	195	186	176	167	158	148	139	129	123	118	114
	2033 TY						161	235	222	211	200	190	181	171	161	152	142	133	126	121
	2034 TY							165	241	228	216	205	195	185	175	165	156	146	136	129
	2035 TY								169	247	234	221	210	200	190	180	170	160	149	139
	2036 TY									174	253	239	227	215	205	195	184	174	164	153
	2037 TY										178	259	245	233	221	210	199	189	178	168
	2038 TY											182	266	252	238	226	215	204	194	183
	2039 TY												187	273	258	244	232	221	210	198
	2040 TY													192	279	264	250	238	226	215

Station	Unit	Capacity	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
BR	BR1	101	1,867	1,770	1,678	1,591	1,510	1,434	1,361	1,290	1,219	1,149	1,080	1,013	946
BR	BR2	167	3,087	2,926	2,774	2,631	2,496	2,371	2,251	2,132	2,015	1,900	1,787	1,675	1,564
BR	BR3	416	7,689	7,289	6,910	6,553	6,218	5,906	5,607	5,312	5,021	4,733	4,450	4,171	3,897
CR	CR4	155	1,421	1,269	1,125	988	859	738	623	511	402	297	194	95	0
CR	CR5	168	1,540	1,375	1,219	1,071	931	800	675	554	436	322	211	103	0
CR	CR6	240	2,200	1,965	1,741	1,529	1,330	1,143	965	792	623	459	301	148	0
GH	GH1	475	14,098	13,375	12,686	12,033	11,415	10,834	10,291	9,770	9,256	8,749	8,249	7,755	7,269
GH	GH2	484	14,365	13,628	12,927	12,261	11,631	11,039	10,486	9,956	9,432	8,915	8,405	7,902	7,407
GH	GH3	480	14,246	13,516	12,820	12,159	11,535	10,948	10,399	9,873	9,354	8,841	8,336	7,837	7,346
GH	GH4	479	14,217	13,488	12,793	12,134	11,511	10,925	10,378	9,853	9,334	8,823	8,318	7,821	7,331
GR	GR3	68	922	860	801	745	692	643	595	549	504	459	415	373	331
GR	GR4	95	1,288	1,201	1,118	1,040	967	898	832	767	704	641	580	521	462
MC	MC1	303	7,053	6,531	6,033	5,559	5,110	4,687	4,290	3,910	3,538	3,173	2,817	2,468	2,128
MC	MC2	301	7,007	6,488	5,993	5,523	5,077	4,656	4,262	3,884	3,515	3,152	2,798	2,452	2,114
MC	MC3	391	9,102	8,428	7,785	7,174	6,595	6,048	5,536	5,046	4,565	4,095	3,635	3,185	2,746
MC	MC4	477	11,104	10,282	9,498	8,752	8,045	7,379	6,754	6,156	5,570	4,996	4,434	3,886	3,350
TC	TC1	383	3,222	3,101	2,986	2,878	2,777	2,652	2,536	2,425	2,315	2,206	2,099	1,993	1,888
TC	TC2	549	4,618	4,445	4,280	4,125	3,980	3,802	3,636	3,476	3,319	3,163	3,009	2,857	2,706
TY	TY3	71	2,117	1,962	1,814	1,675	1,543	1,420	1,303	1,187	1,074	964	855	749	646

2.50%

2011 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2012 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2013 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2014 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2018 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2019 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2020 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2021 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2022 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2023 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2025 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2026 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2027 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2028 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2029 CR	264	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2030 CR	287	271	294	278	0	0	0	0	0	0	0	0	0	0	0
2031 CR	311	294	302	285	0	0	0	0	0	0	0	0	0	0	0
2032 CR	336	319	302	285	0	0	0	0	0	0	0	0	0	0	0
2033 CR	363	345	327	309	292	0	0	0	0	0	0	0	0	0	0
2034 CR	390	372	353	335	317	299	0	0	0	0	0	0	0	0	0
2035 CR	418	400	381	362	344	325	306	0	0	0	0	0	0	0	0
2036 CR	456	429	410	390	371	352	333	314	0	0	0	0	0	0	0
2037 CR	505	468	439	420	400	381	361	342	322	0	0	0	0	0	0
2038 CR	556	518	480	450	430	410	390	370	350	330	0	0	0	0	0

Station	Unit	Capacity	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
	2039 CR		609	570	531	492	462	441	421	400	379	359	338	0	0
	2040 CR		665	624	584	544	504	473	452	431	410	389	368	347	0
	2011 MC		0	0	0	0	0	0	0	0	0	0	0	0	0
	2012 MC		0	0	0	0	0	0	0	0	0	0	0	0	0
	2013 MC		0	0	0	0	0	0	0	0	0	0	0	0	0
	2014 MC		0	0	0	0	0	0	0	0	0	0	0	0	0
	2015 MC		0	0	0	0	0	0	0	0	0	0	0	0	0
	2016 MC		0	0	0	0	0	0	0	0	0	0	0	0	0
	2017 MC		0	0	0	0	0	0	0	0	0	0	0	0	0
	2018 MC		0	0	0	0	0	0	0	0	0	0	0	0	0
	2019 MC		0	0	0	0	0	0	0	0	0	0	0	0	0
	2020 MC		0	0	0	0	0	0	0	0	0	0	0	0	0
	2021 MC		0	0	0	0	0	0	0	0	0	0	0	0	0
	2022 MC		858	0	0	0	0	0	0	0	0	0	0	0	0
	2023 MC		932	879	0	0	0	0	0	0	0	0	0	0	0
	2024 MC		1,010	956	901	0	0	0	0	0	0	0	0	0	0
	2025 MC		1,091	1,035	980	924	0	0	0	0	0	0	0	0	0
	2026 MC		1,176	1,119	1,061	1,004	947	0	0	0	0	0	0	0	0
	2027 MC		1,264	1,205	1,147	1,088	1,029	970	0	0	0	0	0	0	0
	2028 MC		1,356	1,296	1,235	1,175	1,115	1,055	995	0	0	0	0	0	0
	2029 MC		1,451	1,390	1,328	1,266	1,205	1,143	1,081	1,020	0	0	0	0	0
	2030 MC		1,551	1,488	1,424	1,361	1,298	1,235	1,172	1,108	1,045	0	0	0	0
	2031 MC		1,655	1,590	1,525	1,460	1,395	1,330	1,266	1,201	1,136	1,071	0	0	0
	2032 MC		1,762	1,696	1,629	1,563	1,497	1,430	1,364	1,297	1,231	1,164	1,098	0	0
	2033 MC		1,874	1,806	1,738	1,670	1,602	1,534	1,466	1,398	1,330	1,262	1,194	1,125	0
	2034 MC		1,991	1,921	1,852	1,782	1,712	1,642	1,572	1,503	1,433	1,363	1,293	1,223	1,154
	2035 MC		2,154	2,041	1,969	1,898	1,826	1,755	1,683	1,612	1,540	1,469	1,397	1,325	1,254
	2036 MC		2,366	2,208	2,092	2,019	1,945	1,872	1,799	1,725	1,652	1,579	1,505	1,432	1,359
	2037 MC		2,587	2,425	2,263	2,144	2,069	1,994	1,919	1,844	1,768	1,693	1,618	1,543	1,468
	2038 MC		2,818	2,652	2,486	2,319	2,198	2,121	2,044	1,967	1,890	1,813	1,736	1,659	1,581
	2039 MC		3,059	2,888	2,718	2,548	2,377	2,253	2,174	2,095	2,016	1,937	1,858	1,779	1,700
	2040 MC		3,310	3,135	2,961	2,786	2,611	2,437	2,309	2,228	2,147	2,066	1,985	1,904	1,823
	2011 TC		96	91	87	82	77	0	0	0	0	0	0	0	0
	2012 TC		103	98	94	89	84	79	0	0	0	0	0	0	0
	2013 TC		111	106	101	96	91	86	81	0	0	0	0	0	0
	2014 TC		118	113	108	103	98	93	88	83	0	0	0	0	0
	2015 TC		126	121	116	111	106	101	96	91	85	0	0	0	0
	2016 TC		135	130	124	119	114	109	103	98	93	88	0	0	0
	2017 TC		144	138	133	127	122	117	111	106	101	95	90	0	0
	2018 TC		153	147	142	136	131	125	120	114	109	103	98	92	0
	2019 TC		162	156	151	145	139	134	128	123	117	111	106	100	94
	2020 TC		172	166	160	155	149	143	137	131	126	120	114	108	102
	2021 TC		182	176	170	164	158	152	147	141	135	129	123	117	111
	2022 TC		193	187	181	175	168	162	156	150	144	138	132	126	120
	2023 TC		204	198	191	185	179	173	166	160	154	148	141	135	129
	2024 TC		215	209	203	196	190	183	177	171	164	158	151	145	139
	2025 TC		227	221	214	208	201	194	188	181	175	168	162	155	149
	2026 TC		240	233	226	219	213	206	199	193	186	179	173	166	159
	2027 TC		253	246	239	232	225	218	211	204	197	191	184	177	170
	2028 TC		266	259	252	245	238	231	224	217	209	202	195	188	181
	2029 TC		280	273	265	258	251	244	236	229	222	215	207	200	193

Station	Unit	Capacity	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
	2030 TC	294	287	279	272	272	265	257	250	242	235	227	220	213	205
	2031 TC	309	302	294	286	279	271	271	264	256	248	241	233	226	218
	2032 TC	325	317	309	301	293	286	278	270	262	255	247	239	231	231
	2033 TC	341	333	325	317	309	301	293	285	277	269	261	253	245	245
	2034 TC	357	349	341	333	325	317	308	300	292	284	276	267	259	259
	2035 TC	382	366	358	350	341	333	324	316	308	299	291	283	274	274
	2036 TC	417	392	376	367	358	350	341	333	324	315	307	298	290	290
	2037 TC	452	427	402	385	376	367	358	350	341	332	323	314	306	306
	2038 TC	489	463	438	412	395	385	376	367	358	349	340	331	322	322
	2039 TC	528	501	475	449	422	404	395	386	377	367	358	349	340	340
	2040 TC	568	541	514	487	460	433	414	405	396	386	377	367	358	358
	2011 GH	629	0	0	0	0	0	0	0	0	0	0	0	0	0
	2012 GH	683	645	0	0	0	0	0	0	0	0	0	0	0	0
	2013 GH	740	700	661	0	0	0	0	0	0	0	0	0	0	0
	2014 GH	799	759	718	677	0	0	0	0	0	0	0	0	0	0
	2015 GH	861	819	778	736	694	654	612	570	528	486	444	402	360	318
	2016 GH	925	882	840	797	754	712	670	628	586	544	502	460	418	376
	2017 GH	992	948	905	861	817	773	729	686	642	598	554	510	466	422
	2018 GH	1,062	1,017	972	927	882	837	792	748	704	660	616	572	528	484
	2019 GH	1,134	1,088	1,042	996	950	904	858	812	766	722	676	630	584	538
	2020 GH	1,210	1,163	1,116	1,068	1,021	974	927	880	833	785	738	691	644	596
	2021 GH	1,289	1,240	1,192	1,143	1,095	1,047	998	950	902	853	805	757	709	660
	2022 GH	1,370	1,321	1,271	1,222	1,172	1,123	1,073	1,023	974	924	875	825	775	725
	2023 GH	1,455	1,405	1,354	1,303	1,252	1,201	1,151	1,100	1,049	998	947	897	846	795
	2024 GH	1,544	1,492	1,440	1,388	1,336	1,283	1,231	1,179	1,127	1,075	1,023	971	919	866
	2025 GH	1,636	1,582	1,529	1,476	1,422	1,369	1,316	1,262	1,209	1,155	1,102	1,049	995	941
	2026 GH	1,731	1,677	1,622	1,567	1,513	1,458	1,403	1,348	1,294	1,239	1,184	1,130	1,075	1,020
	2027 GH	1,831	1,775	1,719	1,662	1,606	1,550	1,494	1,438	1,382	1,326	1,270	1,214	1,158	1,101
	2028 GH	1,934	1,876	1,819	1,762	1,704	1,647	1,589	1,532	1,474	1,417	1,359	1,302	1,244	1,185
	2029 GH	2,041	1,982	1,923	1,864	1,806	1,747	1,688	1,629	1,570	1,511	1,452	1,393	1,334	1,274
	2030 GH	2,153	2,092	2,032	1,971	1,911	1,851	1,790	1,730	1,670	1,609	1,549	1,488	1,428	1,367
	2031 GH	2,268	2,206	2,144	2,083	2,021	1,959	1,897	1,835	1,773	1,711	1,649	1,588	1,526	1,464
	2032 GH	2,388	2,325	2,262	2,198	2,135	2,071	2,008	1,944	1,881	1,818	1,754	1,691	1,627	1,562
	2033 GH	2,513	2,448	2,383	2,318	2,253	2,188	2,123	2,058	1,993	1,928	1,863	1,798	1,733	1,667
	2034 GH	2,643	2,576	2,509	2,443	2,376	2,309	2,243	2,176	2,109	2,043	1,976	1,910	1,843	1,775
	2035 GH	2,834	2,709	2,640	2,572	2,504	2,435	2,367	2,299	2,231	2,162	2,094	2,026	1,957	1,887
	2036 GH	3,091	2,905	2,776	2,706	2,636	2,566	2,496	2,426	2,356	2,286	2,216	2,146	2,076	1,999
	2037 GH	3,360	3,169	2,977	2,846	2,774	2,702	2,630	2,559	2,487	2,415	2,343	2,272	2,200	2,117
	2038 GH	3,640	3,444	3,248	3,052	2,917	2,843	2,770	2,696	2,623	2,549	2,476	2,402	2,328	2,244
	2039 GH	3,932	3,731	3,530	3,329	3,128	2,990	2,914	2,839	2,764	2,688	2,613	2,537	2,462	2,377
	2040 GH	4,236	4,030	3,824	3,618	3,412	3,206	3,065	2,987	2,910	2,833	2,755	2,678	2,601	2,515
	2011 BR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2012 BR	151	0	0	0	0	0	0	0	0	0	0	0	0	0
	2013 BR	164	154	0	0	0	0	0	0	0	0	0	0	0	0
	2014 BR	177	168	158	0	0	0	0	0	0	0	0	0	0	0
	2015 BR	191	182	172	162	0	0	0	0	0	0	0	0	0	0
	2016 BR	206	196	186	176	166	0	0	0	0	0	0	0	0	0
	2017 BR	222	211	201	191	181	170	0	0	0	0	0	0	0	0
	2018 BR	238	227	217	206	196	185	175	0	0	0	0	0	0	0
	2019 BR	254	244	233	222	211	201	190	179	0	0	0	0	0	0
	2020 BR	272	261	250	239	228	217	206	195	183	0	0	0	0	0

Station	Unit	Capacity	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
	2021 BR	290	278	278	267	256	245	233	222	211	199	188	0	0	0
	2022 BR	309	297	285	274	262	251	239	228	216	204	193	0	0	0
	2023 BR	328	316	304	293	281	269	257	245	233	221	209	198	0	0
	2024 BR	349	336	324	312	300	288	276	263	251	239	227	215	203	203
	2025 BR	370	357	345	332	320	307	295	282	270	257	245	233	220	220
	2026 BR	392	379	366	353	341	328	315	302	290	277	264	251	238	238
	2027 BR	415	402	388	375	362	349	336	323	310	297	284	271	257	277
	2028 BR	438	425	412	398	385	371	358	344	331	318	304	291	277	277
	2029 BR	463	449	436	422	408	394	381	367	353	339	326	312	298	298
	2030 BR	489	475	461	447	432	418	404	390	376	362	348	334	320	320
	2031 BR	516	501	487	472	458	443	429	414	400	385	371	356	342	342
	2032 BR	543	529	514	499	484	469	454	440	425	410	395	380	365	365
	2033 BR	572	557	542	527	511	496	481	466	451	435	420	405	390	390
	2034 BR	602	586	571	555	540	524	509	493	477	462	446	431	415	415
	2035 BR	633	617	601	585	569	553	537	521	505	489	473	457	441	441
	2036 BR	680	649	632	616	600	583	567	551	534	518	502	485	469	469
	2037 BR	743	697	665	648	632	615	598	581	564	548	531	514	497	497
	2038 BR	809	762	714	682	664	647	630	613	596	579	561	544	527	527
	2039 BR	878	829	781	732	699	681	663	646	628	611	593	575	558	558
	2040 BR	950	900	850	800	750	716	698	680	662	644	626	608	590	590
	2011 GR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2012 GR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2013 GR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2014 GR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2015 GR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2016 GR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2017 GR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2018 GR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2019 GR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2020 GR	47	0	0	0	0	0	0	0	0	0	0	0	0	0
	2021 GR	51	48	0	0	0	0	0	0	0	0	0	0	0	0
	2022 GR	56	53	50	0	0	0	0	0	0	0	0	0	0	0
	2023 GR	60	57	54	51	0	0	0	0	0	0	0	0	0	0
	2024 GR	65	62	59	55	52	0	0	0	0	0	0	0	0	0
	2025 GR	70	66	63	60	57	54	0	0	0	0	0	0	0	0
	2026 GR	75	71	68	65	61	58	55	55	0	0	0	0	0	0
	2027 GR	80	77	73	70	66	63	60	60	56	0	0	0	0	0
	2028 GR	86	82	79	75	72	68	65	65	61	58	0	0	0	0
	2029 GR	91	88	84	81	77	73	70	70	66	63	59	0	0	0
	2030 GR	97	93	90	86	83	79	75	75	72	68	64	61	0	0
	2031 GR	103	100	96	92	88	85	81	81	77	73	70	66	62	0
	2032 GR	110	106	102	98	94	91	87	87	83	79	75	71	67	64
	2033 GR	116	113	109	105	101	97	93	93	89	85	81	77	73	69
	2034 GR	123	119	115	111	107	103	99	99	95	91	87	83	79	75
	2035 GR	131	126	122	118	114	110	106	106	102	98	93	89	85	81
	2036 GR	141	134	130	125	121	117	113	113	108	104	100	96	91	87
	2037 GR	155	145	137	133	129	124	120	120	115	111	107	102	98	94
	2038 GR	169	159	148	141	136	132	127	127	123	118	114	109	105	101
	2039 GR	184	173	163	152	144	140	135	135	130	126	121	117	112	108
	2040 GR	200	189	178	167	156	148	143	143	138	134	129	124	120	115
	2011 TY	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Station	Unit	Capacity	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
	2012 TY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2013 TY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2014 TY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2015 TY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2016 TY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2017 TY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2018 TY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2019 TY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2020 TY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2021 TY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2022 TY	54	0	0	0	0	0	0	0	0	0	0	0	0	0
	2023 TY	58	55	0	0	0	0	0	0	0	0	0	0	0	0
	2024 TY	63	60	56	0	0	0	0	0	0	0	0	0	0	0
	2025 TY	68	65	61	58	0	0	0	0	0	0	0	0	0	0
	2026 TY	73	70	66	63	59	0	0	0	0	0	0	0	0	0
	2027 TY	79	75	72	68	64	61	61	0	0	0	0	0	0	0
	2028 TY	85	81	77	73	70	66	66	62	0	0	0	0	0	0
	2029 TY	91	87	83	79	75	71	71	68	64	0	0	0	0	0
	2030 TY	97	93	89	85	81	77	77	73	69	65	0	0	0	0
	2031 TY	103	99	95	91	87	83	83	79	75	71	67	0	0	0
	2032 TY	110	106	102	98	94	89	89	85	81	77	73	69	0	0
	2033 TY	117	113	109	104	100	96	96	92	87	83	79	75	70	0
	2034 TY	124	120	116	111	107	103	103	98	94	90	85	81	76	72
	2035 TY	132	128	123	119	114	110	110	105	101	96	92	87	83	78
	2036 TY	143	135	131	126	122	117	117	112	108	103	99	94	89	85
	2037 TY	157	146	139	134	129	125	125	120	115	111	106	101	96	92
	2038 TY	172	161	150	142	137	133	133	128	123	118	113	108	104	99
	2039 TY	187	176	165	154	146	141	141	136	131	126	121	116	111	106
	2040 TY	203	192	180	169	158	149	149	144	139	134	129	124	119	114

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
BR	BR1	101	0	0	0	0	0	441	454	590	616	785	787
BR	BR2	167	0	0	0	0	0	729	751	975	1,018	1,299	1,301
BR	BR3	416	0	0	0	0	0	1,816	1,870	2,430	2,536	3,235	3,242
CR	CR4	155	258	840	1,124	1,095	1,216	1,960	1,949	1,644	1,927	2,572	2,560
CR	CR5	168	279	910	1,219	1,187	1,318	2,124	2,112	1,782	2,089	2,788	2,774
CR	CR6	240	399	1,300	1,741	1,696	1,882	5,221	5,152	4,566	4,899	5,799	5,682
GH	GH1	475	0	0	0	0	0	5,620	5,988	6,566	7,371	8,085	8,761
GH	GH2	484	0	0	0	0	0	5,727	6,101	6,691	7,510	8,238	8,927
GH	GH3	480	0	0	0	0	0	5,680	6,051	6,635	7,448	8,170	8,854
GH	GH4	479	0	0	0	0	0	5,668	6,038	6,622	7,433	8,153	8,835
GR	GR3	68											
GR	GR4	95											
MC	MC1	303											
MC	MC2	301											
MC	MC3	391											
MC	MC4	477											
TC	TC1	383	0	0	0	0	0	1,965	2,066	2,172	2,216	2,260	2,305
TC	TC2	549	0	0	0	0	0	2,817	2,961	3,114	3,176	3,240	3,304
TY	TY3	71											
	BR Landfill Phase 2 Savings		0	0	0	0	0	0	0	828	908	1,960	1,870
	BR Landfill Phase 3 Savings		0	0	0	0	0	0	0	0	0	0	0
	BR Landfill O&M Savings		0	0	0	0	0	2,985	3,075	3,167	3,262	3,360	3,461
	CR Landfill Capital Savings		936	3,049	4,083	3,979	4,416	4,938	4,772	3,579	4,464	6,617	6,353
	CR Landfill O&M Savings		0	0	0	0	0	2,181	2,307	2,393	2,537	2,726	2,944
	CR6 Stator Rewind Savings		0	0	0	0	0	2,187	2,135	2,020	1,914	1,816	1,719
	GH Landfill Capital Savings		0	0	0	0	0	61	188	1,083	2,805	4,044	4,399
	GH Landfill O&M Savings		0	0	0	0	0	22,633	23,991	25,431	26,957	28,601	30,979
	TC Landfill Capital Savings		0	0	0	0	0	0	0	0	0	0	0
	TC Landfill O&M Savings		0	0	0	0	0	4,782	5,027	5,286	5,392	5,500	5,610

Station	Unit	Capacity	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
BR	BR1	101	789	1,035	1,054	1,357	1,337	1,319	1,301	1,285	1,267	1,122	410
BR	BR2	167	1,305	1,711	1,743	2,245	2,211	2,180	2,151	2,124	2,095	1,855	678
BR	BR3	416	3,252	4,261	4,342	5,591	5,508	5,431	5,359	5,291	5,219	4,620	1,688
CR	CR4	155	2,096	2,059	2,073	1,531	1,768	1,810	1,869	1,932	2,000	1,861	1,810
CR	CR5	168	2,272	2,232	2,247	1,659	1,916	1,962	2,025	2,094	2,168	2,017	1,962
CR	CR6	240	4,867	4,712	4,637	3,700	3,969	3,960	4,000	4,047	4,101	3,833	3,704
GH	GH1	475	9,219	9,707	10,790	12,508	14,281	15,439	15,604	16,273	16,860	17,332	17,856
GH	GH2	484	9,394	9,891	10,994	12,745	14,551	15,732	15,900	16,581	17,180	17,660	18,195
GH	GH3	480	9,316	9,809	10,904	12,640	14,431	15,602	15,769	16,444	17,038	17,514	18,044
GH	GH4	479	9,297	9,789	10,881	12,614	14,401	15,569	15,736	16,410	17,002	17,478	18,007
GR	GR3	68											
GR	GR4	95											
MC	MC1	303											
MC	MC2	301											
MC	MC3	391											
MC	MC4	477											
TC	TC1	383	2,351	2,398	2,446	2,495	2,545	2,596	2,648	5,363	8,239	8,294	12,354
TC	TC2	549	3,371	3,438	3,507	3,577	3,648	3,721	3,796	7,687	11,809	11,888	17,709
TY	TY3	71											
	BR Landfill Phase 2 Savings		1,782	1,697	1,613	1,531	1,451	1,372	1,294	1,215	1,123	156	138
	BR Landfill Phase 3 Savings		0	1,638	1,745	3,767	3,594	3,426	3,261	3,101	2,943	2,789	2,638
	BR Landfill O&M Savings		3,564	3,671	3,781	3,895	4,012	4,132	4,256	4,384	4,515	4,651	
	CR Landfill Capital Savings		4,493	4,170	4,023	1,844	2,496	2,513	2,483	2,455	2,429	1,631	1,345
	CR Landfill O&M Savings		3,121	3,308	3,507	3,717	3,925	4,061	4,305	4,563	4,837	5,128	5,230
	CR6 Stator Rewind Savings		1,621	1,524	1,427	1,329	1,232	1,158	1,106	1,055	1,004	952	901
	GH Landfill Capital Savings		4,388	4,387	6,672	11,397	16,206	18,397	18,341	18,358	17,892	16,784	15,709
	GH Landfill O&M Savings		32,838	34,808	36,897	39,110	41,457	43,944	44,668	47,348	50,189	53,201	56,393
	TC Landfill Capital Savings		0	0	0	0	0	0	0	6,478	13,344	13,344	23,088
	TC Landfill O&M Savings		5,722	5,836	5,953	6,072	6,194	6,318	6,444	6,573	6,704	6,838	6,975

Station	Unit	Capacity	2033	2034	2035	2036	2037	2038	2039	2040
BR	BR1	101	385	360	331	54	46	38	30	23
BR	BR2	167	636	595	547	89	76	63	50	39
BR	BR3	416	1,585	1,482	1,363	222	189	157	124	97
CR	CR4	155	1,778	1,748	1,719	1,692	1,708	1,727	1,747	1,771
CR	CR5	168	1,927	1,895	1,864	1,834	1,851	1,872	1,894	1,919
CR	CR6	240	3,602	2,777	2,662	2,620	2,645	2,674	2,705	2,742
GH	GH1	475	18,548	19,372	20,254	21,186	21,692	2,492	1,854	1,700
GH	GH2	484	18,899	19,739	20,637	21,587	22,103	2,539	1,889	1,733
GH	GH3	480	18,743	19,576	20,467	21,409	21,921	2,518	1,874	1,718
GH	GH4	479	18,704	19,535	20,424	21,364	21,875	2,513	1,870	1,715
GR	GR3	68								
GR	GR4	95								
MC	MC1	303								
MC	MC2	301								
MC	MC3	391								
MC	MC4	477								
TC	TC1	383	12,003	11,666	11,343	11,031	10,731	10,442	10,162	9,886
TC	TC2	549	17,206	16,723	16,259	15,812	15,382	14,967	14,567	14,170
TY	TY3	71								
	BR Landfill Phase 2 Savings		120	101	83	64	46	28	9	0
	BR Landfill Phase 3 Savings		2,487	2,336	2,158	301	265	230	194	159
	BR Landfill O&M Savings									
	CR Landfill Capital Savings		1,123	908	695	485	430	384	338	303
	CR Landfill O&M Savings		5,335	5,441	5,550	5,661	5,774	5,890	6,008	6,128
	CR6 Stator Rewind Savings		850	70	0	0	0	0	0	0
	GH Landfill Capital Savings		15,118	14,860	14,617	14,352	12,126	9,906	7,329	6,705
	GH Landfill O&M Savings		59,776	63,363	67,165	71,194	75,466	155	158	161
	TC Landfill Capital Savings		22,094	21,132	20,199	19,293	18,412	17,554	16,717	15,883
	TC Landfill O&M Savings		7,115	7,257	7,402	7,550	7,701	7,855	8,012	8,172

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
BR	BR1	101	0	0	0	553	743	703	668	635	606	577	548	519	491	462	433	413	403	393
BR	BR2	167	0	0	0	915	1,228	1,163	1,104	1,050	1,002	954	907	859	811	764	716	684	666	649
BR	BR3	416	0	0	0	2,279	3,060	2,897	2,749	2,616	2,496	2,377	2,258	2,140	2,021	1,902	1,784	1,703	1,660	1,617
CR	CR4	155	0	0	0	980	1,582	1,494	1,413	1,339	1,269	1,201	1,132	1,064	996	927	859	806	770	735
CR	CR5	168	0	0	0	1,062	1,715	1,619	1,532	1,451	1,376	1,302	1,227	1,153	1,079	1,005	931	874	835	796
CR	CR6	240	0	0	0	1,518	2,449	2,313	2,188	2,073	1,966	1,860	1,754	1,647	1,541	1,435	1,329	1,249	1,193	1,137
GH	GH1	475	0	0	0	1,462	1,954	1,856	1,767	1,686	1,611	1,540	1,468	1,397	1,325	1,254	1,183	1,111	1,062	1,035
GH	GH2	484	0	0	0	1,489	1,991	1,891	1,800	1,718	1,642	1,569	1,496	1,423	1,350	1,278	1,205	1,132	1,082	1,055
GH	GH3	480	0	0	0	1,477	1,975	1,876	1,786	1,703	1,628	1,556	1,484	1,411	1,339	1,267	1,195	1,123	1,073	1,046
GH	GH4	479	0	0	0	1,474	1,971	1,872	1,782	1,700	1,625	1,553	1,481	1,409	1,337	1,265	1,193	1,121	1,071	1,044
GR	GR3	68	0	0	0	586	837	792	751	713	679	645	611	577	544	510	476	452	438	423
GR	GR4	95	0	0	0	819	1,169	1,106	1,049	996	948	901	854	807	759	712	665	631	611	591
MC	MC1	303	0	0	0	1,215	1,774	1,682	1,598	1,521	1,449	1,380	1,311	1,242	1,173	1,103	1,034	965	915	882
MC	MC2	301	0	0	0	1,207	1,762	1,671	1,588	1,511	1,440	1,371	1,302	1,234	1,165	1,096	1,027	959	908	877
MC	MC3	391	0	0	0	1,568	2,289	2,171	2,063	1,963	1,870	1,781	1,692	1,602	1,513	1,424	1,335	1,245	1,180	1,139
MC	MC4	477	0	0	0	1,913	2,792	2,648	2,516	2,394	2,281	2,172	2,064	1,955	1,846	1,737	1,628	1,519	1,440	1,389
TC	TC1	383	0	0	0	770	1,008	958	912	871	833	797	760	724	688	652	616	579	555	542
TC	TC2	549	0	0	0	1,104	1,445	1,373	1,307	1,248	1,194	1,142	1,090	1,038	986	934	882	830	795	777
TY	TY3	71	0	0	0	586	837	792	751	713	679	645	611	577	544	510	476	452	438	423
			0	0	0	3,747	5,032	4,763	4,521	4,302	4,104	3,908	3,713	3,518	3,323	3,128	2,933	2,800	2,729	2,659
	BRWATER		0	0	0	3,560	5,746	5,427	5,134	4,863	4,611	4,362	4,113	3,865	3,616	3,367	3,118	2,929	2,798	2,668
	CRWATER		0	0	0	5,902	8,617	8,173	7,765	7,389	7,040	6,704	6,368	6,032	5,696	5,361	5,025	4,689	4,443	4,287
	MCWATER		0	0	0	1,874	2,453	2,331	2,220	2,119	2,026	1,938	1,850	1,762	1,674	1,586	1,498	1,410	1,350	1,319
	TCWATER		0	0	0	5,902	7,892	7,495	7,135	6,806	6,505	6,217	5,928	5,640	5,352	5,063	4,775	4,487	4,288	4,180
	GRWATER		0	0	0	1,405	2,006	1,898	1,799	1,709	1,627	1,546	1,465	1,384	1,303	1,222	1,141	1,083	1,049	1,015

Station	Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
BR	BR1	101	382	372	361	351	340	330	320	309	299	288	278	267	257	247	236	226	215	205
BR	BR2	167	632	615	597	580	563	546	528	511	494	477	459	442	425	408	390	373	356	339
BR	BR3	416	1,574	1,531	1,488	1,445	1,402	1,359	1,316	1,273	1,230	1,187	1,144	1,101	1,058	1,016	973	930	887	844
CR	CR4	155	699	663	627	591	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5	168	757	718	679	640	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6	240	1,082	1,026	970	915	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GH	GH1	475	1,008	982	955	928	901	875	848	821	794	767	741	714	687	660	634	607	580	553
GH	GH2	484	1,028	1,000	973	946	918	891	864	837	809	782	755	727	700	673	646	618	591	564
GH	GH3	480	1,019	992	965	938	911	884	857	830	803	776	748	721	694	667	640	613	586	559
GH	GH4	479	1,017	990	963	936	909	882	855	828	801	774	747	720	693	666	639	612	585	558
GR	GR3	68	409	395	380	366	352	337	323	309	294	280	266	251	237	0	0	0	0	0
GR	GR4	95	571	551	531	511	491	471	451	431	411	391	371	351	331	0	0	0	0	0
MC	MC1	303	850	818	786	754	722	690	658	626	594	562	530	0	0	0	0	0	0	0
MC	MC2	301	845	813	781	749	717	686	654	622	590	558	526	0	0	0	0	0	0	0
MC	MC3	391	1,097	1,056	1,015	973	932	891	849	808	766	725	684	0	0	0	0	0	0	0
MC	MC4	477	1,339	1,288	1,238	1,187	1,137	1,086	1,036	986	935	885	834	0	0	0	0	0	0	0
TC	TC1	383	529	517	504	491	479	466	453	441	428	415	403	390	377	364	352	339	326	314
TC	TC2	549	759	741	723	704	686	668	650	632	613	595	577	559	541	522	504	486	468	450
TY	TY3	71	409	395	380	366	352	337	323	309	294	280	266	251	237	0	0	0	0	0
			2,588	2,517	2,447	2,376	2,305	2,235	2,164	2,094	2,023	1,952	1,882	1,811	1,740	1,670	1,599	1,529	1,458	1,387
	BRWATER		2,537	2,407	2,277	2,146	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	CRWATER		4,131	3,976	3,820	3,664	3,508	3,353	3,197	3,041	2,886	2,730	2,574	0	0	0	0	0	0	0
	MCWATER		1,288	1,258	1,227	1,196	1,165	1,134	1,103	1,072	1,041	1,010	979	949	918	887	856	825	794	763
	TCWATER		4,072	3,964	3,856	3,748	3,640	3,531	3,423	3,315	3,207	3,099	2,991	2,883	2,774	2,666	2,558	2,450	2,342	2,234
	GRWATER		980	946	912	877	843	809	774	740	706	671	637	603	568	0	0	0	0	0

Station	Unit	Capacity	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
BR	BR1	101	194	184	174	0	0	0	0	0	0	0	0	0	0
BR	BR2	167	321	304	287	0	0	0	0	0	0	0	0	0	0
BR	BR3	416	801	758	715	0	0	0	0	0	0	0	0	0	0
CR	CR4	155	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5	168	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6	240	0	0	0	0	0	0	0	0	0	0	0	0	0
GH	GH1	475	526	500	473	446	0	0	0	0	0	0	0	0	0
GH	GH2	484	536	509	482	454	0	0	0	0	0	0	0	0	0
GH	GH3	480	532	505	478	451	0	0	0	0	0	0	0	0	0
GH	GH4	479	531	504	477	450	0	0	0	0	0	0	0	0	0
GR	GR3	68	0	0	0	0	0	0	0	0	0	0	0	0	0
GR	GR4	95	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC1	303	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC2	301	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC3	391	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC4	477	0	0	0	0	0	0	0	0	0	0	0	0	0
TC	TC1	383	301	288	276	263	250	237	225	212	0	0	0	0	0
TC	TC2	549	431	413	395	377	359	340	322	304	0	0	0	0	0
TY	TY3	71	0	0	0	0	0	0	0	0	0	0	0	0	0
BRWATER			1,317	1,246	1,175	0	0	0	0	0	0	0	0	0	0
CRWATER			0	0	0	0	0	0	0	0	0	0	0	0	0
MCWATER			0	0	0	0	0	0	0	0	0	0	0	0	0
TCWATER			732	701	670	640	609	578	547	516	0	0	0	0	0
GHWATER			2,125	2,017	1,909	1,801	0	0	0	0	0	0	0	0	0
GRWATER			0	0	0	0	0	0	0	0	0	0	0	0	0

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Retire:																	
No.	TY	TY	TY	TY	TY	TY	TY	TY	TY	TY	TY	TY	TY	TY	TY	TY	TY
Retirements	GR3	GR3	GR3	GR3	GR3	GR3	GR3	GR3	GR3	GR3	GR3	GR3	GR3	GR3	GR3	GR3	GR3
2010																	
2011																	
2012																	
2013																	
2014																	
2015																	
2016	3x1C(1)	3x1C(1)	3x1C(1)	2x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(2)	3x1C(1)	3x1C(2)	3x1C(1)	3x1C(1)	3x1C(2)	3x1C(2)	3x1C(2)	3x1C(2)
2017	3x1C(1)																
2018																	
2019																	
2020																	
2021																	
2022																	
2023																	
2024	3x1C(1)	3x1C(1)															
2025																	
2026																	
2027																	
2028																	
2029																	
2030	3x1C(1)	3x1C(1)															
2031																	
2032																	
2033																	
2034																	
2035																	
2036	3x1C(1)	3x1C(1)	2x1C(1)														
2037																	
2038																	
2039																	
2040																	

New_Unit_Capital_Production_Cost

No Retirements

Table with columns: Retire, \$M, NEVRA, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034

Production Cost

No Retirements

Table with columns: Retire, \$M, NEVRA, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034

Production Cost Delta

No Retirements

Table with columns: Retire, \$M, NEVRA, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034

New_Unit_Capital

No Retirements

Table with columns: Retire, \$M, NEVRA, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034

Production Cost Delta

No Retirements

Table with columns: Retire, \$M, NEVRA, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034

Discount Rate: 6.71%

AESC Gas Prices (Nominal \$) and Low CO2 Prices

Table with columns for Year (2011-2032), SM, and various gas price scenarios (e.g., Retire TY GR CR and GH2, Retire TY GR CR and MCI-2, etc.).

Discount Rate: 6.71%

AESC Gas Prices (Nominal \$) and Low CO2 Prices

Table with columns for Year (2011-2033) and rows for various gas prices and requirements. Includes sections for 'No Retirements', 'Total Revenue Requirements', and 'No Retirements'.

Discount Rate: 6.71%

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Retire TY GR3 CR4 and CR6	-2,432	-14,184	-46,667	-94,816	-129,689	-154,638	-201,667	-233,908	-207,582	-191,793	-194,754	-247,726	-350,254	-396,149	-356,150	-288,946	-268,427	-310,809	-411,371	-514,007	-541,527	-483,562	-408,409
Retire TY GR3 CR6 CR8 and BR1-2	-489	-6,995	-21,601	-55,609	-85,982	-117,752	-151,887	-188,124	-168,700	-168,700	-226,559	-313,343	-300,484	-272,332	-325,056	-415,260	-459,716	-493,208	-485,106	-409,364	-415,141	-501,986	-567,289
Retire TY GR3 and CR	-1,326	-10,990	-36,502	-86,729	-135,089	-162,741	-215,887	-266,559	-243,243	-243,243	-340,756	-469,377	-469,377	-324,635	-381,856	-469,377	-510,279	-539,626	-529,090	-469,387	-477,557	-570,032	-640,105
Retire TY GR3 CR and GH3	-114	-680	-2,042	-6,050	-10,275	-14,121	-18,571	-23,521	-28,971	-34,921	-41,371	-48,321	-55,771	-63,721	-72,171	-81,121	-90,571	-100,521	-110,971	-121,921	-133,371	-145,321	-157,771
Retire TY GR3 CR and GH1	-187	-5,080	-17,078	-43,890	-78,193	-113,521	-155,669	-206,303	-266,303	-335,303	-413,303	-500,303	-597,303	-704,303	-831,303	-979,303	-1,148,303	-1,338,303	-1,549,303	-1,782,303	-2,037,303	-2,314,303	-2,613,303
Retire TY GR and CR	0	-1,885	-7,795	-22,675	-47,929	-73,571	-99,603	-126,031	-152,754	-179,771	-207,089	-234,702	-262,611	-290,815	-319,415	-348,415	-377,815	-407,615	-437,815	-468,415	-499,415	-530,815	-562,615
Retire TY GR and MCI	-862	-13,372	-50,094	-102,223	-159,760	-222,702	-291,049	-364,803	-443,057	-525,811	-618,065	-720,819	-834,073	-957,827	-1,092,081	-1,236,835	-1,392,089	-1,557,843	-1,734,097	-1,920,851	-2,119,105	-2,330,859	-2,556,113
Retire TY GR CR and MCI	0	0	1,387	25,381	69,912	120,659	100,210	139,840	167,311	198,722	234,073	273,374	316,625	363,826	415,077	470,278	529,529	592,830	660,181	732,582	809,933	892,234	979,485
Retire TY GR CR and TCI	-122	-649	725	31,172	86,281	170,926	168,787	174,256	174,256	174,256	174,256	174,256	174,256	174,256	174,256	174,256	174,256	174,256	174,256	174,256	174,256	174,256	174,256
Retire TY GR CR and GH4	0	-1,380	-5,281	-11,598	-16,273	-21,333	-26,783	-32,633	-38,883	-45,533	-52,583	-60,033	-67,883	-76,133	-84,783	-93,933	-103,583	-113,733	-124,383	-135,533	-147,183	-159,433	-172,283
Retire TY GR CR and MCI	-11	-3,657	-8,324	-11,720	-15,201	-18,766	-23,416	-28,166	-33,016	-37,966	-43,016	-48,166	-53,416	-58,866	-64,516	-70,366	-76,416	-82,666	-89,116	-95,766	-102,616	-109,666	-116,916
Retire TY GR CR and GH2	0	-7,206	-26,926	-62,176	-102,441	-147,711	-197,981	-253,251	-313,521	-378,791	-449,061	-524,331	-609,601	-704,871	-810,141	-926,411	-1,053,681	-1,192,951	-1,345,221	-1,511,491	-1,691,761	-1,886,031	-2,095,301
Retire TY GR CR and MCI-2	-489	-14,202	-49,527	-87,570	-133,482	-180,404	-238,326	-307,248	-387,170	-478,092	-580,014	-693,936	-820,858	-970,780	-1,134,702	-1,314,624	-1,511,546	-1,726,468	-1,959,390	-2,312,312	-2,785,234	-3,388,156	-4,121,078
Retire TY GR CR BR1-2 and MCI-2																							

Discount Rate:

2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056 2057 2058

New Unit Capital and Production Cost

Table with 29 columns (years 2034-2058) and multiple rows of data for various unit types like 'No Retirements', 'Retire TY', 'Retire TY GR', etc.

Production Cost

Table with 29 columns (years 2034-2058) and multiple rows of data for various unit types like 'No Retirements', 'Retire TY', 'Retire TY GR', etc.

Production Cost Delta

Table with 29 columns (years 2034-2058) and multiple rows of data for various unit types like 'No Retirements', 'Retire TY', 'Retire TY GR', etc.

New Unit Capital

Table with 29 columns (years 2034-2058) and multiple rows of data for various unit types like 'No Retirements', 'Retire TY', 'Retire TY GR', etc.

Discount Rate:

Retiree TY GR CR and GH2

Retiree TY GR CR and MCI-2

Retiree TY GR CR BR1-2 and MCI-2

Retiree TY GR CR BR1-2 and MCI-2

New Unit/Cumulative Delta

No Retirements

Retiree TY

Retiree TY and GR3

Retiree TY GR3 and BR3

Retiree TY GR3 and BR4

Retiree TY GR3 CR4 and CR6

Retiree TY GR3 CR4 and BR1-2

Retiree TY GR3 CR4 and CR6

Retiree TY GR3 CR4 and GH3

Retiree TY GR3 CR4 and GH1

Retiree TY GR and MCI

Retiree TY GR CR and TCI

Retiree TY GR CR and GH4

Retiree TY GR CR and MCI

Retiree TY GR CR and GH2

Retiree TY GR CR and MCI-2

Retiree TY GR CR BR1-2 and MCI-2

Retiree TY GR CR BR1-2 and MCI-2

New Controls/Cumulative Delta

No Retirements

Retiree TY

Retiree TY and GR3

Retiree TY GR3 and BR3

Retiree TY GR3 and BR4

Retiree TY GR3 CR4 and CR6

Retiree TY GR3 CR4 and BR1-2

Retiree TY GR3 CR4 and CR6

Retiree TY GR3 CR4 and GH3

Retiree TY GR3 CR4 and GH1

Retiree TY GR and MCI

Retiree TY GR CR and TCI

Retiree TY GR CR and GH4

Retiree TY GR CR and MCI

Retiree TY GR CR and GH2

Retiree TY GR CR and MCI-2

Retiree TY GR CR BR1-2 and MCI-2

Retiree TY GR CR BR1-2 and MCI-2

New Controls/Cumulative Delta

No Retirements

Retiree TY

Retiree TY and GR3

Retiree TY GR3 and BR3

Retiree TY GR3 and BR4

Retiree TY GR3 CR4 and CR6

Retiree TY GR3 CR4 and BR1-2

Retiree TY GR3 CR4 and CR6

Retiree TY GR3 CR4 and GH3

Retiree TY GR3 CR4 and GH1

Retiree TY GR and MCI

Retiree TY GR CR and TCI

Retiree TY GR CR and GH4

Retiree TY GR CR and MCI

Retiree TY GR CR and GH2

Retiree TY GR CR and MCI-2

Retiree TY GR CR BR1-2 and MCI-2

Retiree TY GR CR BR1-2 and MCI-2

MTP/Cumulative Delta

No Retirements

Retiree TY

Retiree TY and GR3

Retiree TY GR3 and BR3

Retiree TY GR3 and BR4

Retiree TY GR3 CR4 and CR6

Retiree TY GR3 CR4 and BR1-2

Retiree TY GR3 CR4 and CR6

Retiree TY GR3 CR4 and GH3

Retiree TY GR3 CR4 and GH1

Retiree TY GR and MCI

Retiree TY GR CR and TCI

Retiree TY GR CR and GH4

Retiree TY GR CR and MCI

Retiree TY GR CR and GH2

Retiree TY GR CR and MCI-2

Retiree TY GR CR BR1-2 and MCI-2

Retiree TY GR CR BR1-2 and MCI-2

2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056 2057 2058

Table with 35 columns representing years from 2024 to 2058. Rows are grouped by category: Retiree TY GR CR and GH2, Retiree TY GR CR and MCI-2, Retiree TY GR CR BR1-2 and MCI-2, New Unit/Cumulative Delta, No Retirements, Retiree TY, Retiree TY and GR3, Retiree TY GR3 and BR3, Retiree TY GR3 and BR4, Retiree TY GR3 CR4 and CR6, Retiree TY GR3 CR4 and BR1-2, Retiree TY GR3 CR4 and CR6, Retiree TY GR3 CR4 and GH3, Retiree TY GR3 CR4 and GH1, Retiree TY GR and MCI, Retiree TY GR CR and TCI, Retiree TY GR CR and GH4, Retiree TY GR CR and MCI, Retiree TY GR CR and GH2, Retiree TY GR CR and MCI-2, Retiree TY GR CR BR1-2 and MCI-2, Retiree TY GR CR BR1-2 and MCI-2, New Controls/Cumulative Delta, No Retirements, Retiree TY, Retiree TY and GR3, Retiree TY GR3 and BR3, Retiree TY GR3 and BR4, Retiree TY GR3 CR4 and CR6, Retiree TY GR3 CR4 and BR1-2, Retiree TY GR3 CR4 and CR6, Retiree TY GR3 CR4 and GH3, Retiree TY GR3 CR4 and GH1, Retiree TY GR and MCI, Retiree TY GR CR and TCI, Retiree TY GR CR and GH4, Retiree TY GR CR and MCI, Retiree TY GR CR and GH2, Retiree TY GR CR and MCI-2, Retiree TY GR CR BR1-2 and MCI-2, Retiree TY GR CR BR1-2 and MCI-2, MTP/Cumulative Delta, No Retirements, Retiree TY, Retiree TY and GR3, Retiree TY GR3 and BR3, Retiree TY GR3 and BR4, Retiree TY GR3 CR4 and CR6, Retiree TY GR3 CR4 and BR1-2, Retiree TY GR3 CR4 and CR6, Retiree TY GR3 CR4 and GH3, Retiree TY GR3 CR4 and GH1, Retiree TY GR and MCI, Retiree TY GR CR and TCI, Retiree TY GR CR and GH4, Retiree TY GR CR and MCI, Retiree TY GR CR and GH2, Retiree TY GR CR and MCI-2, Retiree TY GR CR BR1-2 and MCI-2, Retiree TY GR CR BR1-2 and MCI-2.

Discount Rate:

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
Retire TY GR3 CR4 and CR6	-345,934	-363,140	-457,002	-534,959	-559,710	-511,304	-465,079															
Retire TY GR3 CR4 CR5 and BR1-2	-118,872	-85,981	31,663	130,651	175,890	153,586	125,960															
Retire TY GR3 and CR	-559,838	-473,773	-391,403	-317,106	-312,484	-372,816	-430,244															
Retire TY GR3 CR and GH3	632,830	548,197	467,709	394,666	406,468	493,014	571,792															
Retire TY GR3 CR and GH1	356,539	275,030	204,750	145,069	195,776	331,148	466,007															
Retire TY GR and CR	-250,444	-326,708	-319,170	-318,959	-305,368	-294,457	-289,665															
Retire TY GR CR and MC1	720,780	720,232	649,481	648,689	694,528	744,009	812,495															
Retire TY GR CR and TC1	1,167,847	1,183,847	1,130,508	1,083,525	1,142,703	1,276,911	1,419,124															
Retire TY GR CR and GH4	1,124,365	1,122,172	1,044,838	1,043,174	1,126,307	1,194,985	1,271,656															
Retire TY GR CR and MC3	753,152	753,206	694,929	637,135	670,704	781,140	918,795															
Retire TY GR CR and GH2	1,207,248	1,214,459	1,157,517	1,161,873	1,237,041	1,351,747	1,407,782															
Retire TY GR CR and MC2-2	642,122	671,094	631,753	620,736	666,535	793,812	929,887															
Retire TY GR CR BR1-2 and MC1-2	831,867	834,490	849,302	967,784	1,070,356	1,184,655	1,308,494															

2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078

New Unit Capital and Production Cost

No Retirements
 Retire TY
 Retire TY and GR3
 Retire TY GR3 and BR3
 Retire TY GR3 and CR4
 Retire TY GR3 CR4 and CR6
 Retire TY GR3 CR4 CR6 and BR1-2
 Retire TY GR3 and CR
 Retire TY GR3 CR and GR3
 Retire TY GR3 CR and GH1
 Retire TY GR CR and MC4
 Retire TY GR CR and TC1
 Retire TY GR CR and GH4
 Retire TY GR CR and MC3
 Retire TY GR CR and GH2
 Retire TY GR CR and MCL-2
 Retire TY GR CR BR1-2 and MCL-2

Production Cost
 No Retirements
 Retire TY
 Retire TY and GR3
 Retire TY GR3 and BR3
 Retire TY GR3 and CR4
 Retire TY GR3 CR4 and CR6
 Retire TY GR3 CR4 CR6 and BR1-2
 Retire TY GR3 and CR
 Retire TY GR3 CR and GR3
 Retire TY GR3 CR and GH1
 Retire TY GR CR and CR
 Retire TY GR CR and MC4
 Retire TY GR CR and TC1
 Retire TY GR CR and GH4
 Retire TY GR CR and MC3
 Retire TY GR CR and GH2
 Retire TY GR CR and MCL-2
 Retire TY GR CR BR1-2 and MCL-2

Production Cost Delta

No Retirements
 Retire TY
 Retire TY and GR3
 Retire TY GR3 and BR3
 Retire TY GR3 and CR4
 Retire TY GR3 CR4 and CR6
 Retire TY GR3 CR4 CR6 and BR1-2
 Retire TY GR3 and CR
 Retire TY GR3 CR and GR3
 Retire TY GR3 CR and GH1
 Retire TY GR CR and CR
 Retire TY GR CR and MC4
 Retire TY GR CR and TC1
 Retire TY GR CR and GH4
 Retire TY GR CR and MC3
 Retire TY GR CR and GH2
 Retire TY GR CR and MCL-2
 Retire TY GR CR BR1-2 and MCL-2

New Unit Capital

No Retirements
 Retire TY
 Retire TY and GR3
 Retire TY GR3 and BR3
 Retire TY GR3 and CR4
 Retire TY GR3 CR4 and CR6
 Retire TY GR3 CR4 CR6 and BR1-2
 Retire TY GR3 and CR
 Retire TY GR3 CR and GR3
 Retire TY GR3 CR and GH1
 Retire TY GR CR and CR
 Retire TY GR CR and MC4
 Retire TY GR CR and TC1
 Retire TY GR CR and GH4
 Retire TY GR CR and MC3

Discount Rate:

2052 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078

Retire TY GR CR and GR2

Retire TY GR CR and MCI-2

Retire TY GR CR BR1-2 and MCI-2

New Unit Capital Delta

No Retirements

Retire TY

Retire TY and GR3

Retire TY GR3 and BR3

Retire TY GR3 and CR4

Retire TY GR3 CR4 and GR6

Retire TY GR3 CR4 CR6 and BR1-2

Retire TY GR3 and CR

Retire TY GR3 CR and GH3

Retire TY GR3 CR and GH1

Retire TY GR CR and MC4

Retire TY GR CR and TC1

Retire TY GR CR and GH4

Retire TY GR CR and MC3

Retire TY GR CR and GH2

Retire TY GR CR and MCI-2

Retire TY GR CR BR1-2 and MCI-2

New Controls Capital

No Retirements

Retire TY

Retire TY and GR3

Retire TY GR3 and BR3

Retire TY GR3 and CR4

Retire TY GR3 CR4 and GR6

Retire TY GR3 CR4 CR6 and BR1-2

Retire TY GR3 and CR

Retire TY GR3 CR and GH3

Retire TY GR3 CR and GH1

Retire TY GR and CR

Retire TY GR CR and MC4

Retire TY GR CR and TC1

Retire TY GR CR and GH4

Retire TY GR CR and MC3

Retire TY GR CR and GH2

Retire TY GR CR and MCI-2

Retire TY GR CR BR1-2 and MCI-2

New Controls Capital Delta

No Retirements

Retire TY

Retire TY and GR3

Retire TY GR3 and BR3

Retire TY GR3 and CR4

Retire TY GR3 CR4 and GR6

Retire TY GR3 CR4 CR6 and BR1-2

Retire TY GR3 and CR

Retire TY GR3 CR and GH3

Retire TY GR3 CR and GH1

Retire TY GR and CR

Retire TY GR CR and MC4

Retire TY GR CR and TC1

Retire TY GR CR and GH4

Retire TY GR CR and MC3

Retire TY GR CR and GH2

Retire TY GR CR and MCI-2

Retire TY GR CR BR1-2 and MCI-2

MTP Capital

No Retirements

Retire TY

Retire TY and GR3

Retire TY GR3 and BR3

Retire TY GR3 and CR4

Retire TY GR3 CR4 and GR6

Retire TY GR3 CR4 CR6 and BR1-2

Retire TY GR3 and CR

Retire TY GR3 CR and GH3

Retire TY GR3 CR and GH1

Retire TY GR and CR

Retire TY GR CR and MC4

Retire TY GR CR and TC1

Discount Rate:

2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078

Retire TY GR CR and GH4
Retire TY GR CR and MC3
Retire TY GR CR and GH2
Retire TY GR CR and MCL-2
Retire TY GR CR BR1-2 and MCL-2

MIP Capital Delta

No Retirements
Retire TY
Retire TY and GR3
Retire TY GR3 and BR3
Retire TY GR3 and CR4
Retire TY GR3 CR4 CR6 and BR1-2
Retire TY GR3 and CR
Retire TY GR3 CR and GH3
Retire TY GR3 CR and GH1
Retire TY GR and CR
Retire TY GR CR and MC4
Retire TY GR CR and TC1
Retire TY GR CR and GH4
Retire TY GR CR and MC3
Retire TY GR CR and GH2
Retire TY GR CR and MCL-2
Retire TY GR CR BR1-2 and MCL-2

Landfill Capital

No Retirements
Retire TY
Retire TY and GR3
Retire TY GR3 and BR3
Retire TY GR3 and CR4
Retire TY GR3 CR4 CR6 and BR1-2
Retire TY GR3 CR6 and CR
Retire TY GR3 CR and GH3
Retire TY GR3 CR and GH1
Retire TY GR and CR
Retire TY GR CR and MC4
Retire TY GR CR and TC1
Retire TY GR CR and GH4
Retire TY GR CR and MC3
Retire TY GR CR and GH2
Retire TY GR CR and MCL-2
Retire TY GR CR BR1-2 and MCL-2

Landfill Capital Delta

No Retirements
Retire TY
Retire TY and GR3
Retire TY GR3 and BR3
Retire TY GR3 and CR4
Retire TY GR3 CR4 CR6 and BR1-2
Retire TY GR3 and CR
Retire TY GR3 CR and GH3
Retire TY GR3 CR and GH1
Retire TY GR and CR
Retire TY GR CR and MC4
Retire TY GR CR and TC1
Retire TY GR CR and GH4
Retire TY GR CR and MC3
Retire TY GR CR and GH2
Retire TY GR CR and MCL-2
Retire TY GR CR BR1-2 and MCL-2

Water Capital

No Retirements
Retire TY
Retire TY and GR3
Retire TY GR3 and BR3
Retire TY GR3 and CR4
Retire TY GR3 CR4 CR6 and BR1-2
Retire TY GR3 and CR
Retire TY GR3 CR and GH3
Retire TY GR3 CR and GH1
Retire TY GR and CR

Discount Rate:

2052 2053 2054 2055 2056 2057 2058 2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078

Retire TY GR CR and MC4
Retire TY GR CR and TC1
Retire TY GR CR and GH4
Retire TY GR CR and MC3
Retire TY GR CR and GH2
Retire TY GR CR and MC1-2
Retire TY GR CR BR1-2 and MC1-2

Water Capital Debt

No Retirements
Retire TY
Retire TY and GR3
Retire TY GR3 and BR3
Retire TY GR3 and CR4
Retire TY GR3 CR4 and CR6
Retire TY GR3 CR4 CR6 and BR1-2
Retire TY GR3 and CR
Retire TY GR3 CR and GH3
Retire TY GR3 CR and GH1
Retire TY GR and CR
Retire TY GR CR and MC4
Retire TY GR CR and TC1
Retire TY GR CR and GH4
Retire TY GR CR and MC3
Retire TY GR CR and GH2
Retire TY GR CR and MC1-2
Retire TY GR CR BR1-2 and MC1-2

Total Capital

No Retirements
Retire TY
Retire TY and GR3
Retire TY GR3 and BR3
Retire TY GR3 and CR4
Retire TY GR3 CR4 and CR6
Retire TY GR3 CR4 CR6 and BR1-2
Retire TY GR3 and CR
Retire TY GR3 CR and GH3
Retire TY GR3 CR and GH1
Retire TY GR and CR
Retire TY GR CR and MC4
Retire TY GR CR and TC1
Retire TY GR CR and GH4
Retire TY GR CR and MC3
Retire TY GR CR and GH2
Retire TY GR CR and MC1-2
Retire TY GR CR BR1-2 and MC1-2

Total Capital Debt

No Retirements
Retire TY
Retire TY and GR3
Retire TY GR3 and BR3
Retire TY GR3 and CR4
Retire TY GR3 CR4 and CR6
Retire TY GR3 CR4 CR6 and BR1-2
Retire TY GR3 CR and GH3
Retire TY GR3 CR and GH1
Retire TY GR and CR
Retire TY GR CR and MC4
Retire TY GR CR and TC1
Retire TY GR CR and GH4
Retire TY GR CR and MC3
Retire TY GR CR and GH2
Retire TY GR CR and MC1-2
Retire TY GR CR BR1-2 and MC1-2

Retirement O&M Costs

No Retirements
Retire TY
Retire TY and GR3
Retire TY GR3 and BR3
Retire TY GR3 and CR4
Retire TY GR3 CR4 and CR6
Retire TY GR3 CR4 CR6 and BR1-2
Retire TY GR3 and CR
Retire TY GR3 CR and GH3

Discount Rate:

2052 2050 2051 2052 2053 2054 2055 2056 2057 2058 2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078

Retire TY GR3 CR and GH1
 Retire TY GR and CR
 Retire TY GR CR and MC4
 Retire TY GR CR and TC1
 Retire TY GR CR and GH4
 Retire TY GR CR and MC3
 Retire TY GR CR and GH2
 Retire TY GR CR and MC1-2
 Retire TY GR CR BR1-2 and MC1-2

Retirement Cost Delta

No Retirements
 Retire TY
 Retire TY and GR3
 Retire TY GR3 and BR3
 Retire TY GR3 and CR4
 Retire TY GR3 CR4 and CR6
 Retire TY GR3 CR4 CR6 and BR1-2
 Retire TY GR3 and CR
 Retire TY GR3 CR and GH3
 Retire TY GR3 CR and GH1
 Retire TY GR and CR
 Retire TY GR CR and MC4
 Retire TY GR CR and TC1
 Retire TY GR CR and GH4
 Retire TY GR CR and MC3
 Retire TY GR CR and GH2
 Retire TY GR CR and MC1-2
 Retire TY GR CR BR1-2 and MC1-2

Existing Unit Fixed O&M

No Retirements
 Retire TY
 Retire TY and GR3
 Retire TY GR3 and BR3
 Retire TY GR3 and CR4
 Retire TY GR3 CR4 and CR6
 Retire TY GR3 CR4 CR6 and BR1-2
 Retire TY GR3 and CR
 Retire TY GR3 CR and GH3
 Retire TY GR3 CR and GH1
 Retire TY GR and CR
 Retire TY GR CR and MC4
 Retire TY GR CR and TC1
 Retire TY GR CR and GH4
 Retire TY GR CR and MC3
 Retire TY GR CR and GH2
 Retire TY GR CR and MC1-2
 Retire TY GR CR BR1-2 and MC1-2

Existing Unit Fixed O&M Data

No Retirements
 Retire TY
 Retire TY and GR3
 Retire TY GR3 and BR3
 Retire TY GR3 and CR4
 Retire TY GR3 CR4 and CR6
 Retire TY GR3 CR4 CR6 and BR1-2
 Retire TY GR3 and CR
 Retire TY GR3 CR and GH3
 Retire TY GR3 CR and GH1
 Retire TY GR and CR
 Retire TY GR CR and MC4
 Retire TY GR CR and TC1
 Retire TY GR CR and GH4
 Retire TY GR CR and MC3
 Retire TY GR CR and GH2
 Retire TY GR CR and MC1-2
 Retire TY GR CR BR1-2 and MC1-2

New Controls Fixed O&M

No Retirements
 Retire TY
 Retire TY and GR3
 Retire TY GR3 and BR3
 Retire TY GR3 and CR4
 Retire TY GR3 CR4 and CR6
 Retire TY GR3 CR4 CR6 and BR1-2

Discount Rate:

2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078

Retire TY GR3 and CR
Retire TY GR3 CR and GH3
Retire TY GR3 CR and GH1
Retire TY GR and CR
Retire TY GR CR and MC4
Retire TY GR CR and TC1
Retire TY GR CR and GH4
Retire TY GR CR and MC3
Retire TY GR CR and GH2
Retire TY GR CR and MCL-2
Retire TY GR CR BR1-2 and MCL-2

New Controls Fixed Cost Debit

No Retirements
Retire TY
Retire TY and GR3
Retire TY GR3 and BR3
Retire TY GR3 and CR4
Retire TY GR3 CR and CR6
Retire TY GR3 CR and BR1-2
Retire TY GR3 CR and CR
Retire TY GR3 CR and GH1
Retire TY GR and CR
Retire TY GR CR and MC4
Retire TY GR CR and TC1
Retire TY GR CR and GH4
Retire TY GR CR and MC3
Retire TY GR CR and GH2
Retire TY GR CR and MCL-2
Retire TY GR CR BR1-2 and MCL-2

Total Revenue Requirements

Table with 20 columns (years 2059-2078) and multiple rows of values (0, 0.00, 0.00, etc.) representing revenue requirements for various retirement scenarios.

Total Revenue Requirements Delta

Table with 20 columns (years 2059-2078) and multiple rows of values (0, 0.00, 0.00, etc.) representing the delta in revenue requirements for various retirement scenarios.

Total Revenue Requirements Cumulative D

Table with 20 columns (years 2059-2078) and multiple rows of values (0, 0.00, 0.00, etc.) representing the cumulative delta in revenue requirements for various retirement scenarios.

