

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

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PUBLIC SERVICE
COMMISSION

In the Matter of:

APPLICATION OF LOUISVILLE GAS AND ELECTRIC)
COMPANY FOR AN AMENDED ENVIRONMENTAL)
COMPLIANCE PLAN, A REVISED SURCHARGE TO)
RECOVER COSTS, AND CERTIFICATES OF PUBLIC)
CONVENIENCE AND NECESSITY FOR THE)
CONSTRUCTION OF NECESSARY)
ENVIRONMENTAL EQUIPMENT)

CASE NO. 2011-00162

In the Matter of:

APPLICATION OF KENTUCKY UTILITIES COMPANY)
FOR CERTIFICATES OF PUBLIC CONVENIENCE)
AND NECESSITY AND APPROVAL OF ITS 2011)
COMPLIANCE PLAN FOR RECOVERY)
BY ENVIRONMENTAL SURCHARGE)

CASE NO. 2011-00161

SUPPLEMENTAL DISCOVERY RESPONSES OF DREW FOLEY,
JANET OVERMAN, GREGG WAGNER, RICK CLEWETT,
RAYMOND BARRY, SIERRA CLUB, AND
NATURAL RESOURCES DEFENSE COUNCIL TO
COMMISSION STAFF'S FIRST REQUESTS FOR INFORMATION

Intervenors Rick Clewett, Raymond Barry, Drew Foley, Janet Overman, Gregg Wagner, Sierra Club and Natural Resources Defense Council's (collectively "Environmental Intervenors") hereby submit supplemental responses to the Commission Staffs First Requests for Information.

7. Refer to page 21 of the Fisher Testimony.

a. Explain how Mr. Fisher made the decision to use the forecast of Henry Hub gas prices prepared by the Avoided Energy Supply Component Study Group in 2011 in his analysis, rather than one of the other publicly available forecasts.

RESPONSE: Jeremy Fisher (October 13, 2011)

Dr. Fisher does not claim specific expertise in natural gas price forecasting, but rather in the typical application of these prices and other considerations to electric system modeling.

There are a variety of natural gas price forecasts released by a number of entities, both private and public. Dr. Fisher chose to use the AESC forecast for internal consistency with the latest Synapse research, and the stringent review that went into the forecast. The forecast was prepared by an expert contracting with Synapse. The AESC research and assumptions were examined in detail by the utilities and companies sponsoring the research; these utilities and companies have a diverse range of interests in the AESC results. The report is sponsored such that utilities and efficiency program administrators have a consistent set of avoided costs that can be used in regulatory filings throughout New England. As such, participants in the study have a strong incentive to vet the accuracy of the assumptions.

The AESC gas price forecast is quite similar, and in fact, based in large part upon, the forecasts provided by the EIA in the Annual Energy Outlook. Dr. Fisher would not object to the use of the EIA forecast and further, would recommend that the Companies develop or utilize a reasonable range of vetted, auditable forecasts to bound a risk assessment.

b. Explain whether Strategist modeling runs were performed using the prices contained in any of the other gas price forecasts.

RESPONSE: Jeremy Fisher (October 13, 2011)

No.

RESPONSE: Jeremy Fisher (November 3, 2011)

Synapse performed additional Strategist modeling runs using three gas price forecasts to represent a bounded range: high (PIRA Group), mid (Wood Mackenzie), and low (IHS CERA). These forecasts were used by the Companies in response to Staff Question 20(b) on September 14, 2011 in the 2011 Air Compliance Plan Supplemental Analysis and released by the Companies on October 17, 2011. As an additional sensitivity, we tested these three gas forecasts with four CO₂ price forecasts (zero, and a low, mid, and high price as represented in the 2011 Carbon Dioxide Price Forecast (Exhibit JIF-4) for a total of twelve sensitivity combinations.

The series of Strategist modeling runs were performed for the express purpose of testing the economic benefit of maintaining and retrofitting Brown units 1 & 2 (with no SCR requirement). Therefore, we ran the scenario in which Tyrone, Green River 3, Cane Run 4 & 6 are retired, and the scenario in which these units and Brown units 1 & 2 are also retired. The difference between these scenarios indicates the net benefit (in million 2011\$) of maintaining and retrofitting Brown units 1 & 2 under a series of gas and CO₂ price forecast assumptions. The results of these sensitivities are shown in the figure below.