Discount Rates:

	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078
Retire TY GR3 CR4 and CR6																				
Retire TY GR3 CR4 CR6 and BR1-2																				
Retire TY GR3 and CR																				
Retire TY GR3 CR and GH3																				
Retire TY GR and CR																				
Retire TY GR CR and MCI																				
Retire TY GR CR and TCI																				
Retire TY GR CR and GH4																				
Retire TY GR CR and MCI3																				
Retire TY GR CR and GH2																				
Retire TY GR CR and MCI-2																				
Retire TY GR CR BR1-2 and MCI-2																				

Station	Unit	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
BR	BR1FFP 0	0	238	3,127	7,278	12,105	12,775	12,123	11,534	10,999	10,472	9,946	9,420	8,894	8,368	7,842	7,483	7,291	7,099
BR	BR1SAM 0	0	0	0	231	521	550	522	497	474	452	429	407	384	362	339	324	315	307
BR	BR2FFP 0	0	252	3,379	7,865	13,414	13,865	13,156	12,514	11,931	11,357	10,783	10,210	9,636	9,062	8,488	8,095	7,881	7,668
BR	BR2SAM 0	0	0	0	231	534	553	525	499	476	453	431	408	385	362	340	324	315	307
BR	BR3FFP 0	0	0	204	2,854	7,595	13,437	14,120	13,404	12,757	12,171	11,595	11,019	10,443	9,867	9,290	8,714	8,325	8,122
GH	GH1FFP 0	64	4,332	10,157	17,736	19,154	18,156	17,246	16,412	15,591	14,769	13,948	13,127	12,305	11,484	10,897	10,545	10,193	10,193
GH	GH1SAM 0	0	122	562	1,006	1,964	2,121	2,010	1,909	1,817	1,726	1,635	1,544	1,453	1,271	1,206	1,167	1,128	1,128
GH	GH2FFP 0	0	0	2,787	7,280	15,016	18,298	17,569	16,777	16,056	15,369	14,684	13,998	13,313	12,627	11,942	11,257	10,791	10,556
GH	GH2SAM 0	0	11	724	984	935	891	851	814	779	744	709	674	639	605	570	546	535	523
GH	GH3FFP 0	0	0	0	3,571	8,804	18,270	21,813	20,853	19,901	19,030	18,199	17,369	16,538	15,708	14,877	14,047	13,216	12,647
GH	GH3SAM 0	0	115	565	1,578	1,935	1,853	1,769	1,691	1,618	1,544	1,471	1,397	1,324	1,177	1,126	1,099	1,073	1,073
GH	GH4FFP 0	0	0	0	2,843	7,668	14,952	21,319	20,238	19,257	18,361	17,541	16,757	15,973	15,188	14,404	13,619	12,835	12,050
GH	GH4SAM 0	0	122	527	974	1,948	1,967	1,872	1,786	1,707	1,631	1,555	1,479	1,403	1,328	1,252	1,176	1,124	1,096
MC	MC1FFD 0	0	0	2,360	7,268	12,372	21,934	23,856	22,601	21,453	20,399	19,360	18,320	17,281	16,242	15,203	14,164	13,412	12,949
MC	MC1FFP 0	0	0	1,271	5,238	9,364	17,796	19,361	18,343	17,414	16,559	15,717	14,875	14,032	13,190	12,348	11,506	10,896	10,520
MC	MC1SAM 0	0	0	0	42	560	1,131	1,232	1,168	1,109	1,055	1,001	948	895	841	788	735	696	672
MC	MC2FFD 0	0	0	2,361	7,270	12,377	23,214	24,770	23,450	22,238	21,119	20,015	18,911	17,806	16,702	15,598	14,494	13,677	13,148
MC	MC2FFP 0	0	0	1,215	5,051	9,134	18,426	19,666	18,620	17,659	16,772	15,896	15,021	14,145	13,270	12,395	11,519	10,871	10,450
MC	MC2SAM 0	0	0	0	42	560	1,197	1,279	1,211	1,149	1,092	1,035	978	922	865	808	752	710	682
MC	MC3FFD 0	0	0	646	3,668	6,975	9,472	9,135	8,699	8,295	7,908	7,522	7,135	6,748	6,362	5,975	5,589	5,303	5,124
MC	MC3FFP 0	0	0	0	0	39	175	207	175	187	179	170	162	154	145	137	128	121	115
MC	MC3SAM 0	0	0	0	3,730	8,326	13,896	18,276	17,601	16,757	15,977	15,228	14,480	13,732	12,985	12,237	11,489	10,742	10,190
MC	MC4FFD 0	0	0	734	1,992	2,100	1,997	1,901	1,813	1,728	1,642	1,557	1,472	1,387	1,302	1,217	1,155	1,116	1,077
MC	MC4FFP 0	0	379	6,987	15,193	21,072	28,573	27,555	26,231	25,008	23,834	22,662	21,491	20,319	19,147	17,976	16,804	15,940	15,402
MC	MC4SCR 0	0	105	667	724	688	655	625	596	566	537	508	479	449	420	399	386	372	359
MC	MC4FFP 0	0	377	5,055	10,178	14,629	19,836	19,129	18,210	17,361	16,546	15,733	14,919	14,106	13,293	12,479	11,666	10,852	10,692
MC	MC4SAM 0	0	0	0	578	1,620	2,201	2,123	2,022	1,929	1,839	1,749	1,660	1,570	1,480	1,391	1,301	1,235	1,193
TC	TC1FFP 0	0	0	0	2,200	5,745	11,967	15,834	15,223	14,502	13,838	13,200	12,564	11,927	11,291	10,654	10,018	9,381	8,918
CR	CR4FFD 0	64	394	3,222	13,574	27,295	25,773	24,370	23,071	21,861	20,666	19,471	18,276	17,081	15,886	14,691	13,773	13,130	12,488
CR	CR4SCR 0	0	390	2,395	6,163	10,786	10,183	9,627	9,112	8,633	8,160	7,687	7,214	6,740	6,267	5,794	5,431	5,177	4,924
CR	CR4FFP 0	0	280	1,715	3,329	5,526	5,216	4,930	4,666	4,421	4,178	3,935	3,692	3,450	3,207	2,964	2,778	2,648	2,519
CR	CR4PAC 0	0	0	0	235	386	365	345	327	310	293	276	259	242	225	208	195	186	177
CR	CR4LIME 0	0	0	0	259	427	403	381	361	342	323	305	286	267	249	230	216	206	195
CR	CR5FFD 0	0	359	3,311	14,658	29,304	27,663	26,148	24,742	23,429	22,132	20,835	19,538	18,241	16,944	15,647	14,641	13,924	13,207
CR	CR5SCR 0	63	388	2,719	6,475	11,557	10,908	10,308	9,752	9,234	8,721	8,208	7,696	7,183	6,670	6,158	5,760	5,478	5,196
CR	CR5FFP 0	0	300	1,823	3,531	5,992	5,654	5,343	5,054	4,785	4,519	4,253	3,987	3,721	3,455	3,189	2,983	2,837	2,691
CR	CR5PAC 0	0	0	0	251	423	399	378	357	338	320	301	282	263	245	226	212	201	191
CR	CR5LIME 0	0	0	0	278	468	441	417	395	374	353	333	312	291	271	250	234	222	211
CR	CR6FFD 0	0	346	3,887	18,407	35,115	33,170	31,385	29,739	28,213	26,706	25,199	23,692	22,185	20,678	19,171	18,033	17,265	16,496
CR	CR6FFP 0	79	1,294	4,201	8,457	14,206	13,414	12,689	12,019	11,399	10,787	10,175	9,563	8,951	8,339	7,727	7,266	6,956	6,646
CR	CR6SCR 0	0	394	2,364	4,540	7,252	6,848	6,477	6,136	5,819	5,507	5,194	4,882	4,569	4,257	3,944	3,709	3,551	3,393
CR	CR6PAC 0	0	0	0	352	558	527	499	473	448	424	401	377	353	329	305	287	275	262
CR	CR6LIME 0	0	0	0	391	619	585	553	525	498	471	445	418	391	365	338	318	305	291
GR	GR3SFF 0	0	0	1,323	4,035	5,553	5,254	4,983	4,739	4,516	4,297	4,078	3,859	3,640	3,421	3,202	3,050	2,967	2,884
GR	GR3PAC 0	0	0	0	112	154	145	138	131	125	119	113	107	101	95	89	85	82	80
GR	GR4SFF 0	0	0	1,885	5,750	8,517	8,050	7,626	7,237	6,881	6,529	6,177	5,825	5,473	5,122	4,770	4,515	4,356	4,198
GR	GR4PAC 0	0	0	0	160	235	223	211	200	190	181	171	161	152	142	132	125	121	116

Station	Unit	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
BR	BR1FFP 0	6,908	6,716	6,525	6,333	6,141	5,950	5,758	5,566	5,375	5,183	4,991	4,800	4,608	4,417	4,225	4,033	3,842	3,650
BR	BR1SAM 0	299	291	282	274	266	257	249	241	232	224	216	208	199	191	183	174	166	158
BR	BR2FFP 0	7,455	7,242	7,028	6,815	6,602	6,388	6,175	5,962	5,749	5,535	5,322	5,109	4,895	4,682	4,469	4,256	4,042	3,829
BR	BR2SAM 0	298	290	281	273	264	256	247	239	230	222	213	205	196	187	179	170	162	153
BR	BR3FFP 0	7,920	7,717	7,514	7,311	7,109	6,906	6,703	6,501	6,298	6,095	5,893	5,690	5,487	5,284	5,082	4,879	4,676	4,474
BR	BR3SAM 0	9,841	9,489	9,137	8,785	8,433	8,081	7,729	7,377	7,025	6,673	6,321	5,969	5,617	5,265	4,913	4,561	4,209	3,857
GH	GH1JFFP 0	1,089	1,050	1,011	972	933	894	855	816	777	738	699	661	622	583	544	505	466	427
GH	GH1SAM 0	10,330	10,104	9,878	9,652	9,425	9,199	8,973	8,747	8,521	8,295	8,069	7,843	7,617	7,391	7,165	6,939	6,713	6,486
GH	GH2JFFP 0	511	500	488	476	464	453	441	429	418	406	394	383	371	359	348	336	324	312
GH	GH2SAM 0	12,344	12,047	11,750	11,452	11,155	10,858	10,561	10,263	9,966	9,669	9,372	9,075	8,777	8,480	8,183	7,886	7,588	7,291
GH	GH3JFFP 0	1,047	1,020	994	967	941	915	888	862	835	809	782	756	730	703	677	650	624	598
GH	GH3SAM 0	11,513	11,223	10,932	10,642	10,352	10,061	9,771	9,481	9,190	8,900	8,610	8,319	8,029	7,739	7,448	7,158	6,867	6,577
GH	GH4JFFP 0	1,068	1,039	1,011	983	955	927	899	870	842	814	786	758	730	701	673	645	617	589
GH	GH4SAM 0	12,485	12,022	11,558	11,095	10,631	10,167	9,704	9,240	8,777	8,313	7,850	7,388	6,925	6,462	6,000	5,537	5,075	4,612
MC	MC1JFFP 0	10,029	9,608	9,187	8,766	8,344	7,923	7,502	7,081	6,660	6,239	5,818	5,397	4,976	4,555	4,134	3,713	3,292	2,871
MC	MC1SAM 0	655	627	600	572	545	517	490	462	435	407	380	353	326	299	272	245	218	191
MC	MC2JFFP 0	4,950	4,777	4,603	4,429	4,256	4,082	3,909	3,735	3,561	3,388	3,214	3,040	2,867	2,694	2,520	2,347	2,174	2,001
MC	MC2SAM 0	111	107	104	100	96	92	88	85	81	77	73	69	64	60	56	52	48	44
MC	MC3JFFP 0	9,844	9,510	9,175	8,841	8,506	8,172	7,837	7,503	7,168	6,834	6,499	6,165	5,830	5,495	5,160	4,825	4,490	4,155
MC	MC3SAM 0	1,039	1,000	961	923	884	846	807	768	730	691	652	613	574	535	496	457	418	379
MC	MC4JFFP 0	14,880	14,358	13,836	13,314	12,792	12,270	11,748	11,226	10,705	10,183	9,661	9,139	8,617	8,095	7,573	7,051	6,529	6,007
MC	MC4SAM 0	346	332	319	306	292	279	266	252	239	226	213	200	187	174	161	148	135	122
MC	MC5JFFP 0	10,330	9,968	9,605	9,243	8,881	8,519	8,156	7,794	7,431	7,069	6,707	6,344	5,981	5,619	5,256	4,894	4,531	4,169
MC	MC5SAM 0	1,153	1,112	1,072	1,031	991	951	910	870	829	789	748	708	668	628	588	548	508	468
MC	MC6JFFP 0	8,637	8,363	8,089	7,815	7,541	7,267	6,993	6,719	6,445	6,171	5,897	5,623	5,349	5,075	4,801	4,527	4,253	3,979
MC	MC6SAM 0	11,845	11,203	10,560	9,918	9,276	8,634	7,992	7,350	6,708	6,066	5,424	4,782	4,140	3,498	2,856	2,214	1,572	930
CR	CR4JFFP 0	4,671	4,417	4,164	3,910	3,657	3,404	3,151	2,898	2,645	2,392	2,139	1,886	1,633	1,380	1,127	874	621	368
CR	CR4SAM 0	2,389	2,260	2,130	2,000	1,870	1,740	1,610	1,480	1,350	1,220	1,090	960	830	700	570	440	310	180
CR	CR4JFFP 0	168	159	150	141	132	123	114	105	96	87	78	69	60	51	42	33	24	15
CR	CR4SAM 0	185	175	165	155	145	135	125	115	105	95	85	75	65	55	45	35	25	15
CR	CR5JFFP 0	12,490	11,774	11,058	10,342	9,626	8,910	8,194	7,478	6,762	6,046	5,330	4,614	3,898	3,182	2,466	1,750	1,034	318
CR	CR5SAM 0	4,914	4,632	4,350	4,068	3,786	3,504	3,222	2,940	2,658	2,376	2,094	1,812	1,530	1,248	966	684	402	120
CR	CR5JFFP 0	2,545	2,399	2,253	2,107	1,961	1,815	1,669	1,523	1,377	1,231	1,085	939	793	647	501	355	209	63
CR	CR5SAM 0	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10
CR	CR6JFFP 0	15,727	14,959	14,190	13,421	12,653	11,884	11,115	10,346	9,577	8,808	8,039	7,270	6,501	5,732	4,963	4,194	3,425	2,656
CR	CR6SAM 0	6,337	6,027	5,717	5,408	5,098	4,788	4,478	4,168	3,858	3,548	3,238	2,928	2,618	2,308	2,000	1,690	1,380	1,070
CR	CR6JFFP 0	3,235	3,077	2,919	2,761	2,602	2,444	2,286	2,128	1,970	1,812	1,654	1,496	1,338	1,180	1,022	864	706	548
CR	CR6SAM 0	250	238	226	213	201	189	177	165	153	141	129	117	105	93	81	69	57	45
CR	CR6JFFP 0	278	264	250	237	223	210	196	182	168	154	140	126	112	98	84	70	56	42
GR	GR3JFFP 0	2,800	2,717	2,634	2,550	2,467	2,384	2,300	2,217	2,134	2,050	1,967	1,884	1,800	1,717	1,634	1,550	1,467	1,384
GR	GR3SAM 0	78	75	73	71	68	66	64	62	59	57	55	52	50	48	45	43	41	38
GR	GR4JFFP 0	4,040	3,881	3,723	3,565	3,407	3,248	3,090	2,932	2,773	2,615	2,457	2,299	2,140	1,982	1,824	1,665	1,507	1,348
GR	GR4SAM 0	112	108	103	99	94	90	86	81	77	73	69	65	60	56	52	48	44	40

Station	Unit	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
BR	BR1FFP 0	3,458	3,267	1,327	0	0	0	0	0	0	0	0	0	0	0
BR	BR1SAM 0	150	141	57	0	0	0	0	0	0	0	0	0	0	0
BR	BR2FFP 0	3,616	1,180	0	0	0	0	0	0	0	0	0	0	0	0
BR	BR2SAM 0	145	47	0	0	0	0	0	0	0	0	0	0	0	0
BR	BR3FFP 0	4,271	4,068	3,865	3,663	3,460	1,405	0	0	0	0	0	0	0	0
GH	GH1FFP 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GH	GH1SAM 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GH	GH2FFP 0	6,260	6,034	5,808	5,582	5,356	5,130	4,904	4,678	4,452	4,226	4,000	3,489	253	0
GH	GH2SAM 0	301	289	277	266	254	242	231	219	207	196	0	0	0	0
GH	GH3FFP 0	6,994	6,697	6,400	6,102	5,805	5,508	5,211	4,152	214	0	0	0	0	0
GH	GH3SAM 0	571	545	518	492	465	405	21	0	0	0	0	0	0	0
GH	GH4FFP 0	6,287	5,996	5,706	5,416	5,125	4,835	0	0	0	0	0	0	0	0
GH	GH4SAM 0	561	532	504	476	117	0	0	0	0	0	0	0	0	0
MC	MC1FFGD 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC1FFP 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC1SAM 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC2FFGD 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC2FFP 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC2SAM 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC3FFGD 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC3FFP 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC3SAM 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC4FFGD 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC4FFP 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC4SAM 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TC	TC1FFP 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR4FFGD 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR4SCR 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR4FF 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR4PAC 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR4LIME 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5FFGD 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5SCR 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5FF 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5PAC 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5LIME 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6FFGD 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6SCR 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6FF 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6PAC 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6LIME 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR	GR3SFF 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR	GR3PAC 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR	GR4SFF 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR	GR4PAC 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Retirement Cost		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
All Units		0	0	0	0	0	0	2100	0	0	0	0	0	0	0	0	0	0
2% Escalation Rate																		
Unit Costs (\$000)																		
BR	BR1	3,816	4,811	3,969	4,049	4,130	4,212	4,296	4,382	4,470	4,559	4,651	4,744	4,838	4,935	5,034	5,135	5,135
BR	BR2	6,633	7,160	7,253	7,398	7,546	7,697	7,851	8,008	8,168	8,331	8,498	8,668	8,841	9,018	9,199	9,383	9,383
BR	BR3	15,885	20,876	14,904	15,202	15,506	15,816	16,132	16,455	16,784	17,120	17,462	17,811	18,167	18,531	18,901	19,279	19,279
CR	CR4	14,372	9,218	12,029	12,269	12,515	12,765	13,020	13,281	13,546	13,817	14,094	14,375	14,663	14,956	15,255	15,560	15,560
CR	CR5	11,842	9,889	12,791	13,047	13,308	13,574	13,845	14,122	14,405	14,693	14,987	15,286	15,592	15,904	16,222	16,546	16,546
CR	CR6	10,666	11,619	10,173	10,376	10,584	10,795	11,011	11,231	11,456	11,685	11,919	12,157	12,400	12,648	12,901	13,159	13,159
GH	GH1	17,829	19,141	17,966	18,325	18,691	19,065	19,447	19,835	20,232	20,637	21,050	21,471	21,900	22,338	22,785	23,240	23,240
GH	GH2	12,225	18,498	13,429	13,698	13,972	14,251	14,536	14,827	15,124	15,426	15,735	16,049	16,370	16,698	17,032	17,372	17,372
GH	GH3	17,961	13,501	12,475	12,724	12,979	13,238	13,503	13,773	14,049	14,330	14,616	14,909	15,207	15,511	15,821	16,138	16,138
GH	GH4	11,533	13,496	12,105	12,347	12,594	12,846	13,103	13,365	13,632	13,905	14,183	14,467	14,756	15,051	15,352	15,659	15,659
GR	GR3	4,270	5,792	4,360	4,447	4,536	4,627	4,719	4,813	4,910	5,008	5,108	5,210	5,314	5,421	5,529	5,640	5,640
GR	GR4	7,338	6,924	8,633	8,805	8,982	9,161	9,344	9,531	9,722	9,916	10,115	10,317	10,523	10,734	10,949	11,167	11,167
MC	MC1	11,892	17,333	12,669	12,923	13,181	13,445	13,714	13,988	14,268	14,553	14,844	15,141	15,444	15,753	16,068	16,389	16,389
MC	MC2	16,179	11,941	15,201	15,505	15,815	16,131	16,454	16,783	17,118	17,461	17,810	18,166	18,530	18,900	19,278	19,664	19,664
MC	MC3	18,313	14,238	17,221	17,566	17,917	18,275	18,641	19,014	19,394	19,782	20,177	20,581	20,993	21,412	21,841	22,278	22,278
MC	MC4	16,531	18,981	17,245	17,590	17,942	18,300	18,666	19,040	19,421	19,809	20,205	20,609	21,021	21,442	21,871	22,308	22,308
TC	TC1	17,205	15,170	17,403	17,751	18,106	18,468	18,837	19,214	19,598	19,990	20,390	20,798	21,214	21,638	22,071	22,512	22,512
TY	TY3	410	416	418	427	435	444	453	462	471	480	490	500	510	520	530	541	541

Retirement Cost		2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	
All Units		0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2% Escalation Rate																
Unit Costs (\$000)																
BR	BR1	5,237	5,342	5,449	5,558	5,669	5,782	5,898	6,016	6,136	6,259	6,384	6,512	6,642	6,775	
BR	BR2	9,570	9,762	9,957	10,156	10,359	10,566	10,778	10,993	11,213	11,437	11,666	11,899	12,137	12,380	
BR	BR3	19,665	20,058	20,460	20,869	21,286	21,712	22,146	22,589	23,041	23,502	23,972	24,451	24,940	25,439	
CR	CR4	15,872	16,189	16,513	16,843	17,180	17,524	17,874	18,232	18,596	18,968	19,347	19,734	20,129	20,532	
CR	CR5	16,877	17,215	17,559	17,910	18,269	18,634	19,007	19,387	19,775	20,170	20,573	20,985	21,405	21,833	
CR	CR6	13,423	13,691	13,965	14,244	14,529	14,820	15,116	15,418	15,727	16,041	16,362	16,689	17,023	17,364	
GH	GH1	23,705	24,179	24,663	25,156	25,659	26,172	26,696	27,230	27,774	28,330	28,897	29,474	30,064	30,665	
GH	GH2	17,720	18,074	18,436	18,804	19,181	19,564	19,955	20,355	20,762	21,177	21,600	22,032	22,473	22,923	
GH	GH3	16,460	16,790	17,125	17,468	17,817	18,174	18,537	18,908	19,286	19,672	20,065	20,466	20,876	21,293	
GH	GH4	15,973	16,292	16,618	16,950	17,289	17,635	17,988	18,347	18,714	19,089	19,470	19,860	20,257	20,662	
GR	GR3	5,753	5,868	5,985	6,105	6,227	6,351	6,478	6,608	6,740	6,875	7,012	7,153	7,296	7,442	
GR	GR4	11,391	11,619	11,851	12,088	12,330	12,576	12,828	13,084	13,346	13,613	13,885	14,163	14,446	14,735	
MC	MC1	16,717	17,051	17,392	17,740	18,095	18,457	18,826	19,202	19,586	19,978	20,378	20,785	21,201	21,625	
MC	MC2	20,057	20,458	20,867	21,285	21,710	22,145	22,587	23,039	23,500	23,970	24,449	24,938	25,437	25,946	
MC	MC3	22,723	23,178	23,641	24,114	24,596	25,088	25,590	26,102	26,624	27,156	27,699	28,253	28,818	29,395	
MC	MC4	22,794	23,209	23,674	24,147	24,630	25,123	25,625	26,138	26,660	27,194	27,737	28,292	28,858	29,435	
TC	TC1	22,962	23,422	23,890	24,368	24,855	25,352	25,859	26,377	26,904	27,442	27,991	28,551	29,122	29,704	
TY	TY3	552	563	574	586	597	609	622	634	647	660	673	686	700	714	

Escalation Rate: 2% Year \$:

Table with columns: BR, Month, Year Equipment, and 27 columns of financial data from 2014 to 2040. Rows include BR1-10, GH1-10, MC1-10, and CR1-10.

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
BR	BR1	101	69	164	256	346	434	520	605	689	771	852	931	1,008	1,085	1,163	1,241	1,320	1,399	1,479
BR	BR2	167	114	271	423	571	717	860	1,001	1,139	1,275	1,408	1,539	1,667	1,794	1,922	2,052	2,182	2,313	2,446
BR	BR3	416	285	675	1,053	1,423	1,786	2,143	2,493	2,838	3,176	3,508	3,834	4,153	4,469	4,789	5,111	5,435	5,762	6,092
CR	CR4	155	77	204	327	447	564	678	790	899	1,006	1,109	1,210	1,308	1,405	1,501	1,596	1,691	1,786	1,880
CR	CR5	168	84	221	355	485	611	735	856	975	1,090	1,202	1,312	1,418	1,522	1,626	1,730	1,833	1,936	2,038
CR	CR6	240	120	316	507	692	873	1,050	1,223	1,392	1,557	1,718	1,874	2,026	2,175	2,324	2,471	2,619	2,765	2,911
GH	GH1	475	510	1,206	1,884	2,548	3,200	3,843	4,477	5,101	5,717	6,322	6,918	7,504	8,080	8,653	9,231	9,814	10,402	10,995
GH	GH2	484	520	1,228	1,920	2,596	3,261	3,916	4,562	5,198	5,825	6,442	7,049	7,646	8,233	8,817	9,405	9,999	10,599	11,204
GH	GH3	480	516	1,218	1,904	2,575	3,234	3,883	4,524	5,155	5,777	6,389	6,991	7,583	8,165	8,744	9,328	9,917	10,511	11,111
GH	GH4	479	515	1,216	1,900	2,570	3,227	3,875	4,514	5,144	5,765	6,376	6,977	7,567	8,148	8,726	9,308	9,896	10,489	11,088
GR	GR3	68	39	96	151	205	258	309	360	410	458	506	553	598	643	689	734	780	825	871
GR	GR4	95	55	134	211	286	360	432	503	572	640	707	772	836	899	962	1,026	1,089	1,153	1,217
MC	MC1	303	309	767	1,213	1,649	2,077	2,497	2,910	3,315	3,714	4,104	4,487	4,862	5,229	5,592	5,956	6,320	6,686	7,053
MC	MC2	301	307	762	1,205	1,639	2,063	2,480	2,891	3,294	3,689	4,077	4,458	4,830	5,194	5,555	5,916	6,279	6,642	7,007
MC	MC3	391	398	989	1,565	2,128	2,680	3,222	3,755	4,278	4,792	5,296	5,790	6,274	6,747	7,216	7,685	8,156	8,628	9,102
MC	MC4	477	486	1,207	1,910	2,597	3,270	3,931	4,581	5,219	5,846	6,461	7,064	7,654	8,231	8,803	9,376	9,950	10,526	11,103
TC	TC1	383	115	270	420	567	712	855	996	1,135	1,272	1,407	1,539	1,670	1,799	1,927	2,057	2,188	2,320	2,453
TC	TC2	549	166	386	602	813	1,021	1,225	1,427	1,626	1,823	2,016	2,207	2,394	2,579	2,762	2,948	3,136	3,325	3,517
TY	TY3	71	94	233	368	499	628	754	878	999	1,118	1,234	1,347	1,458	1,568	1,677	1,787	1,898	2,008	2,119

2.50% Capital Escalation Rate

2011 CR	454	281	428	405	384	364	344	325	305	285	266	246	231	221	211	200	190	180		
2012 CR	288	288	465	439	415	394	373	353	333	313	293	272	252	237	226	216	205	195		
2013 CR			295	477	450	426	403	382	362	341	321	300	279	259	243	232	221	210		
2014 CR				303	489	461	436	413	392	371	350	329	307	286	265	249	238	227		
2015 CR					310	501	473	447	424	402	380	358	337	315	293	272	255	244		
2016 CR						318	513	485	459	434	412	390	367	345	323	301	279	262		
2017 CR							326	526	497	470	445	422	399	377	354	331	308	286		
2018 CR								334	539	509	482	456	433	409	386	363	339	316		
2019 CR									342	553	522	494	468	444	420	396	372	348		
2020 CR										351	567	535	506	479	455	430	406	381		
2021 CR											360	581	548	519	491	466	441	416		
2022 CR												369	595	562	532	504	478	452		
2023 CR													378	610	576	545	516	490		
2024 CR														387	625	591	559	529		
2025 CR															397	641	605	573		
2026 CR																657	621	589		
2027 CR																	673	641	608	
2028 CR																		689	657	625
2029 CR																			705	673
2030 CR																				721
2031 CR																				737
2032 CR																				753
2033 CR																				769
2034 CR																				785
2035 CR																				801
2036 CR																				817
2037 CR																				833
2038 CR																				849

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	2039 CR																			
	2040 CR																			
	2011 MC		1,499	2,188	2,076	1,972	1,877	1,788	1,703	1,617	1,532	1,447	1,361	1,276	1,191	1,128	1,089	1,049	1,010	970
	2012 MC		1,536	1,536	2,243	2,128	2,021	1,923	1,833	1,745	1,658	1,570	1,483	1,395	1,308	1,221	1,157	1,116	1,075	1,035
	2013 MC				1,575	2,299	2,181	2,072	1,972	1,878	1,789	1,699	1,610	1,520	1,430	1,341	1,251	1,185	1,144	1,102
	2014 MC					1,614	2,357	2,235	2,124	2,021	1,925	1,834	1,742	1,650	1,558	1,466	1,374	1,282	1,215	1,173
	2015 MC						1,655	2,416	2,291	2,177	2,071	1,974	1,879	1,785	1,691	1,597	1,503	1,409	1,314	1,245
	2016 MC							1,696	2,476	2,348	2,231	2,123	2,023	1,926	1,830	1,733	1,637	1,540	1,444	1,347
	2017 MC								1,738	2,538	2,407	2,287	2,176	2,073	1,975	1,876	1,777	1,678	1,579	1,480
	2018 MC									1,782	2,601	2,467	2,344	2,231	2,125	2,024	1,922	1,821	1,720	1,618
	2019 MC										1,826	2,666	2,529	2,403	2,286	2,178	2,075	1,971	1,867	1,763
	2020 MC											1,872	2,733	2,592	2,463	2,344	2,233	2,126	2,020	1,913
	2021 MC												1,919	2,801	2,657	2,524	2,402	2,289	2,180	2,070
	2022 MC													1,967	2,871	2,723	2,588	2,462	2,346	2,234
	2023 MC														2,016	2,943	2,792	2,652	2,524	2,405
	2024 MC															2,066	3,017	2,861	2,719	2,587
	2025 MC																3,092	2,933	2,787	2,657
	2026 MC																	3,092	2,933	2,787
	2027 MC																		3,170	3,006
	2028 MC																			3,249
	2029 MC																			2,225
	2030 MC																			2,281
	2031 MC																			
	2032 MC																			
	2033 MC																			
	2034 MC																			
	2035 MC																			
	2036 MC																			
	2037 MC																			
	2038 MC																			
	2039 MC																			
	2040 MC																			
	2011 TC		281	368	350	333	318	304	291	278	264	251	238	225	211	203	198	193	189	184
	2012 TC			288	377	358	341	326	312	298	284	271	257	244	230	217	208	203	198	193
	2013 TC				295	387	367	350	334	319	305	292	278	264	250	236	222	213	208	203
	2014 TC					303	396	376	359	342	327	313	299	285	270	256	242	228	218	213
	2015 TC						310	406	386	368	351	336	321	306	292	277	263	248	233	224
	2016 TC							318	416	396	377	360	344	329	314	299	284	269	254	239
	2017 TC								326	427	405	386	369	353	337	322	307	291	276	261
	2018 TC									334	437	416	396	378	361	346	330	314	298	283
	2019 TC										342	448	426	406	387	370	354	338	322	306
	2020 TC											351	460	437	416	397	380	363	347	330
	2021 TC												360	471	447	426	407	389	372	355
	2022 TC													369	483	459	437	417	399	381
	2023 TC														378	495	470	448	427	409
	2024 TC															387	507	482	459	438
	2025 TC																397	520	494	470
	2026 TC																	407	482	456
	2027 TC																		417	546
	2028 TC																			428
	2029 TC																			

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
	2030 TC																				
	2031 TC																				
	2032 TC																				
	2033 TC																				
	2034 TC																				
	2035 TC																				
	2036 TC																				
	2037 TC																				
	2038 TC																				
	2039 TC																				
	2040 TC																				
	2011 GH		2,061	2,756	2,617	2,492	2,377	2,272	2,171	2,070	1,970	1,869	1,768	1,667	1,567	1,498	1,460	1,422	1,384	1,346	
	2012 GH			2,113	2,825	2,683	2,554	2,436	2,328	2,225	2,122	2,019	1,916	1,812	1,709	1,606	1,535	1,496	1,458	1,419	
	2013 GH				2,165	2,895	2,750	2,618	2,497	2,387	2,281	2,175	2,069	1,963	1,858	1,752	1,646	1,573	1,534	1,494	
	2014 GH					2,219	2,968	2,819	2,683	2,560	2,446	2,338	2,229	2,121	2,013	1,904	1,796	1,687	1,613	1,572	
	2015 GH						2,275	3,042	2,889	2,750	2,623	2,507	2,396	2,285	2,174	2,063	1,952	1,841	1,729	1,653	
	2016 GH							2,332	3,118	2,961	2,819	2,689	2,570	2,456	2,342	2,228	2,114	2,001	1,887	1,773	
	2017 GH								2,390	3,196	3,035	2,889	2,756	2,634	2,518	2,401	2,284	2,167	2,051	1,934	
	2018 GH									2,450	3,276	3,111	2,962	2,825	2,700	2,581	2,461	2,341	2,221	2,102	
	2019 GH										2,511	3,358	3,189	3,036	2,896	2,768	2,645	2,522	2,400	2,277	
	2020 GH											2,574	3,442	3,269	3,112	2,968	2,837	2,711	2,585	2,460	
	2021 GH												2,638	3,528	3,350	3,189	3,042	2,908	2,779	2,650	
	2022 GH													2,704	3,516	3,343	3,269	3,119	2,981	2,848	
	2023 GH														2,772	3,706	3,520	3,351	3,196	3,055	
	2024 GH															2,841	3,799	3,608	3,435	3,276	
	2025 GH																2,912	3,894	3,698	3,521	
	2026 GH																	2,985	3,991	3,791	
	2027 GH																		3,060	4,091	
	2028 GH																			3,136	
	2029 GH																				
	2030 GH																				
	2031 GH																				
	2032 GH																				
	2033 GH																				
	2034 GH																				
	2035 GH																				
	2036 GH																				
	2037 GH																				
	2038 GH																				
	2039 GH																				
	2040 GH																				
	2011 BR		468	629	595	565	538	513	489	464	440	415	391	367	350	341	332	323	315	306	
	2012 BR			480	645	610	579	551	526	501	476	451	426	401	376	359	350	341	332	323	
	2013 BR				492	661	625	594	565	539	513	488	462	436	411	385	368	358	349	340	
	2014 BR					504	677	641	609	579	552	526	500	474	447	421	395	377	367	358	
	2015 BR						517	694	657	624	594	566	539	512	485	458	432	405	386	377	
	2016 BR							530	712	674	639	608	580	553	525	498	470	442	415	396	
	2017 BR								543	729	690	655	624	595	567	538	510	482	453	425	
	2018 BR									557	748	708	672	639	610	581	552	523	494	465	
	2019 BR										571	766	725	688	655	625	595	566	536	506	
	2020 BR											585	785	743	706	672	641	610	580	549	

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
			\$000																	
	2012 TY	96	140	132	125	119	113	108	102	96	90	85	79	75	72	70	67	65	2028	
	2013 TY	98	143	143	136	129	122	116	110	104	99	93	87	81	77	74	71	69	2027	
	2014 TY	101	147	147	147	139	132	125	119	113	107	101	95	89	83	79	76	73	2026	
	2015 TY	103	151	143	147	151	143	135	128	122	116	110	104	97	91	85	81	78	2025	
	2016 TY	106	154	146	146	154	146	146	138	131	125	119	112	106	100	93	87	83	2024	
	2017 TY	109	158	158	158	150	142	142	138	131	125	119	112	106	100	93	87	83	2023	
	2018 TY	111	162	158	158	150	142	142	138	131	125	119	112	106	100	93	87	83	2022	
	2019 TY	114	166	162	162	150	142	142	138	131	125	119	112	106	100	93	87	83	2021	
	2020 TY	117	171	166	162	150	142	142	138	131	125	119	112	106	100	93	87	83	2020	
	2021 TY	120	175	166	162	150	142	142	138	131	125	119	112	106	100	93	87	83	2019	
	2022 TY	123	175	166	162	150	142	142	138	131	125	119	112	106	100	93	87	83	2018	
	2023 TY	126	179	166	162	150	142	142	138	131	125	119	112	106	100	93	87	83	2017	
	2024 TY	129	184	166	162	150	142	142	138	131	125	119	112	106	100	93	87	83	2016	
	2025 TY	132	188	166	162	150	142	142	138	131	125	119	112	106	100	93	87	83	2015	
	2026 TY	136	193	166	162	150	142	142	138	131	125	119	112	106	100	93	87	83	2014	
	2027 TY	139	198	166	162	150	142	142	138	131	125	119	112	106	100	93	87	83	2013	
	2028 TY	143	203	166	162	150	142	142	138	131	125	119	112	106	100	93	87	83	2012	

Station	Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2040	2041	2042	2043	2044	2045	2046
BR	BR1	101	1,560	1,642	1,724	1,807	1,891	1,975	2,061	2,147	2,234	2,322	2,411	2,446	2,340	2,239	2,145	2,055	1,969
BR	BR2	167	2,579	2,714	2,850	2,988	3,126	3,266	3,407	3,550	3,694	3,839	3,986	4,045	3,868	3,703	3,546	3,397	3,255
BR	BR3	416	6,425	6,761	7,100	7,442	7,787	8,136	8,488	8,843	9,202	9,564	9,930	10,300	9,636	9,223	8,833	8,463	8,109
CR	CR4	155	1,974	2,023	2,073	2,125	2,178	2,233	2,289	2,346	2,405	2,465	2,526	2,492	2,292	2,102	1,921	1,747	1,580
CR	CR5	168	2,139	2,193	2,247	2,304	2,361	2,420	2,481	2,543	2,606	2,671	2,738	2,807	2,484	2,278	2,082	1,893	1,713
CR	CR6	240	3,056	3,132	3,210	3,291	3,373	3,457	3,544	3,632	3,723	3,816	3,912	3,858	3,549	3,255	2,974	2,705	2,447
GH	GH1	475	11,594	12,199	12,809	13,425	14,048	14,676	15,311	15,953	16,601	17,256	17,918	18,587	17,419	16,688	15,994	15,334	14,702
GH	GH2	484	11,814	12,430	13,052	13,680	14,314	14,954	15,601	16,255	16,915	17,583	18,257	18,939	17,749	17,004	16,297	15,624	14,981
GH	GH3	480	11,716	12,327	12,944	13,567	14,196	14,831	15,472	16,121	16,775	17,437	18,106	18,782	17,602	16,863	16,163	15,495	14,857
GH	GH4	479	11,692	12,302	12,917	13,538	14,166	14,800	15,440	16,087	16,741	17,401	18,069	18,743	17,565	16,828	16,129	15,463	14,826
GR	GR3	68	918	964	1,011	1,057	1,104	1,152	1,199	1,247	1,295	1,343	1,391	1,364	1,281	1,203	1,128	1,056	988
GR	GR4	95	1,282	1,347	1,412	1,477	1,543	1,609	1,675	1,742	1,809	1,876	1,943	1,906	1,790	1,680	1,575	1,476	1,380
MC	MC1	303	7,421	7,790	8,160	8,531	8,903	9,277	9,651	10,027	10,403	10,778	11,154	10,698	10,020	9,375	8,758	8,166	7,598
MC	MC2	301	7,372	7,739	8,106	8,475	8,845	9,216	9,588	9,961	10,336	10,711	11,086	10,627	9,954	9,313	8,700	8,112	7,548
MC	MC3	391	9,576	10,052	10,530	11,009	11,489	11,971	12,455	12,940	13,426	13,913	14,401	13,805	12,931	12,097	11,301	10,538	9,805
MC	MC4	477	11,683	12,263	12,846	13,430	14,016	14,604	15,194	15,786	16,380	16,975	17,571	16,841	15,775	14,758	13,787	12,856	11,962
TC	TC1	383	2,588	2,725	2,863	3,002	3,144	3,286	3,431	3,577	3,725	3,875	4,026	4,093	3,927	3,771	3,623	3,483	3,349
TC	TC2	549	3,710	3,906	4,104	4,304	4,506	4,711	4,918	5,127	5,339	5,554	5,771	5,866	5,629	5,405	5,193	4,992	4,801
TY	TY3	71	2,230	2,341	2,453	2,565	2,678	2,790	2,904	3,017	3,092	3,170	3,249	3,217	3,011	2,815	2,629	2,451	2,281

2.50%

2011 CR		169																	
2012 CR		184	174																
2013 CR		200	189	178															
2014 CR		216	205	194	182														
2015 CR		232	221	210	198	187													
2016 CR		250	238	227	215	203	192	180											
2017 CR		268	256	244	232	220	208	196	184										
2018 CR		293	275	263	250	238	226	214	201	201									
2019 CR		324	300	282	269	257	244	232	219	206	206								
2020 CR		357	332	307	289	276	263	250	237	224	217	212							
2021 CR		391	365	340	315	296	283	270	256	243	230	220							
2022 CR		426	400	375	349	323	303	290	276	263	249	236	222						
2023 CR		463	437	410	384	358	331	311	297	283	269	256	242	228					
2024 CR		502	475	448	421	394	366	339	319	305	290	276	262	248	234				
2025 CR		542	514	487	459	431	403	376	348	327	312	298	283	268	254	239			
2026 CR		587	556	527	499	470	442	413	385	357	335	320	305	290	275	260	245		
2027 CR		636	602	570	540	511	482	453	424	395	365	343	328	313	297	282	267	252	
2028 CR		690	652	617	584	554	524	494	464	434	404	375	352	336	320	305	289	273	258
2029 CR		438	708	668	632	599	568	537	506	476	445	415	384	361	345	329	312	296	280
2030 CR		449	449	725	685	648	614	582	551	519	488	456	425	394	370	353	337	320	304
2031 CR			461		743	702	664	629	596	564	532	500	468	436	403	379	362	345	328
2032 CR					472	762	720	681	645	611	578	545	512	479	446	414	388	371	354
2033 CR					484	484	496	781	738	698	661	627	593	559	525	491	458	424	398
2034 CR								496	800	756	715	677	642	608	573	538	504	469	434
2035 CR									508	820	775	733	694	658	623	587	552	516	481
2036 CR										521	841	794	751	712	675	638	602	566	529
2037 CR											534	862	814	770	730	692	654	617	580
2038 CR												547	884	835	789	748	709	671	633

Station	Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
	2039 CR																			
	2040 CR																			
	2011 MC		931	891	851	812	772	733	693	654	0	0	0	0	0	0	0	0	0	0
	2012 MC		994	954	913	873	832	792	751	711	670	0	0	0	0	0	0	0	0	0
	2013 MC		1,061	1,019	978	936	895	853	811	770	728	687	0	0	0	0	0	0	0	0
	2014 MC		1,130	1,087	1,045	1,002	960	917	874	832	789	747	704	0	0	0	0	0	0	0
	2015 MC		1,202	1,158	1,115	1,071	1,027	984	940	896	853	809	765	722	0	0	0	0	0	0
	2016 MC		1,277	1,232	1,187	1,142	1,098	1,053	1,008	963	919	874	829	784	740	0	0	0	0	0
	2017 MC		1,381	1,309	1,263	1,217	1,171	1,125	1,079	1,033	987	942	896	850	804	758	0	0	0	0
	2018 MC		1,517	1,415	1,341	1,294	1,247	1,200	1,153	1,106	1,059	1,012	965	918	871	824	777	0	0	0
	2019 MC		1,659	1,555	1,451	1,375	1,327	1,278	1,230	1,182	1,134	1,086	1,037	989	941	893	845	797	0	0
	2020 MC		1,807	1,700	1,594	1,487	1,409	1,360	1,310	1,261	1,212	1,162	1,113	1,063	1,014	965	915	866	816	0
	2021 MC		1,961	1,852	1,743	1,634	1,524	1,444	1,394	1,343	1,292	1,242	1,191	1,141	1,090	1,039	989	938	887	837
	2022 MC		2,122	2,010	1,898	1,786	1,674	1,562	1,480	1,429	1,377	1,325	1,273	1,221	1,169	1,117	1,065	1,013	962	910
	2023 MC		2,290	2,175	2,060	1,946	1,831	1,716	1,601	1,518	1,464	1,411	1,358	1,305	1,252	1,198	1,145	1,092	1,039	986
	2024 MC		2,465	2,347	2,230	2,112	1,994	1,877	1,759	1,642	1,555	1,501	1,446	1,392	1,337	1,283	1,228	1,174	1,119	1,065
	2025 MC		2,651	2,526	2,406	2,285	2,165	2,044	1,924	1,803	1,683	1,594	1,538	1,483	1,427	1,371	1,315	1,259	1,203	1,147
	2026 MC		2,856	2,718	2,589	2,466	2,342	2,219	2,095	1,972	1,848	1,725	1,634	1,577	1,520	1,462	1,405	1,348	1,290	1,233
	2027 MC		3,081	2,928	2,786	2,654	2,528	2,401	2,274	2,148	2,021	1,894	1,768	1,675	1,616	1,558	1,499	1,440	1,381	1,323
	2028 MC		3,330	3,158	3,001	2,855	2,721	2,591	2,461	2,331	2,201	2,072	1,942	1,812	1,717	1,657	1,597	1,536	1,476	1,416
	2029 MC		3,588	3,413	3,237	3,076	2,927	2,789	2,656	2,522	2,389	2,256	2,123	1,990	1,857	1,760	1,698	1,636	1,575	1,513
	2030 MC		3,899	3,718	3,533	3,318	3,153	3,000	2,858	2,722	2,586	2,449	2,313	2,176	2,040	1,904	1,804	1,741	1,677	1,614
	2031 MC		4,256	4,066	3,871	3,676	3,486	3,322	3,171	3,028	2,892	2,756	2,620	2,483	2,346	2,209	2,109	1,999	1,889	1,779
	2032 MC																			
	2033 MC																			
	2034 MC																			
	2035 MC																			
	2036 MC																			
	2037 MC																			
	2038 MC																			
	2039 MC																			
	2040 MC																			
	2011 TC		179	175	170	165	161	156	152	147	142	138	133	128	124	119	114	110	105	101
	2012 TC		189	184	179	174	170	165	160	155	151	146	141	136	132	127	122	117	113	108
	2013 TC		198	193	188	184	179	174	169	164	159	154	149	145	140	135	130	125	120	115
	2014 TC		208	203	198	193	188	183	178	173	168	163	158	153	148	143	138	133	128	123
	2015 TC		218	213	208	203	198	193	188	183	178	172	167	162	157	152	147	142	137	131
	2016 TC		229	224	219	213	208	203	198	192	187	182	177	171	166	161	156	150	145	140
	2017 TC		245	235	230	224	219	213	208	203	197	192	187	181	176	170	165	160	154	149
	2018 TC		267	251	241	235	230	224	219	213	208	202	197	191	186	180	175	169	164	158
	2019 TC		290	274	258	247	241	235	230	224	219	213	207	202	196	190	185	179	173	168
	2020 TC		314	297	281	264	253	247	241	236	230	224	218	212	207	201	195	189	183	178
	2021 TC		338	321	305	288	271	259	253	247	241	236	230	224	218	212	206	200	194	188
	2022 TC		364	347	329	312	295	277	266	260	254	248	241	235	229	223	217	211	205	199
	2023 TC		391	373	355	338	320	302	284	272	266	260	254	247	241	235	229	223	216	210
	2024 TC		419	401	383	364	346	328	310	292	279	273	266	260	254	247	241	234	228	222
	2025 TC		449	429	411	392	373	355	336	317	299	286	280	273	267	260	253	247	240	234
	2026 TC		482	460	440	421	402	383	364	345	325	306	293	287	280	273	266	260	253	246
	2027 TC		519	494	472	451	432	412	392	373	353	334	314	301	294	287	280	273	266	259
	2028 TC		560	532	507	484	463	442	422	402	382	362	342	322	308	301	294	287	280	273
	2029 TC		438	574	545	519	496	474	453	433	412	392	371	350	330	316	309	301	294	287

Station	Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
2030 TC				449																
2031 TC			1,380	1,341	1,233	1,195	1,158	1,120	1,082	1,044	1,007	969	931	893	856	818	780	742	704	667
2032 TC			1,454	1,415	1,375	1,335	1,296	1,256	1,216	1,177	1,137	1,097	1,058	1,018	978	939	899	859	819	780
2033 TC			1,531	1,491	1,450	1,409	1,369	1,328	1,287	1,247	1,206	1,165	1,125	1,084	1,043	1,003	962	921	881	840
2034 TC			1,611	1,570	1,528	1,486	1,445	1,403	1,361	1,320	1,278	1,236	1,194	1,153	1,111	1,069	1,028	986	944	903
2035 TC			1,694	1,652	1,609	1,566	1,523	1,481	1,438	1,395	1,353	1,310	1,267	1,224	1,182	1,139	1,096	1,053	1,011	968
2036 TC			1,817	1,737	1,693	1,649	1,605	1,562	1,518	1,474	1,430	1,386	1,343	1,299	1,255	1,211	1,167	1,124	1,080	1,036
2037 TC			1,982	1,862	1,780	1,735	1,690	1,645	1,601	1,556	1,511	1,466	1,421	1,376	1,331	1,286	1,241	1,197	1,152	1,107
2038 TC			2,154	2,032	1,909	1,825	1,779	1,733	1,687	1,641	1,595	1,549	1,503	1,457	1,410	1,364	1,318	1,272	1,226	1,180
2039 TC			2,334	2,208	2,082	1,957	1,874	1,823	1,776	1,729	1,682	1,634	1,587	1,540	1,493	1,446	1,399	1,351	1,304	1,257
2040 TC			2,521	2,392	2,263	2,134	2,006	1,917	1,869	1,820	1,772	1,724	1,675	1,627	1,579	1,530	1,482	1,434	1,385	1,337
2041 GH			2,716	2,584	2,452	2,320	2,188	2,056	1,965	1,915	1,866	1,816	1,767	1,717	1,668	1,618	1,569	1,519	1,469	1,420
2042 GH			2,920	2,784	2,649	2,513	2,378	2,243	2,107	2,014	1,963	1,912	1,862	1,811	1,760	1,709	1,659	1,608	1,557	1,506
2043 GH			3,131	2,993	2,854	2,715	2,576	2,437	2,299	2,166	2,064	2,012	1,960	1,908	1,856	1,804	1,752	1,700	1,648	1,596
2044 GH			3,358	3,210	3,067	2,925	2,783	2,641	2,498	2,356	2,214	2,116	2,063	2,009	1,956	1,903	1,849	1,796	1,742	1,689
2045 GH			3,609	3,442	3,290	3,144	2,998	2,852	2,707	2,561	2,415	2,269	2,169	2,114	2,060	2,005	1,950	1,895	1,841	1,786
2046 GH			3,886	3,699	3,528	3,372	3,223	3,073	2,924	2,774	2,625	2,475	2,326	2,223	2,167	2,111	2,055	1,999	1,943	1,887
2047 GH			4,193	3,983	3,791	3,617	3,456	3,303	3,150	2,997	2,844	2,690	2,537	2,384	2,279	2,221	2,164	2,106	2,049	1,991
2048 GH			3,214	4,298	4,082	3,886	3,707	3,543	3,386	3,229	3,072	2,915	2,758	2,601	2,444	2,336	2,277	2,218	2,159	2,100
2049 GH				3,295	4,406	4,184	3,983	3,800	3,631	3,470	3,310	3,149	2,988	2,827	2,666	2,505	2,394	2,334	2,273	2,213
2050 GH					3,377	4,516	4,289	4,083	3,895	3,722	3,557	3,392	3,227	3,062	2,897	2,732	2,567	2,454	2,392	2,330
2051 GH						3,462	4,629	4,396	4,185	3,992	3,815	3,646	3,477	3,308	3,139	2,970	2,801	2,632	2,515	2,452
2052 GH							3,548	4,744	4,506	4,289	4,092	3,911	3,737	3,564	3,391	3,217	3,044	2,871	2,697	2,578
2053 GH								3,637	4,863	4,619	4,397	4,194	4,008	3,831	3,653	3,475	3,298	3,120	2,942	2,765
2054 GH									3,728	4,984	4,734	4,507	4,299	4,109	3,927	3,744	3,562	3,380	3,198	3,016
2055 GH										3,821	5,109	4,852	4,619	4,406	4,211	4,025	3,838	3,651	3,465	3,278
2056 GH											3,917	5,237	4,974	4,735	4,517	4,317	4,125	3,934	3,743	3,551
2057 GH												4,014	5,368	5,098	4,853	4,629	4,425	4,228	4,032	3,836
2058 GH													4,115	5,226	5,226	4,974	4,745	4,535	4,334	4,133
2059 GH														4,218	5,356	5,356	5,099	4,864	4,649	4,443
2060 GH															4,218	5,356	5,099	4,864	4,649	4,443
2061 BR			297	288	279	271	262	253	244	235	226	218	209	200	191	182	173	165	156	147
2062 BR			313	304	295	286	277	268	259	250	241	232	223	214	205	196	187	178	169	160
2063 BR			331	321	312	303	293	284	275	266	256	247	238	229	219	210	201	191	182	173
2064 BR			348	339	329	320	310	301	291	282	272	263	253	244	234	225	215	206	196	187
2065 BR			367	357	347	338	328	318	308	299	289	279	269	260	250	240	230	221	211	201
2066 BR			386	376	366	356	346	336	326	316	306	296	286	276	266	256	246	236	226	216
2067 BR			406	396	385	375	365	355	344	334	324	314	303	293	283	273	263	252	242	232
2068 BR			436	416	406	395	385	374	364	353	343	332	322	311	301	290	280	269	259	248
2069 BR			476	447	426	416	405	394	383	373	362	351	340	330	319	308	297	287	276	265
2070 BR			519	488	458	437	426	415	404	393	382	371	360	349	338	327	316	305	294	283

Station	Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
563	2021 BR	448	532	532	500	469	448	437	425	414	403	391	380	369	358	346	335	324	312	301
609	2022 BR	481	577	545	513	481	459	436	448	436	424	413	401	390	378	367	355	343	332	320
657	2023 BR	526	624	591	559	526	493	471	459	447	435	423	411	399	388	376	364	352	340	340
707	2024 BR	573	673	640	606	573	539	505	482	470	458	446	434	422	409	397	385	373	361	361
760	2025 BR	621	725	690	656	621	587	552	518	495	482	470	457	445	432	420	407	395	382	382
818	2026 BR	672	779	743	708	672	637	602	566	531	507	494	481	469	456	443	430	417	405	405
884	2027 BR	725	839	798	761	725	689	653	617	580	544	520	506	493	480	467	454	441	428	428
957	2028 BR	781	906	860	818	781	743	706	669	632	595	558	519	506	492	479	465	452	442	452
731	2029 BR	839	981	928	881	839	800	762	724	686	648	610	572	546	532	518	505	491	477	477
749	2030 BR	903	1005	952	903	860	820	781	742	703	664	625	586	559	545	531	517	503	503	503
768	2031 BR	975	1031	978	925	881	841	801	761	721	681	641	601	573	559	545	531	517	503	503
	2032 BR	1,056	1,031	926	881	841	801	761	721	681	641	601	573	559	545	531	517	503	503	503
	2033 BR	806	806	1,083	1,025	973	926	883	841	799	757	715	673	631	603	587	573	558	545	530
	2034 BR	827	827	1,083	1,025	973	926	883	841	799	757	715	673	631	603	587	573	558	545	530
	2035 BR																			
	2036 BR																			
	2037 BR																			
	2038 BR																			
	2039 BR																			
	2040 BR																			
58	2011 GR		56	54	52	49	47	45	42	40	38	38	0	0	0	0	0	0	0	0
62	2012 GR		60	58	55	53	51	48	46	44	41	39	39	0	0	0	0	0	0	0
66	2013 GR		64	61	59	57	54	52	49	47	45	42	40	40	0	0	0	0	0	0
70	2014 GR		68	65	63	61	58	56	53	51	48	46	43	41	0	0	0	0	0	0
75	2015 GR		72	70	67	65	62	60	57	54	52	49	47	44	42	0	0	0	0	0
79	2016 GR		77	74	71	69	66	64	61	58	56	53	51	48	45	43	0	0	0	0
84	2017 GR		81	78	76	73	70	68	65	63	60	57	55	52	49	47	44	44	0	0
90	2018 GR		86	83	80	78	75	72	70	67	64	61	59	56	53	50	48	45	0	0
99	2019 GR		93	88	85	82	80	77	74	71	68	66	63	60	57	55	52	49	46	46
108	2020 GR		102	95	90	87	84	82	79	76	73	70	67	64	62	59	56	53	50	50
118	2021 GR		111	104	97	92	87	84	81	78	75	72	69	66	63	60	57	54	51	51
128	2022 GR		121	114	107	100	95	92	89	86	83	80	77	74	71	68	65	62	59	59
139	2023 GR		131	124	117	110	102	97	94	91	88	85	82	79	76	72	69	66	63	63
150	2024 GR		142	135	127	120	112	105	100	96	93	90	87	84	81	77	74	71	68	68
161	2025 GR		153	146	138	130	123	115	107	102	99	96	92	89	86	83	79	76	73	73
174	2026 GR		165	157	149	141	134	126	118	110	105	101	98	95	91	88	85	81	78	78
188	2027 GR		178	169	161	153	145	137	129	121	113	107	104	100	97	94	90	87	83	83
204	2028 GR		193	183	173	165	157	149	140	132	124	116	110	106	103	99	96	92	89	89
146	2029 GR		150	142	135	127	120	112	105	96	93	90	87	84	81	77	74	71	68	68
	2030 GR																			
	2031 GR																			
	2032 GR																			
	2033 GR																			
	2034 GR																			
	2035 GR																			
	2036 GR																			
	2037 GR																			
	2038 GR																			
	2039 GR																			
	2040 GR																			
58	2011 TY		58	56	53	51	48	46	43	41	0	0	0	0	0	0	0	0	0	0

Station	Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
	2012 TY		62	60	57	55	52	49	47	44	42	40	0	0	0	0	0	0	0	0
	2013 TY		66	64	61	59	56	53	51	48	46	43	0	0	0	0	0	0	0	0
	2014 TY		71	68	65	63	60	57	55	52	49	47	44	0	0	0	0	0	0	0
	2015 TY		75	72	70	67	64	61	59	56	53	51	48	45	0	0	0	0	0	0
	2016 TY		80	77	74	71	69	66	63	60	57	55	52	49	46	0	0	0	0	0
	2017 TY		85	82	79	76	73	70	67	65	62	59	56	53	50	47	0	0	0	0
	2018 TY		92	87	84	81	78	75	72	69	66	63	60	57	54	52	49	0	0	0
	2019 TY		101	94	89	86	83	80	77	74	71	68	65	62	59	56	53	50	0	0
	2020 TY		110	103	96	91	88	85	82	79	76	73	70	66	63	60	57	54	51	0
	2021 TY		120	113	106	99	93	90	87	84	81	78	74	71	68	65	62	59	55	52
	2022 TY		130	123	116	108	101	96	93	89	86	83	80	76	73	70	67	63	60	57
	2023 TY		141	134	126	119	111	104	98	95	92	88	85	82	78	75	72	68	65	62
	2024 TY		152	145	137	129	122	114	106	101	97	94	90	87	84	80	77	73	70	67
	2025 TY		164	156	148	140	133	125	117	109	103	100	96	93	89	86	82	79	75	72
	2026 TY		177	168	160	152	144	136	128	120	112	106	102	99	95	91	88	84	81	77
	2027 TY		192	182	172	164	156	148	139	131	123	114	108	105	101	97	94	90	86	83
	2028 TY		208	196	186	177	168	160	151	143	134	126	117	111	107	104	100	96	92	89
	2029 TY		146	213	201	191	181	172	164	155	146	138	129	120	114	110	106	102	98	95
	2030 TY		150	150	218	206	196	186	177	168	159	150	141	132	123	117	113	109	105	101
	2031 TY			154	154	224	212	201	190	181	172	163	154	145	135	126	120	116	112	107
	2032 TY				157	157	229	217	206	195	186	176	167	158	148	139	129	123	118	114
	2033 TY						161	235	222	211	200	190	181	171	161	152	142	133	126	121
	2034 TY							165	241	228	216	205	195	185	175	165	156	146	136	129
	2035 TY								169	247	234	221	210	200	190	180	170	160	149	139
	2036 TY									174	253	239	227	215	205	195	184	174	164	153
	2037 TY										178	259	245	233	221	210	199	189	178	168
	2038 TY											182	266	252	238	226	215	204	194	183
	2039 TY												187	273	258	244	232	221	210	198
	2040 TY													192	279	264	250	238	226	215

Station	Unit	Capacity	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
BR	BR1	101	1,867	1,770	1,678	1,591	1,510	1,434	1,361	1,290	1,219	1,149	1,080	1,013	946
BR	BR2	167	3,087	2,926	2,774	2,631	2,496	2,371	2,251	2,132	2,015	1,900	1,787	1,675	1,564
BR	BR3	416	7,689	7,289	6,910	6,553	6,218	5,906	5,607	5,312	5,021	4,733	4,450	4,171	3,897
CR	CR4	155	1,421	1,269	1,125	988	859	738	623	511	402	297	194	95	0
CR	CR5	168	1,540	1,375	1,219	1,071	931	800	675	554	436	322	211	103	0
CR	CR6	240	2,200	1,965	1,741	1,529	1,330	1,143	965	792	623	459	301	148	0
GH	GH1	475	14,098	13,375	12,686	12,033	11,415	10,834	10,291	9,770	9,256	8,749	8,249	7,755	7,269
GH	GH2	484	14,365	13,628	12,927	12,261	11,631	11,039	10,486	9,956	9,432	8,915	8,405	7,902	7,407
GH	GH3	480	14,246	13,516	12,820	12,159	11,535	10,948	10,399	9,873	9,354	8,841	8,336	7,837	7,346
GH	GH4	479	14,217	13,488	12,793	12,134	11,511	10,925	10,378	9,853	9,334	8,823	8,318	7,821	7,331
GR	GR3	68	922	860	801	745	692	643	595	549	504	459	415	373	331
GR	GR4	95	1,288	1,201	1,118	1,040	967	898	832	767	704	641	580	521	462
MC	MC1	303	7,053	6,531	6,033	5,559	5,110	4,687	4,290	3,910	3,538	3,173	2,817	2,468	2,128
MC	MC2	301	7,007	6,488	5,993	5,523	5,077	4,656	4,262	3,884	3,515	3,152	2,798	2,452	2,114
MC	MC3	391	9,102	8,428	7,785	7,174	6,595	6,048	5,536	5,046	4,565	4,095	3,635	3,185	2,746
MC	MC4	477	11,104	10,282	9,498	8,752	8,045	7,379	6,754	6,156	5,570	4,996	4,434	3,886	3,350
TC	TC1	383	3,222	3,101	2,986	2,878	2,777	2,652	2,536	2,425	2,315	2,206	2,099	1,993	1,888
TC	TC2	549	4,618	4,445	4,280	4,125	3,980	3,802	3,636	3,476	3,319	3,163	3,009	2,857	2,706
TY	TY3	71	2,117	1,962	1,814	1,675	1,543	1,420	1,303	1,187	1,074	964	855	749	646

2.50%

2011 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2012 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2013 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2014 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2018 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2019 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2020 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2021 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2022 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2023 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2025 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2026 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2027 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2028 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2029 CR	264	0	264	0	0	0	0	0	0	0	0	0	0	0	0
2030 CR	287	271	294	278	0	0	0	0	0	0	0	0	0	0	0
2031 CR	311	294	302	285	0	0	0	0	0	0	0	0	0	0	0
2032 CR	336	319	327	309	292	0	0	0	0	0	0	0	0	0	0
2033 CR	363	345	345	327	309	292	0	0	0	0	0	0	0	0	0
2034 CR	390	372	353	335	317	299	0	0	0	0	0	0	0	0	0
2035 CR	418	400	381	362	344	325	306	0	0	0	0	0	0	0	0
2036 CR	456	429	410	390	371	352	333	314	0	0	0	0	0	0	0
2037 CR	505	468	439	420	400	381	361	342	322	0	0	0	0	0	0
2038 CR	556	518	480	450	430	410	390	370	350	330	0	0	0	0	0