**Net Present Value Revenue Requirement of Installing Controls vs. Retiring and Replacing Capacity (Million 2011\$)
Brown Units 1 & 2, no SCR**

Positive values indicate net benefit for retrofit; negative values indicate net loss for retrofit

		CO ₂ Price ²			
		Zero	Low	Mid	High
Gas Price ¹	High (PIRA) ³	177	-28	-207	-425
	Mid (W-M)	49	-150	-324	-600
	Low (CERA)	-75	-293	-511	-778

¹ Gas prices adjusted from Henry Hub using mechanism described in direct testimony

² CO₂ prices from Synapse 2011 Carbon Dioxide Price Forecast, inflated to nominal dollars at 2.18% inflation

³ Current Company gas price forecast (Response to 2nd Set of Env. Groups DR, Question No. 25, received November 2, 2011)

Only under the circumstance that gas prices are high and CO₂ prices are zero does the analysis indicate a marked benefit for maintaining Brown units 1 & 2.¹ At mid-range gas prices and no CO₂ price, the benefit is \$49 million. As discussed in Dr. Fisher's Corrected Direct Testimony, while this result does not *a priori* render these units non-economic, Dr. Fisher believes that other faults in the Companies assumptions quickly erode the remaining margin, including the inflated emergency energy cost assumptions. Under all other scenarios modeled here, maintaining Brown units 1 & 2 results in a net loss to the Companies.

The analysis and workpapers supporting this analysis are attached.

Dated: November 4, 2011

Respectfully submitted,



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¹ It is noted that the combination of the highest available gas price (PIRA) and a zero CO₂ price forms the basis of the Companies revised analysis for the CPCN. The most recent gas price forecast used by the Companies is shown in the first table of Env. Groups Second Set of DR Q-25 supplemental received November 2, 2011. The Companies considered no other combination of gas and CO₂ prices.

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CERTIFICATE OF SERVICE

I certify that I mailed a copy of this Environmental Intervenors Supplement Responses to Commission's Staff First Request for Information by first class mail on November 4, 2011 to the following:

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	Delta NPVRR \$M
	Install Controls / (Retire)
Tyrone 3	(87)
Brown 3	(74)
Cane Run 6	(70)
Brown 1-2	(450)
Cane Run 4-5	(384)
Green River 3-4	(157)
Ghent 1-4	(329)
Trimble County 1	58
Mill Creek 3-4	(4)
Mill Creek 1-2	(234)

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

Retirement Savings (Deltas)	Capital	O&M	Total
Retire TY	-22	-3	-26
Retire TY and GR3	-13	-50	-62
Retire TY GR3 and BR3	-98	-174	-272
Retire TY GR3 and CR4	-46	-140	-186
Retire TY GR3 CR4 and CR6	-84	-118	-202
Retire TY GR3 CR4 CR6 and BR1-2	-63	-129	-192
Retire TY GR3 and CR	-50	-149	-199
Retire TY GR3 CR and GH3	-203	-145	-348
Retire TY GR3 CR and GH1	-201	-210	-411
Retire TY GR and CR	-18	-100	-118
Retire TY GR CR and MC4	-105	-201	-306
Retire TY GR CR and TC1	-68	-203	-271
Retire TY GR CR and GH4	-203	-141	-343
Retire TY GR CR and MC3	-86	-201	-287
Retire TY GR CR and GH2	-205	-156	-361
Retire TY GR CR and MC1-2	-133	-325	-457

Revenue Requirement Deltas	Prod Cost	Capital	Total	Check
Retire TY	-18	-69	-87	0
Retire TY and GR3	-14	-59	-74	0
Retire TY GR3 and BR3	138	-208	-70	0
Retire TY GR3 and CR4	-99	-350	-450	0
Retire TY GR3 CR4 and CR6	112	-496	-384	0
Retire TY GR3 CR4 CR6 and BR1-2	138	-296	-157	0
Retire TY GR3 and CR	41	-370	-329	0
Retire TY GR3 CR and GH3	444	-387	58	0
Retire TY GR3 CR and GH1	369	-373	-4	0
Retire TY GR and CR	-149	-85	-234	0
Retire TY GR CR and MC4	684	-522	162	0
Retire TY GR CR and TC1	572	-185	387	0
Retire TY GR CR and GH4	798	-376	422	0
Retire TY GR CR and MC3	493	-316	177	0
Retire TY GR CR and GH2	803	-365	438	0
Retire TY GR CR and MC1-2	779	-799	-20	0

1 2 3 4 5 6

Retire:

	<u>No</u>					<u>TY GR3 CR4</u>	<u>TY GR3 CR4</u>
	<u>Retirements</u>	<u>TY</u>	<u>TY GR3</u>	<u>TY GR3 BR3</u>	<u>TY GR3 CR4</u>	<u>CR6</u>	<u>CR6 BR1-2</u>
2010							
2011							
2012							
2013							
2014							
2015							
2016		3x1C(1)	2x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)
2017	3x1C(1)						
2018							3x1C(1)
2019							
2020			2x1C(1)	3x1C(1)		3x1C(1)	
2021							
2022					2x1C(1)		
2023							
2024	3x1C(1)	3x1C(1)					3x1C(1)
2025			3x1C(1)				
2026				3x1C(1)	3x1C(1)	3x1C(1)	
2027							
2028							
2029							
2030	2x1C(1)	3x1C(1)					
2031			SCCT(1)				3x1C(1)
2032					SCCT(1)		
2033			3x1C(1)	3x1C(1)		3x1C(1)	
2034					3x1C(1)		
2035	2x1C(1)						
2036		2x1C(1)					
2037							SCCT(1)
2038							
2039	SCCT(1)						SCCT(1)
2040			SCCT(1)	SCCT(1)		SCCT(1)	
30 Yr PVRR (\$B)	23.6	23.7	23.8	24.7	24.2	24.8	25.5

7 8 9 10 11 12 13

	<u>TY GR3 CR</u>	<u>TY GR3 CR</u> <u>GH3</u>	<u>TY GR3 CR</u> <u>GH1</u>	<u>TY GR CR</u>	<u>TY GR CR</u> <u>MC4</u>	<u>TY GR CR</u> <u>TC1</u>	<u>TY GR CR</u> <u>GH4</u>
2010							
2011							
2012							
2013							
2014							
2015							
2016	3x1C(1)	3x1C(1) 2x1C(1)	3x1C(2)	3x1C(1)	3x1C(2)	3x1C(2)	3x1C(2)
2017							
2018				3x1C(1)			
2019	3x1C(1)						
2020		3x1C(1)					
2021					3x1C(1)		3x1C(1)
2022			3x1C(1)			3x1C(1)	
2023							
2024				3x1C(1)			
2025	3x1C(1)						
2026		3x1C(1)					
2027							
2028			3x1C(1)		3x1C(1)	3x1C(1)	3x1C(1)
2029							
2030							
2031	2x1C(1)			3x1C(1)			
2032							
2033		3x1C(1)					
2034							3x1C(1)
2035			2x1C(1)		3x1C(1)	2x1C(1)	
2036	2x1C(1)						
2037				SCCT(1)			
2038							
2039				SCCT(1)			
2040		SCCT(1)	SCCT(1)			SCCT(1)	

30 Yr PVRR (\$B) 25.3 26.6 26.6 25.4 26.9 26.7 26.9

	<u>TY GR CR</u> <u>MC3</u>	<u>TY GR CR</u> <u>GH2</u>	<u>TY GR CR</u> <u>MC1-2</u>
2010			
2011			
2012			
2013			
2014			
2015			
2016	3x1C(2)	3x1C(2)	3x1C(2)
2017			
2018			
2019			
2020			3x1C(1)
2021		3x1C(1)	
2022	3x1C(1)		
2023			
2024			
2025			
2026			2x1C(1)
2027			
2028	3x1C(1)	3x1C(1)	
2029			
2030			
2031			3x1C(1)
2032			
2033			
2034		3x1C(1)	
2035	2x1C(1)		
2036			
2037			SCCT(1)
2038			
2039			SCCT(1)
2040	SCCT(1)		
30 Yr PVRR (\$B)	26.6	27.0	27.5

Breakeven RR by Year (\$M)