Station	Unit	Capacity	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
2039 CR		609	570	531	492	462	441	421	400	379	359	338	318	298	278
2040 CR		665	624	584	544	504	473	452	431	410	389	368	347	326	305
2011 MC		0	0	0	0	0	0	0	0	0	0	0	0	0	0
2012 MC		0	0	0	0	0	0	0	0	0	0	0	0	0	0
2013 MC		0	0	0	0	0	0	0	0	0	0	0	0	0	0
2014 MC		0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015 MC		0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016 MC		0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017 MC		0	0	0	0	0	0	0	0	0	0	0	0	0	0
2018 MC		0	0	0	0	0	0	0	0	0	0	0	0	0	0
2019 MC		0	0	0	0	0	0	0	0	0	0	0	0	0	0
2020 MC		0	0	0	0	0	0	0	0	0	0	0	0	0	0
2021 MC		0	0	0	0	0	0	0	0	0	0	0	0	0	0
2022 MC		858	0	0	0	0	0	0	0	0	0	0	0	0	0
2023 MC		932	879	0	0	0	0	0	0	0	0	0	0	0	0
2024 MC		1,091	956	901	0	0	0	0	0	0	0	0	0	0	0
2025 MC		1,176	1,035	980	924	0	0	0	0	0	0	0	0	0	0
2026 MC		1,264	1,119	1,061	1,004	947	0	0	0	0	0	0	0	0	0
2027 MC		1,356	1,205	1,147	1,088	1,029	970	0	0	0	0	0	0	0	0
2028 MC		1,451	1,296	1,235	1,175	1,115	1,055	995	0	0	0	0	0	0	0
2029 MC		1,551	1,390	1,328	1,266	1,205	1,143	1,081	1,020	0	0	0	0	0	0
2030 MC		1,655	1,488	1,424	1,361	1,298	1,235	1,172	1,108	1,045	0	0	0	0	0
2031 MC		1,762	1,590	1,525	1,460	1,395	1,330	1,266	1,201	1,136	1,071	0	0	0	0
2032 MC		1,874	1,696	1,629	1,563	1,497	1,430	1,364	1,297	1,231	1,164	1,098	0	0	0
2033 MC		1,991	1,806	1,738	1,670	1,602	1,534	1,466	1,398	1,330	1,262	1,194	1,125	0	0
2034 MC		2,114	1,921	1,852	1,782	1,712	1,642	1,572	1,503	1,433	1,363	1,293	1,223	1,154	0
2035 MC		2,242	2,041	1,969	1,898	1,826	1,755	1,683	1,612	1,540	1,469	1,397	1,325	1,254	0
2036 MC		2,377	2,208	2,092	2,019	1,945	1,872	1,799	1,725	1,652	1,579	1,505	1,432	1,359	0
2037 MC		2,518	2,425	2,263	2,144	2,069	1,994	1,919	1,844	1,768	1,693	1,618	1,543	1,468	0
2038 MC		2,665	2,552	2,486	2,319	2,198	2,121	2,044	1,967	1,890	1,813	1,736	1,659	1,581	0
2039 MC		2,818	2,888	2,718	2,548	2,377	2,253	2,174	2,095	2,016	1,937	1,858	1,779	1,700	0
2040 MC		3,059	3,135	2,961	2,786	2,611	2,437	2,262	2,087	1,912	1,737	1,562	1,387	1,212	0
2011 TC		96	91	87	82	77	0	0	0	0	0	0	0	0	0
2012 TC		103	98	94	89	84	79	0	0	0	0	0	0	0	0
2013 TC		111	106	101	96	91	86	81	0	0	0	0	0	0	0
2014 TC		118	113	108	103	98	93	88	83	0	0	0	0	0	0
2015 TC		126	121	116	111	106	101	96	91	85	0	0	0	0	0
2016 TC		135	130	124	119	114	109	103	98	93	88	0	0	0	0
2017 TC		144	138	133	127	122	117	111	106	101	95	90	0	0	0
2018 TC		153	147	142	136	131	125	120	114	109	103	98	92	0	0
2019 TC		162	156	151	145	139	134	128	123	117	111	106	100	94	0
2020 TC		172	166	160	155	149	143	137	131	126	120	114	108	102	0
2021 TC		182	176	170	164	158	152	147	141	135	129	123	117	111	0
2022 TC		193	187	181	175	168	162	156	150	144	138	132	126	120	0
2023 TC		204	198	191	185	179	173	166	160	154	148	141	135	129	0
2024 TC		215	209	203	196	190	183	177	171	164	158	151	145	139	0
2025 TC		227	221	214	208	201	194	188	181	175	168	162	155	149	0
2026 TC		240	233	226	219	213	206	199	193	186	179	173	166	159	0
2027 TC		253	246	239	232	225	218	211	204	197	191	184	177	170	0
2028 TC		266	259	252	245	238	231	224	217	209	202	195	188	181	0
2029 TC		280	273	265	258	251	244	236	229	222	215	207	200	193	0

Station	Unit	Capacity	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
	2030 TC	294	287	279	272	265	257	250	242	235	227	220	213	205	
	2031 TC	309	302	294	286	279	271	264	256	248	241	233	226	218	
	2032 TC	325	317	309	301	293	286	278	270	262	255	247	239	231	
	2033 TC	341	333	325	317	309	301	293	285	277	269	261	253	245	
	2034 TC	357	349	341	333	325	317	308	300	292	284	276	267	259	
	2035 TC	382	366	358	350	341	333	324	316	308	299	291	283	274	
	2036 TC	417	392	376	367	358	350	341	333	324	315	307	298	290	
	2037 TC	452	427	402	385	376	367	358	350	341	332	323	314	306	
	2038 TC	489	463	438	412	395	385	376	367	358	349	340	331	322	
	2039 TC	528	501	475	449	422	404	395	386	377	367	358	349	340	
	2040 TC	568	541	514	487	460	433	414	405	396	386	377	367	358	
	2011 GH	629	0	0	0	0	0	0	0	0	0	0	0	0	
	2012 GH	683	645	0	0	0	0	0	0	0	0	0	0	0	
	2013 GH	740	700	661	0	0	0	0	0	0	0	0	0	0	
	2014 GH	799	759	718	677	0	0	0	0	0	0	0	0	0	
	2015 GH	861	819	778	736	694	0	0	0	0	0	0	0	0	
	2016 GH	925	882	840	797	754	712	0	0	0	0	0	0	0	
	2017 GH	992	948	905	861	817	773	729	0	0	0	0	0	0	
	2018 GH	1,062	1,017	972	927	882	837	792	748	0	0	0	0	0	
	2019 GH	1,134	1,088	1,042	996	950	904	858	812	766	0	0	0	0	
	2020 GH	1,210	1,163	1,116	1,068	1,021	974	927	880	833	785	0	0	0	
	2021 GH	1,289	1,240	1,192	1,143	1,095	1,047	998	950	902	853	805	0	0	
	2022 GH	1,370	1,321	1,271	1,222	1,172	1,123	1,073	1,023	974	924	875	825	0	
	2023 GH	1,455	1,405	1,354	1,303	1,252	1,201	1,151	1,100	1,049	998	947	897	846	
	2024 GH	1,544	1,492	1,440	1,388	1,336	1,283	1,231	1,179	1,127	1,075	1,023	971	919	
	2025 GH	1,636	1,582	1,529	1,476	1,422	1,369	1,316	1,262	1,209	1,155	1,102	1,049	995	
	2026 GH	1,731	1,677	1,622	1,567	1,513	1,458	1,403	1,348	1,294	1,239	1,184	1,130	1,075	
	2027 GH	1,831	1,775	1,719	1,662	1,606	1,550	1,494	1,438	1,382	1,326	1,270	1,214	1,158	
	2028 GH	1,934	1,876	1,819	1,762	1,704	1,647	1,589	1,532	1,474	1,417	1,359	1,302	1,244	
	2029 GH	2,041	1,982	1,923	1,864	1,806	1,747	1,688	1,629	1,570	1,511	1,452	1,393	1,334	
	2030 GH	2,153	2,092	2,032	1,971	1,911	1,851	1,790	1,730	1,670	1,609	1,549	1,488	1,428	
	2031 GH	2,268	2,206	2,144	2,083	2,021	1,959	1,897	1,835	1,773	1,711	1,649	1,588	1,526	
	2032 GH	2,388	2,325	2,262	2,198	2,135	2,071	2,008	1,944	1,881	1,818	1,754	1,691	1,627	
	2033 GH	2,513	2,448	2,383	2,318	2,253	2,188	2,123	2,058	1,993	1,928	1,863	1,798	1,733	
	2034 GH	2,643	2,576	2,509	2,443	2,376	2,309	2,243	2,176	2,109	2,043	1,976	1,910	1,843	
	2035 GH	2,834	2,709	2,640	2,572	2,504	2,435	2,367	2,299	2,231	2,162	2,094	2,026	1,957	
	2036 GH	3,091	2,905	2,776	2,706	2,636	2,566	2,496	2,426	2,356	2,286	2,216	2,146	2,076	
	2037 GH	3,360	3,169	2,977	2,846	2,774	2,702	2,630	2,559	2,487	2,415	2,343	2,272	2,200	
	2038 GH	3,640	3,444	3,248	3,052	2,917	2,843	2,770	2,696	2,623	2,549	2,476	2,402	2,328	
	2039 GH	3,932	3,731	3,530	3,329	3,128	2,990	2,914	2,839	2,764	2,688	2,613	2,537	2,462	
	2040 GH	4,236	4,030	3,824	3,618	3,412	3,206	3,065	2,987	2,910	2,833	2,755	2,678	2,601	
	2011 BR	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2012 BR	151	0	0	0	0	0	0	0	0	0	0	0	0	
	2013 BR	164	154	0	0	0	0	0	0	0	0	0	0	0	
	2014 BR	177	168	158	0	0	0	0	0	0	0	0	0	0	
	2015 BR	191	182	172	162	0	0	0	0	0	0	0	0	0	
	2016 BR	206	196	186	176	166	0	0	0	0	0	0	0	0	
	2017 BR	222	211	201	191	181	170	0	0	0	0	0	0	0	
	2018 BR	238	227	217	206	196	185	175	0	0	0	0	0	0	
	2019 BR	254	244	233	222	211	201	190	179	0	0	0	0	0	
	2020 BR	272	261	250	239	228	217	206	195	183	0	0	0	0	

Station	Unit	Capacity	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
	2021 BR		290	278	267	256	245	233	222	211	199	188	0	0	0
	2022 BR		309	297	285	274	262	251	239	228	216	204	193	0	0
	2023 BR		328	316	304	293	281	269	257	245	233	221	209	198	0
	2024 BR		349	336	324	312	300	288	276	263	251	239	227	215	203
	2025 BR		370	357	345	332	320	307	295	282	270	257	245	233	220
	2026 BR		392	379	366	353	341	328	315	302	290	277	264	251	238
	2027 BR		415	402	388	375	362	349	336	323	310	297	284	271	257
	2028 BR		438	425	412	398	385	371	358	344	331	318	304	291	277
	2029 BR		463	449	436	422	408	394	381	367	353	339	326	312	298
	2030 BR		489	475	461	447	432	418	404	390	376	362	348	334	320
	2031 BR		516	501	487	472	458	443	429	414	400	385	371	356	342
	2032 BR		543	529	514	499	484	469	454	440	425	410	395	380	365
	2033 BR		572	557	542	527	511	496	481	466	451	435	420	405	390
	2034 BR		602	586	571	555	540	524	509	493	477	462	446	431	415
	2035 BR		633	617	601	585	569	553	537	521	505	489	473	457	441
	2036 BR		680	649	632	616	600	583	567	551	534	518	502	485	469
	2037 BR		743	697	665	648	632	615	598	581	564	548	531	514	497
	2038 BR		809	762	714	682	664	647	630	613	596	579	561	544	527
	2039 BR		878	829	781	732	699	681	663	646	628	611	593	575	558
	2040 BR		950	900	850	800	750	716	698	680	662	644	626	608	590
	2011 GR		0	0	0	0	0	0	0	0	0	0	0	0	0
	2012 GR		0	0	0	0	0	0	0	0	0	0	0	0	0
	2013 GR		0	0	0	0	0	0	0	0	0	0	0	0	0
	2014 GR		0	0	0	0	0	0	0	0	0	0	0	0	0
	2015 GR		0	0	0	0	0	0	0	0	0	0	0	0	0
	2016 GR		0	0	0	0	0	0	0	0	0	0	0	0	0
	2017 GR		0	0	0	0	0	0	0	0	0	0	0	0	0
	2018 GR		0	0	0	0	0	0	0	0	0	0	0	0	0
	2019 GR		0	0	0	0	0	0	0	0	0	0	0	0	0
	2020 GR		47	0	0	0	0	0	0	0	0	0	0	0	0
	2021 GR		51	48	0	0	0	0	0	0	0	0	0	0	0
	2022 GR		56	53	50	0	0	0	0	0	0	0	0	0	0
	2023 GR		60	57	54	51	0	0	0	0	0	0	0	0	0
	2024 GR		65	62	59	55	52	0	0	0	0	0	0	0	0
	2025 GR		70	66	63	60	57	54	0	0	0	0	0	0	0
	2026 GR		75	71	68	65	61	58	55	0	0	0	0	0	0
	2027 GR		80	77	73	70	66	63	60	56	0	0	0	0	0
	2028 GR		86	82	79	75	72	68	65	61	58	0	0	0	0
	2029 GR		91	88	84	81	77	73	70	66	63	59	0	0	0
	2030 GR		97	93	90	86	83	79	75	72	68	64	61	0	0
	2031 GR		103	100	96	92	88	85	81	77	73	70	66	62	0
	2032 GR		110	106	102	98	94	91	87	83	79	75	71	67	64
	2033 GR		116	113	109	105	101	97	93	89	85	81	77	73	69
	2034 GR		123	119	115	111	107	103	99	95	91	87	83	79	75
	2035 GR		131	126	122	118	114	110	106	102	98	93	89	85	81
	2036 GR		141	134	130	125	121	117	113	108	104	100	96	91	87
	2037 GR		155	145	137	133	129	124	120	115	111	107	102	98	94
	2038 GR		169	159	148	141	136	132	127	123	118	114	109	105	101
	2039 GR		184	173	163	152	144	140	135	130	126	121	117	112	108
	2040 GR		200	189	178	167	156	148	143	138	134	129	124	120	115
	2011 TY		0	0	0	0	0	0	0	0	0	0	0	0	0

Station	Unit	Capacity	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
	2012 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2013 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2014 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2015 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2016 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2017 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2018 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2019 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2020 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2021 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2022 TY		54	0	0	0	0	0	0	0	0	0	0	0	0
	2023 TY		58	55	0	0	0	0	0	0	0	0	0	0	0
	2024 TY		63	60	56	0	0	0	0	0	0	0	0	0	0
	2025 TY		68	65	61	58	0	0	0	0	0	0	0	0	0
	2026 TY		73	70	66	63	59	0	0	0	0	0	0	0	0
	2027 TY		79	75	72	68	64	61	0	0	0	0	0	0	0
	2028 TY		85	81	77	73	70	66	62	0	0	0	0	0	0
	2029 TY		91	87	83	79	75	71	68	64	0	0	0	0	0
	2030 TY		97	93	89	85	81	77	73	69	65	0	0	0	0
	2031 TY		103	99	95	91	87	83	79	75	71	67	0	0	0
	2032 TY		110	106	102	98	94	89	85	81	77	73	69	0	0
	2033 TY		117	113	109	104	100	96	92	87	83	79	75	70	0
	2034 TY		124	120	116	111	107	103	98	94	90	85	81	76	72
	2035 TY		132	128	123	119	114	110	105	101	96	92	87	83	78
	2036 TY		143	135	131	126	122	117	112	108	103	99	94	89	85
	2037 TY		157	146	139	134	129	125	120	115	111	106	101	96	92
	2038 TY		172	161	150	142	137	133	128	123	118	113	108	104	99
	2039 TY		187	176	165	154	146	141	136	131	126	121	116	111	106
	2040 TY		203	192	180	169	158	149	144	139	134	129	124	119	114

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
BR	BR1	101	0	0	0	0	0	441	454	590	616	785	787	789	1,035	1,054	1,357	1,337	1,319
BR	BR2	167	0	0	0	0	0	729	751	975	1,018	1,299	1,301	1,305	1,711	1,743	2,245	2,211	2,180
BR	BR3	416	0	0	0	0	0	1,816	1,870	2,430	2,536	3,235	3,242	3,252	4,261	4,342	5,591	5,508	5,431
CR	CR4	155	258	840	1,124	1,095	1,216	1,960	1,949	1,644	1,927	2,572	2,560	2,096	2,059	2,073	1,531	1,768	1,810
CR	CR5	168	279	910	1,219	1,187	1,318	2,124	2,112	1,782	2,089	2,788	2,774	2,272	2,232	2,247	1,659	1,916	1,962
CR	CR6	240	399	1,300	1,741	1,696	1,882	5,221	5,152	4,566	4,899	5,799	5,682	4,867	4,712	4,637	3,700	3,969	3,960
GH	GH1	475	0	0	0	0	0	5,620	5,988	6,566	7,371	8,085	8,761	9,219	9,707	10,790	12,508	14,281	15,439
GH	GH2	484	0	0	0	0	0	5,727	6,101	6,691	7,510	8,238	8,927	9,394	9,891	10,994	12,745	14,551	15,732
GH	GH3	480	0	0	0	0	0	5,680	6,051	6,635	7,448	8,170	8,854	9,316	9,809	10,904	12,640	14,431	15,602
GH	GH4	479	0	0	0	0	0	5,668	6,038	6,622	7,433	8,153	8,835	9,297	9,789	10,881	12,614	14,401	15,569
GR	GR3	68																	
GR	GR4	95																	
MC	MC1	303																	
MC	MC2	301																	
MC	MC3	391																	
MC	MC4	477																	
TC	TC1	383	0	0	0	0	0	1,965	2,066	2,172	2,216	2,260	2,305	2,351	2,398	2,446	2,495	2,545	2,596
TC	TC2	549	0	0	0	0	0	2,817	2,961	3,114	3,176	3,240	3,304	3,371	3,438	3,507	3,577	3,648	3,721
TY	TY3	71																	
	BR Landfill Phase 2 Savings		0	0	0	0	0	0	0	828	908	1,960	1,870	1,782	1,697	1,613	1,531	1,451	1,372
	BR Landfill Phase 3 Savings		0	0	0	0	0	0	0	0	0	0	0	0	1,638	1,745	3,767	3,594	3,426
	BR Landfill O&M Savings		0	0	0	0	0	2,985	3,075	3,167	3,262	3,360	3,461	3,564	3,671	3,781	3,895	4,012	4,132
	CR Landfill Capital Savings		936	3,049	4,083	3,979	4,416	4,938	4,772	3,579	4,464	6,617	6,353	4,493	4,170	4,023	1,844	2,496	2,513
	CR Landfill O&M Savings		0	0	0	0	0	2,181	2,307	2,393	2,537	2,726	2,944	3,121	3,308	3,507	3,717	3,925	4,061
	CR6 Stator Rewind Savings		0	0	0	0	0	2,187	2,135	2,020	1,914	1,816	1,719	1,621	1,524	1,427	1,329	1,232	1,158
	GH Landfill Capital Savings		0	0	0	0	0	61	188	1,083	2,805	4,044	4,399	4,388	4,387	6,672	11,397	16,206	18,397
	GH Landfill O&M Savings		0	0	0	0	0	22,633	23,991	25,431	26,957	28,601	30,979	32,838	34,808	36,897	39,110	41,457	43,944
	TC Landfill Capital Savings		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TC Landfill O&M Savings		0	0	0	0	0	4,782	5,027	5,286	5,392	5,500	5,610	5,722	5,836	5,953	6,072	6,194	6,318

Station	Unit	Capacity	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
BR	BR1	101	1,301	1,285	1,267	1,122	410	385	360	331	54	46	38	30	23
BR	BR2	167	2,151	2,124	2,095	1,855	678	636	595	547	89	76	63	50	39
BR	BR3	416	5,359	5,291	5,219	4,620	1,688	1,585	1,482	1,363	222	189	157	124	97
CR	CR4	155	1,869	1,932	2,000	1,861	1,810	1,778	1,748	1,719	1,692	1,708	1,727	1,747	1,771
CR	CR5	168	2,025	2,094	2,168	2,017	1,962	1,927	1,895	1,864	1,834	1,851	1,872	1,894	1,919
CR	CR6	240	4,000	4,047	4,101	3,833	3,704	3,602	2,777	2,662	2,620	2,645	2,674	2,705	2,742
GH	GH1	475	15,504	16,273	16,860	17,332	17,856	18,548	19,372	20,254	21,186	21,692	2,492	1,854	1,700
GH	GH2	484	15,900	16,581	17,180	17,660	18,195	18,899	19,739	20,637	21,587	22,103	2,539	1,889	1,733
GH	GH3	480	15,769	16,444	17,038	17,514	18,044	18,743	19,576	20,467	21,409	21,921	2,518	1,874	1,718
GH	GH4	479	15,736	16,410	17,002	17,478	18,007	18,704	19,535	20,424	21,364	21,875	2,513	1,870	1,715
GR	GR3	68													
GR	GR4	95													
MC	MC1	303													
MC	MC2	301													
MC	MC3	391													
MC	MC4	477													
TC	TC1	383	2,648	5,363	8,239	8,294	12,354	12,003	11,666	11,343	11,031	10,731	10,442	10,162	9,886
TC	TC2	549	3,796	7,687	11,809	11,888	17,709	17,206	16,723	16,259	15,812	15,382	14,967	14,567	14,170
TY	TY3	71													
	BR Landfill Phase 2 Savings		1,294	1,215	1,123	156	138	120	101	83	64	46	28	9	0
	BR Landfill Phase 3 Savings		3,261	3,101	2,943	2,789	2,638	2,487	2,336	2,158	301	265	230	194	159
	BR Landfill O&M Savings		4,256	4,384	4,515	4,651									
	CR Landfill Capital Savings		2,483	2,455	2,429	1,631	1,345	1,123	908	695	485	430	384	338	303
	CR Landfill O&M Savings		4,305	4,563	4,837	5,128	5,230	5,335	5,441	5,550	5,661	5,774	5,890	6,008	6,128
	CR6 Stator Rewind Savings		1,106	1,055	1,004	952	901	850	70	0	0	0	0	0	0
	GH Landfill Capital Savings		18,341	18,358	17,892	16,784	15,709	15,118	14,860	14,617	14,352	12,126	9,906	7,329	6,705
	GH Landfill O&M Savings		44,668	47,348	50,189	53,201	56,393	59,776	63,363	67,165	71,194	75,466	155	158	161
	TC Landfill Capital Savings		0	6,478	13,344	13,344	23,088	22,094	21,132	20,199	19,293	18,412	17,554	16,717	15,883
	TC Landfill O&M Savings		6,444	6,573	6,704	6,838	6,975	7,115	7,257	7,402	7,550	7,701	7,855	8,012	8,172

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
BR	BR1	101	0	0	0	553	743	703	668	635	606	577	548	519	491	462	433	413	403	393
BR	BR2	167	0	0	0	915	1,228	1,163	1,104	1,050	1,002	954	907	859	811	764	716	684	666	649
BR	BR3	416	0	0	0	2,279	3,060	2,897	2,749	2,616	2,496	2,377	2,258	2,140	2,021	1,902	1,784	1,703	1,660	1,617
CR	CR4	155	0	0	0	980	1,582	1,494	1,413	1,339	1,269	1,201	1,132	1,064	996	927	859	806	770	735
CR	CR5	168	0	0	0	1,062	1,715	1,619	1,532	1,451	1,376	1,302	1,227	1,153	1,079	1,005	931	874	835	796
CR	CR6	240	0	0	0	1,518	2,449	2,313	2,188	2,073	1,966	1,860	1,754	1,647	1,541	1,435	1,329	1,249	1,193	1,137
GH	GH1	475	0	0	0	1,462	1,954	1,856	1,767	1,686	1,611	1,540	1,468	1,397	1,325	1,254	1,183	1,111	1,062	1,035
GH	GH2	484	0	0	0	1,489	1,991	1,891	1,800	1,718	1,642	1,569	1,496	1,423	1,350	1,278	1,205	1,132	1,082	1,055
GH	GH3	480	0	0	0	1,477	1,975	1,876	1,786	1,703	1,628	1,556	1,484	1,411	1,339	1,267	1,195	1,123	1,073	1,046
GH	GH4	479	0	0	0	1,474	1,971	1,872	1,782	1,700	1,625	1,553	1,481	1,409	1,337	1,265	1,193	1,121	1,071	1,044
GR	GR3	68	0	0	0	586	837	792	751	713	679	645	611	577	544	510	476	452	438	423
GR	GR4	95	0	0	0	819	1,169	1,106	1,049	996	948	901	854	807	759	712	665	631	611	591
MC	MC1	303	0	0	0	1,215	1,774	1,682	1,598	1,521	1,449	1,380	1,311	1,242	1,173	1,103	1,034	965	915	882
MC	MC2	301	0	0	0	1,207	1,762	1,671	1,588	1,511	1,440	1,371	1,302	1,234	1,165	1,096	1,027	959	908	877
MC	MC3	391	0	0	0	1,568	2,289	2,171	2,063	1,963	1,870	1,781	1,692	1,602	1,513	1,424	1,335	1,245	1,180	1,139
MC	MC4	477	0	0	0	1,913	2,792	2,648	2,516	2,394	2,281	2,172	2,064	1,955	1,846	1,737	1,628	1,519	1,440	1,389
TC	TC1	383	0	0	0	770	1,008	958	912	871	833	797	760	724	688	652	616	579	555	542
TC	TC2	549	0	0	0	1,104	1,445	1,373	1,307	1,248	1,194	1,142	1,090	1,038	986	934	882	830	795	777
TY	TY3	71	0	0	0	586	837	792	751	713	679	645	611	577	544	510	476	452	438	423
BRWATER			0	0	0	3,747	5,032	4,763	4,521	4,302	4,104	3,908	3,713	3,518	3,323	3,128	2,933	2,800	2,729	2,659
CRWATER			0	0	0	3,560	5,746	5,427	5,134	4,863	4,611	4,362	4,113	3,865	3,616	3,367	3,118	2,929	2,798	2,668
MCWATER			0	0	0	5,902	8,617	8,173	7,765	7,389	7,040	6,704	6,368	6,032	5,696	5,361	5,025	4,689	4,443	4,287
TCWATER			0	0	0	1,874	2,453	2,331	2,220	2,119	2,026	1,938	1,850	1,762	1,674	1,586	1,498	1,410	1,350	1,319
GHWATER			0	0	0	5,902	7,892	7,495	7,135	6,806	6,505	6,217	5,928	5,640	5,352	5,063	4,775	4,487	4,288	4,180
GRWATER			0	0	0	1,405	2,006	1,898	1,799	1,709	1,627	1,546	1,465	1,384	1,303	1,222	1,141	1,083	1,049	1,015

Station	Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
BR	BR1	101	382	372	361	351	340	330	320	309	299	288	278	267	257	247	236	226	215	205
BR	BR2	167	632	615	597	580	563	546	528	511	494	477	459	442	425	408	390	373	356	339
BR	BR3	416	1,574	1,531	1,488	1,445	1,402	1,359	1,316	1,273	1,230	1,187	1,144	1,101	1,058	1,016	973	930	887	844
CR	CR4	155	699	663	627	591	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5	168	757	718	679	640	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6	240	1,082	1,026	970	915	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GH	GH1	475	1,008	982	955	928	901	875	848	821	794	767	741	714	687	660	634	607	580	553
GH	GH2	484	1,028	1,000	973	946	918	891	864	837	809	782	755	727	700	673	646	618	591	564
GH	GH3	480	1,019	992	965	938	911	884	857	830	803	776	748	721	694	667	640	613	586	559
GH	GH4	479	1,017	990	963	936	909	882	855	828	801	774	747	720	693	666	639	612	585	558
GR	GR3	68	409	395	380	366	352	337	323	309	294	280	266	251	237	0	0	0	0	0
GR	GR4	95	571	551	531	511	491	471	451	431	411	391	371	351	331	0	0	0	0	0
MC	MC1	303	850	818	786	754	722	690	658	626	594	562	530	0	0	0	0	0	0	0
MC	MC2	301	845	813	781	749	717	686	654	622	590	558	526	0	0	0	0	0	0	0
MC	MC3	391	1,097	1,056	1,015	973	932	891	849	808	766	725	684	0	0	0	0	0	0	0
MC	MC4	477	1,339	1,288	1,238	1,187	1,137	1,086	1,036	986	935	885	834	0	0	0	0	0	0	0
TC	TC1	383	529	517	504	491	479	466	453	441	428	415	403	390	377	364	352	339	326	314
TC	TC2	549	759	741	723	704	686	668	650	632	613	595	577	559	541	522	504	486	468	450
TY	TY3	71	409	395	380	366	352	337	323	309	294	280	266	251	237	0	0	0	0	0
BRWATER		2,588	2,517	2,447	2,376	2,305	2,235	2,164	2,094	2,023	1,952	1,882	1,811	1,740	1,670	1,599	1,529	1,458	1,387	
CRWATER		2,537	2,407	2,277	2,146	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MCWATER		4,131	3,976	3,820	3,664	3,508	3,353	3,197	3,041	2,886	2,730	2,574	0	0	0	0	0	0	0	0
TCWATER		1,288	1,258	1,227	1,196	1,165	1,134	1,103	1,072	1,041	1,010	979	949	918	887	856	825	794	763	
GHWATER		4,072	3,964	3,856	3,748	3,640	3,531	3,423	3,315	3,207	3,099	2,991	2,883	2,774	2,666	2,558	2,450	2,342	2,234	
GRWATER		980	946	912	877	843	809	774	740	706	671	637	603	568	0	0	0	0	0	0

Station	Unit	Capacity	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
BR	BR1	101	194	184	174	0	0	0	0	0	0	0	0	0	0
BR	BR2	167	321	304	287	0	0	0	0	0	0	0	0	0	0
BR	BR3	416	801	758	715	0	0	0	0	0	0	0	0	0	0
CR	CR4	155	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5	168	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6	240	0	0	0	0	0	0	0	0	0	0	0	0	0
GH	GH1	475	526	500	473	446	0	0	0	0	0	0	0	0	0
GH	GH2	484	536	509	482	454	0	0	0	0	0	0	0	0	0
GH	GH3	480	532	505	478	451	0	0	0	0	0	0	0	0	0
GH	GH4	479	531	504	477	450	0	0	0	0	0	0	0	0	0
GR	GR3	68	0	0	0	0	0	0	0	0	0	0	0	0	0
GR	GR4	95	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC1	303	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC2	301	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC3	391	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC4	477	0	0	0	0	0	0	0	0	0	0	0	0	0
TC	TC1	383	301	288	276	263	250	237	225	212	0	0	0	0	0
TC	TC2	549	431	413	395	377	359	340	322	304	0	0	0	0	0
TY	TY3	71	0	0	0	0	0	0	0	0	0	0	0	0	0
BRWATER	BRWATER	1,317	1,246	1,175	1,175	0	0	0	0	0	0	0	0	0	0
CRWATER	CRWATER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MCWATER	MCWATER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TCWATER	TCWATER	732	701	670	640	609	609	578	547	516	0	0	0	0	0
GHWATER	GHWATER	2,125	2,017	1,909	1,801	0	0	0	0	0	0	0	0	0	0
GRWATER	GRWATER	0	0	0	0	0	0	0	0	0	0	0	0	0	0

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
Retire:																			
No	TY	TY GR3	TY GR3 BR3	TY GR3 CRA	TY GR3 CRA	TY GR3 CRA	TY GR3 CRA	TY GR3 CR	TY GR3 CR	TY GR3 CR	TY GR3 CR	TY GR3 CR	TY GR3 CR	TY GR3 CR	TY GR3 CR	TY GR3 CR	TY GR3 CR	TY GR3 CR	
Retirements	TY	TY GR3	TY GR3 BR3	TY GR3 CRA	TY GR3 CRA	TY GR3 CRA	TY GR3 CRA	TY GR3 CR	TY GR3 CR	TY GR3 CR	TY GR3 CR	TY GR3 CR	TY GR3 CR	TY GR3 CR	TY GR3 CR	TY GR3 CR	TY GR3 CR	TY GR3 CR	
2010																			
2011																			
2012																			
2013																			
2014																			
2015																			
2016	3x1C(1)	2x1C(1)	3x1C(1)	2x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(2)	3x1C(1)	3x1C(1)	3x1C(2)	3x1C(2)	3x1C(2)	3x1C(2)	
2017	3x1C(1)																		
2018																			
2019																			
2020		2x1C(1)	3x1C(1)	2x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	2x1C(1)	2x1C(1)	2x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	
2021																			
2022																			
2023																			
2024	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	2x1C(1)	2x1C(1)	3x1C(1)	2x1C(1)	2x1C(1)	2x1C(1)	3x1C(1)	
2025																			
2026																			
2027																			
2028																			
2029																			
2030																			
2031	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	
2032																			
2033																			
2034																			
2035																			
2036	SCCT(1)	SCCT(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	
2037	3x1C(1)	SCCT(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	
2038	3x1C(1)	SCCT(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	
2039																			
2040																			

Discount Rate:

6.75%

AEC Gas Prices (Remainal \$) and Mid CO2 Prices

Table with columns for SW, NEVAR, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033. Rows include production costs for various gas types (e.g., Retire TY GR3 and GH3, Retire TY GR4 and GH4) and unit costs (e.g., Retire TY GR CR3 and MCL-1, Retire TY GR CR BR-2 and MCL-2).

Discount Rate: 6.71%

AESC Gas Prices (Nominal \$) and Mild CO2 Prices

Table with columns: NPV/RR, \$M, \$000, and years 2011-2033. Rows are categorized by retirement type (e.g., Retire TY GR CR and GH4, Retire TY GR CR and GH1) and include a 'Landfill Gas/Delta' section. Values represent financial metrics over a 23-year period.

AESC Gas Prices (Nominal \$) and Mid CO2 Prices

Table with columns: SM, MONTH, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033. Rows include Retire TY GR and CR, Retire TY GR and MCH, Retire TY GR and TCI, etc. Values range from 0 to 6.985.

Total Revenue Requirements

Table with columns: Retire TY, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033. Values range from -59 to 52,142.

Total Revenue Requirements Cumulative Delta

Table with columns: Retire TY, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033. Values range from -187 to 52,142.

Discount Rate: 6.75%

	\$M	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Retire TY GR3 CH4 and CRG	5000	-2,432	-14,184	-46,657	-94,816	-179,689	-154,658	-201,687	-245,508	-231,790	-221,818	-235,999	-306,601	-423,136	-498,662	-491,984	-469,714	-492,915	-521,828	-550,710	-586,362	-620,134	-655,498	-674,715
Retire TY GR3 CH4 CRG and BR1-2	NEVER	-489	-6,995	-22,601	-52,609	-86,982	-41,752	47,853	76,534	12,688	-37,854	-67,104	-42,770	37,201	60,956	11,713	-63,345	-97,854	-179,095	-262,084	-352,581	-452,956	-563,584	-672,280
Retire TY GR3 CR and GH3		-1,326	-10,690	-36,502	-86,729	-135,089	-162,741	-151,887	-135,726	-190,301	-254,219	-306,877	-348,144	-399,195	-463,549	-545,774	-643,946	-761,494	-898,683	-1,046,669	-1,206,669	-1,379,408	-1,563,002	-1,756,508
Retire TY GR3 CR and GH1		-114	-680	-2,042	-4,650	-8,275	-13,421	-19,944	-28,374	-38,451	-50,121	-63,453	-78,453	-95,121	-113,453	-133,453	-154,121	-175,453	-197,453	-220,121	-243,453	-267,453	-292,121	-317,453
Retire TY GR and CR		0	-1,885	-7,795	-22,481	-41,925	-56,268	-72,643	-90,563	-109,563	-129,563	-150,563	-172,563	-196,563	-221,563	-248,563	-276,563	-305,563	-335,563	-366,563	-398,563	-431,563	-465,563	-500,563
Retire TY GR CH and MCH		-862	-13,572	-35,054	-66,223	-97,090	-14,131	-44,660	-77,363	-112,144	-148,068	-184,144	-220,144	-256,144	-292,144	-328,144	-364,144	-400,144	-436,144	-472,144	-508,144	-544,144	-580,144	-616,144
Retire TY GR CH and TCI		0	0	1,587	25,381	63,912	100,639	100,210	123,611	135,611	148,068	160,144	171,817	183,088	193,947	204,347	214,298	223,795	232,847	241,478	249,696	257,501	264,901	271,901
Retire TY GR CH and GH4		-122	-649	725	31,172	86,281	170,926	163,787	152,327	136,786	117,300	94,958	69,287	40,907	19,347	2,983	-14,478	-32,795	-48,178	-61,478	-71,629	-79,629	-85,429	-90,029
Retire TY GR CH and MCH		0	-1,380	-9,281	-1,598	16,273	45,133	7,973	7,355	86,087	146,058	180,553	158,332	81,987	82,931	164,837	252,611	290,169	309,210	266,116	199,807	124,942	204,814	239,556
Retire TY GR CR and MCH		-11	-3,657	-8,324	11,720	49,201	133,235	137,710	130,755	174,395	274,000	342,487	343,003	321,817	269,603	184,123	44,123	442,170	317,804	59,558	52,430	521,331	497,629	471,637
Retire TY GR CR BRL-2 and MCH-2		-489	-14,202	-49,527	-87,570	-153,482	-6,040	-51,138	-69,287	-4,291	36,670	54,211	10,431	-82,264	-113,586	-80,927	-41,083	-45,397	-53,791	-63,017	-88,159	-123,876	-159,816	-204,358
								8,512	57,463	97,680	99,616	90,935	36,444	-14,681	-34,129	41,339	32,824	18,009	-3,842	-26,493	-70,464	-127,524	-192,814	-246,654

Discount Rate:

Retiree TY GR CR and GH2
Retiree TY GR CR and MC1-2
Retiree TY GR CR BR1-2 and MC1-2
Retiree TY GR CR BR1-2 and MC1-2

Table with columns for years 2034-2058 and rows for various retiree categories. Values range from 0 to 573.93.

New Controls Capital

Table with columns for years 2034-2058 and rows for retiree categories. Values range from 141.026 to 85.170.

New Controls Capital Delta

Table with columns for years 2034-2058 and rows for retiree categories. Values range from -2.364 to 85.170.

MTP Capital

Table with columns for years 2034-2058 and rows for retiree categories. Values range from 139.365 to 122.417.

Discount Rate:

Retire TY GR CR and GH4 2034 2035 2036 2037 2038 2039 2040 2050 2051 2052 2053 2054 2055 2057 2058
 Retire TY GR CR and MC3 110.593 115.577 120.286 124.417 128.609 132.865 137.185
 Retire TY GR CR and GR2 115.732 118.562 122.433 127.894 134.416 136.999 141.645
 Retire TY GR CR and MCI-2 110.749 115.416 120.118 124.282 128.425 132.676 136.989
 Retire TY GR CR BR1-2 and MCI-2 107.211 111.778 116.384 120.669 125.010 129.408 133.865
 Retire TY GR BR1-2 and MCI-2 101.970 106.310 110.687 114.741 118.848 123.011 127.229

MTL Capital Delta

No Retirements

Retire TY 2790 -2,904 -3,017 -3,052 -3,170 -3,249 -3,330
 Retire TY and GR3 -1,152 -1,199 -1,247 -1,343 -1,377 -1,411
 Retire TY GR3 and BR3 -8,136 -8,488 -8,843 -9,202 -9,564 -9,930 -10,300
 Retire TY GR3 and CR4 -2,233 -2,289 -2,346 -2,423 -2,465 -2,526 -2,589
 Retire TY GR3 CR4 and GR6 -3,457 -3,544 -3,632 -3,723 -3,816 -3,912 -4,009
 Retire TY GR3 CR4 CR6 and BR1-2 -5,241 -5,468 -5,697 -5,928 -6,161 -6,397 -6,635
 Retire TY GR3 and CR -2,400 -2,481 -2,543 -2,605 -2,671 -2,738 -2,807
 Retire TY GR3 CR and GH3 -14,831 -15,472 -16,121 -16,775 -17,437 -18,106 -18,782
 Retire TY GR3 CR and GH1 -14,676 -15,311 -15,953 -16,601 -17,256 -17,918 -18,587
 Retire TY GR and CR -1,609 -1,673 -1,742 -1,809 -1,876 -1,923 -1,971
 Retire TY GR CR and MC4 -14,604 -15,194 -15,786 -16,180 -16,585 -16,999 -17,424
 Retire TY GR CR and TC1 -3,286 -3,431 -3,577 -3,725 -3,875 -4,026 -4,180
 Retire TY GR CR and GH4 -14,800 -15,440 -16,087 -16,741 -17,401 -18,069 -18,743
 Retire TY GR CR and MC3 -11,971 -12,455 -12,940 -13,283 -13,555 -13,934 -14,283
 Retire TY GR CR and MC2 -14,954 -15,601 -16,255 -16,915 -17,583 -18,257 -18,939
 Retire TY GR CR and MCI-2 -18,492 -19,239 -19,988 -20,488 -21,000 -21,525 -22,063
 Retire TY GR CR BR1-2 and MCI-2 -23,734 -24,707 -25,685 -26,416 -27,152 -27,923 -28,699

Landfill Capital

No Retirements

Retire TY 115.469 117.869 118.900 120.220 121.001 38,766 37,512
 Retire TY and GR3 115.469 117.869 118.900 120.220 121.001 38,766 37,512
 Retire TY GR3 and BR3 113.987 116.506 118.678 120.081 121.894 38,652 37,415
 Retire TY GR3 CR4 113,721 116,150 117,288 118,532 40,273 37,019 35,741
 Retire TY GR3 CR4 and GR6 109,949 112,469 114,583 115,867 37,599 34,314 33,000
 Retire TY GR3 CR4 CR6 and BR1-2 109,049 111,624 112,754 114,016 35,727 32,420 31,081
 Retire TY GR3 CR and CR 89,473 91,157 91,345 92,095 32,209 30,546 29,382
 Retire TY GR3 CR and GH1 89,677 91,370 91,568 92,323 32,235 30,566 29,380
 Retire TY GR and CR 109,049 111,624 112,754 114,016 35,727 32,420 31,081
 Retire TY GR CR and MC4 97,383 100,281 101,723 103,285 28,285 27,258 21,195
 Retire TY GR CR and MC3 89,514 91,199 91,390 92,141 32,214 30,550 29,366
 Retire TY GR CR and MC2 109,049 111,624 112,754 114,016 35,727 32,420 31,081
 Retire TY GR CR and MCI-2 89,310 90,986 91,167 91,912 33,188 30,531 29,348
 Retire TY GR CR BR1-2 and MCI-2 109,049 111,624 112,754 114,016 35,727 32,420 31,081
 Retire TY GR CR BR1-2 and MCI-2 108,094 110,746 112,611 113,894 35,626 32,340 31,015

Landfill Capital Delta

No Retirements

Retire TY 0 0 0 0 0 0 0
 Retire TY and GR3 -1,482 -1,369 -222 -189 0 0 0
 Retire TY GR3 and BR3 -1,748 -1,719 -1,692 -1,708 -1,727 -1,747 -1,771
 Retire TY GR3 CR4 and CR6 -2,777 -2,662 -2,620 -2,645 -2,674 -2,705 -2,742
 Retire TY GR3 CR4 and BR1-2 -955 -878 -143 -122 -101 -80 -62
 Retire TY GR3 CR and CR -1,895 -1,864 -1,834 -1,854 -1,872 -1,894 -1,919
 Retire TY GR3 CR and GH3 -19,576 -20,467 -21,409 -21,921 -2,518 -1,874 -1,718
 Retire TY GR3 CR and GH1 -19,372 -20,254 -21,186 -21,692 -2,492 -1,854 -1,700
 Retire TY GR and CR 0 0 0 0 0 0 0
 Retire TY GR CR and MC4 -11,666 -11,343 -11,031 -10,731 -10,442 -10,162 -9,886
 Retire TY GR CR and GH4 -19,535 -20,424 -21,364 -21,875 -2,513 -1,870 -1,715
 Retire TY GR CR and MC3 0 0 0 0 0 0 0
 Retire TY GR CR and MC2 -19,739 -20,627 -21,587 -22,108 0 0 0
 Retire TY GR CR and MCI-2 0 0 0 0 0 0 0
 Retire TY GR CR BR1-2 and MCI-2 -955 -878 -143 -122 -101 -80 -62

Water Capital

No Retirements

Retire TY 11,999 10,985 10,571 10,157 9,743 9,329 6,496
 Retire TY and GR3 11,062 10,662 10,262 9,862 9,463 9,063 6,245
 Retire TY GR3 and BR3 10,724 10,339 9,953 9,568 9,183 8,797 5,993
 Retire TY GR3 and CR4 9,365 9,023 8,660 8,338 7,995 7,653 4,892
 Retire TY GR3 CR4 and CR6 10,724 10,339 9,953 9,568 9,183 8,797 5,993
 Retire TY GR3 CR4 CR6 and BR1-2 9,949 9,491 9,133 8,775 8,418 8,060 5,284
 Retire TY GR3 CR and CR 10,724 10,339 9,953 9,568 9,183 8,797 5,993
 Retire TY GR3 CR and GH3 9,940 9,482 9,124 8,765 8,407 8,049 5,272
 Retire TY GR3 CR and GH1 9,850 9,401 9,132 8,774 8,415 8,056 5,279
 Retire TY GR and CR 10,253 9,888 9,522 9,157 8,791 8,426 5,842

Discount Rate:

	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	
Retire TY GR3 CR4 and CR6	-699,725	-730,292	-765,131	-796,629	-827,678	-861,819	-895,481																			
Retire TY GR3 CR4 CR6 and BR1-2	-354,120	-367,667	-423,893	-462,247	-500,184	-540,244	-583,789																			
Retire TY GR3 and CR	-684,711	-754,126	-827,790	-1,044,965	-1,044,080	-955,840	-917,650																			
Retire TY GR3 CR and GH3	31,785	48,890	127,048	116,306	39,961	-113,751	-251,005																			
Retire TY GR3 CR and GH1	-93,770	-131,609	-192,387	-283,688	-337,732	-375,599	-434,083																			
Retire TY GR and CR	-371,080	-376,442	-218,966	-196,164	-257,400	-392,812	-505,494																			
Retire TY GR CR and MCH	-15,876	-79,455	-202,683	-268,592	-231,496	-95,713	-234																			
Retire TY GR CR and TCI	609,497	537,801	381,642	282,351	288,760	386,025	437,866																			
Retire TY GR CR and GH4	382,542	319,368	195,068	176,186	188,440	344,713	451,712																			
Retire TY GR CR and MCH	235,338	156,732	-5,628	-112,719	-113,378	-24,208	21,815																			
Retire TY GR CR and GH2	445,557	385,536	265,064	196,527	261,738	417,056	517,990																			
Retire TY GR CR and MCH-2	-252,908	-308,849	-359,543	-407,686	-455,876	-502,018	-549,440																			
Retire TY GR CR BR1-2 and MCH-2	-332,471	-484,733	-690,515	-804,737	-830,566	-762,386	-739,652																			

Discount Rate:

2052 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078

New Unit Capital and Production Cost

- No Retirements
- Retire TY
- Retire TY and GR3
- Retire TY GR3 and BR3
- Retire TY GR3 and CR4
- Retire TY GR3 CR4 and CR6
- Retire TY GR3 CR4 CR6 and BR1-2
- Retire TY GR3 and CR
- Retire TY GR3 CR and GH3
- Retire TY GR3 CR and GH1
- Retire TY GR CR and MCA
- Retire TY GR CR and TCI
- Retire TY GR CR and GH4
- Retire TY GR CR and MCA
- Retire TY GR CR and GH2
- Retire TY GR CR and MCL-2
- Retire TY GR CR BR1-2 and MCL-2

Production Cost

- No Retirements
- Retire TY
- Retire TY and GR3
- Retire TY GR3 and BR3
- Retire TY GR3 and CR4
- Retire TY GR3 CR4 and CR6
- Retire TY GR3 CR4 CR6 and BR1-2
- Retire TY GR3 and CR
- Retire TY GR3 CR and GH3
- Retire TY GR3 CR and GH1
- Retire TY GR CR and CR
- Retire TY GR CR and MCA
- Retire TY GR CR and TCI
- Retire TY GR CR and GH4
- Retire TY GR CR and MCA
- Retire TY GR CR and GH2
- Retire TY GR CR and MCL-2
- Retire TY GR CR BR1-2 and MCL-2

Production Cost Delta

- No Retirements
- Retire TY
- Retire TY and GR3
- Retire TY GR3 and BR3
- Retire TY GR3 and CR4
- Retire TY GR3 CR4 and CR6
- Retire TY GR3 CR4 CR6 and BR1-2
- Retire TY GR3 and CR
- Retire TY GR3 CR and GH3
- Retire TY GR3 CR and GH1
- Retire TY GR CR and CR
- Retire TY GR CR and MCA
- Retire TY GR CR and TCI
- Retire TY GR CR and GH4
- Retire TY GR CR and MCA
- Retire TY GR CR and GH2
- Retire TY GR CR and MCL-2
- Retire TY GR CR BR1-2 and MCL-2

New Unit Capital

- No Retirements
- Retire TY
- Retire TY and GR3
- Retire TY GR3 and BR3
- Retire TY GR3 and CR4
- Retire TY GR3 CR4 and CR6
- Retire TY GR3 CR4 CR6 and BR1-2
- Retire TY GR3 and CR
- Retire TY GR3 CR and GH3
- Retire TY GR3 CR and GH1
- Retire TY GR CR and MCA
- Retire TY GR CR and TCI
- Retire TY GR CR and GH4
- Retire TY GR CR and MCA
- Retire TY GR CR and GH2
- Retire TY GR CR and MCL-2
- Retire TY GR CR BR1-2 and MCL-2

Discount Rate:

2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078

Retire TY GR CR and GH2
Retire TY GR CR and MCL-2
Retire TY GR CR BR1-2 and MCL-2
New Unit Capital Delta
No Retirements
Retire TY
Retire TY and GR3
Retire TY GR3 and BR3
Retire TY GR3 and CR4
Retire TY GR3 CR4 and CR6
Retire TY GR3 CR4 CR6 and BR1-2
Retire TY GR3 and CR
Retire TY GR3 CR and GH3
Retire TY GR3 CR and GH1
Retire TY GR and CR
Retire TY GR CR and MCL
Retire TY GR CR and TCL
Retire TY GR CR and GH4
Retire TY GR CR and MCL-2
Retire TY GR CR and MCL-2
Retire TY GR CR and MCL-2
Retire TY GR CR BR1-2 and MCL-2

New Controls Capital
No Retirements
Retire TY
Retire TY and GR3
Retire TY GR3 and BR3
Retire TY GR3 and CR4
Retire TY GR3 CR4 and CR6
Retire TY GR3 CR4 CR6 and BR1-2
Retire TY GR3 and CR
Retire TY GR3 CR and GH3
Retire TY GR3 CR and GH1
Retire TY GR and CR
Retire TY GR CR and MCL
Retire TY GR CR and TCL
Retire TY GR CR and GH4
Retire TY GR CR and MCL-2
Retire TY GR CR and MCL-2
Retire TY GR CR and MCL-2
Retire TY GR CR BR1-2 and MCL-2

New Controls Capital Delta
No Retirements
Retire TY
Retire TY and GR3
Retire TY GR3 and BR3
Retire TY GR3 and CR4
Retire TY GR3 CR4 and CR6
Retire TY GR3 CR4 CR6 and BR1-2
Retire TY GR3 and CR
Retire TY GR3 CR and GH3
Retire TY GR3 CR and GH1
Retire TY GR and CR
Retire TY GR CR and MCL
Retire TY GR CR and TCL
Retire TY GR CR and GH4
Retire TY GR CR and MCL-2
Retire TY GR CR and MCL-2
Retire TY GR CR and MCL-2
Retire TY GR CR BR1-2 and MCL-2

MCL Capital
No Retirements
Retire TY
Retire TY and GR3
Retire TY GR3 and BR3
Retire TY GR3 and CR4
Retire TY GR3 CR4 and CR6
Retire TY GR3 CR4 CR6 and BR1-2
Retire TY GR3 and CR
Retire TY GR3 CR and GH3
Retire TY GR3 CR and GH1
Retire TY GR and CR
Retire TY GR CR and MCL
Retire TY GR CR and TCL

Table with 20 columns representing years from 2059 to 2078. Each row contains a series of 0s, indicating zero values for each year.

Discount Rate:

2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078

Retire TY GR CR and GH4
 Retire TY GR CR and MC3
 Retire TY GR CR and GH2
 Retire TY GR CR and MC1-2
 Retire TY GR CR BR1-2 and MC1-2

MTF Capital Delta

No Retirements
 Retire TY
 Retire TY and GR3
 Retire TY GR3 and BR3
 Retire TY GR3 and CR4
 Retire TY GR3 CR4 and CR6
 Retire TY GR3 CR4 CR6 and BR1-2
 Retire TY GR3 and CR
 Retire TY GR3 CR and GH3
 Retire TY GR3 CR and GH1
 Retire TY GR and CR
 Retire TY GR CR and MC4
 Retire TY GR CR and TCL
 Retire TY GR CR and GH4
 Retire TY GR CR and MC3
 Retire TY GR CR and GH2
 Retire TY GR CR and MC1-2
 Retire TY GR CR BR1-2 and MC1-2

Landfill Capital

No Retirements
 Retire TY
 Retire TY and GR3
 Retire TY GR3 and BR3
 Retire TY GR3 and CR4
 Retire TY GR3 CR4 and CR6
 Retire TY GR3 CR4 CR6 and BR1-2
 Retire TY GR3 and CR
 Retire TY GR3 CR and GH3
 Retire TY GR3 CR and GH1
 Retire TY GR and CR
 Retire TY GR CR and MC4
 Retire TY GR CR and TCL
 Retire TY GR CR and GH4
 Retire TY GR CR and MC3
 Retire TY GR CR and GH2
 Retire TY GR CR and MC1-2
 Retire TY GR CR BR1-2 and MC1-2

Landfill Capital Delta

No Retirements
 Retire TY
 Retire TY and GR3
 Retire TY GR3 and BR3
 Retire TY GR3 and CR4
 Retire TY GR3 CR4 and CR6
 Retire TY GR3 CR4 CR6 and BR1-2
 Retire TY GR3 and CR
 Retire TY GR3 CR and GH3
 Retire TY GR3 CR and GH1
 Retire TY GR and CR
 Retire TY GR CR and MC4
 Retire TY GR CR and TCL
 Retire TY GR CR and GH4
 Retire TY GR CR and MC3
 Retire TY GR CR and GH2
 Retire TY GR CR and MC1-2
 Retire TY GR CR BR1-2 and MC1-2

Water Capital

No Retirements
 Retire TY
 Retire TY and GR3
 Retire TY GR3 and BR3
 Retire TY GR3 and CR4
 Retire TY GR3 CR4 and CR6
 Retire TY GR3 CR4 CR6 and BR1-2
 Retire TY GR3 and CR
 Retire TY GR3 CR and GH3
 Retire TY GR3 CR and GH1
 Retire TY GR and CR

Discount Rate:

2052 2053 2054 2055 2056 2057 2058 2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078

- Retire TY GR CR and MC4
- Retire TY GR CR and TC1
- Retire TY GR CR and GH4
- Retire TY GR CR and MC3
- Retire TY GR CR and GH2
- Retire TY GR CR and MCL-2

Water Capital Delta

No Retirements

- Retire TY
- Retire TY and GR3
- Retire TY GR3 and BR3
- Retire TY GR3 and CR4
- Retire TY GR3 CR and CR6
- Retire TY GR3 CR and BR1-2
- Retire TY GR3 and CR
- Retire TY GR3 CR and GH3
- Retire TY GR3 CR and GH1
- Retire TY GR CR and CR
- Retire TY GR CR and MC4
- Retire TY GR CR and TC1
- Retire TY GR CR and GH4
- Retire TY GR CR and MC3
- Retire TY GR CR and GH2
- Retire TY GR CR and MCL-2
- Retire TY GR CR BR1-2 and MCL-2

Total Capital

No Retirements

- Retire TY
- Retire TY and GR3
- Retire TY GR3 and BR3
- Retire TY GR3 and CR4
- Retire TY GR3 CR and CR6
- Retire TY GR3 CR and BR1-2
- Retire TY GR3 and CR
- Retire TY GR3 CR and GH3
- Retire TY GR3 CR and GH1
- Retire TY GR CR and CR
- Retire TY GR CR and MC4
- Retire TY GR CR and TC1
- Retire TY GR CR and GH4
- Retire TY GR CR and MC3
- Retire TY GR CR and GH2
- Retire TY GR CR and MCL-2
- Retire TY GR CR BR1-2 and MCL-2

Total Capital Delta

No Retirements

- Retire TY
- Retire TY and GR3
- Retire TY GR3 and BR3
- Retire TY GR3 and CR4
- Retire TY GR3 CR and CR6
- Retire TY GR3 CR and BR1-2
- Retire TY GR3 and CR
- Retire TY GR3 CR and GH3
- Retire TY GR3 CR and GH1
- Retire TY GR CR and CR
- Retire TY GR CR and MC4
- Retire TY GR CR and TC1
- Retire TY GR CR and GH4
- Retire TY GR CR and MC3
- Retire TY GR CR and GH2
- Retire TY GR CR and MCL-2
- Retire TY GR CR BR1-2 and MCL-2

Retirement Cost

No Retirements

- Retire TY
- Retire TY and GR3
- Retire TY GR3 and BR3
- Retire TY GR3 and CR4
- Retire TY GR3 CR and CR6
- Retire TY GR3 CR and BR1-2
- Retire TY GR3 and CR
- Retire TY GR3 CR and GH3

Discount Rate:

2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078

Retire TY GR3 CR and GH1
 Retire TY GR and CR
 Retire TY GR CR and MC1
 Retire TY GR CR and TC1
 Retire TY GR CR and GH4
 Retire TY GR CR and MC3
 Retire TY GR CR and GH2
 Retire TY GR CR and MC1-2
 Retire TY GR CR BR1-2 and MC1-2

Retirement Loan Cost Delta

No Retirements
 Retire TY
 Retire TY and GR3
 Retire TY GR3 and BR3
 Retire TY GR3 and CR4
 Retire TY GR3 CR4 and CR6
 Retire TY GR3 CR4 CR6 and BR1-2
 Retire TY GR3 and CR
 Retire TY GR3 CR and GH3
 Retire TY GR3 CR and GH1
 Retire TY GR and CR
 Retire TY GR CR and MC4
 Retire TY GR CR and TC1
 Retire TY GR CR and GH4
 Retire TY GR CR and MC3
 Retire TY GR CR and GH2
 Retire TY GR CR and MC1-2
 Retire TY GR CR BR1-2 and MC1-2

Existing Unit Elapsed O&M

No Retirements
 Retire TY
 Retire TY and GR3
 Retire TY GR3 and BR3
 Retire TY GR3 and CR4
 Retire TY GR3 CR4 and CR6
 Retire TY GR3 CR4 CR6 and BR1-2
 Retire TY GR3 and CR
 Retire TY GR3 CR and GH3
 Retire TY GR3 CR and GH1
 Retire TY GR and CR
 Retire TY GR CR and MC4
 Retire TY GR CR and TC1
 Retire TY GR CR and GH4
 Retire TY GR CR and MC3
 Retire TY GR CR and GH2
 Retire TY GR CR and MC1-2
 Retire TY GR CR BR1-2 and MC1-2

Existing Unit Fixed O&M Delta

No Retirements
 Retire TY
 Retire TY and GR3
 Retire TY GR3 and BR3
 Retire TY GR3 and CR4
 Retire TY GR3 CR4 and CR6
 Retire TY GR3 CR4 CR6 and BR1-2
 Retire TY GR3 and CR
 Retire TY GR3 CR and GH3
 Retire TY GR3 CR and GH1
 Retire TY GR and CR
 Retire TY GR CR and MC4
 Retire TY GR CR and TC1
 Retire TY GR CR and GH4
 Retire TY GR CR and MC3
 Retire TY GR CR and GH2
 Retire TY GR CR and MC1-2
 Retire TY GR CR BR1-2 and MC1-2

New Contracts Elapsed O&M

No Retirements
 Retire TY
 Retire TY and GR3
 Retire TY GR3 and BR3
 Retire TY GR3 and CR4
 Retire TY GR3 CR4 and CR6
 Retire TY GR3 CR4 CR6 and BR1-2

Discount Rate:

2029 2030 2031 2032 2033 2034 2035 2036 2037 2038

Retire TY GR3 and CR
 Retire TY GR3 CR and GH3
 Retire TY GR3 CR and GH1
 Retire TY GR and CR
 Retire TY GR CR and MC4
 Retire TY GR CR and TC1
 Retire TY GR CR and GH4
 Retire TY GR CR and MC3
 Retire TY GR CR and GH2
 Retire TY GR CR and MC1-2
 Retire TY GR CR BR1-2 and MC1-2
 New Controls Fixed O&M Delta

No Retirements

Retire TY
 Retire TY and GR3
 Retire TY GR3 and BR3
 Retire TY GR3 and CR4
 Retire TY GR3 CR4 and CR6
 Retire TY GR3 CR4 CR6 and BR1-2
 Retire TY GR3 and CR
 Retire TY GR3 CR and GH3
 Retire TY GR3 CR and GH1
 Retire TY GR and CR
 Retire TY GR CR and MC4
 Retire TY GR CR and TC1
 Retire TY GR CR and GH4
 Retire TY GR CR and MC3
 Retire TY GR CR and MC2
 Retire TY GR CR and GH2
 Retire TY GR CR and MC1-2
 Retire TY GR CR BR1-2 and MC1-2

Total Revenue Requirements

No Retirements

Retire TY
 Retire TY and GR3
 Retire TY GR3 and BR3
 Retire TY GR3 and CR4
 Retire TY GR3 CR4 and CR6
 Retire TY GR3 CR4 CR6 and BR1-2
 Retire TY GR3 and CR
 Retire TY GR3 CR and GH3
 Retire TY GR3 CR and GH1
 Retire TY GR and CR
 Retire TY GR CR and MC4
 Retire TY GR CR and TC1
 Retire TY GR CR and GH4
 Retire TY GR CR and MC3
 Retire TY GR CR and MC2
 Retire TY GR CR and GH2
 Retire TY GR CR and MC1-2
 Retire TY GR CR BR1-2 and MC1-2

Total Revenue Requirements Delta

No Retirements

Retire TY
 Retire TY and GR3
 Retire TY GR3 and BR3
 Retire TY GR3 and CR4
 Retire TY GR3 CR4 and CR6
 Retire TY GR3 CR4 CR6 and BR1-2
 Retire TY GR3 and CR
 Retire TY GR3 CR and GH3
 Retire TY GR3 CR and GH1
 Retire TY GR and CR
 Retire TY GR CR and MC4
 Retire TY GR CR and TC1
 Retire TY GR CR and GH4
 Retire TY GR CR and MC3
 Retire TY GR CR and MC2
 Retire TY GR CR and GH2
 Retire TY GR CR and MC1-2
 Retire TY GR CR BR1-2 and MC1-2

Total Revenue Requirements Cumulative Delta

No Retirements

Retire TY
 Retire TY and GR3
 Retire TY GR3 and BR3
 Retire TY GR3 and CR4

10/17/2011

Discount Rate:

	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	
Retire TY GR3 CR4 and CR6																					
Retire TY GR3 CR4 CR6 and BR1-2																					
Retire TY GR3 and CR																					
Retire TY GR3 CR and GR5																					
Retire TY GR3 CR and GH1																					
Retire TY GR and CR																					
Retire TY GR CR and MCA																					
Retire TY GR CR and TCL																					
Retire TY GR CR and GH4																					
Retire TY GR CR and MCA																					
Retire TY GR CR and GH2																					
Retire TY GR CR and MCL-2																					
Retire TY GR CR BR1-2 and MCL-2																					