Year \$	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
TY	-87	-93	-99	-105	-113	-120	-128	-137	-146	-156
GR3	-74	-79	-84	-89	-95	-102	-109	-116	-124	-132
BR3	-70	-74	-79	-85	-91	-97	-103	-110	-117	-125
CR4	-450	-480	-512	-546	-583	-622	-664	-709	-756	-807
CR6	-384	-409	-437	-466	-497	-531	-566	-605	-645	-688
BR1-2	-157	-168	-179	-191	-204	-218	-232	-248	-265	-282
CR5	-329	-351	-374	-400	-426	-455	-486	-518	-553	-590
GH3	58	62	66	70	75	80	85	91	97	104
GH1	-4	-4	-4	-5	-5	-5	-6	-6	-6	-7
GR4	-234	-250	-266	-284	-303	-324	-345	-369	-393	-420
MC4	162	173	185	197	210	224	239	255	272	291
TC1	387	412	440	470	501	535	571	609	650	693
GH4	422	450	481	513	547	584	623	665	710	757
MC3	177	189	202	215	230	245	262	279	298	318
GH2	438	467	498	532	568	606	646	690	736	785
MC1-2	-20	-21	-23	-24	-26	-27	-29	-31	-33	-36

Breakeven Year

Must Op Thru

BR3	2019
BR1-2	2021
GH3	2020
GH1	2021
MC4	2023
TC1	2018
GH4	2018
MC3	2021
GH2	2018
MC1-2	2024

Station	Unit	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
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
BR	BR1SAM 0	0	0	0	231	521	550	522	497	474	452	429	407	384	362	339	324
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
BR	BR2SAM 0	0	0	0	231	534	553	525	499	476	453	431	408	385	362	340	324
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
GH	GH1FFP 0	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
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	1,362	1,271	1,206
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
GH	GH2SAM 0	0	11	724	984	935	891	851	814	779	744	709	674	639	605	570	546
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
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	1,250	1,177	1,126
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
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
MC	MC1FGD 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
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
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
MC	MC2FGD 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
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
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
MC	MC3FGDU 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
MC	MC3FGDR 0	0	0	0	0	39	175	207	197	187	179	170	162	154	145	137	128
MC	MC3FFP 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
MC	MC3SAM 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
MC	MC4FGD 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
MC	MC4SCR 0	0	105	667	724	688	655	625	596	566	537	508	479	449	420	399	386
MC	MC4SP 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
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
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
CR	CR4FGD 0	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
CR	CR4SCR 0	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
CR	CR4FF 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
CR	CR4PAC 0	0	0	0	235	386	365	345	327	310	293	276	259	242	225	208	195
CR	CR4LIME 0	0	0	0	259	427	403	381	361	342	323	305	286	267	249	230	216
CR	CR5FGD 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
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
CR	CR5FF 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
CR	CR5PAC 0	0	0	0	251	423	399	378	357	338	320	301	282	263	245	226	212
CR	CR5LIME 0	0	0	0	278	468	441	417	395	374	353	333	312	291	271	250	234
CR	CR6FGD 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
CR	CR6SCR 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
CR	CR6FF 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
CR	CR6PAC 0	0	0	0	352	558	527	499	473	448	424	401	377	353	329	305	287
CR	CR6LIME 0	0	0	0	391	619	585	553	525	498	471	445	418	391	365	338	318
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
GR	GR3PAC 0	0	0	0	112	154	145	138	131	125	119	113	107	101	95	89	85
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
GR	GR4PAC 0	0	0	0	160	235	223	211	200	190	181	171	161	152	142	132	125