Station	Unit	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
BR	BR1FFP	0	238	3,127	7,278	12,105	12,775	12,123	11,534	10,999	10,472	9,946	9,420	8,894	8,368	7,842	7,483	7,291	7,099
BR	BR1SAM	0	0	0	231	521	550	532	497	474	452	429	407	384	362	339	324	315	307
BR	BR2FFP	0	252	3,379	7,865	13,414	13,865	13,156	12,514	11,931	11,357	10,783	10,210	9,636	9,062	8,488	8,095	7,881	7,668
BR	BR2SAM	0	0	0	231	534	553	525	499	476	453	431	408	385	362	340	324	315	307
BR	BR3FFP	0	0	204	2,854	7,595	13,437	14,120	13,404	12,757	12,171	11,595	11,019	10,443	9,867	9,290	8,714	8,325	8,122
GH	GH1FFP	0	64	4,332	10,157	17,736	19,154	18,156	17,246	16,412	15,591	14,769	13,948	13,127	12,305	11,484	10,897	10,545	10,193
GH	GH1SAM	0	122	562	1,006	1,964	2,121	2,010	1,909	1,817	1,726	1,635	1,544	1,453	1,362	1,271	1,206	1,167	1,128
GH	GH2FFP	0	0	2,787	7,280	15,016	18,298	17,569	16,777	16,056	15,366	14,684	13,998	13,313	12,627	11,942	11,257	10,791	10,556
GH	GH2SAM	0	11	724	984	935	891	851	814	779	744	709	674	639	605	570	546	535	523
GH	GH3FFP	0	0	0	3,571	8,804	18,270	21,813	20,853	19,901	19,030	18,199	17,369	16,538	15,708	14,877	14,047	13,216	12,647
GH	GH3SAM	0	115	565	1,578	1,935	1,853	1,769	1,691	1,618	1,544	1,471	1,397	1,324	1,250	1,177	1,126	1,099	1,073
GH	GH4FFP	0	0	0	2,843	7,668	14,952	21,319	20,238	19,257	18,361	17,541	16,757	15,973	15,188	14,404	13,619	12,835	12,050
GH	GH4SAM	0	122	527	974	1,948	1,967	1,872	1,786	1,707	1,631	1,555	1,479	1,403	1,328	1,252	1,176	1,124	1,096
MC	MC1FFGD	0	0	2,360	7,268	12,372	21,934	23,856	22,601	21,453	20,399	19,360	18,320	17,281	16,242	15,203	14,164	13,412	12,949
MC	MC1FFP	0	0	1,271	5,238	9,364	17,796	19,361	18,343	17,414	16,559	15,717	14,875	14,032	13,190	12,348	11,506	10,896	10,520
MC	MC1SAM	0	0	0	42	560	1,131	1,232	1,168	1,109	1,055	1,001	948	895	841	788	735	696	672
MC	MC2FFGD	0	0	2,361	7,270	12,377	23,214	24,770	23,450	22,238	21,119	20,015	18,911	17,806	16,702	15,598	14,494	13,677	13,148
MC	MC2FFP	0	0	1,215	5,051	9,134	18,426	19,666	18,620	17,659	16,772	15,896	15,021	14,145	13,270	12,395	11,519	10,871	10,450
MC	MC2SAM	0	0	0	42	560	1,197	1,279	1,211	1,149	1,092	1,035	978	922	865	808	752	710	682
MC	MC3FFGD	0	0	646	3,668	6,975	9,472	9,135	8,699	8,295	7,908	7,522	7,135	6,748	6,362	5,975	5,589	5,303	5,124
MC	MC3FFP	0	0	0	0	39	175	207	197	187	179	170	162	154	145	137	128	121	115
MC	MC3SAM	0	0	0	3,730	8,326	13,896	18,276	17,601	16,757	15,977	15,228	14,480	13,732	12,985	12,237	11,489	10,742	10,190
MC	MC4FFGD	0	379	6,987	15,193	21,072	28,573	27,555	26,231	25,008	23,834	22,662	21,491	20,319	19,147	17,976	16,804	15,940	15,402
MC	MC4FFP	0	105	667	724	688	655	625	596	566	537	508	479	449	420	399	386	372	359
MC	MC4SAM	0	377	5,055	10,178	14,629	19,836	19,129	18,210	17,361	16,546	15,733	14,919	14,106	13,293	12,479	11,666	11,066	10,692
TC	TC1FFP	0	0	0	578	1,620	2,201	2,123	2,022	1,929	1,839	1,749	1,660	1,570	1,480	1,391	1,301	1,235	1,193
CR	CR4FFGD	0	394	3,222	13,574	27,295	45,977	45,834	45,223	44,502	43,838	43,200	42,564	41,927	41,291	40,654	40,018	39,381	38,744
CR	CR4SCR	0	390	2,395	6,163	10,786	10,183	9,627	9,112	8,633	8,160	7,687	7,214	6,740	6,267	5,794	5,431	5,177	4,924
CR	CR4FF	0	280	1,715	3,329	5,526	5,216	4,930	4,666	4,421	4,178	3,935	3,692	3,450	3,207	2,964	2,778	2,648	2,519
CR	CR4PAC	0	0	0	235	386	365	345	327	310	293	276	259	242	225	208	195	186	177
CR	CR4LIME	0	0	0	259	427	403	381	361	342	323	305	286	267	249	230	216	206	195
CR	CR5FFGD	0	359	3,311	14,658	29,304	27,663	26,148	24,742	23,429	22,132	20,835	19,538	18,241	16,944	15,647	14,641	13,924	13,207
CR	CR5SCR	0	388	2,719	6,475	11,557	10,908	10,308	9,752	9,234	8,721	8,208	7,696	7,183	6,670	6,158	5,760	5,478	5,196
CR	CR5FF	0	300	1,823	3,531	5,992	5,654	5,343	5,054	4,785	4,519	4,253	3,987	3,721	3,455	3,189	2,983	2,837	2,691
CR	CR5PAC	0	0	0	251	423	399	378	357	338	320	301	282	263	245	226	212	201	191
CR	CR5LIME	0	0	0	278	468	441	417	395	374	353	333	312	291	271	250	234	222	211
CR	CR6FFGD	0	346	3,887	18,407	35,115	33,170	31,385	29,739	28,213	26,706	25,199	23,692	22,185	20,678	19,171	18,033	17,265	16,496
CR	CR6SCR	0	79	4,201	8,457	14,206	13,414	12,689	12,019	11,399	10,787	10,175	9,563	8,951	8,339	7,727	7,266	6,956	6,646
CR	CR6FF	0	394	2,364	4,540	7,252	6,848	6,477	6,136	5,819	5,507	5,194	4,882	4,569	4,257	3,944	3,709	3,551	3,393
CR	CR6PAC	0	0	0	352	558	527	499	473	448	424	401	377	353	329	305	287	275	262
CR	CR6LIME	0	0	0	391	619	585	553	525	498	471	445	418	391	365	338	318	305	291
GR	GR3FF	0	0	1,323	4,035	5,553	5,254	4,983	4,739	4,516	4,297	4,078	3,859	3,640	3,421	3,202	3,050	2,967	2,884
GR	GR3PAC	0	0	0	112	154	145	138	131	125	119	113	107	101	95	89	85	82	80
GR	GR4FF	0	0	1,885	5,750	8,517	8,050	7,626	7,237	6,881	6,529	6,177	5,825	5,473	5,122	4,770	4,515	4,356	4,198
GR	GR4PAC	0	0	0	160	235	223	211	200	190	181	171	161	152	142	132	125	121	116

Station	Unit	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
BR	BR1	6,908	6,716	6,525	6,333	6,141	5,950	5,758	5,566	5,375	5,183	4,991	4,800	4,608	4,417	4,225	4,033	3,842	3,650
BR	BR1SAM	0	291	282	274	266	257	249	241	232	224	216	208	199	191	183	174	166	158
BR	BR2	7,455	7,242	7,028	6,815	6,602	6,388	6,175	5,962	5,749	5,535	5,322	5,109	4,895	4,682	4,469	4,256	4,042	3,829
BR	BR2SAM	0	298	290	273	264	256	247	239	230	222	213	205	196	187	179	170	162	153
BR	BR3	7,920	7,717	7,514	7,311	7,109	6,906	6,703	6,501	6,298	6,095	5,893	5,690	5,487	5,284	5,082	4,879	4,676	4,474
GH	GH1	9,841	9,489	9,137	8,785	8,433	8,081	7,729	7,377	7,025	6,673	6,321	5,969	5,617	5,265	4,913	4,561	4,209	3,857
GH	GH1SAM	0	1,089	1,050	972	933	894	855	816	777	738	699	661	622	583	544	505	466	427
GH	GH2	10,330	10,104	9,878	9,652	9,425	9,199	8,973	8,747	8,521	8,295	8,069	7,843	7,617	7,391	7,165	6,939	6,713	6,486
GH	GH2SAM	0	511	500	488	476	464	453	441	429	418	406	394	383	371	359	348	336	324
GH	GH3	12,344	12,047	11,750	11,452	11,155	10,858	10,561	10,263	9,966	9,669	9,372	9,075	8,777	8,480	8,183	7,886	7,588	7,291
GH	GH3SAM	0	1,047	1,020	994	967	941	915	888	862	835	809	782	756	730	703	677	650	624
GH	GH4	11,513	11,223	10,932	10,642	10,352	10,061	9,771	9,481	9,190	8,900	8,610	8,319	8,029	7,739	7,448	7,158	6,867	6,577
GH	GH4SAM	0	1,068	1,039	1,011	983	955	927	899	870	842	814	786	758	730	701	673	645	617
MC	MC1	12,485	12,022	11,558	11,095	10,631	10,167	9,704	9,240	8,777	8,313	7,850	7,387	6,924	6,461	6,000	5,539	5,078	4,617
MC	MC1SAM	0	10,143	9,767	9,390	9,013	8,637	8,260	7,884	7,507	7,130	6,754	6,377	5,999	5,622	5,245	4,868	4,491	4,114
MC	MC2	648	624	600	576	552	528	504	480	455	431	407	383	359	335	311	287	263	239
MC	MC2SAM	0	12,618	12,088	11,558	11,028	10,499	9,969	9,439	8,909	8,379	7,849	7,319	6,789	6,259	5,729	5,199	4,669	4,139
MC	MC2SFF	0	10,029	9,608	9,187	8,766	8,344	7,923	7,502	7,081	6,660	6,239	5,818	5,397	4,976	4,555	4,134	3,713	3,292
MC	MC3	4,950	4,777	4,603	4,429	4,255	4,082	3,909	3,735	3,561	3,388	3,214	3,040	2,867	2,693	2,519	2,345	2,171	2,000
MC	MC3SAM	0	9,844	9,510	9,175	8,841	8,506	8,172	7,837	7,503	7,168	6,834	6,499	6,165	5,830	5,495	5,160	4,825	4,490
MC	MC3SFF	0	1,111	1,071	1,031	991	951	910	870	829	789	748	708	668	628	588	548	508	468
MC	MC4	14,880	14,358	13,836	13,314	12,792	12,270	11,748	11,226	10,705	10,183	9,661	9,139	8,617	8,095	7,573	7,051	6,529	6,007
MC	MC4SAM	0	346	332	319	306	292	279	266	252	239	226	213	200	187	174	161	148	135
MC	MC4SFF	0	10,330	9,968	9,605	9,243	8,881	8,518	8,156	7,794	7,431	7,069	6,707	6,344	5,982	5,620	5,258	4,896	4,534
MC	MC4SFF	0	1,153	1,112	1,072	1,031	991	951	910	870	829	789	748	708	668	628	588	548	508
TC	TC1	8,637	8,363	8,089	7,815	7,541	7,267	6,993	6,719	6,445	6,171	5,897	5,623	5,349	5,075	4,801	4,527	4,253	3,979
CR	CR4	11,845	11,203	10,560	9,917	9,274	8,631	7,988	7,345	6,702	6,059	5,416	4,773	4,130	3,487	2,844	2,201	1,558	915
CR	CR4SAM	0	4,671	4,417	4,164	3,910	3,657	3,404	3,151	2,898	2,645	2,392	2,139	1,886	1,633	1,380	1,127	874	621
CR	CR4SFF	0	2,389	2,260	2,130	2,000	1,870	1,740	1,610	1,480	1,350	1,220	1,090	960	830	700	570	440	310
CR	CR4PAC	0	168	159	150	141	132	123	114	105	96	87	78	69	60	51	42	33	24
CR	CR4LIME	0	185	175	165	155	145	135	125	115	105	95	85	75	65	55	45	35	25
CR	CR5	12,490	11,774	11,058	10,342	9,626	8,910	8,194	7,478	6,762	6,046	5,330	4,614	3,898	3,182	2,466	1,750	1,034	318
CR	CR5SAM	0	4,914	4,632	4,350	4,068	3,786	3,504	3,222	2,940	2,658	2,376	2,094	1,812	1,530	1,248	966	684	402
CR	CR5SFF	0	2,545	2,399	2,253	2,107	1,961	1,815	1,669	1,523	1,377	1,231	1,085	939	793	647	501	355	209
CR	CR5PAC	0	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20
CR	CR5LIME	0	199	188	178	167	156	145	134	123	112	101	90	79	68	57	46	35	24
CR	CR6	15,727	14,959	14,190	13,421	12,653	11,885	11,117	10,349	9,581	8,813	8,045	7,277	6,509	5,741	4,973	4,205	3,437	2,669
CR	CR6SAM	0	6,337	6,027	5,717	5,408	5,098	4,788	4,478	4,168	3,858	3,548	3,238	2,928	2,618	2,308	2,000	1,690	1,380
CR	CR6SFF	0	3,235	3,077	2,919	2,761	2,602	2,444	2,286	2,128	1,970	1,812	1,654	1,496	1,338	1,180	1,022	864	706
CR	CR6PAC	0	250	238	226	213	201	189	177	165	153	141	129	117	105	93	81	69	57
CR	CR6LIME	0	278	264	250	237	223	210	197	184	171	158	145	132	119	106	93	80	67
GR	GR3	2,800	2,717	2,634	2,550	2,467	2,384	2,300	2,217	2,134	2,050	1,967	1,884	1,800	1,717	1,634	1,550	1,467	1,384
GR	GR3SAM	0	78	75	73	71	68	64	62	59	57	55	52	50	48	45	43	41	38
GR	GR3SFF	0	4,040	3,881	3,723	3,565	3,407	3,248	3,090	2,932	2,773	2,615	2,457	2,299	2,141	1,983	1,825	1,667	1,509
GR	GR4	112	108	103	99	94	90	86	81	77	73	70	66	62	58	54	50	46	42
GR	GR4PAC	0	112	108	103	99	94	86	81	77	73	70	66	62	58	54	50	46	42

Station	Unit	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
BR	BR1	3,458	3,267	1,327	0	0	0	0	0	0	0	0	0	0	0
BR	BR1SAM	0	141	57	0	0	0	0	0	0	0	0	0	0	0
BR	BR2	3,616	1,180	0	0	0	0	0	0	0	0	0	0	0	0
BR	BR2SAM	0	47	0	0	0	0	0	0	0	0	0	0	0	0
BR	BR3	4,271	4,068	3,865	3,663	3,460	1,405	0	0	0	0	0	0	0	0
BR	BR3FFP	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GH	GH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GH	GH1SAM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GH	GH2	6,260	6,034	5,808	5,582	5,356	5,130	4,904	4,678	4,452	4,226	4,000	3,489	253	0
GH	GH2SAM	0	301	277	266	254	242	231	219	207	196	0	0	0	0
GH	GH3	6,994	6,697	6,400	6,102	5,805	5,508	5,211	4,152	214	0	0	0	0	0
GH	GH3SAM	0	571	545	492	465	405	21	0	0	0	0	0	0	0
GH	GH4	6,287	5,996	5,706	5,416	5,125	4,835	0	0	0	0	0	0	0	0
GH	GH4SAM	0	561	504	476	117	0	0	0	0	0	0	0	0	0
MC	MC1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC1FFP	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC1SAM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC2FGD	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC2FFP	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC2SAM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC3FGDU	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC3FGDR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC3FFP	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC3SAM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC4FGD	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC4SCR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC4FFP	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC4SAM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TC	TC1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR4FGD	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR4SCR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR4FF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR4PAC	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR4LIME	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5FGD	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5SCR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5FF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5PAC	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5LIME	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6FGD	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6SCR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6FF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6PAC	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6LIME	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR	GR3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR	GR3SFF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR	GR3PAC	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR	GR4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR	GR4SFF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR	GR4PAC	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Retirement Cost		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	
All Units		0	0	0	0	0	0	2100	0	0	0	0	0	0	0	0	0	0	
2% Escalation Rate																			
Unit Costs (\$000)																			
BR	BR1	3,816	4,811	3,969	4,049	4,130	4,212	4,296	4,382	4,470	4,559	4,651	4,744	4,838	4,935	5,034	5,135		
BR	BR2	6,633	7,160	7,253	7,398	7,546	7,697	7,851	8,008	8,168	8,331	8,498	8,668	8,841	9,018	9,199	9,383		
BR	BR3	15,885	20,876	14,904	15,202	15,506	15,816	16,132	16,455	16,784	17,120	17,462	17,811	18,167	18,531	18,901	19,279		
CR	CR4	14,372	9,218	12,029	12,269	12,515	12,765	13,020	13,281	13,546	13,817	14,094	14,375	14,663	14,956	15,255	15,560		
CR	CR5	11,842	9,889	12,791	13,047	13,308	13,574	13,845	14,122	14,405	14,693	14,987	15,286	15,592	15,904	16,222	16,546		
CR	CR6	10,666	11,619	10,173	10,376	10,584	10,795	11,011	11,231	11,456	11,685	11,919	12,157	12,400	12,648	12,901	13,159		
GH	GH1	17,829	19,141	17,966	18,325	18,691	19,065	19,447	19,835	20,232	20,637	21,050	21,471	21,900	22,338	22,785	23,240		
GH	GH2	12,225	18,498	13,429	13,698	13,972	14,251	14,536	14,827	15,124	15,426	15,735	16,049	16,370	16,698	17,032	17,372		
GH	GH3	17,961	13,501	12,475	12,724	12,979	13,238	13,503	13,773	14,049	14,330	14,616	14,909	15,207	15,511	15,821	16,138		
GH	GH4	11,533	13,496	12,105	12,347	12,594	12,846	13,103	13,365	13,632	13,905	14,183	14,467	14,756	15,051	15,352	15,659		
GR	GR3	4,270	5,792	4,360	4,447	4,536	4,627	4,719	4,813	4,910	5,008	5,108	5,210	5,314	5,421	5,529	5,640		
GR	GR4	7,338	6,924	8,633	8,805	8,982	9,161	9,344	9,531	9,722	9,916	10,115	10,317	10,523	10,734	10,949	11,167		
MC	MC1	11,892	17,333	12,669	12,923	13,181	13,445	13,714	13,988	14,268	14,553	14,844	15,141	15,444	15,753	16,068	16,389		
MC	MC2	16,179	11,941	15,201	15,505	15,815	16,131	16,454	16,783	17,118	17,461	17,810	18,166	18,530	18,900	19,278	19,664		
MC	MC3	18,313	14,238	17,221	17,566	17,917	18,275	18,641	19,014	19,394	19,782	20,177	20,581	20,993	21,412	21,841	22,278		
MC	MC4	16,531	18,981	17,245	17,590	17,942	18,300	18,666	19,040	19,421	19,809	20,205	20,609	21,021	21,442	21,871	22,308		
TC	TC1	17,205	15,170	17,403	17,751	18,106	18,468	18,837	19,214	19,598	19,990	20,390	20,798	21,214	21,638	22,071	22,512		
TY	TY3	410	416	418	427	435	444	453	462	471	480	490	500	510	520	530	541		

Retirement Cost		2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
All Units		0	0	0	0	0	0	0	0	0	0	0	0	0	0
2% Escalation Rate															
Unit Costs (\$000)															
BR	BR1	5,237	5,342	5,449	5,558	5,669	5,782	5,898	6,016	6,136	6,259	6,384	6,512	6,642	6,775
BR	BR2	9,570	9,762	9,957	10,156	10,359	10,566	10,778	10,993	11,213	11,437	11,666	11,899	12,137	12,380
BR	BR3	19,665	20,058	20,460	20,869	21,286	21,712	22,146	22,589	23,041	23,502	23,972	24,451	24,940	25,439
CR	CR4	15,872	16,189	16,513	16,843	17,180	17,524	17,874	18,232	18,596	18,968	19,347	19,734	20,129	20,532
CR	CR5	16,877	17,215	17,559	17,910	18,269	18,634	19,007	19,387	19,775	20,170	20,573	20,985	21,405	21,833
CR	CR6	13,423	13,691	13,965	14,244	14,529	14,820	15,116	15,418	15,727	16,041	16,362	16,689	17,023	17,364
GH	GH1	23,705	24,179	24,663	25,156	25,659	26,172	26,696	27,230	27,774	28,330	28,897	29,474	30,064	30,665
GH	GH2	17,720	18,074	18,436	18,804	19,181	19,564	19,955	20,355	20,762	21,177	21,600	22,032	22,473	22,923
GH	GH3	16,460	16,790	17,125	17,468	17,817	18,174	18,537	18,908	19,286	19,672	20,065	20,466	20,876	21,293
GH	GH4	15,973	16,292	16,618	16,950	17,289	17,635	17,988	18,347	18,714	19,089	19,470	19,860	20,257	20,662
GR	GR3	5,753	5,868	5,985	6,105	6,227	6,351	6,478	6,608	6,740	6,875	7,012	7,153	7,296	7,442
GR	GR4	11,391	11,619	11,851	12,088	12,330	12,576	12,828	13,084	13,346	13,613	13,885	14,163	14,446	14,735
MC	MC1	16,717	17,051	17,392	17,740	18,095	18,457	18,826	19,202	19,586	19,978	20,378	20,785	21,201	21,625
MC	MC2	20,057	20,458	20,867	21,285	21,710	22,145	22,587	23,039	23,500	23,970	24,449	24,938	25,437	25,946
MC	MC3	22,723	23,178	23,641	24,114	24,596	25,088	25,590	26,102	26,624	27,156	27,699	28,253	28,818	29,395
MC	MC4	22,754	23,209	23,674	24,147	24,630	25,123	25,625	26,138	26,660	27,194	27,737	28,292	28,858	29,435
TC	TC1	22,962	23,422	23,890	24,368	24,855	25,352	25,859	26,377	26,904	27,442	27,991	28,551	29,122	29,704
TY	TY3	552	563	574	586	597	609	622	634	647	660	673	686	700	714

Escalation Rate: 2% Year \$: 2010 Fixed O&M \$/yr

	Month	Year	Equipment	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	
BR	BR1	5	2014 P1FF/PAC	0	0	0	598,882	610,860	623,077	635,538	648,249	661,214	674,439	687,927	701,686	715,720	730,034	744,635	759,527	774,718	
BR	BR1	5	2014 SAM Mitigation	0	0	0	78,540	137,333	140,079	142,881	145,739	148,653	151,627	154,659	157,752	160,907	164,125	167,408	170,756	174,171	
BR	BR2	4	2014 P1FF/PAC	0	0	0	714,168	728,451	743,020	757,880	773,038	788,499	804,264	820,354	836,761	853,496	870,566	887,978	905,737	923,852	
BR	BR2	4	2014 SAM Mitigation	0	0	0	134,640	137,333	140,079	142,881	145,739	148,653	151,627	154,659	157,752	160,907	164,125	167,408	170,756	174,171	
BR	BR3	5	2015 P1FF/PAC	0	0	0	1,067,560	1,088,911	1,110,689	1,132,999	1,155,661	1,178,675	1,202,245	1,226,481	1,251,392	1,276,969	1,303,216	1,330,149	1,357,776	1,386,091	1,415,091
GH	GH1	5	2015 P1FF/PAC	0	0	0	1,293,082	1,318,944	1,345,322	1,372,229	1,399,673	1,427,667	1,456,220	1,485,345	1,515,052	1,545,353	1,576,260	1,607,785	1,639,941	1,672,739	
GH	GH1	5	2014 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
GH	GH1	2	2013 SAM Mitigation	0	0	0	4,899	0	0	0	0	0	0	0	0	0	0	0	0	0	
GH	GH2	11	2014 P1FF/PAC	0	0	0	777,600	1,586,304	1,618,030	1,650,391	1,683,399	1,717,067	1,751,408	1,786,436	1,822,165	1,858,608	1,895,781	1,933,696	1,972,370	2,011,817	
GH	GH2	12	2012 Sorbent Injection	0	3,064	98,700	100,674	102,687	104,741	106,836	108,973	111,152	113,375	115,643	117,956	120,315	122,721	125,175	127,679	130,232	
GH	GH3	10	2015 P1FF/PAC	0	0	0	652,436	1,330,969	1,357,589	1,384,741	1,412,435	1,440,684	1,469,498	1,498,888	1,528,865	1,559,443	1,590,632	1,622,444	1,654,893		
GH	GH3	11	2013 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
GH	GH3	2	2013 SAM Mitigation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
GH	GH4	12	2015 P1FF/PAC	0	0	0	631,870	1,289,014	1,314,795	1,341,091	1,367,912	1,395,271	1,423,176	1,451,640	1,480,672	1,510,286	1,540,491	1,571,301	1,602,727		
GH	GH4	3	2014 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
GH	GH4	2	2013 SAM Mitigation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MC	MC1	5	2015 Combined 1&2 FGD	0	0	0	-238,642	-219,636	-200,250	-189,733	-179,749	-169,306	-159,733	-149,749	-121,124	-123,546	-126,017	-128,537	-131,108	-133,730	
MC	MC1	5	2015 P1FF/PAC	0	0	0	1,446,222	1,475,147	1,504,650	1,534,743	1,565,438	1,596,746	1,628,681	1,661,255	1,694,480	1,728,370	1,762,937	1,798,196	1,834,160		
MC	MC1	5	2015 SAM Mitigation	0	0	0	22,100	38,643	39,416	41,008	41,828	42,665	43,518	44,388	45,276	46,182	47,105	48,047			
MC	MC2	4	2015 Combined 1&2 FGD	0	0	0	1,865,506	205,512	224,899	244,673	264,842	285,415	306,400	312,528	318,778	325,154	331,657	338,290	345,056		
MC	MC2	4	2015 P1FF/PAC	0	0	0	1,418,867	1,447,245	1,476,189	1,505,713	1,535,828	1,566,544	1,597,875	1,629,832	1,662,429	1,695,678	1,729,591	1,764,183	1,799,467		
MC	MC2	4	2015 SAM Mitigation	0	0	0	25,257	38,643	39,416	41,008	41,828	42,665	43,518	44,388	45,276	46,182	47,105	48,047			
MC	MC3	11	2014 FGD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MC	MC3	10	2015 P1FF/PAC	0	0	0	646,753	1,319,377	1,345,764	1,372,679	1,400,133	1,428,136	1,456,698	1,485,832	1,515,549	1,545,860	1,576,777	1,608,313	1,640,479		
MC	MC3	4	2013 SAM Mitigation	0	0	0	24,068	36,824	38,312	39,078	39,859	40,657	41,470	42,299	43,145	44,008	44,888	45,786	46,702	47,656	
MC	MC3	4	2013 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MC	MC3	11	2014 FGD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MC	MC4	11	2014 P1FF/PAC	0	0	0	743,376	1,516,487	1,546,817	1,577,754	1,609,309	1,641,495	1,674,325	1,707,811	1,741,967	1,776,807	1,812,343	1,848,590	1,885,562	1,923,273	
MC	MC4	11	2014 SAM Mitigation	0	0	0	3,095	37,885	38,643	39,416	40,204	41,008	41,828	42,665	43,518	44,388	45,276	46,182	47,105	48,047	
MC	MC4	11	2014 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TC	TC1	11	2015 P1FF/PAC	0	0	0	493,761	1,007,273	1,027,418	1,047,966	1,068,926	1,090,304	1,112,110	1,134,353	1,157,040	1,180,180	1,203,784	1,227,860	1,252,417		
CR	CR4	1	2016 SCR	0	0	0	2,107,050	2,149,191	2,192,175	2,236,018	2,280,739	2,326,353	2,372,880	2,420,338	2,468,745	2,518,120	2,568,482	2,619,852			
CR	CR4	1	2016 WFGD	1,871,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CR	CR4	1	2016 P1FF	1,191,000	0	0	0	1,341,259	1,368,085	1,395,446	1,423,355	1,451,822	1,480,859	1,510,476	1,540,685	1,571,499	1,602,929	1,634,988	1,667,688		
CR	CR4	1	2016 SAM Mitigation	174,000	0	0	0	195,952	199,871	203,869	207,946	212,105	216,347	220,674	225,088	229,589	234,181	238,865	243,642		
CR	CR4	1	2016 PAC Injection	169,000	0	0	0	190,321	194,128	198,010	201,971	206,010	210,130	214,333	218,620	222,992	227,452	232,001	236,641		
CR	CR5	1	2016 SCR	1,993,000	0	0	0	2,444,442	2,289,331	2,335,117	2,381,819	2,429,456	2,478,045	2,527,606	2,578,158	2,629,721	2,682,316	2,735,962	2,790,681		
CR	CR5	1	2016 WFGD	1,251,000	0	0	0	1,408,829	1,437,006	1,465,746	1,495,061	1,524,962	1,555,461	1,586,570	1,618,302	1,650,668	1,683,681	1,717,355	1,751,702		
CR	CR5	1	2016 SAM Mitigation	177,000	0	0	0	199,331	203,317	207,384	211,531	215,762	220,077	224,479	228,968	233,548	238,219	242,983	247,843		
CR	CR5	1	2016 PAC Injection	172,000	0	0	0	193,700	197,574	201,525	205,556	209,667	213,860	218,138	222,500	226,950	231,489	236,119	240,842		
CR	CR6	1	2016 SCR	2,392,000	0	0	0	2,693,781	2,747,656	2,802,609	2,858,661	2,915,835	2,974,151	3,033,634	3,094,307	3,156,193	3,219,317	3,283,703	3,349,377		
CR	CR6	1	2016 WFGD	0	0	0	0	1,837,897	1,874,655	1,911,148	1,950,391	1,989,999	2,029,187	2,069,771	2,111,166	2,153,389	2,196,457	2,240,386	2,285,194		
CR	CR6	1	2016 SAM Mitigation	198,000	0	0	0	222,980	227,440	231,989	236,628	241,361	246,188	251,112	256,134	261,257	266,482	271,812	277,248		
CR	CR6	1	2016 PAC Injection	191,000	0	0	0	215,097	219,399	223,787	228,263	232,828	237,484	242,234	247,079	252,020	257,061	262,202	267,446		
GR	GR3	1	2016 SCR	0	0	0	0	3,741,112	3,815,934	3,892,252	3,970,098	4,049,499	4,130,489	4,213,099	4,297,361	4,383,308	4,470,975	4,560,394	4,651,602		
GR	GR3	1	2016 PAC Injection	141,000	0	0	0	158,789	161,965	165,204	168,508	171,878	175,316	178,822	182,399	186,047	189,767	193,569	197,434		
GR	GR4	1	2016 SCR	0	0	0	0	4,852,634	4,945,687	5,048,680	5,149,654	5,252,647	5,357,700	5,464,854	5,574,151	5,685,694	5,799,347	5,915,334	6,033,640		
GR	GR4	1	2016 PAC Injection	150,000	0	0	0	168,924	172,303	175,749	179,264	182,849	186,506	190,236	194,041	197,922	201,880	205,918	210,036		

Escalation Rate: 2% Year \$:

	Month	Year	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
BR														
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\$000

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
BR	BR1	101	69	164	256	346	434	520	605	689	771	852	931	1,008	1,085	1,163	1,241	1,320	1,399	1,479
BR	BR2	167	114	271	423	571	717	860	1,001	1,139	1,275	1,408	1,539	1,667	1,794	1,922	2,052	2,182	2,313	2,446
BR	BR3	416	285	675	1,053	1,423	1,786	2,143	2,493	2,838	3,176	3,508	3,834	4,153	4,469	4,789	5,111	5,435	5,762	6,092
CR	CR4	155	77	204	327	447	564	678	790	899	1,006	1,109	1,210	1,308	1,405	1,501	1,596	1,691	1,786	1,880
CR	CR5	168	84	221	355	485	611	735	856	975	1,090	1,202	1,312	1,418	1,522	1,626	1,730	1,833	1,936	2,038
CR	CR6	240	120	316	507	692	873	1,050	1,223	1,392	1,557	1,718	1,874	2,026	2,175	2,324	2,471	2,619	2,765	2,911
GH	GH1	475	510	1,206	1,884	2,548	3,200	3,843	4,477	5,101	5,717	6,322	6,918	7,504	8,080	8,653	9,231	9,814	10,402	10,995
GH	GH2	484	520	1,228	1,920	2,596	3,261	3,916	4,562	5,198	5,825	6,442	7,049	7,646	8,233	8,817	9,405	9,999	10,599	11,204
GH	GH3	480	516	1,218	1,904	2,575	3,234	3,883	4,524	5,155	5,777	6,389	6,991	7,583	8,165	8,744	9,328	9,917	10,511	11,111
GH	GH4	479	515	1,216	1,900	2,570	3,227	3,875	4,514	5,144	5,765	6,376	6,977	7,567	8,148	8,726	9,308	9,896	10,489	11,088
GR	GR3	68	39	96	151	205	258	309	360	410	458	506	553	598	643	689	734	780	825	871
GR	GR4	95	55	134	211	286	360	432	503	572	640	707	772	836	899	962	1,026	1,089	1,153	1,217
MC	MC1	303	309	767	1,213	1,649	2,077	2,497	2,910	3,315	3,714	4,104	4,487	4,862	5,229	5,592	5,956	6,320	6,686	7,053
MC	MC2	301	307	762	1,205	1,639	2,063	2,480	2,891	3,294	3,689	4,077	4,458	4,830	5,194	5,555	5,916	6,279	6,642	7,007
MC	MC3	391	398	989	1,565	2,128	2,680	3,222	3,755	4,278	4,792	5,296	5,790	6,274	6,747	7,216	7,685	8,156	8,628	9,102
MC	MC4	477	486	1,207	1,910	2,597	3,270	3,931	4,581	5,219	5,846	6,461	7,064	7,654	8,231	8,803	9,376	9,950	10,526	11,103
TC	TC1	383	115	270	420	567	712	855	996	1,135	1,272	1,407	1,539	1,670	1,799	1,927	2,057	2,188	2,320	2,453
TC	TC2	549	166	386	602	813	1,021	1,225	1,427	1,626	1,823	2,016	2,207	2,394	2,579	2,762	2,948	3,136	3,325	3,517
TY	TY3	71	94	233	368	499	628	754	878	999	1,118	1,234	1,347	1,458	1,568	1,677	1,787	1,898	2,008	2,119

2.50% Capital Escalation Rate

2011 CR	281	454	428	405	384	364	344	325	305	285	266	246	231	221	211	200	190	180		
2012 CR		288	465	439	415	394	373	353	333	313	293	272	252	237	226	216	205	195		
2013 CR			295	477	450	426	403	382	362	341	321	300	279	259	243	232	221	210		
2014 CR				303	489	461	436	413	392	371	350	329	307	286	265	249	238	227		
2015 CR					310	501	473	447	424	402	380	358	337	315	293	272	255	244		
2016 CR						318	513	485	459	434	412	390	367	345	323	301	279	262		
2017 CR							326	526	497	470	445	422	399	377	354	331	308	286		
2018 CR								334	539	509	482	456	433	409	386	363	339	316		
2019 CR									342	553	522	494	468	444	420	396	372	348		
2020 CR										351	567	535	506	479	455	430	406	381		
2021 CR											360	581	548	519	491	466	441	416		
2022 CR												369	595	562	532	504	478	452		
2023 CR													378	610	576	545	516	490		
2024 CR														387	625	591	559	529		
2025 CR															397	641	605	573		
2026 CR																407	657	621		
2027 CR																	417	673		
2028 CR																		428		

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
	2039 CR																				
	2040 CR																				
	2011 MC		1,499	2,188	2,076	1,972	1,877	1,788	1,703	1,617	1,532	1,447	1,361	1,276	1,191	1,128	1,089	1,049	1,010	970	
	2012 MC			1,536	2,243	2,128	2,021	1,923	1,833	1,745	1,658	1,570	1,483	1,395	1,308	1,221	1,157	1,116	1,075	1,035	
	2013 MC				1,575	2,299	2,181	2,072	1,972	1,878	1,789	1,699	1,610	1,520	1,430	1,341	1,251	1,185	1,144	1,102	
	2014 MC				1,614	2,357	2,235	2,124	2,021	1,925	1,834	1,742	1,650	1,558	1,466	1,374	1,282	1,215	1,173	1,133	
	2015 MC					1,655	2,416	2,291	2,177	2,071	1,974	1,879	1,785	1,691	1,597	1,503	1,409	1,314	1,245	1,205	
	2016 MC						1,696	2,476	2,348	2,231	2,123	2,023	1,926	1,830	1,733	1,637	1,540	1,444	1,347	1,247	
	2017 MC							1,738	2,538	2,407	2,287	2,176	2,073	1,975	1,876	1,777	1,678	1,579	1,480	1,380	
	2018 MC								1,782	2,601	2,467	2,344	2,231	2,125	2,024	1,922	1,821	1,720	1,618	1,518	
	2019 MC									1,826	2,666	2,529	2,403	2,286	2,178	2,075	1,971	1,867	1,763	1,663	
	2020 MC										1,872	2,733	2,592	2,463	2,344	2,233	2,126	2,020	1,913	1,813	
	2021 MC											1,919	2,801	2,657	2,524	2,402	2,289	2,180	2,070	1,970	
	2022 MC												1,967	2,871	2,723	2,588	2,462	2,346	2,234	2,134	
	2023 MC													2,016	2,943	2,792	2,652	2,524	2,405	2,285	
	2024 MC														2,066	3,017	2,861	2,719	2,587	2,467	
	2025 MC															2,118	3,092	2,933	2,787	2,667	
	2026 MC																3,017	2,861	2,719	2,587	
	2027 MC																	3,092	2,933	2,787	
	2028 MC																		3,170	3,006	
	2029 MC																			3,249	
	2030 MC																				2,281
	2031 MC																				
	2032 MC																				
	2033 MC																				
	2034 MC																				
	2035 MC																				
	2036 MC																				
	2037 MC																				
	2038 MC																				
	2039 MC																				
	2040 MC																				
	2011 TC		281	368	350	333	318	304	291	278	264	251	238	225	211	203	198	193	189	184	
	2012 TC			288	377	358	341	326	312	298	284	271	257	244	230	217	208	203	198	193	
	2013 TC				295	387	367	350	334	319	305	292	278	264	250	236	222	213	208	203	
	2014 TC					303	396	376	359	342	327	313	299	285	270	256	242	228	218	213	
	2015 TC						310	406	386	368	351	336	321	306	292	277	263	248	233	224	
	2016 TC							318	416	396	377	360	344	329	314	299	284	269	254	239	
	2017 TC								326	427	405	386	369	353	337	322	307	291	276	261	
	2018 TC									334	437	416	396	378	361	346	330	314	298	283	
	2019 TC										342	448	426	406	387	370	354	338	322	306	
	2020 TC											351	460	437	416	397	380	363	347	330	
	2021 TC												360	471	447	426	407	389	372	355	
	2022 TC													369	483	459	437	417	399	381	
	2023 TC														378	495	470	448	427	409	
	2024 TC															387	482	459	438	420	
	2025 TC																507	482	459	438	
	2026 TC																	520	494	470	
	2027 TC																		533	506	
	2028 TC																			546	
	2029 TC																			417	
																				428	

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
	2030 TC																				
	2031 TC																				
	2032 TC																				
	2033 TC																				
	2034 TC																				
	2035 TC																				
	2036 TC																				
	2037 TC																				
	2038 TC																				
	2039 TC																				
	2040 TC																				
	2011 GH		2,061	2,756	2,617	2,492	2,377	2,272	2,171	2,070	1,970	1,869	1,768	1,667	1,567	1,498	1,460	1,422	1,384	1,346	
	2012 GH			2,113	2,825	2,683	2,554	2,436	2,328	2,225	2,122	2,019	1,916	1,812	1,709	1,606	1,535	1,496	1,458	1,419	
	2013 GH				2,165	2,895	2,750	2,618	2,497	2,387	2,281	2,175	2,069	1,963	1,858	1,752	1,646	1,573	1,534	1,494	
	2014 GH					2,219	2,968	2,819	2,683	2,560	2,446	2,338	2,229	2,121	2,013	1,904	1,796	1,687	1,613	1,572	
	2015 GH						2,275	3,042	2,889	2,750	2,623	2,507	2,396	2,285	2,174	2,063	1,952	1,841	1,729	1,653	
	2016 GH							2,332	3,118	2,961	2,819	2,689	2,570	2,456	2,342	2,228	2,114	2,001	1,887	1,773	
	2017 GH								2,390	3,196	3,035	2,889	2,756	2,634	2,518	2,401	2,284	2,167	2,051	1,934	
	2018 GH									2,450	3,276	3,111	2,962	2,825	2,700	2,581	2,461	2,341	2,221	2,102	
	2019 GH										2,511	3,358	3,189	3,036	2,896	2,768	2,645	2,522	2,400	2,277	
	2020 GH											2,574	3,442	3,269	3,112	2,968	2,837	2,711	2,585	2,460	
	2021 GH												2,638	3,528	3,350	3,189	3,042	2,908	2,779	2,650	
	2022 GH													2,704	3,616	3,434	3,269	3,119	2,981	2,848	
	2023 GH														2,772	3,706	3,520	3,351	3,196	3,055	
	2024 GH															2,841	3,799	3,608	3,435	3,276	
	2025 GH																2,912	3,894	3,698	3,521	
	2026 GH																	2,985	3,991	3,791	
	2027 GH																		3,060	4,091	
	2028 GH																			3,136	
	2029 GH																				
	2030 GH																				
	2031 GH																				
	2032 GH																				
	2033 GH																				
	2034 GH																				
	2035 GH																				
	2036 GH																				
	2037 GH																				
	2038 GH																				
	2039 GH																				
	2040 GH																				
	2011 BR		468	629	595	565	538	513	489	464	440	415	391	367	350	341	332	323	315	306	
	2012 BR			480	645	610	579	551	526	501	476	451	426	401	376	359	350	341	332	323	
	2013 BR				492	661	625	594	565	539	513	488	462	436	411	385	368	358	349	340	
	2014 BR					504	677	641	609	579	552	526	500	474	447	421	395	377	367	358	
	2015 BR						517	694	657	624	594	566	539	512	485	458	432	405	386	377	
	2016 BR							530	712	674	639	608	580	553	525	498	470	442	415	396	
	2017 BR								543	729	690	655	624	595	567	538	510	482	453	425	
	2018 BR									557	748	708	672	639	610	581	552	523	494	465	
	2019 BR										571	766	725	688	655	625	595	566	536	506	
	2020 BR											585	785	743	706	672	641	610	580	549	

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
			\$000																	
	2021 BR												600	805	762	723	688	657	625	594
	2022 BR													615	825	781	741	706	673	641
	2023 BR														630	846	801	760	723	690
	2024 BR															646	867	821	779	741
	2025 BR																889	841	798	
	2026 BR																678	911	862	
	2027 BR																	695		
	2028 BR																			
	2029 BR																			
	2030 BR																			
	2031 BR																			
	2032 BR																			
	2033 BR																			
	2034 BR																			
	2035 BR																			
	2036 BR																			
	2037 BR																			
	2038 BR																			
	2039 BR																			
	2040 BR																			
	2011 GR		94	134	127	120	114	108	103	98	92	87	81	76	72	70	68	65	63	61
	2012 GR			96	137	130	123	117	111	106	100	95	89	83	78	74	72	69	67	65
	2013 GR				98	141	133	126	120	114	108	103	97	91	86	80	76	73	71	69
	2014 GR					101	144	136	129	123	117	111	105	99	94	88	82	78	75	73
	2015 GR						103	148	140	132	126	120	114	108	102	96	90	84	80	77
	2016 GR							106	151	143	136	129	123	117	111	104	98	92	86	82
	2017 GR								109	155	147	139	132	126	120	113	107	101	94	88
	2018 GR									111	159	150	143	135	129	123	116	110	103	97
	2019 GR										114	163	154	146	139	132	126	119	112	106
	2020 GR											117	167	158	150	142	135	129	122	115
	2021 GR												120	171	162	154	146	139	132	125
	2022 GR													123	176	166	157	150	142	135
	2023 GR														126	180	170	161	153	146
	2024 GR															129	184	174	165	157
	2025 GR																189	179	169	
	2026 GR																	136	194	183
	2027 GR																		139	
	2028 GR																			
	2029 GR																			
	2030 GR																			
	2031 GR																			
	2032 GR																			
	2033 GR																			
	2034 GR																			
	2035 GR																			
	2036 GR																			
	2037 GR																			
	2038 GR																			
	2039 GR																			
	2040 GR																			
	2011 TY		94	137	129	122	116	111	105	99	94	88	83	77	73	71	68	66	63	61

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
			\$000																	
	2012 TY	96	140	132	125	119	113	108	102	96	90	85	79	75	72	70	67	65		
	2013 TY	98	143	136	129	122	116	110	104	99	93	87	81	77	74	71	69			
	2014 TY	101	147	140	133	126	120	114	108	102	96	90	84	78	72	66	60			
	2015 TY	103	151	143	135	128	122	116	110	104	98	92	86	80	74	68	62			
	2016 TY	106	154	146	138	131	125	119	112	106	100	94	88	82	76	70	64			
	2017 TY	109	158	150	142	135	128	122	115	109	102	96	90	84	78	72	66			
	2018 TY	111	162	153	145	138	131	125	118	111	105	98	92	86	80	74	68			
	2019 TY	114	166	157	149	142	135	128	121	114	107	100	93	87	81	75	69			
	2020 TY	117	171	161	153	145	138	131	124	117	110	103	96	90	84	78	72			
	2021 TY	120	175	165	157	149	142	135	128	121	114	107	100	93	87	81	75			
	2022 TY	123	179	169	161	153	145	138	131	124	117	110	103	96	90	84	78			
	2023 TY	126	184	174	166	158	150	142	135	128	121	114	107	100	93	87	81			
	2024 TY	129	188	178	170	162	154	146	138	131	124	117	110	103	96	90	84			
	2025 TY	132	193	183	175	167	159	151	143	135	128	121	114	107	100	93	87			
	2026 TY	136	198	188	180	172	164	156	148	140	132	124	116	108	100	92	84			
	2027 TY	139	203	193	185	177	169	161	153	145	137	129	121	113	105	97	89			
	2028 TY	143	208	198	190	182	174	166	158	150	142	134	126	118	110	102	94			

Station	Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
BR	BR1	101	1,560	1,642	1,724	1,807	1,891	1,975	2,061	2,147	2,234	2,322	2,411	2,501	2,446	2,340	2,239	2,145	2,055	1,969
BR	BR2	167	2,579	2,714	2,850	2,988	3,126	3,266	3,407	3,550	3,694	3,839	3,986	4,135	4,045	3,868	3,703	3,546	3,397	3,255
BR	BR3	416	6,425	6,761	7,100	7,442	7,787	8,136	8,488	8,843	9,202	9,564	9,930	10,300	10,076	9,636	9,223	8,833	8,463	8,109
CR	CR4	155	1,974	2,023	2,073	2,125	2,178	2,233	2,289	2,346	2,405	2,465	2,526	2,589	2,492	2,292	2,102	1,921	1,747	1,580
CR	CR5	168	2,199	2,193	2,247	2,304	2,361	2,420	2,481	2,543	2,606	2,671	2,738	2,807	2,701	2,484	2,278	2,082	1,893	1,713
CR	CR6	240	3,056	3,132	3,210	3,291	3,373	3,457	3,544	3,632	3,723	3,816	3,912	4,009	3,858	3,549	3,255	2,974	2,705	2,447
GH	GH1	475	11,594	12,199	12,809	13,425	14,048	14,676	15,311	15,953	16,601	17,256	17,918	18,587	18,193	17,419	16,688	15,994	15,334	14,702
GH	GH2	484	11,814	12,430	13,052	13,680	14,314	14,954	15,601	16,255	16,915	17,583	18,257	18,939	18,537	17,749	17,004	16,297	15,624	14,981
GH	GH3	480	11,716	12,327	12,944	13,567	14,196	14,831	15,472	16,121	16,775	17,437	18,106	18,782	18,384	17,602	16,863	16,163	15,495	14,857
GH	GH4	479	11,692	12,302	12,917	13,538	14,166	14,800	15,440	16,087	16,741	17,401	18,069	18,743	18,346	17,565	16,828	16,129	15,463	14,826
GR	GR3	68	918	964	1,011	1,057	1,104	1,152	1,199	1,247	1,295	1,343	1,377	1,411	1,364	1,281	1,203	1,128	1,056	988
GR	GR4	95	1,282	1,347	1,412	1,477	1,543	1,609	1,675	1,742	1,809	1,876	1,923	1,971	1,906	1,790	1,680	1,575	1,476	1,380
MC	MC1	303	7,421	7,790	8,160	8,531	8,903	9,277	9,651	10,027	10,403	10,779	11,156	11,534	10,698	10,020	9,375	8,758	8,166	7,598
MC	MC2	301	7,372	7,739	8,106	8,475	8,845	9,216	9,588	9,961	10,335	10,709	11,084	11,459	10,627	9,954	9,313	8,700	8,112	7,548
MC	MC3	391	9,576	10,052	10,530	11,009	11,489	11,971	12,455	12,940	13,426	13,913	14,399	14,886	13,805	12,931	12,097	11,301	10,538	9,805
MC	MC4	477	11,683	12,263	12,846	13,430	14,016	14,604	15,194	15,786	16,380	16,975	17,571	18,167	16,841	15,775	14,758	13,787	12,856	11,962
TC	TC1	383	2,588	2,725	2,863	3,002	3,144	3,286	3,431	3,577	3,725	3,875	4,026	4,180	4,093	3,927	3,771	3,623	3,483	3,349
TC	TC2	549	3,710	3,906	4,104	4,304	4,506	4,711	4,918	5,127	5,339	5,554	5,771	5,991	5,866	5,629	5,405	5,193	4,992	4,801
TY	TY3	71	2,230	2,341	2,453	2,565	2,678	2,790	2,904	3,017	3,092	3,170	3,249	3,330	3,217	3,011	2,815	2,629	2,451	2,281

2.50%

2011 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2012 CR	169	174	174	174	174	174	174	174	174	174	174	174	174	174	174	174	174	174	174	174
2013 CR	184	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189	189
2014 CR	200	205	205	205	205	205	205	205	205	205	205	205	205	205	205	205	205	205	205	205
2015 CR	216	221	221	221	221	221	221	221	221	221	221	221	221	221	221	221	221	221	221	221
2016 CR	232	237	237	237	237	237	237	237	237	237	237	237	237	237	237	237	237	237	237	237
2017 CR	250	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255
2018 CR	268	273	273	273	273	273	273	273	273	273	273	273	273	273	273	273	273	273	273	273
2019 CR	293	298	298	298	298	298	298	298	298	298	298	298	298	298	298	298	298	298	298	298
2020 CR	324	329	329	329	329	329	329	329	329	329	329	329	329	329	329	329	329	329	329	329
2021 CR	357	362	362	362	362	362	362	362	362	362	362	362	362	362	362	362	362	362	362	362
2022 CR	391	396	396	396	396	396	396	396	396	396	396	396	396	396	396	396	396	396	396	396
2023 CR	426	431	431	431	431	431	431	431	431	431	431	431	431	431	431	431	431	431	431	431
2024 CR	463	468	468	468	468	468	468	468	468	468	468	468	468	468	468	468	468	468	468	468
2025 CR	502	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507	507
2026 CR	542	547	547	547	547	547	547	547	547	547	547	547	547	547	547	547	547	547	547	547
2027 CR	587	592	592	592	592	592	592	592	592	592	592	592	592	592	592	592	592	592	592	592
2028 CR	636	641	641	641	641	641	641	641	641	641	641	641	641	641	641	641	641	641	641	641
2029 CR	690	695	695	695	695	695	695	695	695	695	695	695	695	695	695	695	695	695	695	695
2030 CR	748	753	753	753	753	753	753	753	753	753	753	753	753	753	753	753	753	753	753	753
2031 CR	438	443	443	443	443	443	443	443	443	443	443	443	443	443	443	443	443	443	443	443
2032 CR																				
2033 CR																				
2034 CR																				
2035 CR																				
2036 CR																				
2037 CR																				
2038 CR																				

Station	Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
2030 TC				449	588															
2031 TC				461	559															
2032 TC					603															
2033 TC					472															
2034 TC							484													
2035 TC								496												
2036 TC									508											
2037 TC										521										
2038 TC											534									
2039 TC												547								
2040 TC													561							
2011 GH			1,309	1,271	1,233	1,195	1,158	1,120	1,082	1,044	1,007	969	931	893	856	818	780	742	704	667
2012 GH			1,380	1,341	1,303	1,264	1,225	1,187	1,148	1,109	1,070	1,032	993	954	916	877	838	800	761	722
2013 GH			1,454	1,415	1,375	1,335	1,296	1,256	1,216	1,177	1,137	1,097	1,058	1,018	978	939	899	859	819	780
2014 GH			1,531	1,491	1,450	1,409	1,369	1,328	1,287	1,247	1,206	1,165	1,125	1,084	1,043	1,003	962	921	881	840
2015 GH			1,611	1,570	1,528	1,486	1,445	1,403	1,361	1,320	1,278	1,236	1,194	1,153	1,111	1,069	1,028	986	944	903
2016 GH			1,694	1,652	1,609	1,566	1,523	1,481	1,438	1,395	1,353	1,310	1,267	1,224	1,182	1,139	1,096	1,053	1,011	968
2017 GH			1,817	1,737	1,693	1,649	1,605	1,562	1,518	1,474	1,430	1,386	1,343	1,299	1,255	1,211	1,167	1,124	1,080	1,036
2018 GH			1,982	1,862	1,780	1,735	1,690	1,645	1,601	1,556	1,511	1,466	1,421	1,376	1,331	1,286	1,241	1,197	1,152	1,107
2019 GH			2,154	2,032	1,909	1,825	1,779	1,733	1,687	1,641	1,595	1,549	1,503	1,457	1,410	1,364	1,318	1,272	1,226	1,180
2020 GH			2,334	2,208	2,082	1,957	1,870	1,823	1,776	1,729	1,682	1,634	1,587	1,540	1,493	1,446	1,399	1,351	1,304	1,257
2021 GH			2,521	2,392	2,263	2,134	2,006	1,917	1,869	1,820	1,772	1,724	1,675	1,627	1,579	1,530	1,482	1,434	1,385	1,337
2022 GH			2,716	2,584	2,452	2,320	2,188	2,056	1,965	1,915	1,866	1,816	1,767	1,717	1,668	1,618	1,569	1,519	1,469	1,420
2023 GH			2,920	2,784	2,649	2,513	2,378	2,243	2,107	2,014	1,963	1,912	1,862	1,811	1,760	1,709	1,659	1,608	1,557	1,506
2024 GH			3,131	2,993	2,854	2,715	2,576	2,437	2,299	2,160	2,064	2,012	1,960	1,908	1,856	1,804	1,752	1,700	1,648	1,596
2025 GH			3,358	3,210	3,067	2,925	2,783	2,641	2,498	2,356	2,214	2,116	2,063	2,009	1,956	1,903	1,849	1,795	1,742	1,689
2026 GH			3,609	3,442	3,290	3,144	2,998	2,852	2,707	2,561	2,415	2,269	2,169	2,114	2,060	2,005	1,950	1,895	1,841	1,786
2027 GH			3,886	3,699	3,528	3,372	3,223	3,073	2,924	2,774	2,625	2,475	2,326	2,223	2,167	2,111	2,055	1,999	1,943	1,887
2028 GH			4,193	3,983	3,791	3,617	3,456	3,303	3,150	2,997	2,844	2,690	2,537	2,384	2,279	2,221	2,164	2,106	2,049	1,991
2029 GH			3,214	4,298	4,082	3,886	3,707	3,543	3,386	3,229	3,072	2,915	2,758	2,601	2,444	2,336	2,277	2,218	2,159	2,100
2030 GH				3,295	4,406	4,184	3,983	3,800	3,631	3,470	3,310	3,149	2,988	2,827	2,666	2,505	2,394	2,334	2,273	2,213
2031 GH					3,377	4,516	4,289	4,083	3,895	3,722	3,557	3,392	3,227	3,062	2,897	2,732	2,567	2,454	2,392	2,330
2032 GH						3,462	4,629	4,396	4,185	3,992	3,815	3,646	3,477	3,308	3,139	2,970	2,801	2,632	2,515	2,452
2033 GH							3,548	4,744	4,506	4,289	4,092	3,911	3,737	3,564	3,391	3,217	3,044	2,871	2,697	2,578
2034 GH								3,637	4,863	4,619	4,397	4,194	4,008	3,831	3,653	3,475	3,298	3,120	2,942	2,765
2035 GH									3,728	4,984	4,734	4,507	4,299	4,109	3,927	3,744	3,562	3,380	3,198	3,016
2036 GH										3,821	5,109	4,852	4,619	4,406	4,211	4,025	3,838	3,651	3,465	3,278
2037 GH											3,917	5,237	4,974	4,735	4,517	4,317	4,125	3,934	3,743	3,551
2038 GH												4,014	5,368	5,098	4,853	4,629	4,425	4,228	4,032	3,836
2039 GH													4,115	5,502	5,226	4,974	4,745	4,535	4,334	4,133
2040 GH														4,218	5,639	5,356	5,099	4,864	4,649	4,443
2011 BR			297	288	279	271	262	253	244	235	226	218	209	200	191	182	173	165	156	147
2012 BR			313	304	295	286	277	268	259	250	241	232	223	214	205	196	187	178	169	160
2013 BR			331	321	312	303	293	284	275	266	256	247	238	229	219	210	201	191	182	173
2014 BR			348	339	329	320	310	301	291	282	272	263	253	244	234	225	215	206	196	187
2015 BR			367	357	347	338	328	318	308	299	289	279	269	260	250	240	230	221	211	201
2016 BR			386	376	366	356	346	336	326	316	306	296	286	276	266	256	246	236	226	216
2017 BR			406	396	385	375	365	355	344	334	324	314	303	293	283	273	263	252	242	232
2018 BR			436	416	406	395	385	374	364	353	343	332	322	311	301	290	280	269	259	248
2019 BR			476	447	426	416	405	394	383	373	362	351	340	330	319	308	297	287	276	265
2020 BR			519	488	458	437	426	415	404	393	382	371	360	349	338	327	316	305	294	283

Station	Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
2021 BR			563	532	500	469	448	437	425	414	403	391	380	369	358	346	335	324	312	301
2022 BR			609	577	545	513	481	459	448	436	424	413	401	390	378	367	355	343	332	320
2023 BR			657	624	591	559	526	493	471	459	447	435	423	411	399	388	376	364	352	340
2024 BR			707	673	640	606	573	539	505	482	470	458	446	434	422	409	397	385	373	361
2025 BR			760	725	690	656	621	587	552	518	495	482	470	457	445	432	420	407	395	382
2026 BR			818	779	743	708	672	637	602	566	531	507	494	481	469	456	443	430	417	405
2027 BR			884	839	798	761	725	689	653	617	580	544	520	506	493	480	467	454	441	428
2028 BR			957	906	860	818	781	743	706	669	632	595	558	533	519	506	492	479	465	452
2029 BR			731	981	928	881	839	800	762	724	686	648	610	572	546	532	518	505	491	477
2030 BR			749	1,005	952	903	860	820	781	742	703	664	625	586	559	545	531	517	503	503
2031 BR			768	1,031	975	926	881	841	801	761	721	681	641	601	561	521	481	441	401	405
2032 BR				787	1,056	1,000	949	903	862	821	780	739	698	657	616	575	534	493	452	411
2033 BR					806	1,083	1,025	973	926	883	841	799	757	715	673	631	589	547	505	463
2034 BR						827	1,110	1,050	997	949	905	862	819	776	733	690	647	604	561	518
2035 BR							847	1,138	1,077	1,022	973	928	884	840	795	751	707	663	619	575
2036 BR								868	1,166	1,104	1,048	997	951	906	861	815	770	725	680	635
2037 BR									890	1,195	1,131	1,074	1,022	975	928	882	836	789	742	695
2038 BR										912	1,225	1,160	1,101	1,047	999	952	904	857	810	762
2039 BR											935	1,256	1,189	1,128	1,074	1,024	975	927	879	831
2040 BR																				
2041 GR			58	56	54	52	49	47	45	42	40	38	0	0	0	0	0	0	0	0
2042 GR			62	60	58	55	53	51	48	46	44	41	39	0	0	0	0	0	0	0
2043 GR			66	64	61	59	57	54	52	49	47	45	42	40	0	0	0	0	0	0
2044 GR			70	68	65	63	61	58	56	53	51	48	46	43	41	0	0	0	0	0
2045 GR			75	72	70	67	65	62	60	57	54	52	49	47	44	42	0	0	0	0
2046 GR			79	77	74	71	69	66	64	61	58	56	53	51	48	45	43	0	0	0
2047 GR			84	81	78	76	73	70	68	65	63	60	57	55	52	49	47	44	0	0
2048 GR			90	86	83	80	78	75	72	70	67	64	61	59	56	53	50	48	45	0
2049 GR			99	93	88	85	82	80	77	74	71	68	66	63	60	57	55	52	49	46
2050 GR			108	102	95	90	87	84	82	79	76	73	70	67	64	62	59	56	53	50
2051 GR			118	111	104	97	92	90	87	84	81	78	75	72	69	66	63	60	57	54
2052 GR			128	121	114	107	100	95	92	89	86	83	80	77	74	71	68	65	62	59
2053 GR			139	131	124	117	110	102	97	94	91	88	85	82	79	76	72	69	66	63
2054 GR			150	142	135	127	120	112	105	100	96	93	90	87	84	81	77	74	71	68
2055 GR			161	153	146	138	130	123	115	107	102	99	96	92	89	86	83	79	76	73
2056 GR			174	165	157	149	141	134	126	118	110	105	101	98	95	91	88	85	81	78
2057 GR			188	178	169	161	153	145	137	129	121	113	107	104	100	97	94	90	87	83
2058 GR			204	193	183	173	165	157	149	140	132	124	116	110	106	103	99	96	92	89
2059 GR			146	209	197	187	178	169	161	152	144	135	127	119	113	109	105	102	98	95
2060 GR			150	214	202	192	182	173	165	156	148	140	131	122	115	111	108	104	101	101
2061 GR				154	219	207	197	187	178	169	161	152	144	135	127	119	113	108	104	101
2062 GR					157	225	212	201	191	182	173	164	155	146	137	128	121	117	114	114
2063 GR						161	230	218	206	196	187	177	168	159	150	140	131	124	120	120
2064 GR							165	223	212	202	192	182	172	163	153	144	134	127	122	122
2065 GR								169	229	217	206	196	186	177	167	157	147	138	131	131
2066 GR									174	248	235	222	211	201	191	181	171	161	151	151
2067 GR										178	254	240	228	217	206	196	186	175	165	165
2068 GR											182	261	246	234	222	211	201	190	180	180
2069 GR												187	267	253	239	228	217	206	195	195
2070 GR													192	274	259	245	233	222	211	211
2071 TY			58	56	53	51	48	46	43	41	0	0	0	0	0	0	0	0	0	0

Station	Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
	2012 TY		62	60	57	55	52	49	47	44	42	0	0	0	0	0	0	0	0	0
	2013 TY		66	64	61	59	56	53	51	48	46	43	0	0	0	0	0	0	0	0
	2014 TY		71	68	65	63	60	57	55	52	49	47	44	0	0	0	0	0	0	0
	2015 TY		75	72	70	67	64	61	59	56	53	51	48	45	0	0	0	0	0	0
	2016 TY		80	77	74	71	69	66	63	60	57	55	52	49	46	0	0	0	0	0
	2017 TY		85	82	79	76	73	70	67	65	62	59	56	53	50	47	0	0	0	0
	2018 TY		92	87	84	81	78	75	72	69	66	63	60	57	54	52	49	0	0	0
	2019 TY		101	94	89	86	83	80	77	74	71	68	65	62	59	56	53	50	0	0
	2020 TY		110	103	96	91	88	85	82	79	76	73	70	66	63	60	57	54	51	0
	2021 TY		120	113	106	99	93	90	87	84	81	78	74	71	68	65	62	59	55	52
	2022 TY		130	123	116	108	101	96	93	89	86	83	80	76	73	70	67	63	60	57
	2023 TY		141	134	126	119	111	104	98	95	92	88	85	82	78	75	72	68	65	62
	2024 TY		152	145	137	129	122	114	106	101	97	94	90	87	84	80	77	73	70	67
	2025 TY		164	156	148	140	133	125	117	109	103	100	96	93	89	86	82	79	75	72
	2026 TY		177	168	160	152	144	136	128	120	112	106	102	99	95	91	88	84	81	77
	2027 TY		192	182	172	164	156	148	139	131	123	114	108	105	101	97	94	90	86	83
	2028 TY		208	196	186	177	168	160	151	143	134	126	117	111	107	104	100	96	92	89
	2029 TY		146	213	201	191	181	172	164	155	146	138	129	120	114	110	106	102	98	95
	2030 TY			150	218	206	196	186	177	168	159	150	141	132	123	117	113	109	105	101
	2031 TY				154	224	212	201	190	181	172	163	154	145	135	126	120	116	112	107
	2032 TY					157	229	217	206	195	186	176	167	158	148	139	129	123	118	114
	2033 TY						161	235	222	211	200	190	181	171	161	152	142	133	126	121
	2034 TY							165	241	228	216	205	195	185	175	165	156	146	136	129
	2035 TY								169	247	234	221	210	200	190	180	170	160	149	139
	2036 TY									174	253	239	227	215	205	195	184	174	164	153
	2037 TY										178	259	245	233	221	210	199	189	178	168
	2038 TY											182	266	252	238	226	215	204	194	183
	2039 TY											187	273	258	244	232	221	210	200	198
	2040 TY												192	279	264	250	238	226	215	215

Station	Unit	Capacity	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
BR	BR1	101	1,867	1,770	1,678	1,591	1,510	1,434	1,361	1,290	1,219	1,149	1,080	1,013	946
BR	BR2	167	3,087	2,926	2,774	2,631	2,496	2,371	2,251	2,132	2,015	1,900	1,787	1,675	1,564
BR	BR3	416	7,689	7,289	6,910	6,553	6,218	5,906	5,607	5,312	5,021	4,733	4,450	4,171	3,897
CR	CR4	155	1,421	1,269	1,125	988	859	738	623	511	402	297	194	95	0
CR	CR5	168	1,540	1,375	1,219	1,071	931	800	675	554	436	322	211	103	0
CR	CR6	240	2,200	1,965	1,741	1,529	1,330	1,143	965	792	623	459	301	148	0
GH	GH1	475	14,098	13,375	12,686	12,033	11,415	10,834	10,291	9,770	9,256	8,749	8,249	7,755	7,269
GH	GH2	484	14,365	13,628	12,927	12,261	11,631	11,039	10,486	9,956	9,432	8,915	8,405	7,902	7,407
GH	GH3	480	14,246	13,516	12,820	12,159	11,535	10,948	10,399	9,873	9,354	8,841	8,336	7,837	7,346
GH	GH4	479	14,217	13,488	12,793	12,134	11,511	10,925	10,378	9,853	9,334	8,823	8,318	7,821	7,331
GR	GR3	68	922	860	801	745	692	643	595	549	504	459	415	373	331
GR	GR4	95	1,288	1,201	1,118	1,040	967	898	832	767	704	641	580	521	462
MC	MC1	303	7,053	6,531	6,033	5,559	5,110	4,687	4,290	3,910	3,538	3,173	2,817	2,468	2,128
MC	MC2	301	7,007	6,488	5,993	5,523	5,077	4,656	4,262	3,884	3,515	3,152	2,798	2,452	2,114
MC	MC3	391	9,102	8,428	7,785	7,174	6,595	6,048	5,536	5,046	4,565	4,095	3,635	3,185	2,746
MC	MC4	477	11,104	10,282	9,498	8,752	8,045	7,379	6,754	6,156	5,570	4,996	4,434	3,886	3,350
TC	TC1	383	3,222	3,101	2,986	2,878	2,777	2,652	2,536	2,425	2,315	2,206	2,099	1,993	1,888
TC	TC2	549	4,618	4,445	4,280	4,125	3,980	3,802	3,636	3,476	3,319	3,163	3,009	2,857	2,706
TY	TY3	71	2,117	1,962	1,814	1,675	1,543	1,420	1,303	1,187	1,074	964	855	749	646

2.50%

2011 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2012 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2013 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2014 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2018 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2019 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2020 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2021 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2022 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2023 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2025 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2026 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2027 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2028 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2029 CR	264	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2030 CR	287	271	0	0	0	0	0	0	0	0	0	0	0	0	0
2031 CR	311	294	278	0	0	0	0	0	0	0	0	0	0	0	0
2032 CR	336	319	302	285	0	0	0	0	0	0	0	0	0	0	0
2033 CR	363	345	327	309	292	0	0	0	0	0	0	0	0	0	0
2034 CR	390	372	353	335	317	299	0	0	0	0	0	0	0	0	0
2035 CR	418	400	381	362	344	325	306	0	0	0	0	0	0	0	0
2036 CR	456	429	410	390	371	352	333	314	0	0	0	0	0	0	0
2037 CR	505	468	439	420	400	381	361	342	322	309	293	276	260	244	228
2038 CR	556	518	480	450	430	410	390	370	350	330	310	290	270	250	230

Station	Unit	Capacity	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
2039 CR			609	570	531	492	462	441	421	400	379	359	338	0	0
2040 CR			665	624	584	544	504	473	452	431	410	389	368	347	0
2011 MC			0	0	0	0	0	0	0	0	0	0	0	0	0
2012 MC			0	0	0	0	0	0	0	0	0	0	0	0	0
2013 MC			0	0	0	0	0	0	0	0	0	0	0	0	0
2014 MC			0	0	0	0	0	0	0	0	0	0	0	0	0
2015 MC			0	0	0	0	0	0	0	0	0	0	0	0	0
2016 MC			0	0	0	0	0	0	0	0	0	0	0	0	0
2017 MC			0	0	0	0	0	0	0	0	0	0	0	0	0
2018 MC			0	0	0	0	0	0	0	0	0	0	0	0	0
2019 MC			0	0	0	0	0	0	0	0	0	0	0	0	0
2020 MC			0	0	0	0	0	0	0	0	0	0	0	0	0
2021 MC			0	0	0	0	0	0	0	0	0	0	0	0	0
2022 MC			858	0	0	0	0	0	0	0	0	0	0	0	0
2023 MC			932	879	0	0	0	0	0	0	0	0	0	0	0
2024 MC			1,010	956	901	0	0	0	0	0	0	0	0	0	0
2025 MC			1,091	1,035	980	924	0	0	0	0	0	0	0	0	0
2026 MC			1,176	1,119	1,061	1,004	947	0	0	0	0	0	0	0	0
2027 MC			1,264	1,205	1,147	1,088	1,029	970	0	0	0	0	0	0	0
2028 MC			1,356	1,296	1,235	1,175	1,115	1,055	995	0	0	0	0	0	0
2029 MC			1,451	1,390	1,328	1,266	1,205	1,143	1,081	1,020	0	0	0	0	0
2030 MC			1,551	1,488	1,424	1,361	1,298	1,235	1,172	1,108	1,045	0	0	0	0
2031 MC			1,655	1,590	1,525	1,460	1,395	1,330	1,266	1,201	1,136	1,071	0	0	0
2032 MC			1,762	1,696	1,629	1,563	1,497	1,430	1,364	1,297	1,231	1,164	1,098	0	0
2033 MC			1,874	1,806	1,738	1,670	1,602	1,534	1,466	1,398	1,330	1,262	1,194	1,125	0
2034 MC			1,991	1,921	1,852	1,782	1,712	1,642	1,572	1,503	1,433	1,363	1,293	1,223	1,154
2035 MC			2,154	2,041	1,969	1,898	1,826	1,755	1,683	1,612	1,540	1,469	1,397	1,325	1,254
2036 MC			2,366	2,208	2,092	2,019	1,945	1,872	1,799	1,725	1,652	1,579	1,505	1,432	1,359
2037 MC			2,587	2,425	2,263	2,144	2,069	1,994	1,919	1,844	1,768	1,693	1,618	1,543	1,468
2038 MC			2,818	2,652	2,486	2,319	2,198	2,121	2,044	1,967	1,890	1,813	1,736	1,659	1,581
2039 MC			3,059	2,888	2,718	2,548	2,377	2,253	2,174	2,095	2,016	1,937	1,858	1,779	1,700
2040 MC			3,310	3,135	2,961	2,786	2,611	2,437	2,309	2,228	2,147	2,066	1,985	1,904	1,823
2011 TC			96	91	87	82	77	0	0	0	0	0	0	0	0
2012 TC			103	98	94	89	84	79	0	0	0	0	0	0	0
2013 TC			111	106	101	96	91	86	81	0	0	0	0	0	0
2014 TC			118	113	108	103	98	93	88	83	0	0	0	0	0
2015 TC			126	121	116	111	106	101	96	91	85	0	0	0	0
2016 TC			135	130	124	119	114	109	103	98	93	88	0	0	0
2017 TC			144	138	133	127	122	117	111	106	101	95	90	0	0
2018 TC			153	147	142	136	131	125	120	114	109	103	98	92	0
2019 TC			162	156	151	145	139	134	128	123	117	111	106	100	94
2020 TC			172	166	160	155	149	143	137	131	126	120	114	108	102
2021 TC			182	176	170	164	158	152	147	141	135	129	123	117	111
2022 TC			193	187	181	175	168	162	156	150	144	138	132	126	120
2023 TC			204	198	191	185	179	173	166	160	154	148	141	135	129
2024 TC			215	209	203	196	190	183	177	171	164	158	151	145	139
2025 TC			227	221	214	208	201	194	188	181	175	168	162	155	149
2026 TC			240	233	226	219	213	206	199	193	186	179	173	166	159
2027 TC			253	246	239	232	225	218	211	204	197	191	184	177	170
2028 TC			266	259	252	245	238	231	224	217	209	202	195	188	181
2029 TC			280	273	265	258	251	244	236	229	222	215	207	200	193

Station	Unit	Capacity	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
	2030 TC	294	287	279	272	272	265	257	250	242	235	227	220	213	205
	2031 TC	309	302	294	286	279	271	264	256	248	241	233	226	218	211
	2032 TC	325	317	309	301	293	286	278	270	262	255	247	239	231	224
	2033 TC	341	333	325	317	309	301	293	285	277	269	261	253	245	238
	2034 TC	357	349	341	333	325	317	308	300	292	284	276	267	259	252
	2035 TC	382	366	358	350	341	333	324	316	308	299	291	283	274	267
	2036 TC	417	392	376	367	358	341	333	324	315	307	298	290	282	275
	2037 TC	452	427	402	385	376	367	358	341	332	323	314	306	298	291
	2038 TC	489	463	438	412	395	385	376	367	358	349	340	331	322	314
	2039 TC	528	501	475	449	422	404	395	386	377	367	358	349	340	332
	2040 TC	568	541	514	487	460	433	414	405	396	386	377	367	358	350
	2011 GH	629	0	0	0	0	0	0	0	0	0	0	0	0	0
	2012 GH	683	645	0	0	0	0	0	0	0	0	0	0	0	0
	2013 GH	740	700	661	0	0	0	0	0	0	0	0	0	0	0
	2014 GH	799	759	718	677	0	0	0	0	0	0	0	0	0	0
	2015 GH	861	819	778	736	694	0	0	0	0	0	0	0	0	0
	2016 GH	925	882	840	797	754	712	0	0	0	0	0	0	0	0
	2017 GH	992	948	905	861	817	773	729	0	0	0	0	0	0	0
	2018 GH	1,062	1,017	972	927	882	837	792	748	0	0	0	0	0	0
	2019 GH	1,134	1,088	1,042	996	950	904	858	812	766	0	0	0	0	0
	2020 GH	1,210	1,163	1,116	1,068	1,021	974	927	880	833	785	0	0	0	0
	2021 GH	1,289	1,240	1,192	1,143	1,095	1,047	998	950	902	853	0	0	0	0
	2022 GH	1,370	1,321	1,271	1,222	1,172	1,123	1,073	1,023	974	924	875	825	775	725
	2023 GH	1,455	1,405	1,354	1,303	1,252	1,201	1,151	1,100	1,049	998	947	897	846	796
	2024 GH	1,544	1,492	1,440	1,388	1,336	1,283	1,231	1,179	1,127	1,075	1,023	971	919	867
	2025 GH	1,636	1,582	1,529	1,476	1,422	1,369	1,316	1,262	1,209	1,155	1,102	1,049	995	941
	2026 GH	1,731	1,677	1,622	1,567	1,513	1,458	1,403	1,348	1,294	1,239	1,184	1,130	1,075	1,020
	2027 GH	1,831	1,775	1,719	1,662	1,606	1,550	1,494	1,438	1,382	1,326	1,270	1,214	1,158	1,102
	2028 GH	1,934	1,876	1,819	1,762	1,704	1,647	1,589	1,532	1,474	1,417	1,359	1,302	1,244	1,186
	2029 GH	2,041	1,982	1,923	1,864	1,806	1,747	1,688	1,629	1,570	1,511	1,452	1,393	1,334	1,275
	2030 GH	2,153	2,092	2,032	1,971	1,911	1,851	1,790	1,730	1,670	1,609	1,549	1,488	1,428	1,367
	2031 GH	2,268	2,206	2,144	2,083	2,021	1,959	1,897	1,835	1,773	1,711	1,649	1,588	1,526	1,464
	2032 GH	2,388	2,325	2,262	2,198	2,135	2,071	2,008	1,944	1,881	1,818	1,754	1,691	1,627	1,563
	2033 GH	2,513	2,448	2,383	2,318	2,253	2,188	2,123	2,058	1,993	1,928	1,863	1,798	1,733	1,667
	2034 GH	2,643	2,576	2,509	2,443	2,376	2,309	2,243	2,176	2,109	2,043	1,976	1,910	1,843	1,776
	2035 GH	2,834	2,709	2,640	2,572	2,504	2,435	2,367	2,299	2,231	2,162	2,094	2,026	1,957	1,888
	2036 GH	3,091	2,905	2,776	2,706	2,636	2,566	2,496	2,426	2,356	2,286	2,216	2,146	2,076	1,999
	2037 GH	3,360	3,169	2,977	2,846	2,774	2,702	2,630	2,559	2,487	2,415	2,343	2,272	2,200	2,127
	2038 GH	3,640	3,444	3,248	3,052	2,917	2,843	2,770	2,696	2,623	2,549	2,476	2,402	2,328	2,253
	2039 GH	3,932	3,731	3,530	3,329	3,128	2,990	2,914	2,839	2,764	2,688	2,613	2,537	2,462	2,386
	2040 GH	4,236	4,030	3,824	3,618	3,412	3,206	3,065	2,987	2,910	2,833	2,755	2,678	2,601	2,524
	2011 BR	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2012 BR	151	0	0	0	0	0	0	0	0	0	0	0	0	0
	2013 BR	164	154	0	0	0	0	0	0	0	0	0	0	0	0
	2014 BR	177	168	158	0	0	0	0	0	0	0	0	0	0	0
	2015 BR	191	182	172	162	0	0	0	0	0	0	0	0	0	0
	2016 BR	206	196	186	176	166	0	0	0	0	0	0	0	0	0
	2017 BR	222	211	201	191	181	170	0	0	0	0	0	0	0	0
	2018 BR	238	227	217	206	196	185	175	0	0	0	0	0	0	0
	2019 BR	254	244	233	222	211	201	190	179	0	0	0	0	0	0
	2020 BR	272	261	250	239	228	217	206	195	183	0	0	0	0	0

Station	Unit	Capacity	2047	2048	2049	2050	2051	2052	2054	2055	2056	2057	2058	2059
2021 BR		290	278	267	256	245	233	222	211	199	188	0	0	0
2022 BR		309	297	285	274	262	251	239	228	216	204	193	0	0
2023 BR		328	316	304	293	281	269	257	245	233	221	209	198	0
2024 BR		349	336	324	312	300	288	276	263	251	239	227	215	203
2025 BR		370	357	345	332	320	307	295	282	270	257	245	233	220
2026 BR		392	379	366	353	341	328	315	302	290	277	264	251	238
2027 BR		415	402	388	375	362	349	336	323	310	297	284	271	257
2028 BR		438	425	412	398	385	371	358	344	331	318	304	291	277
2029 BR		463	449	436	422	408	394	381	367	353	339	326	312	298
2030 BR		489	475	461	447	432	418	404	390	376	362	348	334	320
2031 BR		516	501	487	472	458	443	429	414	400	385	371	356	342
2032 BR		543	529	514	499	484	469	454	440	425	410	395	380	365
2033 BR		572	557	542	527	511	496	481	466	451	435	420	405	390
2034 BR		602	586	571	555	540	524	509	493	477	462	446	431	415
2035 BR		633	617	601	585	569	553	537	521	505	489	473	457	441
2036 BR		680	649	632	616	600	583	567	551	534	518	502	485	469
2037 BR		743	697	665	648	632	615	598	581	564	548	531	514	497
2038 BR		809	762	714	682	664	647	630	613	596	579	561	544	527
2039 BR		878	829	781	732	699	681	663	646	628	611	593	575	558
2040 BR		950	900	850	800	750	716	698	680	662	644	626	608	590
2011 GR		0	0	0	0	0	0	0	0	0	0	0	0	0
2012 GR		0	0	0	0	0	0	0	0	0	0	0	0	0
2013 GR		0	0	0	0	0	0	0	0	0	0	0	0	0
2014 GR		0	0	0	0	0	0	0	0	0	0	0	0	0
2015 GR		0	0	0	0	0	0	0	0	0	0	0	0	0
2016 GR		0	0	0	0	0	0	0	0	0	0	0	0	0
2017 GR		0	0	0	0	0	0	0	0	0	0	0	0	0
2018 GR		0	0	0	0	0	0	0	0	0	0	0	0	0
2019 GR		0	0	0	0	0	0	0	0	0	0	0	0	0
2020 GR		47	0	0	0	0	0	0	0	0	0	0	0	0
2021 GR		51	48	0	0	0	0	0	0	0	0	0	0	0
2022 GR		56	53	50	0	0	0	0	0	0	0	0	0	0
2023 GR		60	57	54	51	0	0	0	0	0	0	0	0	0
2024 GR		65	62	59	55	52	0	0	0	0	0	0	0	0
2025 GR		70	66	63	60	57	54	0	0	0	0	0	0	0
2026 GR		75	71	68	65	61	58	55	0	0	0	0	0	0
2027 GR		80	77	73	70	66	63	60	56	0	0	0	0	0
2028 GR		86	82	79	75	72	68	65	61	58	0	0	0	0
2029 GR		91	88	84	81	77	73	70	66	63	59	0	0	0
2030 GR		97	93	90	86	83	79	75	72	68	64	61	0	0
2031 GR		103	100	96	92	88	85	81	77	73	70	66	62	0
2032 GR		110	106	102	98	94	91	87	83	79	75	71	67	64
2033 GR		116	113	109	105	101	97	93	89	85	81	77	73	69
2034 GR		123	119	115	111	107	103	99	95	91	87	83	79	75
2035 GR		131	126	122	118	114	110	106	102	98	93	89	85	81
2036 GR		141	134	130	125	121	117	113	108	104	100	96	91	87
2037 GR		155	145	137	133	129	124	120	115	111	107	102	98	94
2038 GR		169	159	148	141	136	132	127	123	118	114	109	105	101
2039 GR		184	173	163	152	144	140	135	130	126	121	117	112	108
2040 GR		200	189	178	167	156	148	143	138	134	129	124	120	115
2011 TY		0	0	0	0	0	0	0	0	0	0	0	0	0

Station	Unit	Capacity	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
	2012 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2013 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2014 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2015 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2016 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2017 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2018 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2019 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2020 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2021 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2022 TY		54	0	0	0	0	0	0	0	0	0	0	0	0
	2023 TY		58	55	0	0	0	0	0	0	0	0	0	0	0
	2024 TY		63	60	56	0	0	0	0	0	0	0	0	0	0
	2025 TY		68	65	61	58	0	0	0	0	0	0	0	0	0
	2026 TY		73	70	66	63	59	0	0	0	0	0	0	0	0
	2027 TY		79	75	72	68	64	61	0	0	0	0	0	0	0
	2028 TY		85	81	77	73	70	66	62	0	0	0	0	0	0
	2029 TY		91	87	83	79	75	71	68	64	0	0	0	0	0
	2030 TY		97	93	89	85	81	77	73	69	65	0	0	0	0
	2031 TY		103	99	95	91	87	83	79	75	71	67	0	0	0
	2032 TY		110	106	102	98	94	89	85	81	77	73	69	0	0
	2033 TY		117	113	109	104	100	96	92	87	83	79	75	70	0
	2034 TY		124	120	116	111	107	103	98	94	90	85	81	76	72
	2035 TY		132	128	123	119	114	110	105	101	96	92	87	83	78
	2036 TY		143	135	131	126	122	117	112	108	103	99	94	89	85
	2037 TY		157	146	139	134	129	125	120	115	111	106	101	96	92
	2038 TY		172	161	150	142	137	133	128	123	118	113	108	104	99
	2039 TY		187	176	165	154	146	141	136	131	126	121	116	111	106
	2040 TY		203	192	180	169	158	149	144	139	134	129	124	119	114

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
BR	BR1	101	0	0	0	0	0	441	454	590	616	785	787	789	1,035	1,054	1,357	1,337	1,319
BR	BR2	167	0	0	0	0	0	729	751	975	1,018	1,299	1,301	1,305	1,711	1,743	2,245	2,211	2,180
BR	BR3	416	0	0	0	0	0	1,816	1,870	2,430	2,536	3,235	3,242	3,252	4,261	4,342	5,508	5,508	5,431
CR	CR4	155	258	840	1,124	1,095	1,216	1,960	1,949	1,644	1,927	2,572	2,560	2,096	2,059	2,073	1,531	1,768	1,810
CR	CR5	168	279	910	1,219	1,187	1,318	2,124	2,112	1,782	2,089	2,788	2,774	2,272	2,232	2,247	1,659	1,916	1,962
CR	CR6	240	399	1,300	1,741	1,696	1,882	5,221	5,152	4,566	4,899	5,799	5,682	4,867	4,712	4,637	3,700	3,969	3,960
GH	GH1	475	0	0	0	0	0	5,620	5,988	6,566	7,371	8,085	8,761	9,219	9,707	10,790	12,508	14,281	15,439
GH	GH2	484	0	0	0	0	0	5,727	6,101	6,691	7,510	8,238	8,927	9,394	9,891	10,994	12,745	14,551	15,732
GH	GH3	480	0	0	0	0	0	5,680	6,051	6,635	7,448	8,170	8,854	9,316	9,809	10,904	12,640	14,431	15,602
GH	GH4	479	0	0	0	0	0	5,668	6,038	6,622	7,433	8,153	8,835	9,297	9,789	10,881	12,614	14,401	15,569
GR	GR3	68																	
GR	GR4	95																	
MC	MC1	303																	
MC	MC2	301																	
MC	MC3	391																	
MC	MC4	477																	
TC	TC1	383	0	0	0	0	0	1,965	2,066	2,172	2,216	2,260	2,305	2,351	2,398	2,446	2,495	2,545	2,596
TC	TC2	549	0	0	0	0	0	2,817	2,961	3,114	3,176	3,240	3,304	3,371	3,438	3,507	3,577	3,648	3,721
TY	TY3	71																	
BR	Landfill Phase 2 Savings		0	0	0	0	0	0	0	828	908	1,960	1,870	1,782	1,697	1,613	1,531	1,451	1,372
BR	Landfill Phase 3 Savings		0	0	0	0	0	0	0	0	0	0	0	0	1,638	1,745	3,767	3,594	3,426
BR	Landfill O&M Savings		0	0	0	0	0	2,985	3,075	3,167	3,262	3,360	3,461	3,564	3,671	3,781	3,895	4,012	4,132
CR	Landfill Capital Savings	936		3,049	4,083	3,979	4,416	4,938	4,772	3,579	4,464	6,617	6,353	4,493	4,170	4,023	1,844	2,496	2,513
CR	Landfill O&M Savings		0	0	0	0	0	2,181	2,307	2,393	2,537	2,726	2,944	3,121	3,308	3,507	3,717	3,925	4,061
CR6	Stator Rewind Savings		0	0	0	0	0	2,187	2,135	2,020	1,914	1,816	1,719	1,621	1,524	1,427	1,329	1,232	1,158
GH	Landfill Capital Savings		0	0	0	0	0	61	188	1,083	2,805	4,044	4,399	4,388	4,387	6,672	11,397	16,206	18,397
GH	Landfill O&M Savings		0	0	0	0	0	22,633	23,991	25,431	26,957	28,601	30,979	32,838	34,808	36,897	39,110	41,457	43,944
TC	Landfill Capital Savings		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TC	Landfill O&M Savings		0	0	0	0	0	4,782	5,027	5,286	5,392	5,500	5,610	5,722	5,836	5,953	6,072	6,194	6,318

Station	Unit	Capacity	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
BR	BR1	101	1,301	1,285	1,267	1,122	410	385	360	331	54	46	38	30	23
BR	BR2	167	2,151	2,124	2,095	1,855	678	636	595	547	89	76	63	50	39
BR	BR3	416	5,359	5,291	5,219	4,620	1,688	1,585	1,482	1,363	222	189	157	124	97
CR	CR4	155	1,869	1,932	2,000	1,861	1,810	1,778	1,748	1,719	1,692	1,708	1,727	1,747	1,771
CR	CR5	168	2,025	2,094	2,168	2,017	1,962	1,927	1,895	1,864	1,834	1,851	1,872	1,894	1,919
CR	CR6	240	4,000	4,047	4,101	3,833	3,704	3,602	2,777	2,662	2,620	2,645	2,674	2,705	2,742
GH	GH1	475	15,604	16,273	16,860	17,332	17,856	18,548	19,372	20,254	21,186	21,692	2,492	1,854	1,700
GH	GH2	480	15,900	16,581	17,180	17,660	18,195	18,899	19,739	20,637	21,587	22,103	2,539	1,889	1,733
GH	GH3	484	15,769	16,444	17,038	17,514	18,044	18,743	19,576	20,467	21,409	21,921	2,518	1,874	1,718
GH	GH4	479	15,736	16,410	17,002	17,478	18,007	18,704	19,535	20,424	21,364	21,875	2,513	1,870	1,715
GR	GR3	68													
GR	GR4	95													
MC	MC1	303													
MC	MC2	301													
MC	MC3	391													
MC	MC4	477													
TC	TC1	383	2,648	5,363	8,239	8,294	12,354	12,003	11,666	11,343	11,031	10,731	10,442	10,162	9,886
TC	TC2	549	3,796	7,687	11,809	11,888	17,709	17,206	16,723	16,259	15,812	15,382	14,967	14,567	14,170
TY	TY3	71													
	BR Landfill Phase 2 Savings		1,294	1,215	1,123	156	138	120	101	83	64	46	28	9	0
	BR Landfill Phase 3 Savings		3,261	3,101	2,943	2,789	2,638	2,487	2,336	2,158	301	265	250	194	159
	BR Landfill O&M Savings		4,256	4,384	4,515	4,651									
	CR Landfill Capital Savings		2,483	2,455	2,429	1,631	1,345	1,123	908	695	485	430	384	338	303
	CR Landfill O&M Savings		4,305	4,563	4,837	5,128	5,230	5,335	5,441	5,550	5,661	5,774	5,890	6,008	6,128
	CR6 Stator Rewind Savings		1,106	1,055	1,004	952	901	850	70	0	0	0	0	0	0
	GH Landfill Capital Savings		18,341	18,358	17,892	16,784	15,709	15,118	14,860	14,617	14,352	12,126	9,906	7,329	6,705
	GH Landfill O&M Savings		44,668	47,348	50,189	53,201	56,393	59,776	63,363	67,165	71,194	75,466	155	158	161
	TC Landfill Capital Savings		0	6,478	13,344	13,344	23,088	22,094	21,132	20,199	19,293	18,412	17,554	16,717	15,883
	TC Landfill O&M Savings		6,444	6,573	6,704	6,838	6,975	7,115	7,257	7,402	7,550	7,701	7,855	8,012	8,172

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
BR	BR1	101	0	0	0	553	743	703	666	635	606	577	548	519	491	462	433	403	393	382	362	372	361	351	340	330	309	2036
BR	BR2	167	0	0	0	915	1,228	1,163	1,104	1,050	1,002	954	907	859	811	764	716	684	666	649	632	615	597	580	563	546	528	511
BR	BR3	416	0	0	0	2,279	3,060	2,897	2,749	2,616	2,496	2,377	2,258	2,140	2,021	1,902	1,784	1,703	1,650	1,617	1,574	1,531	1,488	1,445	1,402	1,359	1,316	1,273
CR	CR4	155	0	0	0	980	1,582	1,494	1,413	1,339	1,269	1,201	1,132	1,064	996	927	859	806	770	735	699	663	627	591	0	0	0	0
CR	CR5	168	0	0	0	1,062	1,715	1,619	1,532	1,451	1,376	1,302	1,227	1,153	1,079	1,005	931	874	835	796	757	718	679	640	0	0	0	0
CR	CR6	240	0	0	0	1,518	2,449	2,313	2,188	2,073	1,966	1,860	1,754	1,647	1,541	1,435	1,329	1,249	1,193	1,137	1,082	1,026	970	915	0	0	0	0
GH	GH1	475	0	0	0	1,462	1,954	1,856	1,767	1,686	1,611	1,540	1,468	1,397	1,325	1,254	1,183	1,111	1,062	1,035	1,008	982	955	928	901	875	848	821
GH	GH2	484	0	0	0	1,489	1,991	1,891	1,800	1,718	1,642	1,569	1,496	1,423	1,350	1,278	1,205	1,132	1,082	1,055	1,028	1,000	973	946	918	891	864	837
GH	GH3	480	0	0	0	1,477	1,975	1,876	1,786	1,700	1,628	1,553	1,481	1,409	1,337	1,265	1,193	1,121	1,071	1,044	1,017	990	963	936	909	884	857	830
GH	GH4	479	0	0	0	1,474	1,971	1,872	1,782	1,700	1,625	1,553	1,481	1,409	1,337	1,265	1,193	1,121	1,071	1,044	1,017	990	963	936	909	884	857	830
GR	GR3	88	0	0	0	586	837	792	751	713	679	645	611	577	544	510	476	452	438	423	409	395	380	366	352	337	323	309
MC	MC1	95	0	0	0	819	1,169	1,106	1,049	996	948	901	854	807	759	712	665	631	611	591	571	551	531	511	491	471	451	431
MC	MC2	303	0	0	0	1,215	1,774	1,682	1,598	1,521	1,449	1,380	1,311	1,242	1,173	1,103	1,034	965	915	882	850	818	786	754	722	690	658	626
MC	MC3	301	0	0	0	1,207	1,762	1,671	1,588	1,511	1,440	1,371	1,302	1,234	1,165	1,096	1,027	959	908	877	845	813	781	749	717	686	654	622
MC	MC4	391	0	0	0	1,568	2,489	2,371	2,263	2,163	2,069	1,978	1,870	1,792	1,702	1,613	1,524	1,435	1,380	1,339	1,297	1,256	1,215	1,174	1,133	1,092	1,051	1,010
MC	MC5	477	0	0	0	1,913	2,932	2,848	2,756	2,694	2,621	2,548	2,475	2,402	2,329	2,256	2,183	2,110	2,040	1,989	1,938	1,887	1,836	1,785	1,734	1,683	1,632	1,581
TC	TC1	383	0	0	0	770	1,008	958	912	871	833	797	760	724	688	652	616	579	555	542	529	517	504	491	479	466	453	441
TC	TC2	549	0	0	0	1,104	1,445	1,373	1,307	1,248	1,194	1,142	1,090	1,038	986	934	882	830	795	777	759	741	723	704	686	668	650	632
TY	TY3	71	0	0	0	586	837	792	751	713	679	645	611	577	544	510	476	452	438	423	409	395	380	366	352	337	323	309

BRWATER			0	0	0	3,747	5,032	4,763	4,521	4,302	4,104	3,908	3,713	3,518	3,323	3,128	2,933	2,800	2,729	2,659	2,588	2,517	2,447	2,376	2,305	2,235	2,164	2,094
CRWATER			0	0	0	3,560	5,746	5,427	5,134	4,863	4,611	4,362	4,113	3,865	3,616	3,367	3,118	2,929	2,798	2,668	2,537	2,407	2,277	2,146	0	0	0	0
MCWATER			0	0	0	5,902	8,617	8,173	7,765	7,389	7,040	6,704	6,368	6,032	5,696	5,361	5,025	4,689	4,443	4,287	4,131	3,976	3,820	3,664	3,508	3,353	3,197	3,041
TCWATER			0	0	0	1,874	2,453	2,331	2,220	2,119	2,026	1,938	1,850	1,762	1,674	1,586	1,498	1,410	1,350	1,319	1,288	1,258	1,227	1,196	1,165	1,134	1,103	1,072
GHWATER			0	0	0	5,902	7,892	7,495	7,135	6,806	6,505	6,217	5,928	5,640	5,352	5,063	4,775	4,487	4,288	4,180	4,072	3,964	3,856	3,748	3,640	3,531	3,423	3,315
GRWATER			0	0	0	1,405	2,006	1,898	1,799	1,709	1,627	1,546	1,465	1,384	1,303	1,222	1,141	1,063	1,049	1,015	980	946	912	877	843	809	774	740

Station	Unit	Capacity	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
BR	BR1	101	299	288	278	267	257	247	236	226	215	205	194	184	174	0	0	0	0	0	0	0	0	0	0
BR	BR2	167	494	477	459	442	425	408	390	373	356	339	321	304	287	0	0	0	0	0	0	0	0	0	0
BR	BR3	416	1,230	1,187	1,144	1,101	1,058	1,016	973	930	887	844	801	758	715	0	0	0	0	0	0	0	0	0	0
CR	CR4	155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5	168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6	240	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GH	GH1	475	794	767	741	714	687	660	634	607	580	553	526	500	473	446	0	0	0	0	0	0	0	0	0
GH	GH2	484	809	782	755	727	700	673	646	618	591	564	536	509	482	454	0	0	0	0	0	0	0	0	0
GH	GH3	480	803	776	748	721	694	667	640	613	586	559	532	505	478	451	0	0	0	0	0	0	0	0	0
GH	GH4	479	801	774	747	720	693	666	639	612	585	558	531	504	477	450	0	0	0	0	0	0	0	0	0
GR	GR3	68	294	280	266	251	237	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR	GR4	95	411	391	371	351	331	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC1	303	594	562	530	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC2	301	590	558	526	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC3	391	766	725	684	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC4	477	935	885	834	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TC	TCL	383	428	415	403	390	377	364	352	339	326	314	301	288	276	263	250	237	225	212	0	0	0	0	0
TC	TC2	549	613	595	577	559	541	522	504	486	468	450	431	413	395	377	359	340	322	304	0	0	0	0	0
TY	TY3	71	294	280	266	251	237	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

BRWATER 2,023 1,952 1,882 1,811 1,740 1,670 1,599 1,529 1,458 1,387 1,317 1,246 1,175 0 0 0 0 0 0 0 0 0 0 0 0 0
 CRWATER 0
 MCWATER 2,886 2,730 2,574 0
 TCWATER 1,041 1,010 979 949 918 887 856 825 794 763 732 701 670 640 609 578 547 0 0 0 0 0 0 0 0 0
 GHWATER 3,207 3,099 2,991 2,883 2,774 2,666 2,558 2,450 2,342 2,234 2,125 2,017 1,909 1,801 0 0 0 0 0 0 0 0 0 0 0 0
 GRWATER 706 671 637 603 568 0

Advocacy group: Fracking makes natural gas 'bridge to nowhere'

June 14, 2011

By Bryan Schutt

Advocacy group Food & Water Watch on June 13 called for a nationwide ban on hydraulic fracturing in shale gas plays and advocated for an aggressive investment in energy efficiency and renewable energy.

"What we've seen happen with fracking, what we know and don't know about fracking is enough to ban the practice from going forward," Jim Walsh, New Jersey director of Food & Water Watch, said in an interview. "We don't really see a responsible way for this practice to continue to go forward, which is why we're calling for a ban on fracking. We don't think it's going to be able to be done safely."

In a new report detailing their concerns, Food & Water Watch said the rapid expansion of shale gas extraction has left behind a trail of environmental and economic problems in rural communities.

"Accidents and leaks have polluted rivers, streams and drinking water supplies. Regions peppered with drilling rigs have high levels of smog as well as other airborne pollutants, including potential carcinogens. Rural communities face an onslaught of heavy truck traffic — often laden with dangerous chemicals used in drilling — and declining property values," according to the report. "The 'bridge fuel' of fracking could well be a bridge to nowhere."

The report summarized 10 studies about the environmental effects of hydraulic fracturing operations and concluded that the well-stimulation technique poses an unacceptable risk to the nation. Further, Food & Water Watch said increased use of fracking represents a "misguided energy policy direction for the United States."

While the gas industry has launched a massive lobbying campaign to sell natural gas to lawmakers and the public, the group criticized regulators for being asleep at the switch. "The current loophole-ridden laws and haphazard enforcement leave communities and the environment vulnerable to fracking pollution," the report said. "To safeguard public health and the environment, the federal government should ban shale gas fracking and invest in a sustainable energy future for the country."

Food & Water Watch released the report as part of its anti-gas lobby in New Jersey, which Walsh believes is gaining traction among legislators. "Right now, I believe there is about 12 legislators that have signed on in support," he said. "The ban bill also unanimously moved out of the Senate Environment Committee with votes from Republicans and Democrats."

In addition to a fracking ban, Walsh said, the state should prohibit all activities related to hydraulic fracturing such as water withdrawals and waste disposals that support the industry. "Spills, trucking accidents and things like that from waste coming into the state could adversely impact our drinking water."

Although there has not been much industry interest in shale acreage in New Jersey, the ban would represent more than symbolism, Walsh said. "In the northwestern part of the state, there are shale deposits that have the hydrocarbons. Even though there aren't leases pending right now, the only reason I believe the industry isn't going after those deposits is because they are a lot deeper than the Marcellus Shale in Pennsylvania and New York."

The New Jersey Sierra Club and Delaware Riverkeeper Network joined Food & Water Watch in calling for a fracking ban.

"The first rule in public health and safety is do no harm, and right now there is no fracking way that it is safe and a ban should be in place," Jeff Tittel, director of the New Jersey Sierra Club, said in a statement. "Until we get rid of the Halliburton loophole that exempts fracking from seven major federal environmental laws, including Superfund and the Clean Water Act, until all the different studies are done that independently analyze the impacts of fracking, we should not allow fracking to go forward. It is too risky to our environment and water supplies." **i**

CNYOG's MARC I project becomes battleground for Marcellus Shale opponents

July 13, 2011

By Sean Sullivan

Central New York Oil and Gas Co. LLC defended FERC's positive environmental review of the MARC I Hub Line Project on July 11 as environmental groups and thousands of individuals poured into the FERC proceeding, protesting not only the natural gas pipeline expansion but all Marcellus Shale development.

Protests came from lawmakers; environmental groups including the Coalition for Responsible Growth & Resource Conservation, Damascus Citizens for Sustainability, the Sierra Club and Trout Unlimited; and citizen comments, including more than 20,000 form letters filed as part of an Earthjustice online campaign. They objected to FERC's finding that the Pennsylvania project would have no significant impact on the environment. They asked for a full environmental impact statement, including a review of the cumulative impacts of all Marcellus Shale gas infrastructure and activity.

The case is an example of how opponents of shale development might use the FERC review process for pipelines and storage projects to broadly challenge production activity not normally under the commission's jurisdiction.

In its comments, CNYOG supported the May 27 environmental assessment prepared by FERC staff as "both comprehensive and detailed." The Inergy LP subsidiary said a more involved environmental impact statement is "unnecessary." The MARC I Hub Line Project would be a roughly 40-mile, 30-inch-diameter bidirectional pipeline in Bradford, Sullivan and Lycoming counties, Pa.

"The EA addresses all major areas of environmental concern, including: geology, soils, water resources and wetlands, vegetation and wildlife, endangered and threatened species, land use, socio-economics, cultural resources, air quality and noise levels, reliability and safety," CNYOG said.

CNYOG noted that it intends to comply with FERC's proposed environmental mitigation measures. As an example, the company said the Audubon Society's concern that it had not filed a migratory bird assessment and habitat restoration plan is addressed by a recommendation in FERC's environmental assessment. Under that requirement, CNYOG would have to file that assessment and plan before beginning construction. In comments submitted by its Pennsylvania office, the Audubon Society called Marcellus Shale development the "single largest threat" to Pennsylvania forest habitat.

CNYOG ripped into the comments produced by Earthjustice, which describes itself as a nonprofit environmental law firm. "These 'comments' were the product of an Internet campaign in which Earthjustice indicated that it would submit comments to the commission on behalf of persons who submitted their name and pertinent information on Earthjustice's website," the company said. "This

campaign, while producing an impressive number of 'comments,' also demonstrates the substantive weakness of the mass filing."

At the time of its comments, CNYOG said, only 37 of the thousands of letters gathered by the Earthjustice campaign were from residents of the three counties around the MARC I project. The company said the letters represented the general public's fear of the environmental impacts of hydraulic fracturing and other aspects of shale development, stoked by a "less-than-objective" description of the project on the Earthjustice website. CNYOG also said a number of letters were duplicates or their senders could not be identified, and "reflect the absence of any attempt at culling of obviously defective submissions."

Members of the Pennsylvania General Assembly, led by state Rep. Richard Mirabito, sent a letter to FERC expressing concerns about the project "on behalf of the tens of thousands of citizens that we represent."

"While natural gas drilling is already impacting the area," the lawmakers wrote, "we believe that construction of a 39-mile transmission pipeline as proposed in this project without an adequate environmental assessment is beyond what this region should be asked to bear and may cause irreparable harm." (CP10-480) *i*

THE POLITICS AND BUSINESS OF CLIMATE CHANGE

9. EMISSIONS:

E.U. emissions show biggest annual increase in 20 years

Published: Tuesday, October 11, 2011

The European Union, despite major gains in green initiatives, is about to set a record for the biggest yearly hike in carbon emissions in 20 years, according to preliminary data from the European Environment Agency.

Incremental economic recovery and an unusually cold winter, which caused consumers to heat their homes for longer, pushed 2010 emissions up by 2.4 percent from the previous year. *The jump is the biggest annual increase since 1990.*

Until now, the biggest increase was in 1996, when emissions from the 27-member union rose by 2 percent from 1995 levels. The increase last year follows a 7 percent drop in annual emissions in 2009 due to slowed industrial production from the recession and growth in renewable energy electricity generation.

The 15 E.U. countries with obligations under the **Kyoto** Protocol are largely on track to meet their obligations. Emissions have dropped by 10.6 percent since 1990, surpassing the pledge to cut levels by 8 percent between 2008 and 2012. Three of the countries -- Italy, Austria and Luxembourg -- are falling behind in their reduction goals, however.

The E.U. bloc of 27 nations also has a separate plan to cut its emissions by 20 percent by 2020 compared to 1990 levels. It has already achieved a 15.5 percent decrease since 1990, but the European Environment Agency, an E.U. body based in Copenhagen, Denmark, says that more needs to be done.

Existing European plans "do not project enough emission reductions for the E.U. to meet its unilateral 20 per cent reduction commitment in 2020," said the agency. "Additional measures currently planned by member states will help further reduce emissions but will be insufficient to achieve the important emission cuts needed in the longer term" (Pilita Clark, *Financial Times*, Oct. 7). -- JP

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The EU Emission Trading Scheme: designed by committee¹

By Arnold Mulder

Ever since the EU Emissions Trading Scheme (EU ETS) came into effect on January 1st 2005, it has been surrounded by uncertainty. Although the scheme is intended as the most powerful weapon in the effort to reduce European carbon emissions, doubts about its effectiveness and feasibility have remained. In theory, 'the ETS should allow the European Union to achieve its emission reduction target under the Kyoto Protocol at a cost of below 0.1% of GDP, significantly less than would otherwise be the case', according to the European Commission (2008). In practice, the efficiency and effectiveness of the ETS remain questionable.

The challenge to reduce emissions

The European Commission aims to reduce 'domestic' carbon emissions by 20% in 2020 compared to 1990. The EU ETS is the flagship in the EU's efforts to meet this goal. The scheme covers all sectors with substantial carbon emissions from point sources, such as the power, steel, iron, petroleum and gas sectors. Mobile sources of emissions (e.g. the transport sector) are not yet included in the ETS.

The fact that the ETS focuses on large, stationary and concentrated sources of carbon emissions is no coincidence. Reducing emissions from a few power plants is easier than reducing emissions from millions of cars. Because the large stationary sources are all covered by the ETS, a stricter reduction target is applied to these sectors than to sectors outside the emissions trading scheme. Effectively, the EU ETS sectors are expected to reduce their emissions by 21% between 2005 and 2020, while sectors outside the scheme are projected to reduce their emissions by merely 10%. Together the reductions suffice to meet the 20% goal in 2020.

The emphasis on the sectors covered by the ETS underlines the key role of the emissions trading scheme: if the 21% reduction target is not met, achieving the overall reduction target will be nearly impossible, because it would require a stronger reduction in sectors where emissions reduction are already more difficult or more costly to achieve. Therefore, meeting the ETS target is crucial.

Why cap and trade is assumed to be effective and efficient...

Under the ETS, allowances are distributed to all the installations included in the scheme. A single allowance provides the owner the right to emit one tonne of CO₂ into the atmosphere. Because the number of allowances issued in a year can be set to a specific level, the scheme is assumed to be an effective means to reduce emissions. The level of

¹ Published April 18th, 2011, in European Energy Review, see http://www.europeanenergyreview.eu/site/pagina.php?id=2914#artikel_2914

emissions is limited after all by the number of issued allowances. If companies fail to buy allowances when they exceed their emission limits, they will incur a high penalty. The penalty is set far above the actual market price for allowances, so cheating does not pay off.

By progressively reducing the number of issued allowances towards the desired level, the EU should be able to achieve its 2020 reduction targets with great certainty. Companies will either have to buy allowances if they don't reduce their emissions sufficiently, or they will have to invest in low-carbon technologies to reduce their emissions. This is also assumed to be the most efficient mechanism to reduce emissions, as market forces will ensure that firms with the lowest-cost technology available will invest first. Thus, the emissions reduction target is achieved against the lowest possible cost.

If this is so, then why, as indicated above, do the efficiency and effectiveness of the ETS remain in doubt?

...and why the EU ETS is not

The answer is that there is a big difference in how the scheme was designed in theory and how it works in practice. The actual design of the EU ETS is nothing like the stylized, effective and efficient trading scheme described above. With 30 national governments, various industries and lobby groups involved in the scheme, the actual design of the EU ETS is the result of a compromise between all stakeholders. This compromise has led to a sub-optimal design with several flaws which undermine the effectiveness and efficiency of the scheme. In fact, under the current regime the scheme is unlikely to incentivize substantial investments in low-carbon technologies until 2020.

A recent study (see Mulder and Bos, 2010) by the University of Groningen (RuG) and Dutch technological consultancy TNO shows that the probability of achieving the EU ETS reduction target is very low indeed.

Investments will only take place if allowances are in scarce supply or are expected to be in short supply in the near future. Otherwise there is no incentive to invest in emission reduction technology. However, the EU ETS suffers from a large oversupply of allowances.

According to the study by the RuG and TNO, on average, a total of 1.4 billion allowances are expected to be carried over to Phase III of the EU ETS which starts in 2013. The excess of 1.4 billion allowances will have been built up over the course of Phase II of the ETS (2008-2012) and is equivalent to approximately 70% of the European demand for allowances in 2009. To put it in another perspective: the surplus would suffice to cover the Dutch demand for allowances for a full 16 years. As a result, allowances are not scarce, which minimizes the pressure on firms to reduce their emissions and puts downward pressure on the carbon price.

Starting in 2013 the number of allowances issued will be reduced by 1.74% on an annual basis. However, this does not imply that the market will move from an annual surplus to

an annual shortage immediately. Although the annual surplus will decrease, on average the market is expected to remain in oversupply until 2020 under the current regime. As a result, if EU ETS policy remains unchanged, the total surplus is expected to grow from 1.4 billion by the end of 2012 to 2.1 billion in 2020.

Sources of oversupply

The reason for the oversupply in the market is that the design of the EU ETS includes a number of regulations (loopholes) that allow for a gradual buildup of allowances over time. Three main sources of oversupply can be identified:

1. Banking of Allowances

As of the beginning of Phase II in 2008, firms were allowed to bank their excess allowances. Before that time, during Phase I (2005-2007), allowances could only be used to offset emissions in a specific year and lost their function and value afterwards. The new rule implied that any allowances in excess of immediate demand could now be transferred to future periods and, as such, would hold their value over time. This change enhanced the tradability of allowances but it also meant that emissions were no longer limited to the number of allowances issued in a particular year.

This means that whereas in the past the European Commission could set annual emission levels that would gradually lead to the desired end target, now it can only control the cumulative number of allowances issued over the 13-year period (2008-2020). The result of this banking rule is that you get a so-called waterbed-effect in the market: lower emissions today allow for higher levels of emissions tomorrow. This makes the system vulnerable to sudden demand shocks. The recent economic recession provides a clear example. The level of emissions under the EU ETS fell by more than 11% in 2009 and as a result companies were able to hoard around 250 million allowances in that single year alone. Over Phase II as a whole the recession is expected to add approximately 700 million allowances to the surplus.

With the banking arrangement in place, the ETS will remain vulnerable to demand shocks in the future. The waterbed-effect removes the ability for policymakers to steer the level of emissions in 2020 to a specific level.

2. The Linking Directive

Another important source of oversupply is the Linking Directive. The Linking Directive allows companies to import extra allowances into the European emissions trading scheme. These allowances originate from two programs under the Kyoto protocol: the Clean Development Mechanism (CDM) and Joint Implementation (JI). Firms are allowed to use these allowances to offset their emissions on top of the allowances that they have already been granted under the scheme. The directive allows companies to raise the number of allowances in the scheme by a maximum of 13.3%.

In 2009 around one third of the potential of the Linking Directive was actually used. This resulted in an extra 83 million allowances that entered the EU ETS in that single year; adding approximately 4% on top of the original cap. As the original cap of the EU ETS is set to decline starting in 2013, and the CDM and JI programs are further developed, the usage of the Linking Directive is likely to grow over time although the European Commission is planning to ban the usage of allowances from certain specific programs.

3. Leftovers from the New Entrants Reserve

The New Entrants Reserve (NER) is the third significant source of oversupply. As the name implies, the allowances in the NER are reserved for new entrants into the EU ETS. For example, if a new power plant is built, allowances are assigned to this installation from the NER.

Five percent of the overall allowance cap is reserved for new entrants. If there are allowances left over in the reserve by the end of Phase II, member states are free to sell these on the market. As these allowances will not be covered by emissions, they will merely alleviate the pressure on incumbents who are able to buy them.

A considerable number of allowances is expected to be left over in the NER by the end of 2012. Estimates range from 180 million to 360 million allowances, depending on the actions of individual member states and the number of new entrants over the next two years. If member states decide to withdraw their surpluses instead of selling them on the market the problem could be eliminated. However, the surpluses represent an easy source of cash for governments with which they could fund other projects. Against a market price of €15 per allowance, an excess of 180 million allowances would provide national governments with a total revenue of €2.7 billion. The upshot is that national governments have an incentive not to act in the best interests of the trading scheme by selling off all remaining allowances in the reserve.

Phase III: lack of alignment further undermines the ETS

Not only does this analysis indicate that there is hardly a basis for a strong and stable price incentive from the ETS, more importantly it shows that European carbon policy lacks internal consistency. The surplus is after all not the consequence of unforeseen circumstances but the direct result of elements that were deliberately introduced into the system, like the Banking Rule, the Linking Directive and the New Entrants Reserve. These are essentially political choices.

Unfortunately, the elements that undermine the effectiveness of the scheme are not limited to the second phase of the ETS. For example, an NER is also set up for the third phase (2013-2020). Although it is still too early to say whether there will be any allowances left over in the reserve by 2020, the European Commission has already reserved 300 million allowances as a means to fund projects related to innovative energy technology and carbon capture and storage (CCS). Hence, the European Commission is again alleviating the pressure on companies covered by the scheme by releasing more

allowances to finance other projects. Although support for the development of technologies like CCS is a necessity in order to reach long term emission reduction goals, the source of financing (allowances from the ETS) once again undermines the ETS. Whereas a high demand for allowances is necessary to stimulate investments, continued oversupply until 2020 is a real possibility. With that in mind even the current price level of €15 per tonne of CO₂ should be considered high, even in a few years' time.

Why a simple reduction of the cap is not the solution

The way to solve the problem of large surpluses seems straightforward: reduce the number of issued allowances. Currently the European Commission plans to reduce the number of issued allowances over Phase 3 by 500 to 800 million allowances to correct for the effects of the recent economic recession. Such a move could increase the probability of achieving the emission reduction goal. However, in isolation, a reduction of allowances is still likely to be ineffective, because it would not fix any of the weaknesses of the ETS. The vulnerability to demand shocks, to the Linking Directive and to the NER is still there.

Policy measures should therefore first and foremost be focused on eliminating the weaknesses of the ETS. Policy alignment is the key here: eliminate the linking directive, stop using the NER as a financial instrument and eliminate any remaining allowances in the reserve. An agreement that would include these elements would constitute a major step forward. Unfortunately, such a far-reaching agreement is unlikely to be achieved given the number of parties sitting at the negotiation table.

Leave the market alone: why subsidies for wind energy are a bad idea

But there is another problem as well. Even if we assume that the parties reach an agreement and do what is necessary to fix some of the main weaknesses of the current scheme, it might still not mean that the emission trading scheme is an effective and efficient method to reach the European emission reduction target.

The carbon market will only work efficiently (i.e. reach the target against the lowest possible costs) if the carbon price is reasonably stable, so companies can plan their investments accordingly. This will only happen if policy makers refrain from interfering with the market and limit their actions to providing a stable and coherent policy environment. In that case an emissions trading scheme could work.

In reality, the past five years have seen an unstable and unpredictable carbon price. In effect, the carbon market is not a real market, in which market forces determine the outcomes. Policy makers are constantly interfering and effectively trying to direct the market. If interfering meant that weaknesses were resolved, that would be a good thing. Yet, in practice, interference is often equal to either crisis management (e.g. repairing the damage of the recession) or providing substitutes for the market (e.g. by subsidizing certain forms of renewable energy).

The latter type of interference often goes unnoticed because the interference with the emissions trading scheme is indirect. For example, governments continually come up with new schemes and subsidies to stimulate the use of renewable energy sources and other low-carbon solutions. These subsidies improve the business cases for the companies involved. As a result they may invest in, for example, offshore wind energy sooner than they would have done otherwise. The problem is, however, that there already is a scheme in place that is intended to provide the same incentive to the industry: the ETS. If policy makers took the necessary steps to improve the functioning of the ETS, rising carbon prices would in time make the offshore wind park economically feasible by itself. A subsidy would not be needed and valuable tax payer money could be saved.

The argument, however, runs even deeper. Companies investing in offshore wind energy with the help of a subsidy do so earlier than they would otherwise do, thereby saving allowances that they would otherwise use to cover emissions. These allowances can now be sold on the market for other companies to use. The companies that buy the excess allowances can postpone their own investments. As a result, policies that speed up the carbon reduction effort in one country effectively reduce the pressure on firms in other ETS member states. On balance, the subsidy does not add anything to the overall reduction effort, but is merely a costly substitute for reductions that would have taken place anyway.

The subsidy for wind energy is just one example of how policies on a local or national (or even European) level work as a substitute to the ETS, with the effect of undermining the allowance price and efficiency of the scheme. Emission norms, regulation, taxes and any other measure that would 'speed up' the reduction efforts of industries covered by the scheme would have a similar effect.

To a certain extent policy makers are right when they stress the need for other incentives. The ETS is not providing the type of strong and stable incentive that should be expected from it, so it is understandable that they look for other methods. As long as the ETS is in place, however, policy makers should leave the market free to work, refrain from introducing other incentives and focus on alignment of the ETS to make the ETS an effective and efficient weapon in the fight against carbon emissions.

The alternative is to abolish the ETS altogether and switch to another incentive scheme. An example of an incentive scheme that could bypass all of the mentioned problems would be a progressively rising carbon tax. Although the government would have no direct control over emission levels and a tax is generally assumed to be less efficient than a market mechanism, it would provide stability, certainty and feed into the general expectation of rising carbon prices. As a result, it would create the type of investment climate that could kick start the investments needed to achieve the 2020 reduction target. The monitoring systems are already in place and allowances that have already been issued would not have to lose their value or function. Most importantly, however, 'allowance surplus' would become a thing of the past. Governments have to choose: either allow the market to do its work, or introduce a tax without control over the

emission levels. But interfering in the market with projects and measures that undermine the CO2 price is not sustainable at any rate.

Arnold Mulder (1985) studied International Economics and Business and is now a PhD Candidate at the University of Groningen. His doctoral thesis focuses on the CCS value chain and incentive systems, with specific attention to the European Emissions Trading Scheme (EU ETS).

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Pa. chapter of Sierra Club calls for moratorium on new Marcellus drilling permits

September 13, 2010

By Bryan Schutt

To provide time for regulations to catch up to drilling operations, the Pennsylvania Chapter of the Sierra Club is pushing state lawmakers to enact a moratorium on new Marcellus Shale permits.

With thousands of permits already issued, State Conservation Chair Thomas Au said a pause on new permits would not stop activity. It would, however, slow down an industry that could leave the state crippled unless proper oversight is adopted, Au said. "There's a need to put a stopgap hold on [new permits] until the state gets back together to pass legislation to protect safety and water," he said.

Although Gov. Edward Rendell has indicated that he will not sign a moratorium proposal, Au said the Sierra Club is intent on taking up the proposal with the new governor, who will be elected in November, as well as in the state's General Assembly.

But a moratorium is not the only demand of the club, which is unsatisfied with the lack of action on many legislative proposals. "The problem is, there are a number of bills that the state Legislature has failed to act on," Au said.

The Sierra Club, which has more than 23,000 members in Pennsylvania, supports new, tougher standards for well design and favors disclosure of hydraulic fracturing chemicals. The group also wants to ensure that no more drilling on state lands occurs, and it is opposed to "forced pooling." Additionally, the Sierra Club strongly favors a severance tax, which the Legislature has vowed to pass by Oct. 1.

"There are various proposals before the House on the severance tax, and whatever number the General Assembly comes up with ... we would like some portion to go to local governments, as well as to environmental conservation funds to deal with the long-term problems created by gas drilling," Au said.

In a Sept. 7 release, Dennis Winters, chairman of the Pennsylvania Chapter of the Sierra Club, said the costs of shale drilling in the state are already mounting. "Drilling pads and wastewater pits scar our landscapes. Heavy rigs damage our roads. Billions of gallons of water are withdrawn from our streams. Pipelines deface our natural areas. Operational errors contaminate our land and water and air," Winters said in a statement. "In Pennsylvania communities, people are being injured and killed from accidents; communities and towns are paying for additional services; and local emergency personnel are dealing with fires and toxic spills."

Jeff Schmidt, state chapter director for the Sierra Club, said those concerns highlight the need for action at the state level. "The legislative stalemate only hurts Pennsylvanians," he said. "Unless the Pennsylvania legislature acts now, Pennsylvania will suffer reckless environmental degradation; loss of drinking water; destruction of our precious state and national forests; increased air pollution; in-

creased exposure to toxic chemicals used in the drilling process and to the inherent toxic chemicals in natural gas."

Au said the Sierra Club still supports natural gas as a bridge fuel, but it wants extraction to be environmentally responsible. "These are not mutually exclusive objectives. I believe the Sierra Club always said that natural gas drilling has to be done safely," Au said. "There is plenty of natural gas available right now, so there's no need for us to rush out and drill every hole in the ground that we can drill. We need to take a step back and look at safety and environmental concerns." *i*

Drill Fee Proposed for Pennsylvania

By Kris Maher

Pennsylvania Gov. Tom Corbett proposed a fee on natural-gas drilling of as much as \$160,000 a well in an effort to find a middle ground between public support for assessing drillers in the booming Marcellus Shale basin and a campaign pledge not to impose taxes.

If passed by the state legislature, the recommendation would generate an estimated \$120 million in the first year, most of which would be kept at the local level to help pay the cost to regulate drilling and to repair roads and bridges. Every other gas-drilling state already imposes a fee on wells or a tax on the value of gas that is extracted.

The governor's proposal also includes new requirements that would keep wells farther from streams and water wells. Environmentalists are concerned that the process of extracting shale gas, which involves pumping water and chemicals underground at high pressure, could contaminate surface and drinking water.

"As the number of wells grows, so will the revenue," said Mr. Corbett, a Republican, who linked the industry's growth to the state's economic future. "We are going to do this safely, and we're going to do it right, because energy equals jobs."

Under the governor's plan, about one-quarter of the well fees would go to state agencies like the Department of Environmental Protection and the rest to local communities. Some state lawmakers suggested they may push for higher fees or for more of the money to go to the state.

Democrat Jay Costa, the state Senate minority leader, said the governor's recommendations "fall woefully short" in terms of revenue and the amount that is going to the state. Some Republicans, who have a majority in both the Senate and House, are also pushing for more drilling revenue. GOP state Rep. Thomas Murt plans to introduce a bill Tuesday that includes a 4.9% tax on the gross value of the gas at the wellhead, rather than a fee. His bill would dedicate 29% of revenue to local governments, 27% to state environmental programs and 44% to state programs including drug rehabilitation.

Senate President Pro Tem Joe Scarnati said he hopes to pass a bill out of the Senate by the end of October.

The gas industry indicated it would push for legislation patterned after the governor's proposal. "The governor's plan...reminds us that the most significant and long-term benefits of clean-burning natural gas will be achieved only through competitive policies that allow the industry to flourish," said Kathryn Klaber, president of the Marcellus Shale Coalition, a trade group.

Sharon Ward, director of the Pennsylvania Budget and Policy Center, a liberal think tank, said: "Gov. Corbett has proposed a small, limited fee that fails to capture for Pennsylvanians the true worth of this vast natural resource, and fails to fully offset the short and long-term damage...by the industry."

Paul King, president of the Pennsylvania Environmental Council, called the governor's recommendations "a good start." Many of the state environmental rules related to drilling are nearly 30 years old.

A poll conducted last week by Quinnipiac University found that 64% of Pennsylvania residents favor a new tax on natural-gas drillers in the Marcellus, while 27% opposed a tax. The telephone survey of 1,370 registered voters conducted between Sept. 21-26 had a margin of error of 2.7%.

Other states, including Texas, Oklahoma, Arkansas and West Virginia, have taxes based on the value or volume of gas produced at a well site. Mr. Corbett, who was elected last year with strong gas-industry support, has said such a tax on drilling would turn away drillers and jobs.

EU Weighs Pullback on Cutting Emissions

Commission's Energy Department Urges EU to Reconsider Energy Transition Absent a Broader Emissions Deal

By Alessandro Torello

BRUSSELS—The European Union is for the first time clearly questioning whether it should press ahead with long-term plans to cut greenhouse-gas emissions if other countries don't follow suit, in what could herald a significant policy shift for a region that has been at the forefront of advocating action to combat climate change.

In a document reviewed by The Wall Street Journal, the European Commission's energy department says the EU should consider whether the region should seek to switch its domestic energy base away from carbon-emitting sources in the absence of a global climate-change deal.

"If coordinated action on climate among the main global players fails to strengthen in the next few years, the question arises how far the EU should continue with an energy-system transition oriented to decarbonization," the commission says in a draft of its Energy Roadmap 2050. The document is an effort to look at how the EU energy and climate picture would look in 2050, according to different scenarios.

To be sure, the EU will stick to its end-of-decade greenhouse-gas reduction goals and the paper could change before it is published later this year. Even if it doesn't, the document would only be the opening salvo in what would be a fiercely contested debate. Many member states are strongly committed to slashing emissions, and the climate-change department within the Commission, the EU's executive, would likely resist any attempt to water down the EU's green credentials. There has been frequent friction between the energy and climate-change departments in Brussels.

The EU has long been recognized as a global leader in the fight to slash carbon emissions.

EU law mandates that the 27 countries cut their CO₂ emissions by 20% on average by 2020, compared with 1990 levels, and policy after that is being drawn with the assumption of bringing that cut to between 80% and 95% by 2050. The EU has lobbied hard to get a successor for the Kyoto treaty, the instrument that regulates carbon emissions internationally and expires next year.

A spokeswoman for Energy Commissioner Guenther Oettinger declined to comment on the content of the document.

The EU's doubts come ahead of a climate-change summit in Durban, South Africa, which is thought to be unlikely to deliver a significant global climate-change deal.

The current focus seems to be on salvaging the minimum commitments that have driven global action since the Copenhagen summit's failure in 2009.

In the past, the EU has rejected the idea that inaction by others was a reason to shelve its goals. But in light of the lack of international progress, there had been signs of a debate within the EU over how hard

the region should push on the issue. A meeting of EU environment ministers in Luxembourg last week agreed to commit internationally to new CO₂-reduction targets only if there is a clear signal in Durban that other countries would follow suit.

The draft document says there are many benefits in pushing ahead with action to reduce carbon emissions. The commission says this will drive energy-infrastructure investments that will be needed anyway and reduce the region's external energy dependence.

Working on the assumption of a global deal, the document shows the commission urging member states to set out clear strategies for cutting emissions beyond 2020. The commission says the longer the wait, the higher the cost.

"Today there is an inadequate direction as to what should follow the 2020 agenda. This creates uncertainty among investors, citizens and governments," the document reads.

But the document is unambiguous about the risks if Europe acts alone.

"It has to be seen clearly that there are risks associated to unilateral EU action," the commission says in its draft. "There is a trade-off between climate-change policies and competitiveness. Europe cannot act alone in an effort to achieve global decarbonization," the paper says.

The commission is particularly worried that EU industry would lose competitiveness in the battle for global markets against companies from other parts of the world as its costs would be higher. EU companies would likely pay higher electricity prices because clean power production would be more expensive, while some would also have to pay for their own CO₂ emissions, or face big investments to reduce them.

In a May 2010 study, the commission estimated that the 20% CO₂ cut by 2020 would cost €48 billion a year (\$66.3 billion).

Schram - Appendix A

Table with columns: Year (2008-2032), Retiree TV GR and MCI-1, Retiree TV GR and MCI-2, No Refinements, Production Cost, Retiree TV GR and MCI-1, Retiree TV GR and MCI-2, No Refinements, Production Cost. Rows list various scenarios for retiree TV GR and MCI-1 and MCI-2 with values from 2008 to 2032.

	SM	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Retire TY and GR3	0	-309	-566	-553	-598	-643	-689	-734	-780	-825	-871	-918	-964	-1,011	-1,057	-1,104	-1,151	-1,197	-1,244	-1,291	-1,338	-1,385	-1,432	-1,479
Retire TY GR3 and BR3	-7	-2,143	-2,493	-2,834	-3,176	-3,508	-3,834	-4,153	-4,469	-4,789	-5,111	-5,435	-5,762	-6,092	-6,425	-6,761	-7,101	-7,444	-7,791	-8,141	-8,494	-8,850	-9,208	-9,569
Retire TY GR3 and GR4	-47	-678	-790	-899	-1,006	-1,109	-1,212	-1,312	-1,418	-1,522	-1,626	-1,730	-1,834	-1,938	-2,042	-2,147	-2,251	-2,356	-2,460	-2,565	-2,670	-2,774	-2,879	-2,984
Retire TY GR3 CR4 and BR1-2	-21	-1,050	-1,223	-1,392	-1,557	-1,718	-1,874	-2,026	-2,175	-2,324	-2,471	-2,619	-2,767	-2,915	-3,063	-3,211	-3,359	-3,507	-3,655	-3,803	-3,951	-4,100	-4,248	-4,396
Retire TY GR3 CR4 and GR1	-15	-735	-856	-975	-1,090	-1,202	-1,312	-1,418	-1,522	-1,626	-1,730	-1,834	-1,938	-2,042	-2,147	-2,251	-2,356	-2,460	-2,565	-2,670	-2,774	-2,879	-2,984	-3,089
Retire TY GR3 CR and GR4	-85	-3,883	-4,524	-5,155	-5,777	-6,389	-6,991	-7,583	-8,166	-8,741	-9,307	-9,865	-10,415	-10,958	-11,495	-12,027	-12,554	-13,076	-13,593	-14,106	-14,615	-15,119	-15,618	-16,113
Retire TY GR CR and GR1	-9	-432	-503	-572	-640	-707	-772	-836	-899	-962	-1,025	-1,088	-1,150	-1,212	-1,274	-1,336	-1,398	-1,460	-1,522	-1,584	-1,646	-1,708	-1,770	-1,832
Retire TY GR CR and BR1-2	-30	-1,380	-1,606	-1,828	-2,046	-2,260	-2,470	-2,675	-2,879	-3,083	-3,287	-3,491	-3,695	-3,899	-4,103	-4,307	-4,511	-4,715	-4,919	-5,123	-5,327	-5,531	-5,735	-5,939
Retire TY GR CR BR1-2 and MCL1-2	-107	-4,977	-5,800	-6,609	-7,403	-8,182	-8,945	-9,692	-10,423	-11,146	-11,862	-12,571	-13,275	-13,973	-14,666	-15,353	-16,035	-16,712	-17,385	-18,054	-18,719	-19,380	-20,037	-20,691
Retire TY GR and GR	-9	-432	-503	-572	-640	-707	-772	-836	-899	-962	-1,025	-1,088	-1,150	-1,212	-1,274	-1,336	-1,398	-1,460	-1,522	-1,584	-1,646	-1,708	-1,770	-1,832
Retire TY GR and CR4	-14	-478	-562	-646	-730	-814	-898	-982	-1,066	-1,150	-1,234	-1,318	-1,402	-1,486	-1,570	-1,654	-1,738	-1,822	-1,906	-1,990	-2,074	-2,158	-2,242	-2,326
Retire TY GR and CR5	-15	-478	-562	-646	-730	-814	-898	-982	-1,066	-1,150	-1,234	-1,318	-1,402	-1,486	-1,570	-1,654	-1,738	-1,822	-1,906	-1,990	-2,074	-2,158	-2,242	-2,326
Retire TY GR and CR6	-21	-1,050	-1,223	-1,392	-1,557	-1,718	-1,874	-2,026	-2,175	-2,324	-2,471	-2,619	-2,767	-2,915	-3,063	-3,211	-3,359	-3,507	-3,655	-3,803	-3,951	-4,100	-4,248	-4,396
Retire TY GR CR and MCL1	-85	-3,883	-4,524	-5,155	-5,777	-6,389	-6,991	-7,583	-8,166	-8,741	-9,307	-9,865	-10,415	-10,958	-11,495	-12,027	-12,554	-13,076	-13,593	-14,106	-14,615	-15,119	-15,618	-16,113
Retire TY GR CR and TCI	-19	-591	-691	-791	-891	-991	-1,091	-1,191	-1,291	-1,391	-1,491	-1,591	-1,691	-1,791	-1,891	-1,991	-2,091	-2,191	-2,291	-2,391	-2,491	-2,591	-2,691	-2,791
Retire TY GR CR and GR4	-65	-2,875	-3,414	-3,954	-4,494	-5,034	-5,574	-6,114	-6,654	-7,194	-7,734	-8,274	-8,814	-9,354	-9,894	-10,434	-10,974	-11,514	-12,054	-12,594	-13,134	-13,674	-14,214	-14,754
Retire TY GR CR and MCL3	-86	-3,222	-3,755	-4,278	-4,792	-5,296	-5,790	-6,274	-6,747	-7,216	-7,685	-8,154	-8,623	-9,092	-9,561	-10,030	-10,499	-10,968	-11,437	-11,906	-12,375	-12,844	-13,313	-13,782
Retire TY GR CR and GR2	-86	-3,222	-3,755	-4,278	-4,792	-5,296	-5,790	-6,274	-6,747	-7,216	-7,685	-8,154	-8,623	-9,092	-9,561	-10,030	-10,499	-10,968	-11,437	-11,906	-12,375	-12,844	-13,313	-13,782
Retire TY GR CR and MCL2	-107	-4,977	-5,800	-6,609	-7,403	-8,182	-8,945	-9,692	-10,423	-11,146	-11,862	-12,571	-13,275	-13,973	-14,666	-15,353	-16,035	-16,712	-17,385	-18,054	-18,719	-19,380	-20,037	-20,691

	SM	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
No Retirements																								
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10/18/2011

Ordering Sensitivities

Discount Rate: 6.71%

Table with 32 columns (SM, \$000, 2011-2016) and 12 rows of data. Includes sections for Retiree Types, Total Capital Delta, and Retirement O&M Costs.

Discount Rate: 6.71%

Ordering Sensitivities

Table with columns: SM, YEAR (2011-2022), and rows for various retirement categories like 'Retiree TY GR CR and MCL-2', 'Total Revenue Requirements Delta', and 'No Retirements'. Each row contains 12 numerical values representing data for each year.

Discount Rate:

Retire TY GR CR and MCI-2

Water Capital

No Retirements

Retire BR1-2

Retire TY

Retire TY and BR1-2

Retire TY and GR3

Retire TY, GR3 and BR3

Retire TY, GR3 and CR4

Retire TY, GR3 CR4 and CR6

Retire TY, GR3 CR4 CR6 and BR1-2

Retire TY, GR3 and CR

Retire TY, GR3 CR and GR5

Retire TY, GR3 CR and GR1

Retire TY, GR and CR

Retire TY, GR CR and BR1-2

Retire TY, GR CR BR1-2 and MCI-2

Retire TY and GR

Retire TY, GR and CR4

Retire TY, GR and CR5

Retire TY, GR and CR6

Retire TY, GR and CR7

Retire TY, GR and CR8

Retire TY, GR and CR9

Retire TY, GR CR and MCA

Retire TY, GR CR and TCI

Retire TY, GR CR and GR4

Retire TY, GR CR and MCI-2

Retire TY, GR CR and GR2

Retire TY, GR CR and MCI-2

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Retire TY, GR CR and MCI-2

Discount Rate:

	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058				
Retire TY and BR1-2	45,374	46,282	47,207	48,152	49,115	50,097	51,099	52,124	53,172	54,243	55,336	56,451	57,588	58,747	59,928	61,131	62,356	63,603	64,872	66,163	67,476	68,811	70,168	71,547	72,948	74,371			
Retire TY and GR3	42,156	42,999	43,859	44,736	45,631	46,544	47,474	48,421	49,384	50,362	51,355	52,363	53,385	54,421	55,469	56,530	57,603	58,688	59,784	60,891	62,009	63,138	64,278	65,429	66,591	67,763	68,945		
Retire TY GR3 and BR3	40,600	41,412	42,241	43,085	43,947	44,826	45,723	46,636	47,564	48,506	49,462	50,431	51,413	52,407	53,413	54,430	55,458	56,496	57,544	58,602	59,670	60,748	61,836	62,934	64,042	65,159	66,286	67,423	
Retire TY GR3 CR4 and GR6	36,679	37,412	38,161	38,924	39,702	40,496	41,306	42,131	42,970	43,823	44,690	45,571	46,465	47,373	48,294	49,228	50,175	51,135	52,106	53,088	54,081	55,085	56,099	57,123	58,156	59,198	60,249	61,309	
Retire TY GR3 CR4 and BR1-2	29,581	30,171	30,776	31,391	32,013	32,642	33,278	33,920	34,568	35,221	35,879	36,541	37,207	37,877	38,549	39,225	39,904	40,586	41,271	41,959	42,650	43,344	44,041	44,740	45,441	46,144	46,848	47,553	48,259
Retire TY GR3 CR	27,230	27,774	28,330	28,896	29,474	30,064	30,665	31,277	31,899	32,531	33,173	33,825	34,486	35,156	35,834	36,520	37,213	37,913	38,619	39,331	40,048	40,770	41,497	42,229	42,965	43,706	44,451	45,199	45,950
Retire TY GR3 CR and GR3	23,602	24,278	24,963	25,659	26,364	27,079	27,803	28,536	29,278	30,028	30,786	31,552	32,325	33,105	33,891	34,683	35,480	36,282	37,089	37,901	38,717	39,537	40,360	41,187	42,018	42,852	43,688	44,526	45,365
Retire TY GR3 CR and GR1	21,901	22,339	22,786	23,241	23,704	24,174	24,650	25,132	25,619	26,111	26,607	27,107	27,611	28,119	28,631	29,146	29,664	30,186	30,711	31,239	31,770	32,304	32,841	33,381	33,923	34,467	35,013	35,560	36,108
Retire TY GR CR and BR1-2	16,630	16,962	17,301	17,648	18,000	18,356	18,728	19,104	19,484	19,867	20,253	20,641	21,031	21,423	21,817	22,213	22,610	23,008	23,408	23,809	24,211	24,614	25,018	25,423	25,829	26,236	26,643	27,051	27,459
Retire TY GR CR BR1-2 and MCI-2	14,278	14,564	14,856	15,152	15,451	15,752	16,055	16,359	16,664	16,970	17,277	17,584	17,891	18,198	18,505	18,812	19,119	19,426	19,733	20,040	20,347	20,654	20,961	21,268	21,574	21,880	22,186	22,492	22,798
Retire TY and GR	34,584	35,683	36,787	37,891	38,995	40,099	41,203	42,307	43,411	44,515	45,619	46,723	47,827	48,931	50,035	51,139	52,243	53,347	54,451	55,555	56,659	57,763	58,867	59,971	61,075	62,179	63,283	64,387	
Retire TY GR and CR4	29,207	29,788	30,369	30,950	31,531	32,112	32,693	33,274	33,855	34,436	35,017	35,598	36,179	36,760	37,341	37,922	38,503	39,084	39,665	40,246	40,827	41,408	41,989	42,570	43,151	43,732	44,313	44,894	
Retire TY GR and CR5	29,204	29,788	30,369	30,950	31,531	32,112	32,693	33,274	33,855	34,436	35,017	35,598	36,179	36,760	37,341	37,922	38,503	39,084	39,665	40,246	40,827	41,408	41,989	42,570	43,151	43,732	44,313	44,894	
Retire TY GR and CR6	27,895	28,443	29,012	29,592	30,184	30,788	31,404	32,030	32,666	33,311	33,966	34,631	35,305	35,988	36,671	37,363	38,064	38,774	39,493	40,220	40,955	41,698	42,449	43,208	43,965	44,720	45,473	46,224	46,974
Retire TY GR CR and MCI-2	14,865	14,653	14,946	15,244	15,546	15,850	16,156	16,463	16,772	17,080	17,388	17,696	18,004	18,312	18,620	18,928	19,235	19,543	19,850	20,157	20,464	20,771	21,078	21,385	21,692	21,999	22,306	22,613	22,920
Retire TY GR CR and TC1	15,191	15,495	15,805	16,121	16,443	16,772	17,108	17,444	17,780	18,116	18,452	18,788	19,124	19,460	19,796	20,132	20,468	20,804	21,140	21,476	21,812	22,148	22,484	22,820	23,156	23,492	23,828	24,164	24,500
Retire TY GR CR and GR4	14,769	15,084	15,396	15,704	16,008	16,318	16,628	16,938	17,247	17,556	17,864	18,172	18,480	18,788	19,096	19,404	19,711	20,019	20,326	20,634	20,941	21,248	21,555	21,862	22,169	22,476	22,783	23,090	23,397
Retire TY GR CR and MCI-2	14,661	14,984	15,304	15,624	15,944	16,264	16,584	16,904	17,224	17,544	17,864	18,184	18,504	18,824	19,144	19,464	19,784	20,104	20,424	20,744	21,064	21,384	21,704	22,024	22,344	22,664	22,984	23,304	23,624
Retire TY GR CR and GR2	14,669	14,992	15,312	15,632	15,952	16,272	16,592	16,912	17,232	17,552	17,872	18,192	18,512	18,832	19,152	19,472	19,792	20,112	20,432	20,752	21,072	21,392	21,712	22,032	22,352	22,672	22,992	23,312	23,632
Retire TY GR CR and MCI-2	12,103	12,345	12,592	12,843	13,098	13,356	13,616	13,878	14,141	14,406	14,672	14,939	15,206	15,474	15,742	16,010	16,278	16,546	16,814	17,082	17,350	17,618	17,886	18,154	18,422	18,690	18,958	19,226	19,494

New Controls Exced O&M Delta

No Retirements

Retire BR1-2	-2,351	-2,398	-2,446	-2,495	-2,545	-2,596	-2,648	-2,699	-2,751	-2,803	-2,855	-2,907	-2,959	-3,011	-3,063	-3,115	-3,167	-3,219	-3,271	-3,323	-3,375	-3,427	-3,479	-3,531	-3,583	-3,635	-3,687	-3,739
Retire TY	-5,570	-5,681	-5,795	-5,911	-6,029	-6,150	-6,273	-6,396	-6,519	-6,642	-6,765	-6,888	-7,011	-7,134	-7,257	-7,380	-7,503	-7,626	-7,749	-7,872	-7,995	-8,118	-8,241	-8,364	-8,487	-8,610	-8,733	-8,856
Retire TY and BR1-2	-2,351	-2,398	-2,446	-2,495	-2,545	-2,596	-2,648	-2,699	-2,751	-2,803	-2,855	-2,907	-2,959	-3,011	-3,063	-3,115	-3,167	-3,219	-3,271	-3,323	-3,375	-3,427	-3,479	-3,531	-3,583	-3,635	-3,687	-3,739
Retire TY and GR3	-5,570	-5,681	-5,795	-5,911	-6,029	-6,150	-6,273	-6,396	-6,519	-6,642	-6,765	-6,888	-7,011	-7,134	-7,257	-7,380	-7,503	-7,626	-7,749	-7,872	-7,995	-8,118	-8,241	-8,364	-8,487	-8,610	-8,733	-8,856
Retire TY GR3 and BR3	-1,555	-1,586	-1,618	-1,650	-1,683	-1,717	-1,751	-1,785	-1,819	-1,853	-1,887	-1,921	-1,955	-1,989	-2,023	-2,057	-2,091	-2,125	-2,159	-2,193	-2,227	-2,261	-2,295	-2,329	-2,363	-2,397	-2,431	-2,465
Retire TY GR3 and CR4	-5,477	-5,586	-5,698	-5,812	-5,928	-6,047	-6,168	-6,289	-6,410	-6,531	-6,652	-6,773	-6,894	-7,015	-7,136	-7,257	-7,378	-7,499	-7,620	-7,741	-7,862	-7,983	-8,104	-8,225	-8,346	-8,467	-8,588	-8,709
Retire TY GR3 CR4 and CR6	-7,089	-7,240	-7,385	-7,532	-7,683	-7,837	-7,994	-8,151	-8,308	-8,465	-8,622	-8,779	-8,936	-9,093	-9,250	-9,407	-9,564	-9,721	-9,878	-10,035	-10,192	-10,349	-10,506	-10,663	-10,820	-10,977	-11,134	-11,291
Retire TY GR3 CR4 and BR1-2	-2,351	-2,398	-2,446	-2,495	-2,545	-2,596	-2,648	-2,699	-2,751	-2,803	-2,855	-2,907	-2,959	-3,011	-3,063	-3,115	-3,167	-3,219	-3,271	-3,323	-3,375	-3,427	-3,479	-3,531	-3,583	-3,635	-3,687	-3,739
Retire TY GR3 CR and CR	-5,570	-5,681	-5,795	-5,911	-6,029	-6,150	-6,273	-6,396	-6,519	-6,642	-6,765	-6,888	-7,011	-7,134	-7,257	-7,380	-7,503	-7,626	-7,749	-7,872	-7,995	-8,118	-8,241	-8,364	-8,487	-8,610	-8,733	-8,856
Retire TY GR3 CR and GR3	-1,901	-1,939	-1,978	-2,017	-2,058	-2,099	-2,141	-2,184	-2,227	-2,270	-2,313	-2,356	-2,399	-2,442	-2,485	-2,528	-2,571	-2,614	-2,657	-2,700	-2,743	-2,786	-2,829	-2,872	-2,915	-2,958	-3,001	-3,044
Retire TY GR CR and GR1	-1,921	-1,960	-1,999	-2,039	-2,080	-2,121	-2,164	-2,207	-2,250	-2,293	-2,336	-2,379	-2,422	-2,465	-2,508	-2,551	-2,594	-2,637	-2,680	-2,723	-2,766	-2,809	-2,852	-2,895	-2,938	-2,981	-3,024	-3,067
Retire TY GR CR and CR	-7,172	-7,315	-7,462	-7,611	-7,763	-7,918	-8,077	-8,237	-8,397	-8,557	-8,717	-8,877	-9,037	-9,197	-9,357	-9,517	-9,677	-9,837	-9,997	-10,157	-10,317	-10,477	-10,637	-10,797	-10,957	-11,117	-11,277	-11,437
Retire TY GR CR and BR1-2	-2,351	-2,398	-2,446	-2,495	-2,545	-2,596	-2,648	-2,699	-2,751	-2,803	-2,855	-2,907	-2,959	-3,011	-3,063	-3,115	-3,167	-3,219	-3,271	-3,323	-3,375	-3,427	-3,479	-3,531	-3,583	-3,635	-3,687	-3,739
Retire TY GR CR and MCI-2	-4,527	-4,618	-4,710	-4,804	-4,900	-4,998	-5,098	-5,198	-5,298	-5,398	-5,498	-5,598	-5,698	-5,798	-5,898	-5,998	-6,098	-6,198	-6,298	-6,398	-6,498	-6,598	-6,698	-6,798	-			

Discount Rate:

2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058
3,862,531	3,849,795	3,832,537	4,624,330	4,672,276	4,677,882	4,173,352	41,615	34,581	32,444	27,938	25,896	26,052	22,474	18,378	16,149	14,973	12,154	5,232	4,152	114	0	0	0	0
3,808,219	3,805,491	3,866,280	4,056,086	4,112,637	4,120,635	4,249,914	49,585	42,094	35,719	31,374	32,895	32,633	28,798	24,464	21,997	20,589	17,236	10,366	9,049	4,873	4,421	4,000	3,489	253

Total Revenue Requirements Delta

No Retirements																									
Retire BRL-2	24,408	25,074	26,629	17,584	15,724	45,197	36,366	-9,477	-9,055	-8,634	-8,212	-7,790	-7,369	-6,936	-1,384	0	0	0	0	0	0	0	0	0	0
Retire TY	17,171	18,283	10,817	-19,694	-12,914	-17,129	-17,659	-1,765	-1,679	-1,594	-1,508	-1,422	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY and BRL-2	111,118	47,820	37,317	46,116	44,888	45,337	-9,477	-9,055	-8,634	-8,212	-7,790	-7,369	-6,936	-1,384	0	0	0	0	0	0	0	0	0	0	0
Retire TY and GR3	22,304	-38,826	-42,531	-44,632	-26,626	-1,984	-1,765	-1,679	-1,594	-1,508	-1,422	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 and BR3	80,161	86,044	89,651	97,008	100,875	106,293	83,697	-5,284	-5,082	-4,879	-4,676	-4,474	-4,271	-4,068	-3,865	-3,663	-1,405	0	0	0	0	0	0	0	0
Retire TY GR3 and CR4	59,048	64,113	55,216	52,593	37,913	11,008	22,661	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR4 and CR6	19,902	19,623	35,377	36,805	41,256	84,939	71,535	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR4 CR6 and BRL-2	-109	17,928	55,266	54,424	71,147	40,258	55,589	-9,477	-9,055	-8,634	-8,212	-7,790	-7,369	-6,936	-1,384	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR and GR1	133,851	79,520	83,095	72,094	97,235	147,407	136,501	-9,183	-8,860	-8,536	-8,212	-7,889	-7,565	-7,241	-6,918	-6,594	-6,270	-5,943	-5,622	-5,302	-4,981	-4,661	-4,341	-4,021	
Retire TY GR CR and GR1	149,494	58,040	86,715	78,801	127,112	147,315	149,337	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and CR	-46,721	-87,389	-50,380	-48,863	-13,303	-19,815	-12,901	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and BR3-2	66,008	56,891	49,627	64,924	45,189	75,708	60,539	-9,477	-9,055	-8,634	-8,212	-7,790	-7,369	-6,936	-1,384	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR BRL-2 and MCL-2	176,795	179,468	198,410	212,280	212,654	219,407	227,182	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY and GR	27,010	36,739	32,980	27,096	10,573	-12,337	-13,340	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR and CR4	5,255	5,016	1,535	7,072	11,418	8,794	21,958	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR and CR5	6,149	1,481	-1,358	9,311	12,154	17,618	20,431	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR and CR6	-25,595	-19,394	23,392	21,354	32,813	76,812	69,094	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and MCL-2	247,352	229,303	182,295	183,843	123,372	160,715	145,687	-1,014	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and TC1	205,128	169,980	150,508	134,066	135,715	158,094	156,891	-5,075	-4,801	-4,186	-3,61	-3,036	-2,461	-1,886	-1,311	-7,893	-7,484	-7,075	-6,666	-6,257	-5,848	-5,439	-5,030	-4,621	
Retire TY GR CR and GR4	231,221	218,936	157,943	172,920	156,869	171,248	161,315	-8,440	-8,121	-7,803	-7,484	-7,166	-6,847	-6,529	-6,210	-5,892	-5,573	-5,254	-4,935	-4,616	-4,297	-3,978	-3,659	-3,340	
Retire TY GR CR and MCL-2	187,003	140,188	132,408	121,221	117,034	143,586	138,267	-4,906	-4,411	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and GR2	232,284	222,940	185,518	167,543	165,130	166,237	140,966	-7,750	-7,312	-7,274	-7,037	-6,799	-6,561	-6,323	-6,086	-5,848	-5,610	-5,372	-5,135	-4,897	-4,659	-4,421	-4,183	-3,945	
Retire TY GR CR and MCL-2	177,972	178,656	183,261	202,300	205,491	209,010	217,468	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total Revenue Requirements Cumulative D

No Retirements																									
Retire BRL-2	645,699	670,773	697,402	714,966	730,691	775,887	812,253																		
Retire TY	-14,686	2,475	20,757	31,574	11,880	-1,034	-18,163																		
Retire TY and BRL-2	474,625	522,445	567,417	604,744	650,861	695,748	741,135																		
Retire TY and GR3	10,604	-28,022	-70,554	-115,186	-141,812	-146,796	-154,554																		
Retire TY GR3 and BR3	1,283,264	1,369,308	1,458,959	1,555,967	1,656,842	1,763,134	1,846,831																		
Retire TY GR3 and CR4	-72,737	-8,624	46,592	99,185	137,099	146,106	170,767																		
Retire TY GR3 CR4 and CR6	177,931	197,554	232,931	269,736	310,992	395,931	468,466																		
Retire TY GR3 CR4 CR6 and BRL-2	484,834	502,762	558,058	612,482	689,690	728,897	785,476																		
Retire TY GR3 CR and CR	-114,445	-28,556	48,821	134,596	198,359	237,595	279,856																		
Retire TY GR3 CR and GR3	2,063,885	2,136,605	2,218,700	2,290,784	2,368,079	2,535,486	2,671,967																		
Retire TY GR CR and GR1	1,761,886	1,819,826	1,908,641	1,987,442	2,114,354	2,261,868	2,411,205																		
Retire TY GR CR and CR	-101,185	-188,574	-238,954	-287,817	-301,119	-320,995	-333,836																		
Retire TY GR CR and BRL-2	798,041	814,972	858,499	923,423	968,613	1,044,320	1,104,859																		
Retire TY GR CR BRL-2 and MCL-2	2,562,321	2,744,990	2,937,399	3,148,679	3,362,334	3,581,740	3,808,922																		
Retire TY and GR	-237,090	-195,351	-162,371	-135,275	-124,701	-137,039	-150,379																		
Retire TY GR and CR4	-25,004	-19,588	-18,453	-11,381	38	8,831	30,789																		
Retire TY GR and CR5	-19,029	-17,548	-18,906	-9,595	2,559	20,177	40,609																		
Retire TY GR and CR6	209,309	189,915	213,307	234,661	267,474	344,286	413,370																		
Retire TY GR CR and MCL-2	1,885,834	2,115,137	2,297,432	2,481,274	2,604,646	2,765,361	2,911,048																		
Retire TY GR CR and TC1	2,062,219	2,232,009	2,389,716	2,516,782	2,652,487	2,810,581	2,967,471																		
Retire TY GR CR and GR4	2,468,062	2,666,987	2,844,940	3,017,861	3,174,730	3,345,978	3,507,283																		
Retire TY GR CR and MCL-2	1,620,858	1,761,146	1,899,535	2,034,776	2,131,789	2,274,376	2,412,643																		
Retire TY GR CR and GR2	2,447,940	2,670,881	2,856,398	3,025,942	3,186,072	3,355,310	3,496,215																		
Retire TY GR CR and MCL-2	2,302,362	2,481,999	2,670,859	2,873,159	3,076,651	3,287,660	3,505,128																		

Discount Rate:

2052 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078

New_Unit_Capital_and_Production_Cost

- No Retirements
- Retire BR1-2
- Retire TY
- Retire TY and BR1-2
- Retire TY and GR3
- Retire TY GR3 and BR3
- Retire TY GR3 and CR4
- Retire TY GR3 CR4 and CR6
- Retire TY GR3 CR4 CR6 and BR1-2
- Retire TY GR3 and CR
- Retire TY GR3 CR and GH3
- Retire TY GR3 CR and GH1
- Retire TY GR and CR
- Retire TY GR CR and BR1-2
- Retire TY GR CR BR1-2 and MCL-2
- Retire TY and GR
- Retire TY GR and CR4
- Retire TY GR and CR5
- Retire TY GR and CR6
- Retire TY GR CR and MCA
- Retire TY GR CR and TC1
- Retire TY GR CR and GH4
- Retire TY GR CR and MCA3
- Retire TY GR CR and GH2
- Retire TY GR CR and MCL-2

Production Cost

- No Retirements
- Retire BR1-2
- Retire TY
- Retire TY and BR1-2
- Retire TY and GR3
- Retire TY GR3 and BR3
- Retire TY GR3 and CR4
- Retire TY GR3 CR4 and CR6
- Retire TY GR3 CR4 CR6 and BR1-2
- Retire TY GR3 CR and CR
- Retire TY GR3 CR and GH3
- Retire TY GR3 CR and GH1
- Retire TY GR and CR
- Retire TY GR CR and BR1-2
- Retire TY GR CR BR1-2 and MCL-2
- Retire TY and GR
- Retire TY GR and CR4
- Retire TY GR and CR5
- Retire TY GR and CR6
- Retire TY GR CR and MCA
- Retire TY GR CR and TC1
- Retire TY GR CR and GH4
- Retire TY GR CR and MCA3
- Retire TY GR CR and GH2
- Retire TY GR CR and MCL-2

Production Cost Delta

- No Retirements
- Retire BR1-2
- Retire TY
- Retire TY and BR1-2
- Retire TY and GR3
- Retire TY GR3 and BR3
- Retire TY GR3 and CR4
- Retire TY GR3 CR4 and CR6
- Retire TY GR3 CR4 CR6 and BR1-2
- Retire TY GR3 and CR
- Retire TY GR3 CR and GH3
- Retire TY GR3 CR and GH1
- Retire TY GR and CR
- Retire TY GR CR and BR1-2
- Retire TY GR CR BR1-2 and MCL-2
- Retire TY and GR
- Retire TY GR and CR4
- Retire TY GR and CR5

Discount Rate:

2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078

- Retire TY and GR3
- Retire TY GR3 and BR3
- Retire TY GR3 and CR4
- Retire TY GR3 CR4 CR6 and BR1-2
- Retire TY GR3 and CR
- Retire TY GR3 CR and GH3
- Retire TY GR3 CR and GH1
- Retire TY GR CR and BR1-2
- Retire TY GR CR BR1-2 and MCL-2
- Retire TY and GR
- Retire TY GR and CR4
- Retire TY GR and CR5
- Retire TY GR and CR6
- Retire TY GR CR and MCA
- Retire TY GR CR and TCL
- Retire TY GR CR and GH4
- Retire TY GR CR and MCA
- Retire TY GR CR and GH2
- Retire TY GR CR and MCL-2

Landfill Capital

- No Retirements
- Retire BR1-2
- Retire TY
- Retire TY and BR1-2
- Retire TY and GR3
- Retire TY GR3 and BR3
- Retire TY GR3 and CR4
- Retire TY GR3 CR4 and CR6
- Retire TY GR3 CR4 CR6 and BR1-2
- Retire TY GR3 CR and CR
- Retire TY GR3 CR and GH3
- Retire TY GR3 CR and GH1
- Retire TY GR and CR
- Retire TY GR CR and BR1-2
- Retire TY GR CR BR1-2 and MCL-2
- Retire TY and GR
- Retire TY GR and CR4
- Retire TY GR and CR5
- Retire TY GR and CR6
- Retire TY GR CR and MCA
- Retire TY GR CR and TCL
- Retire TY GR CR and GH4
- Retire TY GR CR and MCA
- Retire TY GR CR and GH2
- Retire TY GR CR and MCL-2

Landfill Capital Delta

- No Retirements
- Retire BR1-2
- Retire TY
- Retire TY and BR1-2
- Retire TY and GR3
- Retire TY GR3 and BR3
- Retire TY GR3 and CR4
- Retire TY GR3 CR4 and CR6
- Retire TY GR3 CR4 CR6 and BR1-2
- Retire TY GR3 and CR
- Retire TY GR3 CR and GH3
- Retire TY GR3 CR and GH1
- Retire TY GR and CR
- Retire TY GR CR and BR1-2
- Retire TY GR CR BR1-2 and MCL-2
- Retire TY and GR
- Retire TY GR and CR4
- Retire TY GR and CR5
- Retire TY GR and CR6
- Retire TY GR CR and MCA
- Retire TY GR CR and TCL
- Retire TY GR CR and GH4
- Retire TY GR CR and MCA
- Retire TY GR CR and GH2
- Retire TY GR CR and MCL-2

Discount Rate:

2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078

Retire TY GR3 CR and GH3
 Retire TY GR3 CR and GH1
 Retire TY GR and CH
 Retire TY GR CR and BR1-2
 Retire TY GR CR BR1-2 and MCI-2
 Retire TY and GR
 Retire TY GR and CH4
 Retire TY GR and CH5
 Retire TY GR and CR6
 Retire TY GR CR and MC4
 Retire TY GR CR and TC1
 Retire TY GR CR and GH4
 Retire TY GR CR and MC3
 Retire TY GR CR and GH2
 Retire TY GR CR and MCI-2

Existing Unit Fixed O&M

No Retirements
 Retire BR1-2
 Retire TY
 Retire TY and BR1-2
 Retire TY and GR3
 Retire TY GR3 and BR3
 Retire TY GR3 and CR4
 Retire TY GR3 CR4 and CR6
 Retire TY GR3 CR4 CR6 and BR1-2
 Retire TY GR3 and CR
 Retire TY GR3 CR and GH3
 Retire TY GR3 CR and GH1
 Retire TY GR and CH
 Retire TY GR CR and BR1-2
 Retire TY GR CR BR1-2 and MCI-2
 Retire TY and GR
 Retire TY GR and CH4
 Retire TY GR and CR5
 Retire TY GR and CR6
 Retire TY GR CR and MC4
 Retire TY GR CR and TC1
 Retire TY GR CR and GH4
 Retire TY GR CR and MC3
 Retire TY GR CR and GH2
 Retire TY GR CR and MCI-2

Existing Unit Fixed O&M Data

No Retirements
 Retire BR1-2
 Retire TY
 Retire TY and BR1-2
 Retire TY and GR3
 Retire TY GR3 and BR3
 Retire TY GR3 and CR4
 Retire TY GR3 CR4 and CR6
 Retire TY GR3 CR4 CR6 and BR1-2
 Retire TY GR3 and CR
 Retire TY GR3 CR and GH3
 Retire TY GR3 CR and GH1
 Retire TY GR and CH
 Retire TY GR CR and BR1-2
 Retire TY GR CR BR1-2 and MCI-2
 Retire TY and GR
 Retire TY GR and CR4
 Retire TY GR and CR5
 Retire TY GR and CR6
 Retire TY GR CR and MC4
 Retire TY GR CR and TC1
 Retire TY GR CR and GH4
 Retire TY GR CR and MC3
 Retire TY GR CR and GH2
 Retire TY GR CR and MCI-2

New Controls Fixed O&M

No Retirements
 Retire BR1-2
 Retire TY

Discount Rate:

	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	
Retire TY and BR1-2																					
Retire TY and GR3																					
Retire TY GR3 and BR3																					
Retire TY GR3 and CR4																					
Retire TY GR3 CR4 and CR6																					
Retire TY GR3 CR4 CR6 and BR1-2																					
Retire TY GR3 and CR																					
Retire TY GR3 CR and GH3																					
Retire TY GR3 CR and GH1																					
Retire TY GR and CR																					
Retire TY GR CR and BR1-2																					
Retire TY GR CR BR1-2 and MCL-2																					
Retire TY and GR																					
Retire TY GR and CR4																					
Retire TY GR and CR5																					
Retire TY GR and CR6																					
Retire TY GR CR and MC4																					
Retire TY GR CR and TCL																					
Retire TY GR CR CR and GH4																					
Retire TY GR CR CR and MC3																					
Retire TY GR CR CR and GH2																					
Retire TY GR CR and MCL-2																					
New Controls Fixed O&M Delta																					
No Retirements																					
Retire BR1-2																					
Retire TY and BR1-2																					
Retire TY and GR3																					
Retire TY GR3 and BR3																					
Retire TY GR3 and CR4																					
Retire TY GR3 CR4 and CR6																					
Retire TY GR3 CR4 CR6 and BR1-2																					
Retire TY GR3 and CR																					
Retire TY GR3 CR and GH3																					
Retire TY GR3 CR and GH1																					
Retire TY GR and CR																					
Retire TY GR CR and BR1-2																					
Retire TY GR CR BR1-2 and MCL-2																					
Retire TY and GR																					
Retire TY GR and CR4																					
Retire TY GR and CR5																					
Retire TY GR and CR6																					
Retire TY GR CR and MC4																					
Retire TY GR CR and TCL																					
Retire TY GR CR CR and GH4																					
Retire TY GR CR CR and MC3																					
Retire TY GR CR CR and GH2																					
Retire TY GR CR CR and MCL-2																					
Total Revenue Requirements																					
No Retirements																					
Retire BR1-2																					
Retire TY																					
Retire TY and BR1-2																					
Retire TY and GR3																					
Retire TY GR3 and BR3																					
Retire TY GR3 and CR4																					
Retire TY GR3 CR4 and CR6																					
Retire TY GR3 CR4 CR6 and BR1-2																					
Retire TY GR3 and CR																					
Retire TY GR3 CR and GH3																					
Retire TY GR3 CR and GH1																					
Retire TY GR and CR																					
Retire TY GR CR and BR1-2																					
Retire TY GR CR BR1-2 and MCL-2																					
Retire TY and GR																					
Retire TY GR and CR4																					
Retire TY GR and CR5																					
Retire TY GR and CR6																					
Retire TY GR CR and MC4																					
Retire TY GR CR and TCL																					
Retire TY GR CR CR and GH4																					
Retire TY GR CR CR and MC3																					
Retire TY GR CR CR and GH2																					
Retire TY GR CR CR and MCL-2																					

Discount Rate:

	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078
Retire TY GR and GH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR and MCL-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Revenue Requirements Delta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No Retirements	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire BR1-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY and BR1-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY and GR3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 and BR3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 and CR4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR4 and CR6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR4 CR6 and BR1-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 and CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR and GH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR and GH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR and CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and BR1-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR BR1-2 and MCL-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY and GR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR and CR4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR and CR5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR and CR6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR and MCL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and TC1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and GH4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and MCL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and GH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and MCL-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Total Revenue Requirements Cumulative D

No Retirements	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire BR1-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY and BR1-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY and GR3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 and BR3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 and CR4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR4 and CR6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR4 CR6 and BR1-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 and CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR and GH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR3 CR and GH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR and CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and BR1-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR BR1-2 and MCL-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY and GR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR and CR4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR and CR5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR and CR6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR and MCL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and TC1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and GH4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and MCL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and GH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retire TY GR CR and MCL-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Station	Unit	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
BR	BR1	0	0	3,127	7,278	12,105	12,775	12,423	11,534	10,999	10,472	9,946	9,420	8,894	8,368	7,842	7,483	7,291	7,099
BR	BR1	0	0	0	231	521	550	522	497	474	452	429	407	384	362	339	324	315	307
BR	BR2	0	252	3,379	7,865	13,414	13,865	13,156	12,514	11,931	11,357	10,783	10,210	9,636	9,062	8,488	8,095	7,881	7,668
BR	BR2	0	0	0	231	534	553	525	499	476	453	431	408	385	362	340	324	315	307
BR	BR3	0	0	204	2,854	7,595	13,437	14,120	13,404	12,757	12,171	11,595	11,019	10,443	9,867	9,290	8,714	8,325	8,122
GH	GH1	0	64	4,332	10,157	17,736	19,154	18,156	17,246	16,412	15,591	14,769	13,948	13,127	12,305	11,484	10,897	10,545	10,193
GH	GH1	0	122	562	1,006	1,964	2,121	2,010	1,909	1,817	1,726	1,635	1,544	1,453	1,362	1,271	1,206	1,167	1,128
GH	GH2	0	0	2,787	7,280	15,016	18,298	17,569	16,777	16,056	15,369	14,684	13,998	13,313	12,627	11,942	11,257	10,791	10,556
GH	GH2	0	11	724	984	935	891	851	814	779	744	709	674	639	605	570	546	535	523
GH	GH3	0	0	0	3,571	8,804	18,270	21,813	20,853	19,901	19,030	18,199	17,369	16,538	15,708	14,877	14,047	13,216	12,647
GH	GH3	0	115	565	1,578	1,935	1,853	1,769	1,691	1,618	1,544	1,471	1,397	1,324	1,250	1,177	1,126	1,099	1,073
GH	GH4	0	0	0	2,843	7,668	14,952	21,319	20,238	19,257	18,361	17,541	16,757	15,973	15,188	14,404	13,619	12,835	12,050
GH	GH4	0	122	527	974	1,948	1,967	1,872	1,786	1,707	1,631	1,555	1,479	1,403	1,328	1,252	1,176	1,124	1,096
MC	MC1	0	0	2,360	7,268	12,372	21,934	23,856	22,601	21,453	20,399	19,360	18,320	17,281	16,242	15,203	14,164	13,412	12,949
MC	MC1	0	0	1,271	5,238	9,364	17,796	19,361	18,343	17,414	16,559	15,717	14,875	14,032	13,190	12,348	11,506	10,896	10,520
MC	MC1	0	0	0	42	560	1,131	1,232	1,168	1,109	1,055	1,001	948	895	841	788	735	696	672
MC	MC2	0	0	2,361	7,270	12,377	23,214	24,770	23,450	22,238	21,119	20,015	18,911	17,806	16,702	15,598	14,494	13,677	13,148
MC	MC2	0	0	1,215	5,051	9,134	18,426	19,666	18,620	17,659	16,772	15,896	15,021	14,145	13,270	12,395	11,519	10,871	10,450
MC	MC2	0	0	0	42	560	1,197	1,279	1,211	1,149	1,092	1,035	978	922	865	808	752	710	682
MC	MC3	0	0	646	3,668	6,975	9,472	9,135	8,699	8,295	7,908	7,522	7,135	6,748	6,362	5,975	5,589	5,303	5,124
MC	MC3	0	0	0	0	39	175	207	197	187	179	170	162	154	145	137	128	121	115
MC	MC3	0	0	0	3,730	8,326	13,896	18,276	17,601	16,757	15,977	15,228	14,480	13,732	12,985	12,237	11,489	10,742	10,190
MC	MC3	0	0	734	1,992	2,100	1,997	1,901	1,813	1,728	1,642	1,557	1,472	1,387	1,302	1,217	1,155	1,116	1,077
MC	MC4	0	379	6,987	15,193	21,072	28,573	27,555	26,231	25,008	23,834	22,662	21,491	20,319	19,147	17,976	16,804	15,940	15,402
MC	MC4	0	105	667	724	688	655	625	596	566	537	508	479	449	420	399	386	372	359
MC	MC4	0	377	5,055	10,178	14,629	19,836	19,129	18,210	17,361	16,546	15,733	14,919	14,106	13,293	12,479	11,666	11,066	10,692
MC	MC4	0	0	0	578	1,620	2,201	2,123	2,022	1,929	1,839	1,749	1,660	1,570	1,480	1,391	1,301	1,235	1,193
TC	TC1	0	0	0	2,200	5,745	11,967	15,834	15,223	14,502	13,838	13,200	12,564	11,927	11,291	10,654	10,018	9,381	8,918
CR	CR4	0	394	3,222	13,574	27,295	25,773	24,370	23,071	21,861	20,666	19,471	18,276	17,081	15,886	14,691	13,773	13,130	12,488
CR	CR4	64	390	2,395	6,163	10,786	10,183	9,627	9,112	8,633	8,160	7,687	7,214	6,740	6,267	5,794	5,431	5,177	4,924
CR	CR4	0	280	1,715	3,329	5,526	5,216	4,930	4,666	4,421	4,178	3,935	3,692	3,450	3,207	2,964	2,778	2,648	2,519
CR	CR4	0	0	0	235	386	365	345	327	310	293	276	259	242	225	208	195	186	177
CR	CR4	0	0	0	259	427	403	381	361	342	323	305	286	267	249	230	216	206	195
CR	CR5	0	359	3,311	14,658	29,304	27,663	26,148	24,742	23,429	22,132	20,835	19,538	18,241	16,944	15,647	14,641	13,924	13,207
CR	CR5	63	388	2,719	6,475	11,557	10,908	10,308	9,752	9,234	8,721	8,208	7,696	7,183	6,670	6,158	5,760	5,478	5,196
CR	CR5	0	300	1,823	3,531	5,992	5,654	5,343	5,054	4,785	4,519	4,253	3,987	3,721	3,455	3,189	2,983	2,837	2,691
CR	CR5	0	0	0	251	423	399	378	357	338	320	301	282	263	245	226	212	201	191
CR	CR5	0	0	0	278	468	441	417	395	374	353	333	312	291	271	250	234	222	211
CR	CR6	0	346	3,887	18,407	35,115	33,170	31,385	29,739	28,213	26,706	25,199	23,692	22,185	20,678	19,171	18,033	17,265	16,496
CR	CR6	79	1,294	4,201	8,457	14,206	13,414	12,689	12,019	11,399	10,787	10,175	9,563	8,951	8,339	7,727	7,266	6,956	6,646
CR	CR6	0	394	2,364	4,540	7,252	6,848	6,477	6,136	5,819	5,507	5,194	4,882	4,569	4,257	3,944	3,709	3,551	3,393
CR	CR6	0	0	0	352	558	527	499	473	448	424	401	377	353	329	305	287	275	262
CR	CR6	0	0	0	391	619	585	553	525	498	471	445	418	391	365	338	318	305	291
GR	GR3	0	0	1,323	4,035	5,553	5,254	4,983	4,739	4,516	4,297	4,078	3,859	3,640	3,421	3,202	3,050	2,967	2,884
GR	GR3	0	0	0	112	154	145	138	131	125	119	113	107	101	95	89	85	82	80
GR	GR4	0	0	1,885	5,750	8,517	8,050	7,626	7,237	6,881	6,529	6,177	5,825	5,473	5,122	4,770	4,515	4,356	4,198
GR	GR4	0	0	0	160	235	223	211	200	190	181	171	161	152	142	132	125	121	116

Station	Unit	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
BR	BR1FFP 0	6,908	6,716	6,525	6,333	6,141	5,950	5,758	5,566	5,375	5,183	4,991	4,800	4,508	4,417	4,225	4,033	3,842	3,650
BR	BR1SAM 0	299	291	282	274	266	257	249	241	232	224	216	208	199	191	183	174	166	158
BR	BR2FFP 0	7,455	7,242	7,028	6,815	6,602	6,388	6,175	5,962	5,749	5,535	5,322	5,109	4,895	4,682	4,469	4,256	4,042	3,829
BR	BR2SAM 0	298	290	281	273	264	256	247	239	230	222	213	205	196	187	179	170	162	153
BR	BR3FFP 0	7,920	7,717	7,514	7,311	7,109	6,906	6,703	6,501	6,298	6,095	5,893	5,690	5,487	5,284	5,082	4,879	4,676	4,474
GH	GH1FFP 0	9,841	9,489	9,137	8,785	8,433	8,081	7,729	7,377	7,025	6,673	6,321	5,969	5,617	5,265	4,913	4,561	4,209	3,857
GH	GH1SAM 0	1,089	1,050	1,011	972	933	894	855	816	777	738	699	661	622	583	544	505	466	427
GH	GH2FFP 0	10,330	10,104	9,878	9,652	9,425	9,199	8,973	8,747	8,521	8,295	8,069	7,843	7,617	7,391	7,165	6,939	6,713	6,486
GH	GH2SAM 0	511	500	488	476	464	453	441	429	418	406	394	383	371	359	348	336	324	312
GH	GH3FFP 0	12,344	12,047	11,750	11,452	11,155	10,858	10,561	10,263	9,966	9,669	9,372	9,075	8,777	8,480	8,183	7,886	7,588	7,291
GH	GH3SAM 0	1,047	1,020	994	967	941	915	888	862	835	809	782	756	730	703	677	650	624	598
GH	GH4FFP 0	11,513	11,223	10,932	10,642	10,352	10,061	9,771	9,481	9,190	8,900	8,610	8,319	8,029	7,739	7,448	7,158	6,867	6,577
GH	GH4SAM 0	1,068	1,039	1,011	983	955	927	899	870	842	814	786	758	730	701	673	645	617	589
MC	MC1FFD 0	12,485	12,022	11,558	11,095	10,631	10,167	9,704	9,240	8,777	8,313	7,850	7,388	6,925	6,462	6,000	5,537	5,075	4,613
MC	MC1FFP 0	10,143	9,767	9,390	9,013	8,637	8,260	7,884	7,507	7,130	6,754	6,377	5,999	5,623	5,247	4,871	4,495	4,119	3,743
MC	MC1SAM 0	648	624	600	576	552	528	504	480	455	431	407	383	359	335	311	287	263	239
MC	MC2FFD 0	12,618	12,088	11,558	11,028	10,498	9,969	9,439	8,909	8,379	7,849	7,319	6,789	6,259	5,729	5,199	4,669	4,139	3,609
MC	MC2FFP 0	10,029	9,608	9,187	8,766	8,344	7,923	7,502	7,081	6,660	6,239	5,818	5,397	4,976	4,555	4,134	3,713	3,292	2,871
MC	MC2SAM 0	655	627	600	572	545	517	490	462	435	407	380	353	326	299	272	245	218	191
MC	MC3FFD 0	4,950	4,777	4,603	4,429	4,255	4,082	3,909	3,735	3,561	3,388	3,214	3,040	2,867	2,693	2,519	2,345	2,171	1,997
MC	MC3FFP 0	111	107	104	100	96	92	88	85	81	77	73	69	64	60	56	52	48	44
MC	MC3SAM 0	9,844	9,510	9,175	8,841	8,506	8,172	7,837	7,503	7,168	6,834	6,499	6,165	5,830	5,495	5,160	4,825	4,490	4,155
MC	MC3SAM 0	1,039	1,000	961	923	884	846	807	768	730	691	652	613	574	535	496	457	418	379
MC	MC4FFD 0	14,880	14,358	13,836	13,314	12,792	12,270	11,748	11,226	10,705	10,183	9,661	9,139	8,617	8,095	7,573	7,051	6,529	6,007
MC	MC4FFP 0	346	332	319	306	292	279	266	252	239	226	213	200	187	174	161	148	135	122
MC	MC4SAM 0	10,330	9,968	9,605	9,243	8,881	8,518	8,156	7,794	7,431	7,069	6,707	6,344	5,981	5,619	5,257	4,895	4,533	4,171
MC	MC4SAM 0	1,153	1,112	1,072	1,031	991	951	910	870	829	789	748	708	668	628	588	548	508	468
TC	TC1FFP 0	8,637	8,363	8,089	7,815	7,541	7,267	6,993	6,719	6,445	6,171	5,897	5,623	5,349	5,075	4,801	4,527	4,253	3,979
CR	CR4FFD 0	11,845	11,203	10,560	9,917	9,274	8,631	7,988	7,345	6,702	6,059	5,416	4,773	4,130	3,487	2,844	2,201	1,558	915
CR	CR4FFP 0	4,671	4,417	4,164	3,910	3,657	3,404	3,151	2,898	2,645	2,392	2,139	1,886	1,633	1,380	1,127	874	621	368
CR	CR4FF 0	2,389	2,260	2,130	2,000	1,870	1,740	1,610	1,480	1,350	1,220	1,090	960	830	700	570	440	310	180
CR	CR4PAC 0	168	159	150	141	132	123	114	105	96	87	78	69	60	51	42	33	24	15
CR	CR4LIME 0	185	175	165	155	145	135	125	115	105	95	85	75	65	55	45	35	25	15
CR	CR5FFD 0	12,490	11,774	11,058	10,342	9,626	8,910	8,194	7,478	6,762	6,046	5,330	4,614	3,898	3,182	2,466	1,750	1,034	318
CR	CR5FFP 0	4,914	4,632	4,350	4,068	3,786	3,504	3,222	2,940	2,658	2,376	2,094	1,812	1,530	1,248	966	684	402	120
CR	CR5FF 0	2,545	2,399	2,253	2,107	1,961	1,815	1,669	1,523	1,377	1,231	1,085	939	793	647	501	355	209	63
CR	CR5PAC 0	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10
CR	CR5LIME 0	199	188	178	168	158	148	138	128	118	108	98	88	78	68	58	48	38	28
CR	CR6FFD 0	15,727	14,959	14,190	13,421	12,653	11,885	11,116	10,348	9,579	8,811	8,042	7,273	6,504	5,735	4,966	4,197	3,428	2,659
CR	CR6FFP 0	6,337	6,027	5,717	5,408	5,098	4,788	4,479	4,169	3,859	3,549	3,239	2,929	2,619	2,309	2,000	1,690	1,380	1,070
CR	CR6FF 0	3,235	3,077	2,919	2,761	2,602	2,444	2,286	2,128	1,970	1,812	1,654	1,496	1,338	1,180	1,022	864	706	548
CR	CR6PAC 0	250	238	226	213	201	189	177	165	153	141	129	117	105	93	81	69	57	45
CR	CR6LIME 0	278	264	250	237	223	210	196	183	170	157	144	131	118	105	92	79	66	53
GR	GR3FF 0	2,800	2,717	2,634	2,550	2,467	2,384	2,300	2,217	2,134	2,050	1,967	1,884	1,800	1,717	1,634	1,550	1,467	1,384
GR	GR3PAC 0	78	75	73	71	68	66	64	62	59	57	55	52	50	48	45	43	41	38
GR	GR4FF 0	4,040	3,881	3,723	3,565	3,407	3,248	3,090	2,932	2,773	2,615	2,457	2,299	2,141	1,983	1,824	1,666	1,508	1,350
GR	GR4PAC 0	112	108	103	99	94	90	86	81	77	73	69	65	61	57	52	48	44	40

Station	Unit	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
BR	BR1FFP 0	3,458	3,267	1,327	0	0	0	0	0	0	0	0	0	0	0
BR	BR1SAM 0	150	141	57	0	0	0	0	0	0	0	0	0	0	0
BR	BR2FFP 0	3,616	1,180	0	0	0	0	0	0	0	0	0	0	0	0
BR	BR2SAM 0	145	47	0	0	0	0	0	0	0	0	0	0	0	0
BR	BR3FFP 0	4,271	4,068	3,865	3,663	3,460	1,405	0	0	0	0	0	0	0	0
GH	GH1FFP 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GH	GH1SAM 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GH	GH2FFP 0	6,260	6,034	5,808	5,582	5,356	5,130	4,904	4,678	4,452	4,226	4,000	3,489	253	0
GH	GH2SAM 0	301	289	277	266	254	242	231	219	207	196	0	0	0	0
GH	GH3FFP 0	6,994	6,697	6,400	6,102	5,805	5,508	5,211	4,152	214	0	0	0	0	0
GH	GH3SAM 0	571	545	518	492	465	405	21	0	0	0	0	0	0	0
GH	GH4FFP 0	6,287	5,996	5,706	5,416	5,125	4,835	0	0	0	0	0	0	0	0
GH	GH4SAM 0	561	532	504	476	117	0	0	0	0	0	0	0	0	0
MC	MC1FFG 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC1FFP 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC1SAM 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC2FGD 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC2FFP 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC2SAM 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC3FGDU 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC3FGDR 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC3FFP 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC3SAM 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC4FGD 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC4SCR 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC4FFP 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC4SAM 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TC	TC1FFP 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR4FGD 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR4SCR 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR4FF 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR4PAC 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR4LIME 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5FGD 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5SCR 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5FF 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5PAC 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5LIME 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6FGD 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6SCR 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6FF 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6PAC 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6LIME 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR	GR3SFF 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR	GR3PAC 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR	GR4SFF 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR	GR4PAC 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Retirement Cost											
All Units	0	0	0	0	0	0	2100	0	0	0	0

2% Escalation Rate

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Unit Costs (\$000)											
BR											
BR1		3,816	4,811	3,969	4,049	4,130	4,212	4,296	4,382	4,470	4,559
BR2		6,633	7,160	7,253	7,398	7,546	7,697	7,851	8,008	8,168	8,331
BR3		15,885	20,876	14,904	15,202	15,506	15,816	16,132	16,455	16,784	17,120
CR		14,372	9,218	12,029	12,269	12,515	12,765	13,020	13,281	13,546	13,817
CR5		11,842	9,889	12,791	13,047	13,308	13,574	13,845	14,122	14,405	14,693
CR6		10,666	11,619	10,173	10,376	10,584	10,795	11,011	11,231	11,456	11,685
GH		17,829	19,141	17,966	18,325	18,691	19,065	19,447	19,835	20,232	20,637
GH2		12,225	18,498	13,429	13,698	13,972	14,251	14,536	14,827	15,124	15,426
GH3		17,961	13,501	12,475	12,724	12,979	13,238	13,503	13,773	14,049	14,330
GH4		11,533	13,496	12,105	12,347	12,594	12,846	13,103	13,365	13,632	13,905
GR		4,270	5,792	4,360	4,447	4,536	4,627	4,719	4,813	4,910	5,008
GR4		7,338	6,924	8,633	8,805	8,982	9,161	9,344	9,531	9,722	9,916
MC		11,892	17,333	12,669	12,923	13,181	13,445	13,714	13,988	14,268	14,553
MC2		16,179	11,941	15,201	15,505	15,815	16,131	16,454	16,783	17,118	17,461
MC3		18,313	14,238	17,221	17,566	17,917	18,275	18,641	19,014	19,394	19,782
MC4		16,531	18,981	17,245	17,590	17,942	18,300	18,666	19,040	19,421	19,809
TC		17,205	15,170	17,403	17,751	18,106	18,468	18,837	19,214	19,598	19,990
TY		410	416	418	427	435	444	453	462	471	480

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Retirement Cost											
All Units	0	0	0	0	0	0	0	0	0	0	0

2% Escalation Rate

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Unit Costs (\$000)											
BR	4,651	4,744	4,838	4,935	5,034	5,135	5,237	5,342	5,449	5,558	5,669
BR2	8,498	8,668	8,841	9,018	9,199	9,383	9,570	9,762	9,957	10,156	10,359
BR3	17,462	17,811	18,167	18,531	18,901	19,279	19,665	20,058	20,460	20,869	21,286
CR	14,094	14,375	14,663	14,956	15,255	15,560	15,872	16,189	16,513	16,843	17,180
CR5	14,987	15,286	15,592	15,904	16,222	16,546	16,877	17,215	17,559	17,910	18,269
CR6	11,919	12,157	12,400	12,648	12,901	13,159	13,423	13,691	13,965	14,244	14,529
GH	21,050	21,471	21,900	22,338	22,785	23,240	23,705	24,179	24,663	25,156	25,659
GH2	15,735	16,049	16,370	16,698	17,032	17,372	17,720	18,074	18,436	18,804	19,181
GH3	14,616	14,909	15,207	15,511	15,821	16,138	16,460	16,790	17,125	17,468	17,817
GH4	14,183	14,467	14,756	15,051	15,352	15,659	15,973	16,292	16,618	16,950	17,289
GR	5,108	5,210	5,314	5,421	5,529	5,640	5,753	5,868	5,985	6,105	6,227
GR4	10,115	10,317	10,523	10,734	10,949	11,167	11,391	11,619	11,851	12,088	12,330
MC	14,844	15,141	15,444	15,753	16,068	16,389	16,717	17,051	17,392	17,740	18,095
MC2	17,810	18,166	18,530	18,900	19,278	19,664	20,057	20,458	20,867	21,285	21,710
MC3	20,177	20,581	20,993	21,412	21,841	22,278	22,723	23,178	23,641	24,114	24,596
MC4	20,205	20,609	21,021	21,442	21,871	22,308	22,754	23,209	23,674	24,147	24,630
TC	20,390	20,798	21,214	21,638	22,071	22,512	22,962	23,422	23,890	24,368	24,855
TY	490	500	510	520	530	541	552	563	574	586	597

Retirement Cost		2032	2033	2034	2035	2036	2037	2038	2039	2040
All Units		0	0	0	0	0	0	0	0	0

2% Escalation Rate

Unit Costs (\$000)		2032	2033	2034	2035	2036	2037	2038	2039	2040
BR	BR1	5,782	5,898	6,016	6,136	6,259	6,384	6,512	6,642	6,775
BR	BR2	10,566	10,778	10,993	11,213	11,437	11,666	11,899	12,137	12,380
BR	BR3	21,712	22,146	22,589	23,041	23,502	23,972	24,451	24,940	25,439
CR	CR4	17,524	17,874	18,232	18,596	18,968	19,347	19,734	20,129	20,532
CR	CR5	18,634	19,007	19,387	19,775	20,170	20,573	20,985	21,405	21,833
CR	CR6	14,820	15,116	15,418	15,727	16,041	16,362	16,689	17,023	17,364
GH	GH1	26,172	26,696	27,230	27,774	28,330	28,897	29,474	30,064	30,665
GH	GH2	19,564	19,955	20,355	20,762	21,177	21,600	22,032	22,473	22,923
GH	GH3	18,174	18,537	18,908	19,286	19,672	20,065	20,466	20,876	21,293
GH	GH4	17,635	17,988	18,347	18,714	19,089	19,470	19,860	20,257	20,662
GR	GR3	6,351	6,478	6,608	6,740	6,875	7,012	7,153	7,296	7,442
GR	GR4	12,576	12,828	13,084	13,346	13,613	13,885	14,163	14,446	14,735
MC	MC1	18,457	18,826	19,202	19,586	19,978	20,378	20,785	21,201	21,625
MC	MC2	22,145	22,587	23,039	23,500	23,970	24,449	24,938	25,437	25,946
MC	MC3	25,088	25,590	26,102	26,624	27,156	27,699	28,253	28,818	29,395
MC	MC4	25,123	25,625	26,138	26,660	27,194	27,737	28,292	28,858	29,435
TC	TC1	25,352	25,859	26,377	26,904	27,442	27,991	28,551	29,122	29,704
TY	TY3	609	622	634	647	660	673	686	700	714

Escalation Rate: 2% Year \$: 2010 Fixed O&M \$/Yr

	Month	Year	Equipment	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
BR	BR1	5	2014 PJFF/PAC	0	0	0	598,882	610,860	623,077	635,538	648,249	661,214	674,439	687,927	701,686
BR	BR1	5	2014 SAM Mitigation	0	0	0	78,540	137,333	140,079	142,881	145,739	148,653	151,627	154,659	157,752
BR	BR2	4	2014 PJFF/PAC	0	0	0	714,168	728,451	743,020	757,880	773,038	788,499	804,269	820,354	836,761
BR	BR2	4	2014 SAM Mitigation	0	0	0	134,640	137,333	140,079	142,881	145,739	148,653	151,627	154,659	157,752
BR	BR3	5	2015 PJFF/PAC	0	0	0	0	1,067,560	1,088,911	1,110,689	1,132,903	1,155,561	1,178,672	1,202,245	1,226,290
GH	GH1	5	2014 PJFF/PAC	0	0	0	1,293,082	1,318,944	1,345,322	1,372,229	1,399,673	1,427,667	1,456,220	1,485,345	1,515,052
GH	GH1	5	2014 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	0
GH	GH1	2	2013 SAM Mitigation	0	0	0	4,899	0	0	0	0	0	0	0	0
GH	GH2	11	2014 PJFF/PAC	0	0	0	777,600	1,586,304	1,618,030	1,650,391	1,683,399	1,717,067	1,751,408	1,786,436	1,822,165
GH	GH2	12	2012 Sorbent Injection	0	8,064	98,700	100,674	102,687	104,741	106,836	108,973	111,152	113,375	115,643	117,956
GH	GH3	10	2015 PJFF/PAC	0	0	0	0	652,436	1,330,969	1,357,589	1,384,741	1,412,435	1,440,684	1,469,498	1,498,888
GH	GH3	11	2013 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	0
GH	GH3	2	2013 SAM Mitigation	0	0	0	0	0	0	0	0	0	0	0	0
GH	GH4	12	2015 PJFF/PAC	0	0	0	0	631,870	1,289,014	1,314,795	1,341,091	1,367,912	1,395,271	1,423,176	1,451,640
GH	GH4	3	2014 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	0
GH	GH4	2	2013 SAM Mitigation	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC1	5	2015 Combined 1&2 FGD	0	0	0	0	-238,642	-219,636	-200,250	-180,476	-160,306	-139,733	-118,749	-121,124
MC	MC1	5	2015 PJFF/PAC	0	0	0	1,446,222	1,475,147	1,504,650	1,534,743	1,565,438	1,596,746	1,628,681	1,661,255	1,694,518
MC	MC1	5	2015 SAM Mitigation	0	0	0	22,100	38,643	39,416	40,204	41,008	41,828	42,665	43,518	44,384
MC	MC2	4	2015 Combined 1&2 FGD	0	0	0	0	186,506	205,512	224,899	244,673	264,842	285,415	306,400	312,528
MC	MC2	4	2015 PJFF/PAC	0	0	0	0	1,418,867	1,447,245	1,476,189	1,505,713	1,535,828	1,566,544	1,597,875	1,629,832
MC	MC2	4	2015 SAM Mitigation	0	0	0	0	25,257	38,643	39,416	40,204	41,008	41,828	42,665	43,518
MC	MC3	11	2014 FGD	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC3	10	2015 PJFF/PAC	0	0	0	0	646,753	1,319,377	1,345,764	1,372,679	1,400,133	1,428,136	1,456,698	1,485,832
MC	MC3	4	2013 SAM Mitigation	0	0	24,068	36,824	37,560	38,312	39,078	39,859	40,657	41,470	42,299	43,145
MC	MC3	4	2013 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC4	11	2014 FGD	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC4	11	2014 PJFF/PAC	0	0	0	743,376	1,516,487	1,546,817	1,577,754	1,609,309	1,641,495	1,674,325	1,707,811	1,741,967
MC	MC4	11	2014 SAM Mitigation	0	0	0	3,095	37,885	38,643	39,416	40,204	41,008	41,828	42,665	43,518
MC	MC4	11	2014 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	0
TC	TC1	11	2015 PJFF/PAC	0	0	0	0	493,761	1,007,273	1,027,418	1,047,966	1,068,926	1,090,304	1,112,110	1,134,353
CR	CR4	1	2016 SCR	0	0	0	0	0	2,107,050	2,149,191	2,192,175	2,236,018	2,280,739	2,326,353	2,372,880
CR	CR4	1	2016 WFGD	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR4	1	2016 PJFF	0	0	0	0	0	1,341,259	1,368,085	1,395,446	1,423,355	1,451,822	1,480,859	1,510,476
CR	CR4	1	2016 SAM Mitigation	0	0	0	0	0	195,952	199,871	203,869	207,946	212,105	216,347	220,674
CR	CR4	1	2016 PAC Injection	0	0	0	0	0	190,321	194,128	198,010	201,971	206,010	210,130	214,333
CR	CR5	1	2016 SCR	0	0	0	0	0	2,244,442	2,289,331	2,335,117	2,381,819	2,429,456	2,478,045	2,527,606
CR	CR5	1	2016 WFGD	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5	1	2016 PJFF	0	0	0	0	0	1,408,829	1,437,006	1,465,746	1,495,061	1,524,962	1,555,461	1,586,570
CR	CR5	1	2016 SAM Mitigation	0	0	0	0	0	199,331	203,317	207,384	211,531	215,762	220,077	224,479
CR	CR5	1	2016 PAC Injection	0	0	0	0	0	193,700	197,574	201,525	205,556	209,667	213,860	218,138
CR	CR6	1	2016 SCR	0	0	0	0	0	2,693,781	2,747,656	2,802,609	2,858,561	2,915,835	2,974,151	3,033,634
CR	CR6	1	2016 WFGD	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6	1	2016 PJFF	0	0	0	0	0	1,837,897	1,874,655	1,912,148	1,950,391	1,989,399	2,029,187	2,069,771
CR	CR6	1	2016 SAM Mitigation	0	0	0	0	0	222,980	227,440	231,989	236,628	241,361	246,188	251,112
CR	CR6	1	2016 PAC Injection	0	0	0	0	0	215,097	219,399	223,787	228,263	232,828	237,484	242,234
GR	GR3	1	2016 SCR	0	0	0	0	0	0	0	0	0	0	0	0

Escalation Rate:		2%	Year \$:											
			Fixed O&M											
	Month	Year Equipment	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
GR	1	2016 CDS-FF	0	0	0	0	0	3,741,112	3,815,934	3,892,252	3,970,098	4,049,499	4,130,489	4,213,099
GR	1	2016 PAC Injection	0	0	0	0	0	158,789	161,965	165,204	168,508	171,878	175,316	178,822
GR	1	2016 SCR	0	0	0	0	0	0	0	0	0	0	0	0
GR	1	2016 CDS-FF	0	0	0	0	0	4,852,634	4,949,687	5,048,680	5,149,654	5,252,647	5,357,700	5,464,854
GR	1	2016 PAC Injection	0	0	0	0	0	168,924	172,303	175,749	179,264	182,849	186,506	190,236

Escalation Rate: 2% Year \$: 2010 Fixed O&M \$/yr

	Month	Year	Equipment	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
BR	BR1	5	2014 PJFF/PAC	715,720	744,635	759,527	774,718	790,212	806,016	822,137	838,580	855,351	872,458	889,907
BR	BR1	5	2014 SAM Mitigation	160,907	167,408	170,756	174,171	177,655	181,208	184,832	188,529	192,299	196,145	200,068
BR	BR2	4	2014 PJFF/PAC	853,496	887,978	905,737	923,852	942,329	961,175	980,399	1,000,007	1,020,007	1,040,407	1,061,215
BR	BR2	4	2014 SAM Mitigation	160,907	167,408	170,756	174,171	177,655	181,208	184,832	188,529	192,299	196,145	200,068
BR	BR3	5	2015 PJFF/PAC	1,250,816	1,301,349	1,327,376	1,353,924	1,381,002	1,408,622	1,436,795	1,465,530	1,494,841	1,524,738	1,555,233
GH	GH1	5	2014 PJFF/PAC	1,545,353	1,607,785	1,639,941	1,672,739	1,706,194	1,740,318	1,775,124	1,810,627	1,846,839	1,883,776	1,921,452
GH	GH1	2	2013 SAM Mitigation	0	0	0	0	0	0	0	0	0	0	0
GH	GH2	11	2014 PJFF/PAC	1,858,608	1,895,781	1,933,696	1,972,370	2,011,817	2,052,054	2,093,095	2,134,957	2,177,656	2,221,209	2,265,633
GH	GH2	12	2012 Sorbent Injection	120,315	122,721	125,175	127,679	130,232	132,837	135,494	138,204	140,968	143,787	146,663
GH	GH3	10	2015 PJFF/PAC	1,528,865	1,559,443	1,622,444	1,654,893	1,687,991	1,721,751	1,756,186	1,791,310	1,827,136	1,863,678	1,900,952
GH	GH3	11	2013 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0
GH	GH3	2	2013 SAM Mitigation	0	0	0	0	0	0	0	0	0	0	0
GH	GH4	12	2015 PJFF/PAC	1,480,672	1,510,286	1,540,491	1,571,301	1,602,727	1,634,782	1,667,477	1,700,827	1,734,844	1,804,931	1,841,030
GH	GH4	3	2014 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0
GH	GH4	2	2013 SAM Mitigation	0	0	0	0	0	0	0	0	0	0	0
MC	MC1	5	2015 Combined 1&2 FGD	-123,546	-128,537	-131,108	-133,730	-136,405	-139,133	-141,916	-144,754	-147,649	-150,602	-153,614
MC	MC1	5	2015 PJFF/PAC	1,694,480	1,728,370	1,762,937	1,798,196	1,834,160	1,870,843	1,908,260	1,946,425	1,985,354	2,025,061	2,065,562
MC	MC1	5	2015 SAM Mitigation	44,388	45,276	46,182	47,105	48,047	49,008	49,989	50,988	52,008	53,048	54,109
MC	MC2	4	2015 SAM Mitigation	318,778	325,154	331,657	338,290	345,056	351,957	358,996	366,176	373,499	380,969	388,589
MC	MC2	4	2015 PJFF/PAC	1,662,429	1,695,678	1,729,591	1,764,183	1,799,467	1,835,456	1,872,165	1,909,608	1,947,801	1,986,757	2,026,492
MC	MC2	4	2015 SAM Mitigation	44,388	45,276	46,182	47,105	48,047	49,008	49,989	50,988	52,008	53,048	54,109
MC	MC3	11	2014 FGD	0	0	0	0	0	0	0	0	0	0	0
MC	MC3	10	2015 PJFF/PAC	1,515,549	1,545,860	1,576,777	1,608,313	1,640,479	1,673,288	1,706,754	1,740,889	1,775,707	1,811,221	1,847,446
MC	MC3	4	2013 SAM Mitigation	44,008	44,888	45,786	46,702	47,636	48,588	49,560	50,551	51,562	52,594	53,645
MC	MC3	4	2013 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0
MC	MC4	11	2014 FGD	0	0	0	0	0	0	0	0	0	0	0
MC	MC4	11	2014 PJFF/PAC	1,776,807	1,812,343	1,848,590	1,885,562	1,923,273	1,961,738	2,000,973	2,040,992	2,081,812	2,123,449	2,165,918
MC	MC4	11	2014 SAM Mitigation	44,388	45,276	46,182	47,105	48,047	49,008	49,989	50,988	52,008	53,048	54,109
MC	MC4	11	2014 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0
TC	TC1	11	2015 PJFF/PAC	1,157,040	1,180,180	1,203,784	1,227,860	1,252,417	1,277,465	1,303,015	1,329,075	1,355,656	1,382,769	1,410,425
CR	CR4	1	2016 SCR	2,420,338	2,468,745	2,518,120	2,568,482	2,619,852	2,672,249	2,725,694	2,780,208	2,835,812	2,892,528	2,950,379
CR	CR4	1	2016 WFGD	0	0	0	0	0	0	0	0	0	0	0
CR	CR4	1	2016 PJFF	1,540,685	1,571,499	1,602,929	1,634,988	1,667,688	1,701,041	1,735,062	1,769,763	1,805,159	1,841,262	1,878,087
CR	CR4	1	2016 SAM Mitigation	225,088	229,589	234,181	238,865	243,642	248,515	253,485	258,555	263,726	269,000	274,380
CR	CR4	1	2016 PAC Injection	218,620	222,992	227,452	232,001	236,641	241,374	246,201	251,125	256,148	261,271	266,496
CR	CR5	1	2016 SCR	2,578,158	2,629,721	2,682,316	2,735,962	2,790,681	2,846,495	2,903,425	2,961,493	3,020,723	3,081,137	3,142,760
CR	CR5	1	2016 WFGD	0	0	0	0	0	0	0	0	0	0	0
CR	CR5	1	2016 PJFF	1,618,302	1,650,668	1,683,681	1,717,355	1,751,702	1,786,736	1,822,471	1,858,920	1,896,099	1,934,021	1,972,701
CR	CR5	1	2016 SAM Mitigation	228,968	233,548	238,219	242,983	247,843	252,800	257,856	263,013	268,273	273,638	279,111
CR	CR5	1	2016 PAC Injection	222,500	226,950	231,489	236,119	240,842	245,658	250,572	255,583	260,695	265,909	271,227
CR	CR6	1	2016 SCR	3,094,307	3,156,193	3,219,317	3,283,703	3,349,377	3,416,365	3,484,692	3,554,386	3,625,474	3,697,983	3,771,943
CR	CR6	1	2016 WFGD	0	0	0	0	0	0	0	0	0	0	0
CR	CR6	1	2016 PJFF	2,111,166	2,153,389	2,196,457	2,240,386	2,285,194	2,330,898	2,377,516	2,425,066	2,473,567	2,523,039	2,573,500
CR	CR6	1	2016 SAM Mitigation	256,134	261,257	266,482	271,812	277,248	282,793	288,449	294,218	300,102	306,104	312,226
CR	CR6	1	2016 PAC Injection	247,079	252,020	257,061	262,202	267,446	272,795	278,251	283,816	289,492	295,282	301,188
GR	GR3	1	2016 SCR	0	0	0	0	0	0	0	0	0	0	0

Escalation Rate:	2%	Year	Equipment	2010																			
				Month	Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
				GR	1	2016	CDS-FF	3,322,000	4,297,361	4,383,308	4,470,975	4,560,394	4,651,602	4,744,634	4,839,527	4,936,317	5,035,044	5,135,744	5,238,459	5,343,229			
				GR	1	2016	PAC Injection	141,000	182,399	186,047	189,767	193,563	197,434	201,383	205,410	209,519	213,709	217,983	222,343	226,790			
				GR	1	2016	SCR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
				GR	1	2016	CDS-FF	4,309,000	5,574,151	5,685,634	5,799,347	5,915,334	6,033,640	6,154,313	6,277,399	6,402,947	6,531,006	6,661,626	6,794,859	6,930,756			
				GR	1	2016	PAC Injection	150,000	194,041	197,922	201,880	205,918	210,036	214,237	218,522	222,892	227,350	231,897	236,535	241,266			

Fixed O&M

Year \$:

2%

Escalation Rate:

Escalation Rate: 2% Year \$: 2010 Fixed O&M \$/yr

	Month	Year Equipment	2035	2036	2037	2038	2039	2040
BR	BR1	2014 PJFF/PAC	907,705	925,860	944,377	963,264	982,530	1,002,180
BR	BR1	2014 SAM Mitigation	204,069	208,151	212,314	216,560	220,891	225,309
BR	BR2	2014 PJFF/PAC	1,082,440	1,104,088	1,126,170	1,148,694	1,171,668	1,195,101
BR	BR2	2014 SAM Mitigation	204,069	208,151	212,314	216,560	220,891	225,309
BR	BR3	2015 PJFF/PAC	1,586,337	1,618,064	1,650,425	1,683,434	1,717,103	1,751,445
GH	GH1	2014 PJFF/PAC	1,959,881	1,999,078	2,039,060	2,079,841	2,121,438	2,163,867
GH	GH1	2014 SCR Turn-Down	0	0	0	0	0	0
GH	GH1	2013 SAM Mitigation	0	0	0	0	0	0
GH	GH2	2014 PJFF/PAC	2,357,165	2,404,308	2,452,394	2,501,442	2,551,471	2,602,500
GH	GH2	2012 Sorbent Injection	152,588	155,640	158,753	161,928	165,166	168,470
GH	GH3	2015 PJFF/PAC	1,938,971	1,977,751	2,017,306	2,057,652	2,098,805	2,140,781
GH	GH3	2013 SCR Turn-Down	0	0	0	0	0	0
GH	GH3	2013 SAM Mitigation	0	0	0	0	0	0
GH	GH4	2015 PJFF/PAC	1,877,850	1,915,407	1,953,716	1,992,790	2,032,646	2,073,299
GH	GH4	2014 SCR Turn-Down	0	0	0	0	0	0
GH	GH4	2013 SAM Mitigation	0	0	0	0	0	0
MC	MC1	2015 Combined 1&2 FGD	-156,686	-159,820	-163,017	-166,277	-169,602	-172,994
MC	MC1	2015 PJFF/PAC	2,149,010	2,191,991	2,235,831	2,280,547	2,326,158	2,372,681
MC	MC1	2015 SAM Mitigation	56,295	57,421	58,570	59,741	60,936	62,155
MC	MC2	2015 Combined 1&2 FGD	404,288	412,374	420,621	429,033	437,614	446,366
MC	MC2	2015 PJFF/PAC	2,108,362	2,150,529	2,193,540	2,237,411	2,282,159	2,327,802
MC	MC2	2015 SAM Mitigation	56,295	57,421	58,570	59,741	60,936	62,155
MC	MC3	2014 FGD	0	0	0	0	0	0
MC	MC3	2015 PJFF/PAC	1,922,083	1,960,524	1,999,735	2,039,729	2,080,524	2,122,134
MC	MC3	2013 SAM Mitigation	55,813	56,929	58,068	59,229	60,414	61,622
MC	MC3	2013 SCR Turn-Down	0	0	0	0	0	0
MC	MC4	2014 FGD	0	0	0	0	0	0
MC	MC4	2014 PJFF/PAC	2,253,421	2,298,489	2,344,459	2,391,348	2,439,175	2,487,958
MC	MC4	2014 SAM Mitigation	56,295	57,421	58,570	59,741	60,936	62,155
MC	MC4	2014 SCR Turn-Down	0	0	0	0	0	0
TC	TC1	2015 PJFF/PAC	1,467,406	1,496,754	1,526,689	1,557,223	1,588,367	1,620,135
CR	CR4	2016 SCR	3,069,574	3,130,965	3,193,585	3,257,456	3,322,605	3,389,058
CR	CR4	2016 WFGD	0	0	0	0	0	0
CR	CR4	2016 PJFF	1,191,000	1,953,962	1,993,041	2,032,902	2,073,560	2,115,031
CR	CR4	2016 SAM Mitigation	174,000	285,465	291,175	296,998	302,938	308,997
CR	CR4	2016 PAC Injection	169,000	277,262	282,808	288,464	294,233	300,118
CR	CR5	2016 SCR	1,993,000	3,269,728	3,335,422	3,401,825	3,469,861	3,539,258
CR	CR5	2016 WFGD	0	0	0	0	0	0
CR	CR5	2016 PJFF	1,251,000	2,052,398	2,093,446	2,135,315	2,178,021	2,221,582
CR	CR5	2016 SAM Mitigation	177,000	290,387	296,195	302,119	308,161	314,325
CR	CR5	2016 PAC Injection	172,000	282,184	287,828	293,584	299,456	305,445
CR	CR6	2016 SCR	2,392,000	3,924,330	4,002,816	4,082,872	4,164,530	4,247,820
CR	CR6	2016 WFGD	0	0	0	0	0	0
CR	CR6	2016 PJFF	1,632,000	2,677,469	2,731,018	2,785,639	2,841,352	2,898,179
CR	CR6	2016 SAM Mitigation	198,000	324,840	331,337	337,964	344,723	351,617
CR	CR6	2016 PAC Injection	191,000	313,356	319,623	326,015	332,536	339,186
GR	GR3	2016 SCR	0	0	0	0	0	0

Escalation Rate:		2%	Year \$:	2010	Fixed O&M										
	Month	Year Equipment	\$/yr	2035	2036	2037	2038	2039	2040						
GR	1	2016 CDS-FF	3,322,000	5,450,093	5,559,095	5,670,277	5,783,682	5,899,356	6,017,343						
GR	1	2016 PAC Injection	141,000	231,325	235,952	240,671	245,484	250,394	255,402						
GR	1	2016 SCR	0	0	0	0	0	0	0						
GR	1	2016 CDS-FF	4,309,000	7,069,371	7,210,759	7,354,974	7,502,073	7,652,115	7,805,157						
GR	1	2016 PAC Injection	150,000	246,091	251,013	256,033	261,154	266,377	271,704						

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
BR	BR1	101	69	164	256	346	434	520	605	689	771	852	931	1,008	1,085	1,163	1,241	1,320	1,399	1,479
BR	BR2	167	114	271	423	571	717	860	1,001	1,139	1,275	1,408	1,539	1,667	1,794	1,922	2,052	2,182	2,313	2,446
BR	BR3	416	285	675	1,053	1,423	1,786	2,143	2,493	2,838	3,176	3,508	3,834	4,153	4,469	4,789	5,111	5,435	5,762	6,092
CR	CR4	155	77	204	327	447	564	678	790	899	1,006	1,109	1,210	1,308	1,405	1,501	1,596	1,691	1,786	1,880
CR	CR5	168	84	221	355	485	611	735	856	975	1,090	1,202	1,312	1,418	1,522	1,626	1,730	1,833	1,936	2,038
CR	CR6	240	120	316	507	692	873	1,050	1,223	1,392	1,557	1,718	1,874	2,026	2,175	2,324	2,471	2,619	2,765	2,911
GH	GH1	475	510	1,206	1,884	2,548	3,200	3,843	4,477	5,101	5,717	6,322	6,918	7,504	8,080	8,653	9,231	9,814	10,402	10,995
GH	GH2	484	520	1,228	1,920	2,596	3,261	3,916	4,562	5,198	5,825	6,442	7,049	7,646	8,233	8,817	9,405	9,999	10,599	11,204
GH	GH3	480	516	1,218	1,904	2,575	3,234	3,883	4,524	5,155	5,777	6,389	6,991	7,583	8,165	8,744	9,328	9,917	10,511	11,111
GH	GH4	479	515	1,216	1,900	2,570	3,227	3,875	4,514	5,144	5,765	6,376	6,977	7,567	8,148	8,726	9,308	9,896	10,489	11,088
GR	GR3	68	39	96	151	205	258	309	360	410	458	506	553	598	643	689	734	780	825	871
GR	GR4	95	55	134	211	286	360	432	503	572	640	707	772	836	899	962	1,026	1,089	1,153	1,217
MC	MC1	303	309	767	1,213	1,649	2,077	2,497	2,910	3,315	3,714	4,104	4,487	4,862	5,229	5,592	5,956	6,320	6,686	7,053
MC	MC2	301	307	762	1,205	1,639	2,063	2,480	2,891	3,294	3,689	4,077	4,458	4,830	5,194	5,555	5,916	6,279	6,642	7,007
MC	MC3	391	398	989	1,565	2,128	2,680	3,222	3,755	4,278	4,792	5,296	5,790	6,274	6,747	7,216	7,685	8,156	8,628	9,102
MC	MC4	477	486	1,207	1,910	2,597	3,270	3,931	4,581	5,219	5,846	6,461	7,064	7,654	8,231	8,803	9,376	9,950	10,526	11,103
TC	TC1	383	115	270	420	567	712	855	996	1,135	1,272	1,407	1,539	1,670	1,799	1,927	2,057	2,188	2,320	2,453
TC	TC2	549	166	386	602	813	1,021	1,225	1,427	1,626	1,823	2,016	2,207	2,394	2,579	2,762	2,948	3,136	3,325	3,517
TY	TY3	71	94	233	368	499	628	754	878	999	1,118	1,234	1,347	1,458	1,568	1,677	1,787	1,898	2,008	2,119

2.50% Capital Escalation Rate

2011 CR	281	454	428	405	384	364	344	325	305	285	266	246	231	221	211	200	190	180		
2012 CR		288	465	439	415	394	373	353	333	313	293	272	252	237	226	216	205	195		
2013 CR			295	477	450	426	403	382	362	341	321	300	279	259	243	232	221	210		
2014 CR				303	489	461	436	413	392	371	350	329	307	286	265	249	238	227		
2015 CR					310	501	473	447	424	402	380	358	337	315	293	272	255	244		
2016 CR						318	513	485	459	434	412	390	367	345	323	301	279	262		
2017 CR							326	526	497	470	445	422	399	377	354	331	308	286		
2018 CR								334	539	509	482	456	433	409	386	363	339	316		
2019 CR									342	553	522	494	468	444	420	396	372	348		
2020 CR										351	567	535	506	479	455	430	406	381		
2021 CR											360	581	548	519	491	466	441	416		
2022 CR												369	595	562	532	504	478	452		
2023 CR													378	610	576	545	516	490		
2024 CR														387	625	591	559	529		
2025 CR															397	641	605	573		
2026 CR																641	605	573		
2027 CR																	641	605	573	
2028 CR																		641	605	573
2029 CR																			641	605
2030 CR																				641
2031 CR																				641
2032 CR																				641
2033 CR																				641
2034 CR																				641
2035 CR																				641
2036 CR																				641
2037 CR																				641
2038 CR																				641

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	2039 CR																			
	2040 CR																			
	2011 MC		1,499	2,188	2,076	1,972	1,877	1,788	1,703	1,617	1,532	1,447	1,361	1,276	1,191	1,128	1,089	1,049	1,010	970
	2012 MC			1,536	2,243	2,128	2,021	1,923	1,833	1,745	1,658	1,570	1,483	1,395	1,308	1,221	1,157	1,116	1,075	1,035
	2013 MC				1,575	2,299	2,181	2,072	1,972	1,878	1,789	1,699	1,610	1,520	1,430	1,341	1,251	1,185	1,144	1,102
	2014 MC					1,614	2,357	2,235	2,124	2,021	1,925	1,834	1,742	1,650	1,558	1,466	1,374	1,282	1,215	1,173
	2015 MC						1,655	2,416	2,291	2,177	2,071	1,974	1,879	1,785	1,691	1,597	1,503	1,409	1,314	1,245
	2016 MC							1,696	2,476	2,348	2,231	2,123	2,023	1,926	1,830	1,733	1,637	1,540	1,444	1,347
	2017 MC								1,738	2,538	2,407	2,287	2,176	2,073	1,975	1,876	1,777	1,678	1,579	1,480
	2018 MC									1,782	2,601	2,467	2,344	2,231	2,125	2,024	1,922	1,821	1,720	1,618
	2019 MC										1,826	2,666	2,529	2,403	2,286	2,178	2,075	1,971	1,867	1,763
	2020 MC											1,872	2,733	2,592	2,463	2,344	2,233	2,126	2,020	1,913
	2021 MC												1,919	2,801	2,657	2,524	2,402	2,289	2,180	2,070
	2022 MC													1,967	2,871	2,723	2,588	2,462	2,346	2,234
	2023 MC														2,016	2,943	2,792	2,652	2,524	2,405
	2024 MC															2,066	3,017	2,861	2,719	2,587
	2025 MC																2,118	3,092	2,933	2,787
	2026 MC																	2,171	3,170	3,006
	2027 MC																		2,225	3,249
	2028 MC																			3,249
	2029 MC																			2,281
	2011 TC		281	368	350	333	318	304	291	278	264	251	238	225	211	203	198	193	189	184
	2012 TC			288	377	358	341	326	312	298	284	271	257	244	230	217	208	203	198	193
	2013 TC				295	387	367	350	334	319	305	292	278	264	250	236	222	213	208	203
	2014 TC					303	396	376	359	342	327	313	299	285	270	256	242	228	218	213
	2015 TC						310	406	386	368	351	336	321	306	292	277	263	248	233	224
	2016 TC							318	416	396	377	360	344	329	314	299	284	269	254	239
	2017 TC								326	427	405	386	369	353	337	322	307	291	276	261
	2018 TC									334	437	416	396	378	361	346	330	314	298	283
	2019 TC										342	448	426	406	387	370	354	338	322	306
	2020 TC											351	460	437	397	377	380	363	347	330
	2021 TC												360	471	447	426	407	389	372	355
	2022 TC													369	483	459	437	417	399	381
	2023 TC														378	495	470	448	427	409
	2024 TC															387	507	482	459	438
	2025 TC																397	520	494	470
	2026 TC																	407	533	506
	2027 TC																		417	546
	2028 TC																			428
	2029 TC																			

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
			\$000																		
	2030 TC																				
	2031 TC																				
	2032 TC																				
	2033 TC																				
	2034 TC																				
	2035 TC																				
	2036 TC																				
	2037 TC																				
	2038 TC																				
	2039 TC																				
	2040 TC																				
	2011 GH		2,061	2,756	2,617	2,492	2,377	2,272	2,171	2,070	1,970	1,869	1,768	1,667	1,567	1,498	1,460	1,422	1,384	1,346	
	2012 GH			2,113	2,825	2,683	2,554	2,436	2,328	2,225	2,122	2,019	1,916	1,812	1,709	1,606	1,535	1,496	1,458	1,419	
	2013 GH				2,165	2,895	2,750	2,618	2,497	2,387	2,281	2,175	2,069	1,963	1,858	1,752	1,646	1,573	1,534	1,494	
	2014 GH					2,219	2,968	2,819	2,683	2,560	2,446	2,338	2,229	2,121	2,013	1,904	1,796	1,687	1,613	1,572	
	2015 GH						2,275	3,042	2,889	2,750	2,623	2,507	2,396	2,285	2,174	2,063	1,952	1,841	1,729	1,653	
	2016 GH							2,332	3,118	2,961	2,819	2,689	2,570	2,456	2,342	2,228	2,114	2,001	1,887	1,773	
	2017 GH								2,390	3,196	3,035	2,889	2,756	2,634	2,518	2,401	2,284	2,167	2,051	1,934	
	2018 GH									2,450	3,276	3,111	2,962	2,825	2,700	2,581	2,461	2,341	2,221	2,102	
	2019 GH										2,511	3,358	3,189	3,036	2,896	2,768	2,645	2,522	2,400	2,277	
	2020 GH											2,574	3,442	3,269	3,112	2,968	2,837	2,711	2,585	2,460	
	2021 GH												2,638	3,528	3,350	3,189	3,042	2,908	2,779	2,650	
	2022 GH													2,704	3,616	3,434	3,269	3,119	2,981	2,848	
	2023 GH														2,772	3,706	3,520	3,351	3,196	3,055	
	2024 GH															2,841	3,799	3,608	3,435	3,276	
	2025 GH																2,912	3,894	3,698	3,521	
	2026 GH																	2,985	3,991	3,791	
	2027 GH																		3,060	4,091	
	2028 GH																			4,091	3,136
	2029 GH																				
	2030 GH																				
	2031 GH																				
	2032 GH																				
	2033 GH																				
	2034 GH																				
	2035 GH																				
	2036 GH																				
	2037 GH																				
	2038 GH																				
	2039 GH																				
	2040 GH																				
	2011 BR		468	629	595	565	538	513	489	464	440	415	391	367	350	341	332	323	315	306	
	2012 BR			480	645	610	579	551	526	501	476	451	426	401	376	359	350	341	332	323	
	2013 BR				492	661	625	594	565	539	513	488	462	436	411	385	368	358	349	340	
	2014 BR					504	677	641	609	579	552	526	500	474	447	421	395	377	367	358	
	2015 BR						517	694	657	624	594	566	539	512	485	458	432	405	386	377	
	2016 BR							530	712	674	639	608	580	553	525	498	470	442	415	396	
	2017 BR								543	729	690	655	624	595	567	538	510	482	453	425	
	2018 BR									557	748	708	672	639	610	581	552	523	494	465	
	2019 BR										571	766	725	688	655	625	595	566	536	506	
	2020 BR											585	785	743	706	672	641	610	580	549	

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	2012 TY		96	140	132	125	119	113	108	102	96	90	85	79	75	72	70	67	65	
	2013 TY			98	143	136	129	122	116	110	104	99	93	87	81	77	74	71	69	
	2014 TY				101	147	139	132	125	119	113	107	101	95	89	83	79	76	73	
	2015 TY				103	151	143	135	128	122	116	110	104	97	91	85	81	78	75	
	2016 TY				106	154	146	138	131	125	119	112	106	100	93	87	83	80	78	
	2017 TY				109	158	150	142	135	128	122	115	109	102	96	90	85	82	80	
	2018 TY				111	162	154	146	139	132	125	118	111	105	98	92	87	84	82	
	2019 TY				114	166	158	150	142	135	128	121	114	107	100	94	88	85	83	
	2020 TY				117	170	162	154	146	139	132	125	118	111	104	97	91	88	86	
	2021 TY					120	173	165	157	149	142	135	128	121	114	107	100	93	89	
	2022 TY					123	176	168	160	152	144	137	130	123	116	109	102	95	91	
	2023 TY					126	179	171	163	155	147	140	133	126	119	112	105	98	94	
	2024 TY					129	182	174	166	158	150	142	135	128	121	114	107	100	96	
	2025 TY					132	185	177	169	161	153	145	138	131	124	117	110	103	99	
	2026 TY					136	189	181	173	165	157	149	141	134	127	120	113	106	102	
	2027 TY					139	192	184	176	168	160	152	144	137	130	123	116	109	105	
	2028 TY					143	196	188	180	172	164	156	148	141	134	127	120	113	109	

Station	Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
BR	BR1	101	1,560	1,642	1,724	1,807	1,891	1,975	2,061	2,147	2,234	2,322	2,411	2,501	2,446	2,340	2,239	2,145	2,055	1,969
BR	BR2	167	2,579	2,714	2,850	2,988	3,126	3,266	3,407	3,550	3,694	3,839	3,986	4,135	4,045	3,868	3,703	3,546	3,397	3,255
BR	BR3	416	6,425	6,761	7,100	7,442	7,787	8,136	8,488	8,843	9,202	9,564	9,930	10,300	10,076	9,636	9,223	8,833	8,463	8,109
CR	CR4	155	1,974	2,023	2,073	2,125	2,178	2,233	2,289	2,346	2,405	2,465	2,526	2,589	2,492	2,292	2,102	1,921	1,747	1,580
CR	CR5	168	2,139	2,193	2,247	2,304	2,361	2,420	2,481	2,543	2,606	2,671	2,738	2,807	2,701	2,484	2,278	2,082	1,893	1,713
CR	CR6	240	3,056	3,132	3,210	3,291	3,373	3,457	3,544	3,632	3,723	3,816	3,912	4,009	3,858	3,549	3,255	2,974	2,705	2,447
GH	GH1	475	11,594	12,199	12,809	13,425	14,048	14,676	15,311	15,953	16,601	17,256	17,918	18,587	18,193	17,419	16,688	15,994	15,334	14,702
GH	GH2	484	11,814	12,430	13,052	13,680	14,314	14,954	15,601	16,255	16,915	17,583	18,257	18,939	18,537	17,749	17,004	16,297	15,624	14,981
GH	GH3	480	11,716	12,327	12,944	13,567	14,196	14,831	15,472	16,121	16,775	17,437	18,106	18,782	18,384	17,602	16,863	16,163	15,495	14,857
GH	GH4	479	11,692	12,302	12,917	13,538	14,166	14,800	15,440	16,087	16,741	17,401	18,069	18,743	18,346	17,565	16,828	16,129	15,463	14,826
GR	GR3	68	918	964	1,011	1,057	1,104	1,152	1,199	1,247	1,295	1,343	1,377	1,411	1,364	1,281	1,203	1,128	1,056	988
GR	GR4	95	1,282	1,347	1,412	1,477	1,543	1,609	1,675	1,742	1,809	1,876	1,923	1,971	1,906	1,790	1,680	1,575	1,476	1,380
MC	MC1	303	7,421	7,790	8,160	8,531	8,903	9,277	9,651	10,027	10,278	10,535	10,798	11,068	10,698	10,020	9,375	8,758	8,166	7,598
MC	MC2	301	7,372	7,739	8,106	8,475	8,845	9,216	9,588	9,961	10,210	10,465	10,727	10,995	10,627	9,954	9,313	8,700	8,112	7,548
MC	MC3	391	9,576	10,052	10,530	11,009	11,489	11,971	12,455	12,940	13,263	13,595	13,934	14,283	13,805	12,931	12,097	11,301	10,538	9,805
MC	MC4	477	11,683	12,263	12,846	13,430	14,016	14,604	15,194	15,786	16,180	16,585	16,999	17,424	16,841	15,775	14,758	13,787	12,856	11,962
TC	TC1	383	2,588	2,725	2,863	3,002	3,144	3,286	3,431	3,577	3,725	3,875	4,026	4,180	4,093	3,927	3,771	3,623	3,483	3,349
TC	TC2	549	3,710	3,906	4,104	4,304	4,506	4,711	4,918	5,127	5,339	5,554	5,771	5,991	5,866	5,629	5,405	5,193	4,992	4,801
TV	TV3	71	2,230	2,341	2,453	2,565	2,678	2,790	2,904	3,017	3,092	3,170	3,249	3,330	3,217	3,011	2,815	2,629	2,451	2,281

2.50%

2011 CR			169	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2012 CR			184	174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2013 CR			200	189	178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2014 CR			216	205	194	182	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015 CR			232	221	210	198	187	0	0	0	0	0	0	0	0	0	0	0	0	0
2016 CR			250	238	227	215	203	192	0	0	0	0	0	0	0	0	0	0	0	0
2017 CR			268	256	244	232	220	208	196	0	0	0	0	0	0	0	0	0	0	0
2018 CR			293	275	263	250	238	226	214	201	206	0	0	0	0	0	0	0	0	0
2019 CR			324	300	282	269	257	244	232	219	206	0	0	0	0	0	0	0	0	0
2020 CR			357	332	307	289	276	263	250	237	224	212	208	0	0	0	0	0	0	0
2021 CR			391	365	340	315	296	283	270	256	243	230	217	0	0	0	0	0	0	0
2022 CR			426	400	375	349	323	303	290	276	263	249	236	222	0	0	0	0	0	0
2023 CR			463	437	410	384	358	331	311	297	283	269	256	242	228	208	194	180	166	152
2024 CR			502	475	448	421	394	366	339	319	305	290	276	262	248	234	220	206	192	178
2025 CR			542	514	487	459	431	403	376	348	327	312	298	283	268	254	239	225	211	197
2026 CR			587	556	527	499	470	442	413	385	357	335	320	305	290	275	260	245	230	215
2027 CR			636	602	570	540	511	482	453	424	395	365	343	328	313	297	282	267	252	237
2028 CR			690	652	617	584	554	524	494	464	434	404	375	352	336	320	305	289	273	258
2029 CR			438	708	668	632	599	568	537	506	476	445	415	384	361	345	329	312	296	280
2030 CR			449	725	685	648	614	582	551	519	488	456	425	394	370	353	337	320	304	288
2031 CR			461	743	703	666	632	599	566	532	500	468	436	403	379	362	345	328	312	296
2032 CR				472	762	725	691	657	624	590	556	522	488	454	420	386	352	318	284	250
2033 CR				484	781	744	708	673	638	603	568	532	496	460	424	388	352	316	280	244
2034 CR					496	799	762	725	689	652	615	578	541	504	467	429	392	354	316	278
2035 CR						800	762	725	688	650	612	574	536	498	460	422	384	345	306	268
2036 CR						508	770	732	694	655	616	577	538	499	460	421	382	343	304	265
2037 CR							841	803	764	725	685	646	606	567	527	487	447	407	367	327
2038 CR							534	534	534	534	534	534	534	534	534	534	534	534	534	534

Station	Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
	2039 CR																			
	2040 CR																			
	2011 MC		931	891	851	812	772	733	693	654	0	0	0	0	0	0	0	0	0	0
	2012 MC		994	954	913	873	832	792	751	711	670	0	0	0	0	0	0	0	0	0
	2013 MC		1,061	1,019	978	936	895	853	811	770	728	687	0	0	0	0	0	0	0	0
	2014 MC		1,130	1,087	1,045	1,002	960	917	874	832	789	747	704	0	0	0	0	0	0	0
	2015 MC		1,202	1,158	1,115	1,071	1,027	984	940	896	853	809	765	722	0	0	0	0	0	0
	2016 MC		1,277	1,232	1,187	1,142	1,098	1,053	1,008	963	919	874	829	784	740	0	0	0	0	0
	2017 MC		1,381	1,309	1,263	1,217	1,171	1,125	1,079	1,033	987	942	896	850	804	758	0	0	0	0
	2018 MC		1,517	1,415	1,341	1,294	1,247	1,200	1,153	1,106	1,059	1,012	965	918	871	824	777	0	0	0
	2019 MC		1,659	1,555	1,451	1,375	1,327	1,278	1,230	1,182	1,134	1,086	1,037	989	941	893	845	797	0	0
	2020 MC		1,807	1,700	1,594	1,487	1,409	1,360	1,310	1,261	1,212	1,162	1,113	1,063	1,014	965	915	866	816	0
	2021 MC		1,961	1,852	1,743	1,634	1,524	1,444	1,394	1,343	1,292	1,242	1,191	1,141	1,090	1,039	989	938	887	837
	2022 MC		2,122	2,010	1,898	1,786	1,674	1,562	1,480	1,429	1,377	1,325	1,273	1,221	1,169	1,117	1,065	1,013	962	910
	2023 MC		2,290	2,175	2,060	1,946	1,831	1,716	1,601	1,518	1,464	1,411	1,358	1,305	1,252	1,198	1,145	1,092	1,039	986
	2024 MC		2,465	2,347	2,230	2,112	1,994	1,877	1,759	1,642	1,585	1,501	1,446	1,392	1,337	1,283	1,228	1,174	1,119	1,065
	2025 MC		2,651	2,526	2,406	2,285	2,165	2,044	1,924	1,803	1,688	1,594	1,538	1,483	1,427	1,371	1,315	1,259	1,203	1,147
	2026 MC		2,856	2,718	2,589	2,466	2,342	2,219	2,095	1,972	1,848	1,725	1,634	1,577	1,520	1,462	1,405	1,348	1,290	1,233
	2027 MC		3,081	2,928	2,786	2,654	2,528	2,401	2,274	2,148	2,021	1,894	1,768	1,675	1,616	1,558	1,499	1,440	1,381	1,323
	2028 MC		3,330	3,158	3,001	2,855	2,721	2,591	2,461	2,331	2,201	2,072	1,942	1,812	1,717	1,657	1,597	1,536	1,476	1,416
	2029 MC		3,338	3,413	3,237	3,076	2,927	2,789	2,656	2,522	2,389	2,256	2,123	1,990	1,857	1,760	1,698	1,636	1,575	1,513
	2030 MC			2,396	3,499	3,318	3,153	3,000	2,858	2,722	2,586	2,449	2,313	2,176	2,040	1,904	1,804	1,741	1,677	1,614
	2031 MC			2,456		3,586	3,401	3,232	3,075	2,930	2,790	2,650	2,510	2,371	2,231	2,091	1,951	1,849	1,784	1,719
	2032 MC					2,518	2,580	2,645	2,711	2,779	2,848	2,920	2,993	3,067	3,144	3,229	3,316	3,404	3,492	3,580
	2033 MC							2,645	2,711	2,779	2,848	2,920	2,993	3,067	3,144	3,229	3,316	3,404	3,492	3,580
	2034 MC								2,711	2,779	2,848	2,920	2,993	3,067	3,144	3,229	3,316	3,404	3,492	3,580
	2035 MC									2,779	2,848	2,920	2,993	3,067	3,144	3,229	3,316	3,404	3,492	3,580
	2036 MC										2,848	2,920	2,993	3,067	3,144	3,229	3,316	3,404	3,492	3,580
	2037 MC											2,848	2,920	2,993	3,067	3,144	3,229	3,316	3,404	3,492
	2038 MC												2,920	2,993	3,067	3,144	3,229	3,316	3,404	3,492
	2039 MC													2,993	3,067	3,144	3,229	3,316	3,404	3,492
	2040 MC														2,993	3,067	3,144	3,229	3,316	3,404
	2011 TC		179	175	170	165	161	156	152	147	142	138	133	128	124	119	114	110	105	101
	2012 TC		189	184	179	174	170	165	160	155	151	146	141	136	132	127	122	117	113	108
	2013 TC		198	193	188	184	179	174	169	164	159	154	149	145	140	135	130	125	120	115
	2014 TC		208	203	198	193	188	183	178	173	168	163	158	153	148	143	138	133	128	123
	2015 TC		218	213	208	203	198	193	188	183	178	172	167	162	157	152	147	142	137	131
	2016 TC		229	224	219	213	208	203	198	192	187	182	177	171	166	161	156	150	145	140
	2017 TC		245	235	230	224	219	213	208	203	197	192	187	181	176	170	165	160	154	149
	2018 TC		267	251	241	235	230	224	219	213	208	202	197	191	186	180	175	169	164	158
	2019 TC		290	274	258	247	241	235	230	224	219	213	207	202	196	190	185	179	173	168
	2020 TC		314	297	281	264	253	247	241	236	230	224	218	212	206	200	194	188	182	176
	2021 TC		338	321	305	288	271	259	253	247	241	236	230	224	218	212	206	200	194	188
	2022 TC		364	347	329	312	295	277	266	260	254	248	241	235	229	223	217	211	205	199
	2023 TC		391	373	355	338	320	302	284	272	266	260	254	247	241	235	229	223	216	210
	2024 TC		419	401	383	364	346	328	310	292	279	273	266	260	254	247	241	234	228	222
	2025 TC		449	429	411	392	373	355	336	317	299	286	280	273	267	260	253	247	240	234
	2026 TC		482	460	440	421	402	383	364	345	325	306	293	287	280	273	266	260	253	246
	2027 TC		519	494	472	451	432	412	392	373	353	334	314	301	294	287	280	273	266	259
	2028 TC		560	532	507	484	463	442	422	402	382	362	342	322	308	301	294	287	280	273
	2029 TC		438	574	545	519	496	474	453	433	412	392	371	350	330	316	309	301	294	287

Station	Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
	2030 TC																			
	2031 TC			449	588	559	532	508	486	465	444	423	401	380	359	338	324	316	309	302
	2032 TC				461	603	573	546	521	498	476	455	433	411	390	368	347	332	324	317
	2033 TC					472	618	587	559	534	511	488	466	444	422	400	377	355	340	332
	2034 TC						484	633	602	573	547	523	501	478	455	432	410	387	364	349
	2035 TC							496	649	617	588	561	536	513	490	466	443	420	396	373
	2036 TC								508	665	632	602	575	550	526	502	478	454	430	406
	2037 TC									521	682	648	617	589	564	539	515	490	466	441
	2038 TC										534	699	664	633	604	578	553	527	502	477
	2039 TC											547	717	681	648	619	592	566	541	515
	2040 TC												561	735	698	665	634	607	580	554
	2011 GH		1,309	1,271	1,233	1,195	1,158	1,120	1,082	1,044	1,007	969	931	893	856	818	780	742	704	667
	2012 GH		1,380	1,341	1,303	1,264	1,225	1,187	1,148	1,109	1,070	1,032	993	954	916	877	838	800	761	722
	2013 GH		1,454	1,415	1,375	1,335	1,296	1,256	1,216	1,177	1,137	1,097	1,058	1,018	978	939	899	859	819	780
	2014 GH		1,531	1,491	1,450	1,409	1,369	1,328	1,287	1,247	1,206	1,165	1,125	1,084	1,043	1,003	962	921	881	840
	2015 GH		1,611	1,570	1,528	1,486	1,445	1,403	1,361	1,320	1,278	1,236	1,194	1,153	1,111	1,069	1,028	986	944	903
	2016 GH		1,694	1,652	1,609	1,566	1,523	1,481	1,438	1,395	1,353	1,310	1,267	1,224	1,182	1,139	1,096	1,053	1,011	968
	2017 GH		1,817	1,777	1,693	1,649	1,605	1,562	1,518	1,474	1,430	1,386	1,343	1,299	1,255	1,211	1,167	1,124	1,080	1,036
	2018 GH		1,982	1,862	1,780	1,735	1,690	1,645	1,601	1,556	1,511	1,466	1,421	1,376	1,331	1,286	1,241	1,197	1,152	1,107
	2019 GH		2,154	2,032	1,909	1,825	1,779	1,733	1,687	1,641	1,595	1,549	1,503	1,457	1,410	1,364	1,318	1,272	1,226	1,180
	2020 GH		2,334	2,208	2,082	1,957	1,870	1,823	1,776	1,729	1,682	1,634	1,587	1,540	1,493	1,446	1,399	1,351	1,304	1,257
	2021 GH		2,521	2,392	2,263	2,134	2,006	1,917	1,869	1,820	1,772	1,724	1,675	1,627	1,579	1,530	1,482	1,434	1,385	1,337
	2022 GH		2,716	2,584	2,452	2,320	2,188	2,056	1,965	1,915	1,866	1,816	1,767	1,717	1,668	1,618	1,569	1,519	1,469	1,420
	2023 GH		2,920	2,784	2,649	2,513	2,378	2,243	2,107	2,014	1,963	1,912	1,862	1,811	1,760	1,709	1,659	1,608	1,557	1,506
	2024 GH		3,131	2,993	2,854	2,715	2,576	2,437	2,299	2,160	2,064	2,012	1,960	1,908	1,856	1,804	1,752	1,700	1,648	1,596
	2025 GH		3,358	3,210	3,067	2,925	2,783	2,641	2,498	2,356	2,214	2,116	2,063	2,009	1,956	1,903	1,849	1,796	1,742	1,689
	2026 GH		3,609	3,442	3,290	3,144	2,998	2,852	2,707	2,561	2,415	2,269	2,169	2,114	2,060	2,005	1,950	1,895	1,841	1,786
	2027 GH		3,886	3,699	3,528	3,372	3,223	3,073	2,924	2,774	2,625	2,475	2,326	2,223	2,167	2,111	2,055	1,999	1,943	1,887
	2028 GH		4,193	3,983	3,791	3,617	3,456	3,303	3,150	2,997	2,844	2,690	2,537	2,384	2,279	2,221	2,164	2,106	2,049	1,991
	2029 GH		4,082	4,298	4,082	3,886	3,707	3,543	3,386	3,229	3,072	2,915	2,758	2,601	2,444	2,336	2,277	2,218	2,159	2,100
	2030 GH			3,295	4,046	4,184	3,983	3,800	3,631	3,470	3,310	3,149	2,988	2,827	2,666	2,505	2,394	2,334	2,273	2,213
	2031 GH				3,377	4,516	4,289	4,083	3,895	3,722	3,557	3,392	3,227	3,062	2,897	2,732	2,567	2,454	2,392	2,330
	2032 GH					3,462	4,629	4,396	4,185	3,992	3,815	3,646	3,477	3,308	3,139	2,970	2,801	2,632	2,515	2,452
	2033 GH						3,548	4,744	4,506	4,289	4,092	3,911	3,737	3,564	3,391	3,217	3,044	2,871	2,697	2,578
	2034 GH							3,637	4,863	4,619	4,397	4,194	4,008	3,831	3,653	3,475	3,298	3,120	2,942	2,765
	2035 GH								3,728	4,984	4,734	4,507	4,299	4,109	3,927	3,744	3,562	3,380	3,198	3,016
	2036 GH									3,821	5,109	4,852	4,619	4,406	4,211	4,025	3,838	3,651	3,465	3,278
	2037 GH										3,917	5,237	4,974	4,735	4,517	4,317	4,125	3,934	3,743	3,551
	2038 GH											4,014	5,368	5,098	4,853	4,629	4,425	4,228	4,032	3,836
	2039 GH												4,115	5,502	5,226	4,974	4,745	4,535	4,334	4,133
	2040 GH													4,218	5,639	5,356	5,099	4,864	4,649	4,443
	2011 BR		297	288	279	271	262	253	244	235	226	218	209	200	191	182	173	165	156	147
	2012 BR		313	304	295	286	277	268	259	250	241	232	223	214	205	196	187	178	169	160
	2013 BR		331	321	312	303	293	284	275	266	256	247	238	229	219	210	201	191	182	173
	2014 BR		348	339	329	320	310	301	291	282	272	263	253	244	234	225	215	206	196	187
	2015 BR		367	357	347	338	328	318	308	299	289	279	269	260	250	240	230	221	211	201
	2016 BR		386	376	366	356	346	336	326	316	306	296	286	276	266	256	246	236	226	216
	2017 BR		406	396	385	375	365	355	344	334	324	314	303	293	283	273	263	252	242	232
	2018 BR		436	416	406	395	385	374	364	353	343	332	322	311	301	290	280	269	259	248
	2019 BR		476	447	426	416	405	394	383	373	362	351	340	330	319	308	297	287	276	265
	2020 BR		519	488	458	437	426	415	404	393	382	371	360	349	338	327	316	305	294	283

Station	Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
2021 BR	2021 BR	563	532	500	469	448	437	425	414	403	391	380	369	358	346	335	324	312	301	
2022 BR	2022 BR	609	577	545	513	481	459	448	436	424	413	401	390	378	367	355	343	332	320	
2023 BR	2023 BR	657	624	591	559	526	493	471	459	447	435	423	411	399	388	376	364	352	340	
2024 BR	2024 BR	707	673	640	606	573	539	505	482	470	458	446	434	422	409	397	385	373	361	
2025 BR	2025 BR	760	725	690	656	621	587	552	518	495	482	470	457	445	432	420	407	395	382	
2026 BR	2026 BR	818	779	743	708	672	637	603	566	531	507	494	481	469	456	443	430	417	405	
2027 BR	2027 BR	884	839	798	761	725	689	653	617	580	544	520	506	493	480	467	454	441	428	
2028 BR	2028 BR	957	906	860	818	781	743	706	669	632	595	558	533	519	506	492	479	465	452	
2029 BR	2029 BR	731	981	928	881	839	800	762	724	686	648	610	572	546	532	518	505	491	477	
2030 BR	2030 BR	749	1,005	952	903	860	820	781	742	703	664	625	586	566	559	545	531	517	503	
2031 BR	2031 BR	768	1,031	975	925	881	841	801	761	721	681	641	601	581	573	559	545	530	516	
2032 BR	2032 BR	787	1,056	1,000	949	903	862	821	780	739	698	657	616	588	573	558	543	528	513	
2033 BR	2033 BR	806	1,083	1,025	973	926	883	841	799	757	715	673	631	603	588	573	558	543	528	
2034 BR	2034 BR	827	1,110	1,050	997	949	905	862	819	776	733	690	647	618	603	588	573	558	543	
2035 BR	2035 BR		847	847	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025	
2036 BR	2036 BR		868	868	1,104	1,104	1,104	1,104	1,104	1,104	1,104	1,104	1,104	1,104	1,104	1,104	1,104	1,104	1,104	
2037 BR	2037 BR		890	890	1,195	1,195	1,195	1,195	1,195	1,195	1,195	1,195	1,195	1,195	1,195	1,195	1,195	1,195	1,195	
2038 BR	2038 BR				912	912	912	912	912	912	912	912	912	912	912	912	912	912	912	
2039 BR	2039 BR				935	935	935	935	935	935	935	935	935	935	935	935	935	935	935	
2040 BR	2040 BR																			
2011 GR	2011 GR	58	56	54	52	49	47	45	42	40	38	0	0	0	0	0	0	0	0	
2012 GR	2012 GR	62	60	58	55	53	51	48	46	44	41	39	0	0	0	0	0	0	0	
2013 GR	2013 GR	66	64	61	59	57	54	52	49	47	45	42	40	0	0	0	0	0	0	
2014 GR	2014 GR	70	68	65	63	61	58	56	53	51	48	46	43	41	0	0	0	0	0	
2015 GR	2015 GR	75	72	70	67	65	62	60	57	54	52	49	47	44	42	0	0	0	0	
2016 GR	2016 GR	79	77	74	71	69	66	64	61	58	56	53	51	0	0	0	0	0	0	
2017 GR	2017 GR	84	81	78	76	73	70	68	65	63	60	57	55	52	49	47	44	0	0	
2018 GR	2018 GR	90	86	83	80	78	75	72	70	67	64	61	59	56	53	50	48	45	0	
2019 GR	2019 GR	99	93	88	85	82	80	77	74	71	68	66	63	60	57	55	52	49	46	
2020 GR	2020 GR	108	102	95	90	87	84	82	79	76	73	70	67	64	62	59	56	53	50	
2021 GR	2021 GR	118	111	104	97	92	90	87	84	81	78	75	72	69	66	63	60	57	54	
2022 GR	2022 GR	128	121	114	107	100	95	92	89	86	83	80	77	74	71	68	65	62	59	
2023 GR	2023 GR	139	131	124	117	110	102	97	94	91	88	85	82	79	76	72	69	66	63	
2024 GR	2024 GR	150	142	135	127	120	112	105	100	96	93	90	87	84	81	77	74	71	68	
2025 GR	2025 GR	161	153	146	138	130	123	115	107	102	99	96	92	89	86	83	79	76	73	
2026 GR	2026 GR	174	165	157	149	141	134	126	118	110	105	101	98	95	91	88	85	81	78	
2027 GR	2027 GR	188	178	169	161	153	145	137	129	121	113	107	104	100	97	94	90	87	83	
2028 GR	2028 GR	204	193	183	173	165	157	149	140	132	124	116	110	106	103	99	96	92	89	
2029 GR	2029 GR	146	209	197	187	178	169	161	152	144	135	127	119	113	109	105	102	98	95	
2030 GR	2030 GR	150	150	214	202	192	182	173	165	156	148	139	130	122	115	112	108	104	101	
2031 GR	2031 GR	154	154	219	207	197	187	178	169	160	151	142	133	125	118	115	111	107	104	
2032 GR	2032 GR			157	157	225	212	201	191	182	173	164	155	146	137	128	121	117	114	
2033 GR	2033 GR					161	161	218	206	196	187	177	168	159	150	140	131	124	120	
2034 GR	2034 GR						165	236	223	212	201	191	182	172	163	153	144	134	127	
2035 GR	2035 GR							169	242	229	217	206	196	186	177	167	157	147	138	
2036 GR	2036 GR						174	248	235	222	211	201	191	181	171	161	151	141	131	
2037 GR	2037 GR							182	254	241	228	217	206	196	186	176	166	156	146	
2038 GR	2038 GR								182	261	248	235	222	211	201	191	181	171	161	
2039 GR	2039 GR									187	267	253	239	228	217	206	195	184	173	
2040 GR	2040 GR										192	274	259	245	233	222	211	200	189	
2011 TY	2011 TY		58	56	53	51	46	43	41	0	0	0	0	0	0	0	0	0	0	

Station	Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
	2012 TY		62	60	57	55	52	49	47	44	42	0	0	0	0	0	0	0	0	0
	2013 TY		66	64	61	59	56	53	51	48	46	43	0	0	0	0	0	0	0	0
	2014 TY		71	68	65	63	60	57	55	52	49	47	44	0	0	0	0	0	0	0
	2015 TY		75	72	70	67	64	61	59	56	53	51	48	45	0	0	0	0	0	0
	2016 TY		80	77	74	71	69	66	63	60	57	55	52	49	46	0	0	0	0	0
	2017 TY		85	82	79	76	73	70	67	65	62	59	56	53	50	47	0	0	0	0
	2018 TY		92	87	84	81	78	75	72	69	66	63	60	57	54	52	49	0	0	0
	2019 TY		101	94	89	86	83	80	77	74	71	68	65	62	59	56	53	50	0	0
	2020 TY		110	103	96	91	88	85	82	79	76	73	70	66	63	60	57	54	51	0
	2021 TY		120	113	106	99	93	90	87	84	81	78	74	71	68	65	62	59	55	52
	2022 TY		130	123	116	108	101	96	93	89	86	83	80	76	73	70	67	63	60	57
	2023 TY		141	134	126	119	111	104	98	95	92	88	85	82	78	75	72	68	65	62
	2024 TY		152	145	137	129	122	114	106	101	97	94	90	87	84	80	77	73	70	67
	2025 TY		164	156	148	140	133	125	117	109	103	100	96	93	89	86	82	79	75	72
	2026 TY		177	168	160	152	144	136	128	120	112	106	102	99	95	91	88	84	81	77
	2027 TY		192	182	172	164	156	148	139	131	123	114	108	105	101	97	94	90	86	83
	2028 TY		208	196	186	177	168	160	151	143	134	126	117	111	107	104	100	96	92	89
	2029 TY		146	213	201	191	181	172	164	155	146	138	129	120	114	110	106	102	98	95
	2030 TY			150	218	206	196	186	177	168	159	150	141	132	123	117	113	109	105	101
	2031 TY			154		224	212	201	190	181	172	163	154	145	135	126	120	116	112	107
	2032 TY					157	229	217	206	195	186	176	167	158	148	139	129	123	118	114
	2033 TY						161	235	222	211	200	190	181	171	161	152	142	133	126	121
	2034 TY							165	241	228	216	205	195	185	175	165	156	146	136	129
	2035 TY								169	247	234	221	210	200	190	180	170	160	149	139
	2036 TY									174	253	239	227	215	205	195	184	174	164	153
	2037 TY										178	259	245	233	221	210	199	189	178	168
	2038 TY											182	266	252	238	226	215	204	194	183
	2039 TY												187	273	258	244	232	221	210	198
	2040 TY													192	279	264	250	238	226	215

Station	Unit	Capacity	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
BR	BR1	101	1,867	1,770	1,678	1,591	1,510	1,434	1,361	1,290	1,219	1,149	1,080	1,013	946
BR	BR2	167	3,087	2,926	2,774	2,631	2,496	2,371	2,251	2,132	2,015	1,900	1,787	1,675	1,564
BR	BR3	416	7,689	7,289	6,910	6,553	6,218	5,906	5,607	5,312	5,021	4,733	4,450	4,171	3,897
CR	CR4	155	1,421	1,269	1,125	988	859	738	623	511	402	297	194	95	0
CR	CR5	168	1,540	1,375	1,219	1,071	931	800	675	554	436	322	211	103	0
CR	CR6	240	2,200	1,965	1,741	1,529	1,330	1,143	965	792	623	459	301	148	0
GH	GH1	475	14,098	13,375	12,686	12,033	11,415	10,834	10,291	9,770	9,256	8,749	8,249	7,755	7,269
GH	GH2	484	14,365	13,628	12,927	12,261	11,631	11,039	10,486	9,956	9,432	8,915	8,405	7,902	7,407
GH	GH3	480	14,246	13,516	12,820	12,159	11,535	10,948	10,399	9,873	9,354	8,841	8,336	7,837	7,346
GH	GH4	479	14,217	13,488	12,793	12,134	11,511	10,925	10,378	9,853	9,334	8,823	8,318	7,821	7,331
GR	GR3	68	922	860	801	745	692	643	595	549	504	459	415	373	331
GR	GR4	95	1,288	1,201	1,118	1,040	967	898	832	767	704	641	580	521	462
MC	MC1	303	7,053	6,531	6,033	5,559	5,110	4,687	4,290	3,910	3,538	3,173	2,817	2,468	2,128
MC	MC2	301	7,007	6,488	5,993	5,523	5,077	4,656	4,262	3,884	3,515	3,152	2,798	2,452	2,114
MC	MC3	391	9,102	8,428	7,785	7,174	6,595	6,048	5,536	5,046	4,565	4,095	3,635	3,185	2,746
MC	MC4	477	11,104	10,282	9,498	8,752	8,045	7,379	6,754	6,156	5,570	4,996	4,434	3,886	3,350
TC	TC1	383	3,222	3,101	2,986	2,878	2,777	2,652	2,536	2,425	2,315	2,206	2,099	1,993	1,888
TC	TC2	549	4,618	4,445	4,280	4,125	3,980	3,802	3,636	3,476	3,319	3,163	3,009	2,857	2,706
TY	TY3	71	2,117	1,962	1,814	1,675	1,543	1,420	1,303	1,187	1,074	964	855	749	646

2.50%

2011 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2012 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2013 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2014 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2018 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2019 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2020 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2021 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2022 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2023 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2025 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2026 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2027 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2028 CR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2029 CR	264	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2030 CR	287	271	0	0	0	0	0	0	0	0	0	0	0	0	0
2031 CR	311	294	278	0	0	0	0	0	0	0	0	0	0	0	0
2032 CR	336	319	302	285	0	0	0	0	0	0	0	0	0	0	0
2033 CR	363	345	327	309	292	0	0	0	0	0	0	0	0	0	0
2034 CR	390	372	353	335	317	299	0	0	0	0	0	0	0	0	0
2035 CR	418	400	381	362	344	325	306	0	0	0	0	0	0	0	0
2036 CR	456	429	410	390	371	352	333	314	0	0	0	0	0	0	0
2037 CR	505	468	439	420	400	381	361	342	322	0	0	0	0	0	0
2038 CR	556	518	480	450	430	410	390	370	350	330	310	290	270	250	230

Station	Unit	Capacity	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
	2039 CR		609	570	531	492	462	441	421	400	379	359	338	0	0
	2040 CR		665	624	584	544	504	473	452	431	410	389	368	347	0
	2011 MC		0	0	0	0	0	0	0	0	0	0	0	0	0
	2012 MC		0	0	0	0	0	0	0	0	0	0	0	0	0
	2013 MC		0	0	0	0	0	0	0	0	0	0	0	0	0
	2014 MC		0	0	0	0	0	0	0	0	0	0	0	0	0
	2015 MC		0	0	0	0	0	0	0	0	0	0	0	0	0
	2016 MC		0	0	0	0	0	0	0	0	0	0	0	0	0
	2017 MC		0	0	0	0	0	0	0	0	0	0	0	0	0
	2018 MC		0	0	0	0	0	0	0	0	0	0	0	0	0
	2019 MC		0	0	0	0	0	0	0	0	0	0	0	0	0
	2020 MC		0	0	0	0	0	0	0	0	0	0	0	0	0
	2021 MC		0	0	0	0	0	0	0	0	0	0	0	0	0
	2022 MC		858	0	0	0	0	0	0	0	0	0	0	0	0
	2023 MC		932	879	0	0	0	0	0	0	0	0	0	0	0
	2024 MC		1,010	956	901	0	0	0	0	0	0	0	0	0	0
	2025 MC		1,091	1,035	980	924	0	0	0	0	0	0	0	0	0
	2026 MC		1,176	1,119	1,061	1,004	947	0	0	0	0	0	0	0	0
	2027 MC		1,264	1,205	1,147	1,088	1,029	970	0	0	0	0	0	0	0
	2028 MC		1,356	1,296	1,235	1,175	1,115	1,055	995	0	0	0	0	0	0
	2029 MC		1,451	1,390	1,328	1,266	1,205	1,143	1,081	1,020	0	0	0	0	0
	2030 MC		1,551	1,488	1,424	1,361	1,298	1,235	1,172	1,108	1,045	0	0	0	0
	2031 MC		1,655	1,590	1,525	1,460	1,395	1,330	1,266	1,201	1,136	1,071	0	0	0
	2032 MC		1,762	1,696	1,629	1,563	1,497	1,430	1,364	1,297	1,231	1,164	1,098	0	0
	2033 MC		1,874	1,806	1,738	1,670	1,602	1,534	1,466	1,398	1,330	1,262	1,194	1,125	0
	2034 MC		1,991	1,921	1,852	1,782	1,712	1,642	1,572	1,503	1,433	1,363	1,293	1,223	1,154
	2035 MC		2,154	2,041	1,969	1,898	1,826	1,755	1,683	1,612	1,540	1,469	1,397	1,325	1,254
	2036 MC		2,366	2,208	2,092	2,019	1,945	1,872	1,799	1,725	1,652	1,579	1,505	1,432	1,359
	2037 MC		2,587	2,425	2,263	2,144	2,069	1,994	1,919	1,844	1,768	1,693	1,618	1,543	1,468
	2038 MC		2,818	2,652	2,486	2,319	2,198	2,121	2,044	1,967	1,890	1,813	1,736	1,659	1,581
	2039 MC		3,059	2,888	2,718	2,548	2,377	2,253	2,174	2,095	2,016	1,937	1,858	1,779	1,700
	2040 MC		3,310	3,135	2,961	2,786	2,611	2,437	2,309	2,228	2,147	2,066	1,985	1,904	1,823
	2011 TC		96	91	87	82	77	0	0	0	0	0	0	0	0
	2012 TC		103	98	94	89	84	79	0	0	0	0	0	0	0
	2013 TC		111	106	101	96	91	86	81	0	0	0	0	0	0
	2014 TC		118	113	108	103	98	93	88	83	0	0	0	0	0
	2015 TC		126	121	116	111	106	101	96	91	85	0	0	0	0
	2016 TC		135	130	124	119	114	109	103	98	93	88	0	0	0
	2017 TC		144	138	133	127	122	117	111	106	101	95	90	0	0
	2018 TC		153	147	142	136	131	125	120	114	109	103	98	92	0
	2019 TC		162	156	151	145	139	134	128	123	117	111	106	100	94
	2020 TC		172	166	160	155	149	143	137	131	126	120	114	108	102
	2021 TC		182	176	170	164	158	152	147	141	135	129	123	117	111
	2022 TC		193	187	181	175	168	162	156	150	144	138	132	126	120
	2023 TC		204	198	191	185	179	173	166	160	154	148	141	135	129
	2024 TC		215	209	203	196	190	183	177	171	164	158	151	145	139
	2025 TC		227	221	214	208	201	194	188	181	175	168	162	155	149
	2026 TC		240	233	226	219	213	206	199	193	186	179	173	166	159
	2027 TC		253	246	239	232	225	218	211	204	197	191	184	177	170
	2028 TC		266	259	252	245	238	231	224	217	209	202	195	188	181
	2029 TC		280	273	265	258	251	244	236	229	222	215	207	200	193

Station	Unit	Capacity	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
2030 TC			294	287	279	272	265	257	250	242	235	227	220	213	205
2031 TC			309	302	294	286	279	271	264	256	248	241	233	226	218
2032 TC			325	317	309	301	293	286	278	270	262	255	247	239	231
2033 TC			341	333	325	317	309	301	293	285	277	269	261	253	245
2034 TC			357	349	341	333	325	317	308	300	292	284	276	267	259
2035 TC			382	366	358	350	341	333	324	316	308	299	291	283	274
2036 TC			417	392	376	367	358	350	341	333	324	315	307	298	290
2037 TC			452	427	402	385	376	367	358	350	341	332	323	314	306
2038 TC			489	463	438	412	395	385	376	367	358	349	340	331	322
2039 TC			528	501	475	449	422	404	395	386	377	367	358	349	340
2040 TC			568	541	514	487	460	433	414	405	396	386	377	367	358
2011 GH			629	0	0	0	0	0	0	0	0	0	0	0	0
2012 GH			683	645	0	0	0	0	0	0	0	0	0	0	0
2013 GH			740	700	661	0	0	0	0	0	0	0	0	0	0
2014 GH			799	759	718	677	0	0	0	0	0	0	0	0	0
2015 GH			861	819	778	736	694	0	0	0	0	0	0	0	0
2016 GH			925	882	840	797	754	712	0	0	0	0	0	0	0
2017 GH			992	948	905	861	817	773	729	0	0	0	0	0	0
2018 GH			1,062	1,017	972	927	882	837	792	748	0	0	0	0	0
2019 GH			1,134	1,088	1,042	996	950	904	858	812	766	0	0	0	0
2020 GH			1,210	1,163	1,116	1,068	1,021	974	927	880	833	785	0	0	0
2021 GH			1,289	1,240	1,192	1,143	1,095	1,047	998	950	902	853	805	0	0
2022 GH			1,370	1,321	1,271	1,222	1,172	1,123	1,073	1,023	974	924	875	825	0
2023 GH			1,454	1,405	1,354	1,303	1,252	1,201	1,151	1,100	1,049	998	947	897	846
2024 GH			1,544	1,492	1,440	1,388	1,336	1,283	1,231	1,179	1,127	1,075	1,023	971	919
2025 GH			1,636	1,582	1,529	1,476	1,422	1,369	1,316	1,262	1,209	1,155	1,102	1,049	995
2026 GH			1,731	1,677	1,622	1,567	1,513	1,458	1,403	1,348	1,294	1,239	1,184	1,130	1,075
2027 GH			1,831	1,775	1,719	1,662	1,606	1,550	1,494	1,438	1,382	1,326	1,270	1,214	1,158
2028 GH			1,934	1,876	1,819	1,762	1,704	1,647	1,589	1,532	1,474	1,417	1,359	1,302	1,244
2029 GH			2,041	1,982	1,923	1,864	1,806	1,747	1,688	1,629	1,570	1,511	1,452	1,393	1,334
2030 GH			2,153	2,092	2,032	1,971	1,911	1,851	1,790	1,730	1,670	1,609	1,549	1,488	1,428
2031 GH			2,268	2,206	2,144	2,083	2,021	1,959	1,897	1,835	1,773	1,711	1,649	1,588	1,526
2032 GH			2,388	2,325	2,262	2,198	2,135	2,071	2,008	1,944	1,881	1,818	1,754	1,691	1,627
2033 GH			2,513	2,448	2,383	2,318	2,253	2,188	2,123	2,058	1,993	1,928	1,863	1,798	1,733
2034 GH			2,643	2,576	2,509	2,443	2,376	2,309	2,243	2,176	2,109	2,043	1,976	1,910	1,843
2035 GH			2,834	2,709	2,640	2,572	2,504	2,435	2,367	2,299	2,231	2,162	2,094	2,026	1,957
2036 GH			3,091	2,905	2,776	2,706	2,636	2,566	2,496	2,426	2,356	2,286	2,216	2,146	2,076
2037 GH			3,360	3,169	2,977	2,846	2,774	2,702	2,630	2,559	2,487	2,415	2,343	2,272	2,200
2038 GH			3,640	3,444	3,248	3,052	2,917	2,843	2,770	2,696	2,623	2,549	2,476	2,402	2,328
2039 GH			3,932	3,731	3,530	3,329	3,128	2,990	2,914	2,839	2,764	2,688	2,613	2,537	2,462
2040 GH			4,236	4,030	3,824	3,618	3,412	3,206	3,065	2,987	2,910	2,833	2,755	2,678	2,601
2011 BR			0	0	0	0	0	0	0	0	0	0	0	0	0
2012 BR			151	0	0	0	0	0	0	0	0	0	0	0	0
2013 BR			164	154	0	0	0	0	0	0	0	0	0	0	0
2014 BR			177	168	158	0	0	0	0	0	0	0	0	0	0
2015 BR			191	182	172	162	0	0	0	0	0	0	0	0	0
2016 BR			206	196	186	176	166	0	0	0	0	0	0	0	0
2017 BR			222	211	201	191	181	170	0	0	0	0	0	0	0
2018 BR			238	227	217	206	196	185	175	0	0	0	0	0	0
2019 BR			254	244	233	222	211	201	190	179	0	0	0	0	0
2020 BR			272	261	250	239	228	217	206	195	183	0	0	0	0

Station	Unit	Capacity	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
2021 BR	290	278	267	256	245	233	222	211	199	188	0	0	0	0	0
2022 BR	309	297	285	274	262	251	239	228	216	204	193	0	0	0	0
2023 BR	328	316	304	293	281	269	257	245	233	221	209	198	0	0	0
2024 BR	349	336	324	312	300	288	276	263	251	239	227	215	203	203	203
2025 BR	370	357	345	332	320	307	295	282	270	257	245	233	220	220	220
2026 BR	392	379	366	353	341	328	315	302	290	277	264	251	238	238	238
2027 BR	415	402	388	375	362	349	336	323	310	297	284	271	257	257	257
2028 BR	438	425	412	398	385	371	358	344	331	318	304	291	277	277	277
2029 BR	463	449	436	422	408	394	381	367	353	339	326	312	298	298	298
2030 BR	489	475	461	447	432	418	404	390	376	362	348	334	320	320	320
2031 BR	516	501	487	472	458	443	429	414	400	385	371	356	342	342	342
2032 BR	543	529	514	499	484	469	454	440	425	410	395	380	365	365	365
2033 BR	572	557	542	527	511	496	481	466	451	435	420	405	390	390	390
2034 BR	602	586	571	555	540	524	509	493	477	462	446	431	415	415	415
2035 BR	633	617	601	585	569	553	537	521	505	489	473	457	441	441	441
2036 BR	680	649	632	616	600	583	567	551	534	518	502	485	469	469	469
2037 BR	743	697	665	648	632	615	598	581	564	548	531	514	497	497	497
2038 BR	809	762	714	682	664	647	630	613	596	579	561	544	527	527	527
2039 BR	878	829	781	732	699	681	663	646	628	611	593	575	558	558	558
2040 BR	950	900	850	800	750	716	698	680	662	644	626	608	590	590	590
2011 GR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2012 GR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2013 GR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2014 GR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015 GR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016 GR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017 GR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2018 GR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2019 GR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2020 GR	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2021 GR	51	48	0	0	0	0	0	0	0	0	0	0	0	0	0
2022 GR	56	53	50	0	0	0	0	0	0	0	0	0	0	0	0
2023 GR	60	57	54	51	0	0	0	0	0	0	0	0	0	0	0
2024 GR	65	62	59	55	52	0	0	0	0	0	0	0	0	0	0
2025 GR	70	66	63	60	57	54	0	0	0	0	0	0	0	0	0
2026 GR	75	71	68	65	61	58	55	0	0	0	0	0	0	0	0
2027 GR	80	77	73	70	66	63	60	56	0	0	0	0	0	0	0
2028 GR	86	82	79	75	72	68	65	61	58	0	0	0	0	0	0
2029 GR	91	88	84	81	77	73	70	66	63	59	0	0	0	0	0
2030 GR	97	93	90	86	83	79	75	72	68	64	61	0	0	0	0
2031 GR	103	100	96	92	88	85	81	77	73	70	66	62	0	0	0
2032 GR	110	106	102	98	94	91	87	83	79	75	71	67	64	64	64
2033 GR	116	113	109	105	101	97	93	89	85	81	77	73	69	69	69
2034 GR	123	119	115	111	107	103	99	95	91	87	83	79	75	75	75
2035 GR	131	126	122	118	114	110	106	102	98	93	89	85	81	81	81
2036 GR	141	134	130	125	121	117	113	108	104	100	96	91	87	87	87
2037 GR	155	145	137	133	129	124	120	115	111	107	102	98	94	94	94
2038 GR	169	159	148	141	136	132	127	123	118	114	109	105	101	101	101
2039 GR	184	173	163	152	144	140	135	130	126	121	117	112	108	108	108
2040 GR	200	189	178	167	156	148	143	138	134	129	124	120	115	115	115
2011 TY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Station	Unit	Capacity	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
	2012 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2013 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2014 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2015 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2016 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2017 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2018 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2019 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2020 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2021 TY		0	0	0	0	0	0	0	0	0	0	0	0	0
	2022 TY		54	0	0	0	0	0	0	0	0	0	0	0	0
	2023 TY		58	55	0	0	0	0	0	0	0	0	0	0	0
	2024 TY		63	60	56	0	0	0	0	0	0	0	0	0	0
	2025 TY		68	65	61	58	0	0	0	0	0	0	0	0	0
	2026 TY		73	70	66	63	59	0	0	0	0	0	0	0	0
	2027 TY		79	75	72	68	64	61	0	0	0	0	0	0	0
	2028 TY		85	81	77	73	70	66	62	0	0	0	0	0	0
	2029 TY		91	87	83	79	75	71	68	64	0	0	0	0	0
	2030 TY		97	93	89	85	81	77	73	69	65	0	0	0	0
	2031 TY		103	99	95	91	87	83	79	75	71	67	0	0	0
	2032 TY		110	106	102	98	94	89	85	81	77	73	69	0	0
	2033 TY		117	113	109	104	100	96	92	87	83	79	75	70	0
	2034 TY		124	120	116	111	107	103	98	94	90	85	81	76	72
	2035 TY		132	128	123	119	114	110	105	101	96	92	87	83	78
	2036 TY		143	135	131	126	122	117	112	108	103	99	94	89	85
	2037 TY		157	146	139	134	129	125	120	115	111	106	101	96	92
	2038 TY		172	161	150	142	137	133	128	123	118	113	108	104	99
	2039 TY		187	176	165	154	146	141	136	131	126	121	116	111	106
	2040 TY		203	192	180	169	158	149	144	139	134	129	124	119	114

\$000

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
BR	BR1	101	0	0	0	0	0	441	454	590	616	785	787
BR	BR2	167	0	0	0	0	0	729	751	975	1,018	1,299	1,301
BR	BR3	416	0	0	0	0	0	1,816	1,870	2,430	2,536	3,235	3,242
CR	CR4	155	258	840	1,124	1,095	1,216	1,960	1,949	1,644	1,927	2,572	2,560
CR	CR5	168	279	910	1,219	1,187	1,318	2,124	2,112	1,782	2,089	2,788	2,774
CR	CR6	240	399	1,300	1,741	1,696	1,882	5,221	5,152	4,566	4,899	5,799	5,682
GH	GH1	475	0	0	0	0	0	5,620	5,988	6,566	7,371	8,085	8,761
GH	GH2	484	0	0	0	0	0	5,727	6,101	6,691	7,510	8,238	8,927
GH	GH3	480	0	0	0	0	0	5,680	6,051	6,635	7,448	8,170	8,854
GH	GH4	479	0	0	0	0	0	5,668	6,038	6,622	7,433	8,153	8,835
GR	GR3	68											
GR	GR4	95											
MC	MC1	303											
MC	MC2	301											
MC	MC3	391											
MC	MC4	477											
TC	TC1	383	0	0	0	0	0	1,965	2,066	2,172	2,216	2,260	2,305
TC	TC2	549	0	0	0	0	0	2,817	2,961	3,114	3,176	3,240	3,304
TY	TY3	71											
	BR Landfill Phase 2 Savings		0	0	0	0	0	0	0	828	908	1,960	1,870
	BR Landfill Phase 3 Savings		0	0	0	0	0	0	0	0	0	0	0
	BR Landfill O&M Savings		0	0	0	0	0	2,985	3,075	3,167	3,262	3,360	3,461
	CR Landfill Capital Savings		936	3,049	4,083	3,979	4,416	4,938	4,772	3,579	4,464	6,617	6,353
	CR Landfill O&M Savings		0	0	0	0	0	2,181	2,307	2,393	2,537	2,726	2,944
	CR6 Stator Rewind Savings		0	0	0	0	0	2,187	2,135	2,020	1,914	1,816	1,719
	GH Landfill Capital Savings		0	0	0	0	0	61	188	1,083	2,805	4,044	4,399
	GH Landfill O&M Savings		0	0	0	0	0	22,633	23,991	25,431	26,957	28,601	30,979
	TC Landfill Capital Savings		0	0	0	0	0	0	0	0	0	0	0
	TC Landfill O&M Savings		0	0	0	0	0	4,782	5,027	5,286	5,392	5,500	5,610

Station	Unit	Capacity	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
BR	BR1	101	789	1,035	1,054	1,357	1,337	1,319	1,301	1,285	1,267	1,122	410
BR	BR2	167	1,305	1,711	1,743	2,245	2,211	2,180	2,151	2,124	2,095	1,855	678
BR	BR3	416	3,252	4,261	4,342	5,591	5,508	5,431	5,359	5,291	5,219	4,620	1,688
CR	CR4	155	2,096	2,059	2,073	1,531	1,768	1,810	1,869	1,932	2,000	1,861	1,810
CR	CR5	168	2,272	2,232	2,247	1,659	1,916	1,962	2,025	2,094	2,168	2,017	1,962
CR	CR6	240	4,867	4,712	4,637	3,700	3,969	3,960	4,000	4,047	4,101	3,833	3,704
GH	GH1	475	9,219	9,707	10,790	12,508	14,281	15,439	15,604	16,273	16,860	17,332	17,856
GH	GH2	484	9,394	9,891	10,994	12,745	14,551	15,732	15,900	16,581	17,180	17,660	18,195
GH	GH3	480	9,316	9,809	10,904	12,640	14,431	15,602	15,769	16,444	17,038	17,514	18,044
GH	GH4	479	9,297	9,789	10,881	12,614	14,401	15,569	15,736	16,410	17,002	17,478	18,007
GR	GR3	68											
GR	GR4	95											
MC	MC1	303											
MC	MC2	301											
MC	MC3	391											
MC	MC4	477											
TC	TC1	383	2,351	2,398	2,446	2,495	2,545	2,596	2,648	5,363	8,239	8,294	12,354
TC	TC2	549	3,371	3,438	3,507	3,577	3,648	3,721	3,796	7,687	11,809	11,888	17,709
TY	TY3	71											
	BR Landfill Phase 2 Savings		1,782	1,697	1,613	1,531	1,451	1,372	1,294	1,215	1,123	156	138
	BR Landfill Phase 3 Savings		0	1,638	1,745	3,767	3,594	3,426	3,261	3,101	2,943	2,789	2,638
	BR Landfill O&M Savings		3,564	3,671	3,781	3,895	4,012	4,132	4,256	4,384	4,515	4,651	
	CR Landfill Capital Savings		4,493	4,170	4,023	1,844	2,496	2,513	2,483	2,455	2,429	1,631	1,345
	CR Landfill O&M Savings		3,121	3,308	3,507	3,717	3,925	4,061	4,305	4,563	4,837	5,128	5,230
	CR6 Stator Rewind Savings		1,621	1,524	1,427	1,329	1,232	1,158	1,106	1,055	1,004	952	901
	GH Landfill Capital Savings		4,388	4,387	6,672	11,397	16,206	18,397	18,341	18,358	17,892	16,784	15,709
	GH Landfill O&M Savings		32,838	34,808	36,897	39,110	41,457	43,944	44,668	47,348	50,189	53,201	56,393
	TC Landfill Capital Savings		0	0	0	0	0	0	0	6,478	13,344	13,344	23,088
	TC Landfill O&M Savings		5,722	5,836	5,953	6,072	6,194	6,318	6,444	6,573	6,704	6,838	6,975

Station	Unit	Capacity	2033	2034	2035	2036	2037	2038	2039	2040
BR	BR1	101	385	360	331	54	46	38	30	23
BR	BR2	167	636	595	547	89	76	63	50	39
BR	BR3	416	1,585	1,482	1,363	222	189	157	124	97
CR	CR4	155	1,778	1,748	1,719	1,692	1,708	1,727	1,747	1,771
CR	CR5	168	1,927	1,895	1,864	1,834	1,851	1,872	1,894	1,919
CR	CR6	240	3,602	2,777	2,662	2,620	2,645	2,674	2,705	2,742
GH	GH1	475	18,548	19,372	20,254	21,186	21,692	2,492	1,854	1,700
GH	GH2	484	18,899	19,739	20,637	21,587	22,103	2,539	1,889	1,733
GH	GH3	480	18,743	19,576	20,467	21,409	21,921	2,518	1,874	1,718
GH	GH4	479	18,704	19,535	20,424	21,364	21,875	2,513	1,870	1,715
GR	GR3	68								
GR	GR4	95								
MC	MC1	303								
MC	MC2	301								
MC	MC3	391								
MC	MC4	477								
TC	TC1	383	12,003	11,666	11,343	11,031	10,731	10,442	10,162	9,886
TC	TC2	549	17,206	16,723	16,259	15,812	15,382	14,967	14,567	14,170
TY	TY3	71								
	BR Landfill Phase 2 Savings		120	101	83	64	46	28	9	0
	BR Landfill Phase 3 Savings		2,487	2,336	2,158	301	265	230	194	159
	BR Landfill O&M Savings									
	CR Landfill Capital Savings		1,123	908	695	485	430	384	338	303
	CR Landfill O&M Savings		5,335	5,441	5,550	5,661	5,774	5,890	6,008	6,128
	CR6 Stator Rewind Savings		850	70	0	0	0	0	0	0
	GH Landfill Capital Savings		15,118	14,860	14,617	14,352	12,126	9,906	7,329	6,705
	GH Landfill O&M Savings		59,776	63,363	67,165	71,194	75,466	155	158	161
	TC Landfill Capital Savings		22,094	21,132	20,199	19,293	18,412	17,554	16,717	15,883
	TC Landfill O&M Savings		7,115	7,257	7,402	7,550	7,701	7,855	8,012	8,172

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
BR	BR1	101	0	0	0	553	743	703	668	635	606	577	548	519	491	462	433	413	403	393
BR	BR2	167	0	0	0	915	1,228	1,163	1,104	1,050	1,002	954	907	859	811	764	716	684	666	649
BR	BR3	416	0	0	0	2,279	3,060	2,897	2,749	2,616	2,496	2,377	2,258	2,140	2,021	1,902	1,784	1,703	1,660	1,617
CR	CR4	155	0	0	0	980	1,582	1,494	1,413	1,339	1,269	1,201	1,132	1,064	996	927	859	806	770	735
CR	CR5	168	0	0	0	1,062	1,715	1,619	1,532	1,451	1,376	1,302	1,227	1,153	1,079	1,005	931	874	835	796
CR	CR6	240	0	0	0	1,518	2,449	2,313	2,188	2,073	1,966	1,860	1,754	1,647	1,541	1,435	1,329	1,249	1,193	1,137
GH	GH1	475	0	0	0	1,462	1,954	1,856	1,767	1,686	1,611	1,540	1,468	1,397	1,325	1,254	1,183	1,111	1,062	1,035
GH	GH2	484	0	0	0	1,489	1,991	1,891	1,800	1,718	1,642	1,569	1,496	1,423	1,350	1,278	1,205	1,132	1,082	1,055
GH	GH3	480	0	0	0	1,477	1,975	1,876	1,786	1,703	1,628	1,556	1,484	1,411	1,339	1,267	1,195	1,123	1,073	1,046
GH	GH4	479	0	0	0	1,474	1,971	1,872	1,782	1,700	1,625	1,553	1,481	1,409	1,337	1,265	1,193	1,121	1,071	1,044
GR	GR3	68	0	0	0	586	837	792	751	713	679	645	611	577	544	510	476	452	438	423
GR	GR4	95	0	0	0	819	1,169	1,106	1,049	996	948	901	854	807	759	712	665	631	611	591
MC	MC1	303	0	0	0	1,215	1,774	1,682	1,598	1,521	1,449	1,380	1,311	1,242	1,173	1,103	1,034	965	915	882
MC	MC2	301	0	0	0	1,207	1,762	1,671	1,588	1,511	1,440	1,371	1,302	1,234	1,165	1,096	1,027	959	908	877
MC	MC3	391	0	0	0	1,568	2,289	2,171	2,063	1,963	1,870	1,781	1,692	1,602	1,513	1,424	1,335	1,245	1,180	1,139
MC	MC4	477	0	0	0	1,913	2,792	2,648	2,516	2,394	2,281	2,172	2,064	1,955	1,846	1,737	1,628	1,519	1,440	1,389
TC	TC1	383	0	0	0	770	1,008	958	912	871	833	797	760	724	688	652	616	579	555	542
TC	TC2	549	0	0	0	1,104	1,445	1,373	1,307	1,248	1,194	1,142	1,090	1,038	986	934	882	830	795	777
TY	TY3	71	0	0	0	586	837	792	751	713	679	645	611	577	544	510	476	452	438	423
	BRWATER		0	0	0	3,747	5,032	4,763	4,521	4,302	4,104	3,908	3,713	3,518	3,323	3,128	2,933	2,800	2,729	2,659
	CRWATER		0	0	0	3,560	5,746	5,427	5,134	4,863	4,611	4,362	4,113	3,865	3,616	3,367	3,118	2,929	2,798	2,668
	MCWATER		0	0	0	5,902	8,617	8,173	7,765	7,389	7,040	6,704	6,368	6,032	5,696	5,361	5,025	4,689	4,443	4,287
	TCWATER		0	0	0	1,874	2,453	2,331	2,220	2,119	2,026	1,938	1,850	1,762	1,674	1,586	1,498	1,410	1,350	1,319
	GHWATER		0	0	0	5,902	7,892	7,495	7,135	6,806	6,505	6,217	5,928	5,640	5,352	5,063	4,775	4,487	4,288	4,180
	GRWATER		0	0	0	1,405	2,006	1,898	1,799	1,709	1,627	1,546	1,465	1,384	1,303	1,222	1,141	1,083	1,049	1,015

\$000

Station	Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
BR	BR1	101	382	372	361	351	340	330	320	309	299	288	278	267	257	247	236	226	215	205
BR	BR2	167	632	615	597	580	563	546	528	511	494	477	459	442	425	408	390	373	356	339
BR	BR3	416	1,574	1,531	1,488	1,445	1,402	1,359	1,316	1,273	1,230	1,187	1,144	1,101	1,058	1,016	973	930	887	844
CR	CR4	155	699	663	627	591	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5	168	757	718	679	640	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6	240	1,082	1,026	970	915	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GH	GH1	475	1,008	982	955	928	901	875	848	821	794	767	741	714	687	660	634	607	580	553
GH	GH2	484	1,028	1,000	973	946	918	891	864	837	809	782	755	727	700	673	646	618	591	564
GH	GH3	480	1,019	992	965	938	911	884	857	830	803	776	748	721	694	667	640	613	586	559
GH	GH4	479	1,017	990	963	936	909	882	855	828	801	774	747	720	693	666	639	612	585	558
GR	GR3	68	409	395	380	366	352	337	323	309	294	280	266	251	237	0	0	0	0	0
GR	GR4	95	571	551	531	511	491	471	451	431	411	391	371	351	331	0	0	0	0	0
MC	MC1	303	850	818	786	754	722	690	658	626	594	562	530	0	0	0	0	0	0	0
MC	MC2	301	845	813	781	749	717	686	654	622	590	558	526	0	0	0	0	0	0	0
MC	MC3	391	1,097	1,056	1,015	973	932	891	849	808	766	725	684	0	0	0	0	0	0	0
MC	MC4	477	1,339	1,288	1,238	1,187	1,137	1,086	1,036	986	935	885	834	0	0	0	0	0	0	0
TC	TC1	383	529	517	504	491	479	466	453	441	428	415	403	390	377	364	352	339	326	314
TC	TC2	549	759	741	723	704	686	668	650	632	613	595	577	559	541	522	504	486	468	450
TY	TY3	71	409	395	380	366	352	337	323	309	294	280	266	251	237	0	0	0	0	0
BRWATER			2,588	2,517	2,447	2,376	2,305	2,235	2,164	2,094	2,023	1,952	1,882	1,811	1,740	1,670	1,599	1,529	1,458	1,387
CRWATER			2,537	2,407	2,277	2,146	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MCWATER			4,131	3,976	3,820	3,664	3,508	3,353	3,197	3,041	2,886	2,730	2,574	0	0	0	0	0	0	0
TCWATER			1,288	1,258	1,227	1,196	1,165	1,134	1,103	1,072	1,041	1,010	979	949	918	887	856	825	794	763
GHWATER			4,072	3,964	3,856	3,748	3,640	3,531	3,423	3,315	3,207	3,099	2,991	2,883	2,774	2,666	2,558	2,450	2,342	2,234
GRWATER			980	946	912	877	843	809	774	740	706	671	637	603	568	0	0	0	0	0

Station	Unit	Capacity	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
BR	BR1	101	194	184	174	0	0	0	0	0	0	0	0	0	0
BR	BR2	167	321	304	287	0	0	0	0	0	0	0	0	0	0
BR	BR3	416	801	758	715	0	0	0	0	0	0	0	0	0	0
CR	CR4	155	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5	168	0	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6	240	0	0	0	0	0	0	0	0	0	0	0	0	0
GH	GH1	475	526	500	473	446	0	0	0	0	0	0	0	0	0
GH	GH2	484	536	509	482	454	0	0	0	0	0	0	0	0	0
GH	GH3	480	532	505	478	451	0	0	0	0	0	0	0	0	0
GH	GH4	479	531	504	477	450	0	0	0	0	0	0	0	0	0
GR	GR3	68	0	0	0	0	0	0	0	0	0	0	0	0	0
GR	GR4	95	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC1	303	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC2	301	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC3	391	0	0	0	0	0	0	0	0	0	0	0	0	0
MC	MC4	477	0	0	0	0	0	0	0	0	0	0	0	0	0
TC	TC1	383	301	288	276	263	250	237	225	212	0	0	0	0	0
TC	TC2	549	431	413	395	377	359	340	322	304	0	0	0	0	0
TY	TY3	71	0	0	0	0	0	0	0	0	0	0	0	0	0
BRWATER			1,317	1,246	1,175	0	0	0	0	0	0	0	0	0	0
CRWATER			0	0	0	0	0	0	0	0	0	0	0	0	0
MCWATER			0	0	0	0	0	0	0	0	0	0	0	0	0
TCWATER			732	701	670	640	609	578	547	516	0	0	0	0	0
GHWATER			2,125	2,017	1,909	1,801	0	0	0	0	0	0	0	0	0
GRWATER			0	0	0	0	0	0	0	0	0	0	0	0	0

6.71% Discount Rate

Original_Emergency_Cost	\$M	\$000	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
No Retirements	295	14,711	10,395	21,068	26,862	32,937	1,283	2,028	5,421	10,405	22,573	31,344	51,844	17,598	8,745	25,879		
Retire TY	290	14,711	10,395	20,875	26,640	1,174	1,904	2,956	7,628	14,097	29,789	40,987	66,355	23,219	11,650	32,935		
Retire TY and GR3	247	14,711	10,395	20,687	26,423	4,759	7,408	8,894	12,891	18,959	35,449	60,211	32,357	12,057	12,176	32,357		
Retire TY GR3 and BR3	325	14,711	10,395	20,687	26,423	11,751	17,624	24,503	50,645	13,545	7,696	11,038	18,959	35,449	60,211	32,357		
Retire TY GR3 and CR4	326	14,711	10,395	20,502	26,207	3,882	5,958	8,788	20,437	33,956	66,493	23,729	17,944	33,778	59,075	68,548		
Retire TY GR3 CR4 and CR6	329	14,711	10,395	20,245	25,893	11,762	17,618	24,858	51,771	13,995	7,297	11,020	18,575	34,224	60,160	53,456		
Retire TY GR3 CR4 CR6 and BR1-2	353	14,711	10,395	20,043	25,574	36,511	52,437	17,832	6,019	11,214	21,790	31,827	49,869	13,637	8,891	21,451		
Retire TY GR3 CR and CR	338	14,711	10,395	20,064	25,889	23,956	34,779	48,076	23,258	7,118	14,598	21,023	34,506	58,853	17,827	14,863		
Retire TY GR3 CR and GH3	371	14,711	10,395	20,064	25,889	32,571	19,823	29,060	57,914	14,752	8,560	12,657	21,336	37,853	67,042	56,527		
Retire TY GR3 CR and GH1	387	14,711	10,395	19,766	25,158	24,131	19,282	12,617	27,279	44,887	75,958	18,594	9,650	18,818	34,081	63,466		
Retire TY GR and CR	339	14,711	10,395	19,811	25,388	34,749	49,742	17,481	5,570	10,571	21,082	29,716	47,428	11,995	8,412	19,618		
Retire TY GR CR and MC4	396	14,711	10,395	19,811	24,438	34,475	13,012	17,945	37,002	58,752	22,828	7,749	13,135	24,532	44,180	76,228		
Retire TY GR CR and TC1	406	14,711	10,395	19,811	25,387	28,058	9,437	13,974	28,951	46,726	83,243	19,741	10,190	19,440	35,256	70,407		
Retire TY GR CR and GH4	401	14,711	10,395	19,811	25,387	38,483	13,058	19,297	39,023	61,393	23,539	8,169	13,918	25,851	46,096	90,229		
Retire TY GR CR and MC3	391	14,711	10,395	19,811	25,293	24,865	9,432	13,162	25,992	44,983	79,481	18,738	9,436	18,838	34,441	66,647		
Retire TY GR CR and GH2	391	14,711	10,395	19,811	24,597	34,501	13,614	18,869	37,230	60,924	22,608	8,162	13,820	25,722	45,748	82,988		
Retire TY GR CR and MC1-2	420	14,711	10,395	19,811	24,772	63,474	22,549	32,746	60,703	15,185	9,621	14,021	22,875	40,257	69,186	57,245		
% of Total Cost																		
No Retirements	0.9%	1.3%	0.7%	1.2%	1.3%	1.5%	0.1%	0.1%	0.2%	0.4%	0.9%	1.2%	1.9%	0.6%	0.3%	0.9%		
Retire TY	0.9%	1.3%	0.7%	1.2%	1.3%	1.5%	0.1%	0.1%	0.3%	0.6%	1.2%	1.5%	2.4%	0.8%	0.4%	1.1%		
Retire TY and GR3	0.7%	1.3%	0.7%	1.2%	1.3%	1.5%	0.2%	0.3%	1.0%	0.3%	0.3%	0.5%	0.8%	1.5%	0.4%	1.1%		
Retire TY GR3 and BR3	1.0%	1.3%	0.7%	1.2%	1.3%	1.5%	0.8%	1.0%	2.0%	0.5%	0.3%	0.4%	0.7%	1.2%	2.0%	1.0%		
Retire TY GR3 and CR4	1.0%	1.3%	0.7%	1.2%	1.3%	1.5%	0.2%	0.3%	0.9%	1.4%	2.6%	0.9%	0.7%	1.2%	2.0%	2.2%		
Retire TY GR3 CR4 and CR6	1.0%	1.3%	0.7%	1.2%	1.3%	1.5%	0.6%	0.8%	2.1%	0.5%	0.3%	0.4%	0.7%	1.2%	2.0%	1.7%		
Retire TY GR3 CR4 CR6 and BR1-2	1.1%	1.3%	0.7%	1.2%	1.3%	1.5%	1.3%	1.3%	2.3%	0.3%	0.5%	1.2%	1.8%	1.3%	2.2%	1.7%		
Retire TY GR3 CR and CR	1.0%	1.3%	0.7%	1.2%	1.3%	1.5%	1.1%	1.6%	1.0%	0.3%	0.6%	0.8%	1.3%	2.1%	0.6%	0.5%		
Retire TY GR3 CR and GH3	1.1%	1.3%	0.7%	1.2%	1.3%	1.5%	0.9%	1.2%	2.3%	0.6%	0.3%	0.5%	0.8%	1.3%	2.2%	1.7%		
Retire TY GR3 CR and GH1	1.1%	1.3%	0.7%	1.2%	1.3%	1.5%	0.4%	0.6%	1.1%	1.8%	2.8%	0.7%	0.3%	0.7%	1.1%	2.1%		
Retire TY GR and CR	1.0%	1.3%	0.7%	1.2%	1.3%	1.5%	2.3%	0.8%	0.2%	0.4%	0.6%	0.7%	1.7%	0.4%	0.3%	0.6%		
Retire TY GR CR and MC4	1.2%	1.3%	0.7%	1.2%	1.3%	1.5%	1.6%	1.6%	2.3%	0.8%	0.2%	0.4%	0.3%	0.5%	0.9%	1.5%		
Retire TY GR CR and TC1	1.2%	1.3%	0.7%	1.2%	1.3%	1.5%	1.6%	1.6%	2.3%	0.8%	0.2%	0.4%	0.3%	0.5%	0.9%	1.5%		
Retire TY GR CR and GH4	1.2%	1.3%	0.7%	1.2%	1.3%	1.5%	0.6%	0.8%	1.5%	2.3%	3.4%	0.7%	0.4%	0.7%	1.2%	2.2%		
Retire TY GR CR and MC3	1.2%	1.3%	0.7%	1.2%	1.3%	1.5%	0.6%	0.8%	1.5%	2.3%	3.4%	0.7%	0.4%	0.7%	1.2%	2.2%		
Retire TY GR CR and GH2	1.2%	1.3%	0.7%	1.2%	1.3%	1.5%	1.1%	1.1%	1.6%	1.6%	1.6%	2.4%	0.9%	0.3%	0.5%	1.5%		
Retire TY GR CR and MC1-2	1.2%	1.3%	0.7%	1.2%	1.3%	1.5%	0.6%	0.8%	1.1%	1.8%	3.0%	0.7%	0.3%	0.7%	1.2%	2.1%		
Emergency_Energy_(GWh)																		
Max	3.68	0.89	0.63	1.27	1.62	1.88	0.08	0.12	0.33	0.63	1.36	1.89	3.12	1.06	0.53	1.56		
No Retirements	4.00	0.89	0.63	1.26	1.59	0.07	0.11	0.18	0.46	0.85	1.79	2.47	4.00	1.40	0.70	1.98		
Retire TY	3.20	0.89	0.63	1.25	1.57	0.29	0.45	0.66	1.54	0.51	0.54	0.78	1.38	2.60	0.73	1.93		
Retire TY and GR3	4.32	0.89	0.63	1.25	1.57	0.71	1.06	1.48	3.05	0.82	0.46	0.66	1.14	2.14	3.63	1.95		
Retire TY GR3 and BR3	4.13	0.89	0.63	1.24	1.56	0.23	0.36	0.53	1.23	2.05	4.01	1.43	1.08	2.03	3.56	4.13		
Retire TY GR3 and CR4	4.24	0.89	0.63	1.22	1.56	0.71	1.06	1.50	3.12	0.81	0.44	0.66	1.12	2.06	3.62	3.22		
Retire TY GR3 CR4 and CR6	4.90	0.89	0.63	1.21	1.55	2.20	3.16	1.07	0.36	0.68	1.31	1.92	3.00	0.82	0.54	1.29		
Retire TY GR3 CR4 CR6 and BR1-2	3.76	0.89	0.63	1.21	1.55	1.44	2.10	2.90	1.40	0.43	0.88	1.27	2.08	3.55	1.07	0.90		
Retire TY GR3 CR and CR	4.61	0.89	0.63	1.21	1.55	1.96	1.19	1.75	3.49	0.89	0.52	0.76	1.29	2.28	4.04	3.41		
Retire TY GR3 CR and GH3	4.99	0.89	0.63	1.19	1.53	1.52	1.64	0.76	1.64	2.70	4.58	1.12	0.58	1.13	2.05	4.12		
Retire TY GR CR and GH1	5.89	0.89	0.63	1.19	1.47	2.08	0.78	1.08	2.23	3.54	1.38	0.47	0.79	1.48	2.66	4.59		
Retire TY GR CR and CR	5.07	0.89	0.63	1.19	1.53	1.69	0.57	0.84	1.74	2.81	5.01	1.19	0.61	1.17	2.12	4.24		
Retire TY GR CR and MC4	5.70	0.89	0.63	1.19	1.53	2.32	0.79	1.16	2.35	3.70	1.42	0.49	0.84	1.56	2.78	5.44		
Retire TY GR CR and TC1	4.98	0.89	0.63	1.19	1.52	1.50	0.57	0.79	1.57	4.79	1.13	0.49	0.84	1.56	2.78	5.44		
Retire TY GR CR and GH4	5.61	0.89	0.63	1.19	1.48	2.08	0.82	1.14	2.24	3.67	1.36	0.49	0.83	1.55	2.76	5.00		
Retire TY GR CR and MC3	4.97	0.89	0.63	1.19	1.49	3.82	1.36	1.97	3.66	0.91	0.58	0.84	1.38	2.43	4.17	3.45		

-6.71% Discount Rate

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Retire TY GR CR and MC1-2	33,807	1,146,244	1,373,647	1,621,285	1,846,512	2,200,244	2,168,133	2,308,525	2,481,440	2,523,967	2,618,958	2,740,925	2,810,721	2,911,785	3,092,739	3,240,126
Adjusted Total RR Delta																
No Retirements																
Retire TY	-1	0	1,042	26,977	29,301	-12,528	-17,456	-16,244	-14,085	-12,224	-7,634	-4,195	1,651	-7,087	-10,633	-5,921
Retire TY and GR3	-69	0	-5,551	-19,842	-30,555	-40,361	-34,340	871	47,400	44,102	22,055	-28,225	-47,582	31,434	46,709	30,063
Retire TY GR3 and BR3	603	0	-1,451	1,356	-61	23,511	33,037	46,889	70,906	62,043	63,901	58,947	22,000	19,456	102,172	100,051
Retire TY GR3 and CR4	-87	-1,322	-23,282	-35,631	-23,374	-16,634	-22,096	-51,478	-79,449	-37,870	34,842	11,734	-40,935	-45,340	29,591	89,855
Retire TY GR3 CR4 and CR6	11	-2,432	-33,887	-59,413	-56,640	-44,549	-32,041	21,548	81,775	30,502	-41,654	-14,774	2,467	4,302	22,745	5,330
Retire TY GR3 CR4 CR6 and BR1-2	230	-489	-15,605	-33,118	-31,339	47,171	93,647	42,664	-42,533	-29,742	-6,927	53,382	109,806	57,030	-16,966	-42,088
Retire TY GR3 and CR	-57	-1,326	-26,412	-50,255	-48,367	-26,426	13,166	27,597	-37,849	-43,434	-32,571	-20,088	36,700	53,459	-20,795	-57,389
Retire TY GR3 CR and GH3	921	-114	-1,361	18,091	33,222	88,987	22,054	23,790	99,446	100,878	97,635	93,955	53,573	48,618	155,583	189,307
Retire TY GR3 CR and GH1	800	-187	-4,894	8,448	36,763	99,050	38,438	-21,227	-272	76,490	145,198	133,364	71,251	21,077	51,303	143,515
Retire TY GR and CR	-94	0	-1,885	-15,137	-10,267	31,260	35,895	-24,413	-45,854	-24,656	-12,744	29,051	38,177	-35,197	-26,081	-21,926
Retire TY GR CR and MC4	859	-862	-12,710	-1,174	2,221	51,782	-22,641	-10,015	75,181	139,657	134,138	63,657	25,558	43,830	90,650	161,785
Retire TY GR CR and TC1	996	0	2,991	35,023	60,285	80,371	-5,844	9,884	45,422	108,870	180,300	110,749	36,916	64,501	76,077	180,474
Retire TY GR CR and GH4	1,161	-122	1,374	30,448	55,107	88,795	4,181	18,011	102,369	165,177	156,108	86,491	42,735	63,775	103,799	195,369
Retire TY GR CR and MC3	756	0	-6,498	18,941	39,621	52,644	-22,363	-14,212	12,434	83,965	153,444	87,957	14,286	42,503	66,386	153,585
Retire TY GR CR and GH2	1,146	-11	-4,667	20,041	37,447	87,835	10,527	26,465	91,199	172,268	157,778	101,151	43,667	73,598	100,787	171,784
Retire TY GR CR and MC1-2	1,022	0	-7,206	-5,250	-29,281	59,846	-36,290	25,699	119,670	106,281	105,682	65,798	28,135	102,335	183,596	207,185

	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Original Emergency Cost														
No Retirements	22,608	34,664	45,432	28,196	20,594	28,115	39,816	61,158	23,677	24,912	36,693	55,808	38,427	52,244
Retire TY	29,218	44,038	57,202	28,035	11,450	15,995	22,926	36,097	47,714	21,739	21,487	32,993	38,455	56,884
Retire TY and GR3	9,906	16,251	21,915	46,169	40,988	48,927	12,885	6,543	9,435	20,172	30,071	45,600	53,043	49,600
Retire TY GR3 and BR3	7,853	12,851	17,023	35,935	54,562	70,852	19,575	10,728	14,890	29,528	42,393	62,819	71,665	66,392
Retire TY GR3 and CR4	7,478	12,353	16,665	35,490	53,983	43,046	52,696	18,097	7,025	15,249	22,913	34,602	40,705	59,624
Retire TY GR3 CR4 and CR6	7,783	12,147	17,022	35,508	52,323	69,523	18,556	10,571	14,222	29,033	41,645	56,872	70,332	65,016
Retire TY GR3 CR4 CR6 and BR1-2	21,774	31,373	42,706	81,415	18,999	11,828	16,705	26,614	34,998	64,497	55,116	69,046	52,949	69,028
Retire TY GR3 and CR	14,843	22,277	29,705	59,956	20,346	18,747	26,222	41,187	52,801	24,148	24,945	34,395	43,730	62,337
Retire TY GR3 CR and GH3	8,982	13,904	18,905	39,548	56,994	76,192	19,850	11,949	16,001	32,144	45,773	61,916	76,496	89,989
Retire TY GR3 CR and GH1	70,584	14,364	8,981	18,944	30,203	39,751	54,041	79,749	26,357	35,395	49,879	67,104	82,909	72,693
Retire TY GR and CR	20,361	30,709	40,215	78,840	18,074	11,243	15,993	25,060	33,311	62,043	53,072	65,928	51,037	66,156
Retire TY GR CR and MC4	88,547	21,112	11,891	23,733	38,182	50,248	67,103	97,802	24,420	20,892	30,342	38,657	51,098	67,721
Retire TY GR CR and TC1	73,954	20,505	9,260	20,159	30,795	41,123	55,664	81,189	30,252	36,034	50,849	67,743	84,106	75,994
Retire TY GR CR and GH4	94,676	27,047	12,439	26,532	39,832	52,751	70,867	22,188	10,549	21,849	31,657	42,439	53,709	73,999
Retire TY GR CR and MC3	71,409	19,966	8,977	19,677	30,049	40,334	53,590	78,974	26,111	35,129	49,895	66,647	82,706	74,711
Retire TY GR CR and GH2	93,146	26,175	12,406	26,321	39,652	52,433	69,172	21,553	10,507	21,825	31,540	42,291	53,475	72,766
Retire TY GR CR and MC1-2	22,190	33,058	43,658	82,478	18,224	12,390	17,446	27,062	35,671	65,486	56,212	69,677	54,023	69,497
% of Total Cost														
No Retirements	0.8%	1.1%	1.4%	0.9%	0.6%	0.8%	1.1%	1.7%	0.6%	0.7%	1.0%	1.5%	1.0%	1.3%
Retire TY	1.0%	1.4%	1.8%	0.9%	0.3%	0.5%	0.7%	1.0%	1.3%	0.6%	0.6%	0.9%	1.0%	1.5%
Retire TY and GR3	0.3%	0.4%	0.5%	1.1%	1.6%	2.0%	0.4%	0.2%	0.3%	0.5%	0.8%	1.2%	1.4%	1.3%
Retire TY GR3 and BR3	0.3%	0.4%	0.5%	1.1%	1.6%	2.0%	0.5%	0.3%	0.4%	0.8%	1.1%	1.6%	1.8%	1.7%
Retire TY GR3 and CR4	0.2%	0.4%	0.5%	1.1%	1.6%	1.3%	1.5%	0.5%	0.2%	0.4%	0.6%	0.9%	1.1%	1.5%
Retire TY GR3 CR4 and CR6	0.3%	0.4%	0.5%	1.1%	1.6%	2.0%	0.5%	0.3%	0.4%	0.8%	1.1%	1.5%	1.8%	1.6%
Retire TY GR3 CR4 CR6 and BR1-2	0.7%	1.0%	1.3%	2.4%	0.6%	0.5%	0.7%	1.1%	1.4%	0.6%	0.6%	0.9%	1.1%	1.5%
Retire TY GR3 and CR	0.5%	0.7%	0.9%	1.2%	1.6%	2.1%	0.5%	0.3%	0.4%	0.8%	1.2%	1.5%	1.9%	1.7%
Retire TY GR3 CR and GH3	0.3%	0.4%	0.6%	1.2%	1.8%	2.1%	0.5%	0.3%	0.4%	0.9%	1.3%	1.7%	2.0%	1.7%
Retire TY GR3 CR and GH1	2.2%	0.4%	0.3%	0.5%	0.9%	1.1%	1.5%	2.1%	0.7%	0.8%	1.4%	1.7%	1.9%	1.6%
Retire TY GR and CR	0.7%	1.0%	1.2%	2.3%	0.5%	0.3%	0.4%	0.7%	0.9%	1.6%	1.4%	1.7%	2.0%	1.6%
Retire TY GR CR and MC4	2.7%	0.6%	0.4%	0.7%	1.1%	1.4%	1.8%	2.5%	0.6%	0.5%	0.9%	1.0%	1.3%	1.6%
Retire TY GR CR and TC1	2.3%	0.6%	0.3%	0.6%	0.9%	1.2%	1.5%	2.1%	0.6%	0.9%	1.3%	1.7%	2.1%	1.8%
Retire TY GR CR and GH4	2.9%	0.8%	0.4%	0.8%	1.1%	1.4%	1.9%	0.6%	0.3%	0.6%	0.8%	1.0%	1.3%	1.8%
Retire TY GR CR and MC3	2.2%	0.6%	0.3%	0.6%	0.9%	1.1%	1.4%	2.1%	0.7%	0.9%	1.3%	1.7%	2.0%	1.8%
Retire TY GR CR and GH2	2.8%	0.8%	0.4%	0.8%	1.1%	1.4%	1.8%	0.6%	0.3%	0.5%	0.8%	1.0%	1.3%	1.7%
Retire TY GR CR and MC1-2	0.7%	1.0%	1.3%	2.3%	0.5%	0.3%	0.5%	0.7%	0.9%	1.6%	1.4%	1.7%	1.9%	1.6%
Emergency Energy (GWh)														
No Retirements	1.36	2.09	2.74	1.70	1.24	1.69	2.40	3.68	1.43	1.50	2.21	3.36	2.31	3.15
Retire TY	1.76	2.65	3.45	1.69	0.69	0.96	1.38	2.17	2.87	1.31	1.29	1.99	2.32	3.43
Retire TY and GR3	0.60	0.98	1.32	2.78	2.47	2.95	0.78	0.39	0.57	1.22	1.81	2.75	3.20	2.99
Retire TY GR3 and BR3	0.47	0.77	1.03	2.16	3.29	4.27	1.18	0.65	0.90	1.78	2.55	3.78	4.32	4.00
Retire TY GR3 and CR4	0.45	0.74	1.00	2.14	3.25	2.59	3.17	1.09	0.42	0.92	1.38	2.08	2.45	3.59
Retire TY GR3 CR4 and CR6	0.47	0.73	1.03	2.14	3.15	4.19	1.12	0.64	0.86	1.75	2.51	3.43	4.24	3.92
Retire TY GR3 CR4 CR6 and BR1-2	1.31	1.89	2.57	4.90	1.14	0.71	1.01	1.60	2.07	3.69	3.32	4.16	3.19	4.16
Retire TY GR3 and CR	0.89	1.34	1.79	3.61	1.23	1.13	1.58	2.48	3.18	1.45	1.50	2.07	2.63	3.76
Retire TY GR3 CR and GH3	0.54	0.84	1.14	2.38	3.43	4.59	1.20	0.72	0.96	1.94	2.76	3.73	4.61	4.22
Retire TY GR3 CR and GH1	4.25	0.87	0.54	1.14	1.82	2.39	3.26	4.80	1.59	2.13	3.00	4.04	4.99	4.38
Retire TY GR and CR	1.23	1.85	2.42	4.75	1.09	0.68	0.96	1.51	2.01	3.74	3.20	3.97	3.07	3.99
Retire TY GR CR and MC4	5.33	1.27	0.72	1.43	2.30	3.03	4.04	5.89	1.47	1.26	1.83	2.33	3.08	4.08
Retire TY GR CR and TC1	4.46	1.24	0.56	1.21	1.86	2.48	3.35	4.89	1.82	2.16	3.06	4.08	5.07	4.58
Retire TY GR CR and GH4	5.70	1.63	0.75	1.60	2.40	3.18	4.27	1.34	0.64	1.32	1.91	2.56	3.24	4.45
Retire TY GR CR and MC3	4.30	1.20	0.54	1.19	1.81	2.43	3.23	4.76	1.57	2.12	3.01	4.01	4.98	4.50
Retire TY GR CR and GH2	5.61	1.58	0.75	1.59	2.39	3.16	4.17	1.30	0.63	1.31	1.90	2.55	3.22	4.38
Retire TY GR CR and MC1-2	1.34	1.99	2.63	4.97	1.10	0.75	1.05	1.63	2.15	3.94	3.39	4.20	3.25	4.19

	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Adjusted Emergency Cost														
No Retirements	22608	34664	45432	28196	20594	28115	39816	61158	23677	24912	36693	55808	38427	52244
Retire TY	29218	44038	57202	28035	11450	15935	22926	36097	47714	21739	21487	32993	38455	56884
Retire TY and GR3	9906	16251	21915	46169	40988	48927	12885	6543	30071	20172	30071	45600	53043	49600
Retire TY GR3 and BR3	7853	12851	17023	35935	54562	70852	10728	14890	29528	42393	62819	71665	66392	66392
Retire TY GR3 and CR4	7478	12353	16665	35490	53983	43046	52686	18097	7025	15249	22913	34602	40705	59624
Retire TY GR3 CR4 and CR6	7783	12147	17022	35508	52323	69523	18556	10571	14222	29033	41645	56872	70332	65016
Retire TY GR3 CR4 CR6 and BR1-2	21774	31373	42706	81415	18999	11828	16705	26614	34398	64496	55116	69046	52949	69028
Retire TY GR3 and CR	14843	22277	29705	59956	20346	18747	26222	41187	52801	24148	24945	34395	43730	62337
Retire TY GR3 CR and GH3	8982	13904	18905	39548	56994	76192	19850	11949	16001	32144	45773	61916	76496	69999
Retire TY GR3 CR and GH1	70584	14364	8981	18944	30203	39751	54041	79749	26357	35395	49879	67104	82909	72693
Retire TY GR and CR	20361	30709	40215	78840	18074	11243	15993	25060	33311	62043	53072	65928	51037	66156
Retire TY GR CR and MC4	88547	21112	11891	23733	38182	50248	67103	97802	24420	20892	30342	38657	51098	67721
Retire TY GR CR and TC1	73954	20505	9260	20159	30795	41123	55664	81189	30252	36034	50849	67743	84106	75994
Retire TY GR CR and GH4	94676	27047	12439	26532	39832	52751	70867	22188	10549	31657	42439	53709	73939	73939
Retire TY GR CR and M/C3	71409	19966	8977	30049	40334	53590	78974	26111	35129	49895	66647	82706	74711	74711
Retire TY GR CR and GH2	93146	26175	12406	26821	39652	52433	69172	21553	10507	21825	31540	42291	53475	72766
Retire TY GR CR and MC1-2	22190	33058	43658	82478	18224	12390	17446	27062	35671	65486	56212	69677	54023	69496

Original Total RR

No Retirements	2,987,847	3,114,818	3,203,297	3,290,340	3,297,676	3,356,737	3,480,390	3,589,844	3,666,273	3,703,679	3,761,291	3,823,836	3,814,175	3,932,779
Retire TY	2,982,627	3,126,986	3,232,640	3,320,644	3,322,437	3,371,484	3,451,256	3,548,538	3,683,443	3,721,962	3,772,108	3,804,142	3,801,261	3,915,650
Retire TY and GR3	3,005,704	3,085,744	3,133,701	3,253,475	3,327,262	3,447,690	3,528,144	3,570,841	3,644,617	3,679,430	3,727,476	3,777,515	3,796,277	3,907,892
Retire TY GR3 and BR3	3,032,856	3,114,122	3,151,389	3,249,120	3,319,956	3,423,237	3,578,812	3,629,889	3,708,731	3,734,646	3,780,069	3,815,429	3,807,285	3,930,553
Retire TY GR3 CR4 and CR6	3,061,307	3,141,689	3,185,904	3,278,394	3,374,325	3,508,998	3,605,774	3,649,791	3,728,354	3,770,023	3,816,874	3,856,685	3,892,224	4,003,088
Retire TY GR3 CR4 CR6 and BR1-2	3,051,132	3,141,549	3,222,890	3,391,323	3,404,135	3,468,989	3,577,556	3,676,519	3,814,243	3,847,400	3,902,649	3,920,448	3,931,460	4,045,348
Retire TY GR3 CR and GH3	3,194,981	3,275,265	3,317,229	3,431,987	3,516,957	3,670,256	3,764,424	3,809,369	3,887,763	3,929,495	3,974,733	4,017,743	4,078,867	4,181,849
Retire TY GR3 CR and GH1	3,239,207	3,292,000	3,356,181	3,444,654	3,487,886	3,549,096	3,627,444	3,702,009	3,856,157	3,979,315	4,037,629	4,090,517	4,072,360	4,178,133
Retire TY GR and CR	3,029,538	3,127,833	3,225,237	3,418,572	3,422,194	3,485,560	3,584,414	3,630,247	3,726,854	3,779,020	3,853,786	3,907,145	3,911,645	4,032,447
Retire TY GR CR and MC4	3,265,676	3,317,295	3,364,667	3,434,348	3,502,301	3,566,140	3,760,848	3,877,599	3,956,157	3,979,315	4,037,629	4,090,517	4,072,360	4,178,133
Retire TY GR CR and TC1	3,251,949	3,338,878	3,355,330	3,463,115	3,484,830	3,564,633	3,704,593	3,835,375	3,896,834	3,947,527	3,987,852	4,042,860	4,069,729	4,189,337
Retire TY GR CR and GH4	3,282,974	3,340,850	3,350,207	3,471,962	3,509,465	3,640,933	3,819,709	3,861,468	3,945,790	3,954,963	4,026,707	4,064,015	4,082,893	4,193,762
Retire TY GR CR and M/C3	3,219,568	3,315,564	3,359,807	3,445,296	3,471,313	3,550,533	3,702,909	3,849,719	3,867,042	3,929,428	3,975,008	4,024,159	4,054,231	4,170,714
Retire TY GR CR and GH2	3,282,509	3,342,602	3,372,967	3,466,107	3,519,584	3,695,374	3,802,638	3,862,531	3,949,795	3,982,537	4,021,330	4,072,276	4,077,882	4,173,352
Retire TY GR CR and MC1-2	3,190,536	3,298,114	3,401,540	3,591,820	3,597,255	3,660,924	3,770,667	3,808,219	3,905,491	3,986,280	4,056,086	4,112,637	4,120,655	4,249,914

Adjusted Total RR

No Retirements	2,987,847	3,114,818	3,203,297	3,290,340	3,297,676	3,356,737	3,480,390	3,589,844	3,666,273	3,703,679	3,761,291	3,823,836	3,814,175	3,932,779
Retire TY	2,982,627	3,126,986	3,232,640	3,320,644	3,322,437	3,371,484	3,451,256	3,548,538	3,683,443	3,721,962	3,772,108	3,804,142	3,801,261	3,915,650
Retire TY and GR3	3,005,704	3,085,744	3,133,701	3,253,475	3,327,262	3,447,690	3,528,144	3,570,841	3,644,617	3,679,430	3,727,476	3,777,515	3,796,277	3,907,892
Retire TY GR3 and BR3	3,032,856	3,114,122	3,151,389	3,249,120	3,319,956	3,423,237	3,578,812	3,629,889	3,708,731	3,734,646	3,780,069	3,815,429	3,807,285	3,930,553
Retire TY GR3 CR4 and CR6	3,061,307	3,141,689	3,185,904	3,278,394	3,374,325	3,508,998	3,605,774	3,649,791	3,728,354	3,770,023	3,816,874	3,856,685	3,892,224	4,003,088
Retire TY GR3 CR4 CR6 and BR1-2	3,062,027	3,159,031	3,266,583	3,429,527	3,439,106	3,500,717	3,604,957	3,649,683	3,746,282	3,825,319	3,871,298	3,933,832	3,932,482	4,058,677
Retire TY GR3 CR and CR	3,051,132	3,141,549	3,222,890	3,391,323	3,404,135	3,468,989	3,577,556	3,676,519	3,814,243	3,847,400	3,902,649	3,920,448	3,931,460	4,045,348
Retire TY GR3 CR and GH3	3,194,981	3,275,265	3,317,229	3,431,987	3,516,957	3,670,256	3,764,424	3,809,369	3,887,763	3,929,495	3,974,733	4,017,743	4,078,867	4,181,849
Retire TY GR3 CR and GH1	3,239,207	3,292,000	3,356,181	3,444,654	3,487,886	3,549,096	3,627,444	3,702,009	3,856,157	3,979,315	4,037,629	4,090,517	4,072,360	4,178,133
Retire TY GR and CR	3,028,538	3,127,833	3,225,237	3,418,572	3,422,194	3,485,560	3,584,414	3,630,247	3,726,854	3,779,020	3,853,786	3,907,145	3,911,645	4,032,447
Retire TY GR CR and MC4	3,265,676	3,317,295	3,364,667	3,434,348	3,502,301	3,566,140	3,760,848	3,877,599	3,956,157	3,979,315	4,037,629	4,090,517	4,072,360	4,178,133
Retire TY GR CR and TC1	3,251,949	3,338,878	3,355,330	3,463,115	3,484,830	3,564,633	3,704,593	3,835,375	3,896,834	3,947,527	3,987,852	4,042,860	4,069,729	4,189,337
Retire TY GR CR and GH4	3,282,974	3,340,850	3,350,207	3,471,962	3,509,465	3,640,933	3,819,709	3,861,468	3,945,790	3,954,963	4,026,707	4,064,015	4,082,893	4,193,762
Retire TY GR CR and M/C3	3,219,568	3,315,564	3,359,807	3,445,296	3,471,313	3,550,533	3,702,909	3,849,719	3,867,042	3,929,428	3,975,008	4,024,159	4,054,231	4,170,714
Retire TY GR CR and GH2	3,282,509	3,342,602	3,372,967	3,466,107	3,519,584	3,695,374	3,802,638	3,862,531	3,949,795	3,982,537	4,021,330	4,072,276	4,077,882	4,173,352
Retire TY GR CR and MC1-2	3,190,536	3,298,114	3,401,540	3,591,820	3,597,255	3,660,924	3,770,667	3,808,219	3,905,491	3,986,280	4,056,086	4,112,637	4,120,655	4,249,914

	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Retire TY GR CR and MCI-2	3,190,536	3,298,114	3,401,540	3,591,820	3,597,255	3,660,924	3,770,667	3,808,219	3,905,491	3,986,280	4,056,086	4,112,637	4,120,655	4,249,914
Adjusted Total RR Delta														
No Retirements														
Retire TY	-5,219	12,168	29,342	30,304	24,761	14,747	-29,134	-41,306	17,171	18,283	10,817	-19,694	-12,914	-17,129
Retire TY and GR3	23,077	-41,242	-98,939	-67,169	4,824	76,205	76,888	22,304	-38,826	-42,531	-44,632	-26,626	-4,984	-7,758
Retire TY GR3 and BR3	100,381	98,123	90,104	68,795	83,151	89,279	70,719	80,161	86,044	89,651	97,008	100,875	106,293	83,697
Retire TY GR3 and CR4	27,152	28,378	17,688	-4,355	-7,306	-24,453	50,668	59,048	64,113	55,216	52,593	37,913	11,008	22,661
Retire TY GR3 CR4 and CR6	28,451	27,568	34,514	29,274	54,369	85,361	26,962	19,902	19,623	35,377	36,805	41,256	84,939	72,535
Retire TY GR3 CR4 CR6 and BR1-2	719	17,342	80,680	151,133	64,781	-7,880	-817	-109	17,928	55,296	54,424	77,147	40,258	55,589
Retire TY GR3 and CR	-10,176	-140	36,986	112,930	29,809	-39,609	-28,219	26,727	85,889	77,377	85,775	63,763	39,236	42,260
Retire TY GR3 CR and GH3	143,449	133,716	94,340	40,663	112,822	201,276	186,868	132,851	73,520	82,095	72,084	97,295	147,407	136,501
Retire TY GR3 CR and GH1	188,076	150,451	133,292	53,331	83,751	80,107	143,075	143,494	58,040	88,715	78,801	127,112	147,315	149,337
Retire TY GR and CR	-22,594	-13,716	2,348	27,249	18,059	16,571	6,858	-46,271	-87,389	-50,380	-48,863	-13,303	-19,815	-12,901
Retire TY GR CR and MCI	237,137	189,462	139,430	15,776	80,107	80,580	176,434	247,352	229,303	182,295	183,843	123,372	160,715	145,687
Retire TY GR CR and TC1	223,411	211,044	130,093	44,543	62,656	79,073	120,180	205,128	169,980	150,508	134,066	135,715	158,084	156,891
Retire TY GR CR and GH4	254,435	213,017	124,969	53,390	87,271	155,373	235,295	231,221	218,936	157,943	172,920	156,869	171,248	161,315
Retire TY GR CR and MCI3	191,030	187,790	114,570	26,724	49,119	64,974	118,495	187,003	140,188	132,408	121,221	117,014	142,586	138,267
Retire TY GR CR and GH2	253,971	214,768	147,730	47,535	97,390	149,815	218,225	232,284	222,940	185,518	167,543	165,130	166,237	140,906
Retire TY GR CR and MCI-2	161,998	170,280	176,303	173,248	175,062	175,365	186,253	177,972	178,636	189,261	202,300	205,491	209,010	217,467

	NPVRR Delta at Varying Emergency Energy Cost (\$/MWh)					Compliance Plan (16,600)
	100	1,000	5,000	10,000		
TY	4	4	2	1	-1	
GR3	-26	-28	-39	-52	-69	
BR3	525	530	548	572	603	
CR4	-166	-162	-142	-119	-87	
CR6	8	8	9	10	11	
BR1-2	205	207	213	220	230	
CR5	-66	-65	-63	-60	-57	
GH3	888	890	898	908	921	
GH1	752	754	766	781	800	
GR4	-96	-96	-95	-95	-94	
MC4	803	806	820	837	859	
TC1	930	933	949	969	996	
GH4	1,100	1,104	1,118	1,137	1,161	
MC3	705	708	720	736	756	
GH2	1,095	1,098	1,110	1,126	1,146	
MC1-2	942	946	965	990	1,022	

Note: The values above reflect the correction of the landfill cost error identified by Dr. Fisher and the error identified by the Companies' in response to Supplemental Requests for Information of Rick Clewett, Raymond Barry, Sierra Club and the Natural Resource Defense Council dated August 18, 2011, Question No. 8(b). The impact of these errors is insignificant.