Station	Unit	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
BR	BR1FFP 0	7,291	7,099	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
BR	BR1SAM 0	315	307	299	291	282	274	266	257	249	241	232	224	216	208	199	191
BR	BR2FFP 0	7,881	7,668	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
BR	BR2SAM 0	315	307	298	290	281	273	264	256	247	239	230	222	213	205	196	187
BR	BR3FFP 0	8,325	8,122	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
GH	GH1FFP 0	10,545	10,193	9,841	9,489	9,137	8,785	8,433	8,081	7,729	7,377	7,025	6,673	6,321	5,969	2,424	0
GH	GH1SAM 0	1,167	1,128	1,089	1,050	1,011	972	933	894	855	816	777	738	699	661	268	0
GH	GH2FFP 0	10,791	10,556	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
GH	GH2SAM 0	535	523	511	500	488	476	464	453	441	429	418	406	394	383	371	359
GH	GH3FFP 0	13,216	12,647	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
GH	GH3SAM 0	1,099	1,073	1,047	1,020	994	967	941	915	888	862	835	809	782	756	730	703
GH	GH4FFP 0	12,835	12,050	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
GH	GH4SAM 0	1,124	1,096	1,068	1,039	1,011	983	955	927	899	870	842	814	786	758	730	701
MC	MC1FGD 0	13,412	12,949	12,485	12,022	11,558	11,095	10,631	10,167	9,704	9,240	8,777	8,313	7,850	3,188	0	0
MC	MC1FFP 0	10,896	10,520	10,143	9,767	9,390	9,013	8,637	8,260	7,884	7,507	7,130	6,754	6,377	2,590	0	0
MC	MC1SAM 0	696	672	648	624	600	576	552	528	504	480	455	431	407	165	0	0
MC	MC2FGD 0	13,677	13,148	12,618	12,088	11,558	11,028	10,499	9,969	9,439	8,909	2,908	0	0	0	0	0
MC	MC2FFP 0	10,871	10,450	10,029	9,608	9,187	8,766	8,344	7,923	7,502	7,081	2,311	0	0	0	0	0
MC	MC2SAM 0	710	682	655	627	600	572	545	517	490	462	151	0	0	0	0	0
MC	MC3FGDU 0	5,303	5,124	4,950	4,777	4,603	4,429	4,256	4,082	3,909	3,735	3,561	3,388	3,214	3,040	2,653	188
MC	MC3GDR 0	121	115	111	107	104	100	96	92	88	85	81	77	73	69	64	44
MC	MC3FFP 0	10,742	10,190	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	4,673
MC	MC3SAM 0	1,116	1,077	1,039	1,000	961	923	884	846	807	768	730	691	652	213	0	0
MC	MC4FGD 0	15,940	15,402	14,880	14,358	13,836	13,314	12,792	12,270	11,748	11,226	10,705	10,183	9,661	9,139	7,976	573
MC	MC4SCR 0	372	359	346	332	319	306	292	279	266	252	239	226	92	0	0	0
MC	MC4FFP 0	11,066	10,692	10,330	9,968	9,605	9,243	8,881	8,518	8,156	7,794	7,431	7,069	6,707	6,344	5,537	398
MC	MC4SAM 0	1,235	1,193	1,153	1,112	1,072	1,031	991	951	910	870	829	789	748	708	618	44
TC	TC1FFP 0	9,381	8,918	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
CR	CR4FGD 0	13,130	12,488	11,845	11,203	10,560	0	0	0	0	0	0	0	0	0	0	0
CR	CR4SCR 0	5,177	4,924	4,671	4,417	4,164	0	0	0	0	0	0	0	0	0	0	0
CR	CR4FF 0	2,648	2,519	2,389	2,260	2,130	0	0	0	0	0	0	0	0	0	0	0
CR	CR4PAC 0	186	177	168	159	150	0	0	0	0	0	0	0	0	0	0	0
CR	CR4LIME 0	206	195	185	175	165	0	0	0	0	0	0	0	0	0	0	0
CR	CR5FGD 0	13,924	13,207	12,490	11,774	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5SCR 0	5,478	5,196	4,914	4,632	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5FF 0	2,837	2,691	2,545	2,399	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5PAC 0	201	191	180	170	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR5LIME 0	222	211	199	188	0	0	0	0	0	0	0	0	0	0	0	0
CR	CR6FGD 0	17,265	16,496	15,727	14,959	14,190	13,421	12,653	0	0	0	0	0	0	0	0	0
CR	CR6SCR 0	6,956	6,646	6,337	6,027	5,717	5,408	5,098	0	0	0	0	0	0	0	0	0
CR	CR6FF 0	3,551	3,393	3,235	3,077	2,919	2,761	2,602	0	0	0	0	0	0	0	0	0
CR	CR6PAC 0	275	262	250	238	226	213	201	0	0	0	0	0	0	0	0	0
CR	CR6LIME 0	305	291	278	264	250	237	223	0	0	0	0	0	0	0	0	0
GR	GR3SFF 0	2,967	2,884	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
GR	GR3PAC 0	82	80	78	75	73	71	68	66	64	62	59	57	55	52	50	48
GR	GR4SFF 0	4,356	4,198	4,040	3,881	3,723	3,565	3,407	3,248	3,090	2,932	2,773	2,615	2,457	2,300	2,143	1,985
GR	GR4PAC 0	121	116	112	108	103	99	94	90	86	81	77	73	69	65	61	57

Station	Unit	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057
BR	BR1FFP 0	4,225	4,033	3,842	3,650	3,458	3,267	1,327	0	0	0	0	0	0	0	0	0
BR	BR1SAM 0	183	174	166	158	150	141	57	0	0	0	0	0	0	0	0	0
BR	BR2FFP 0	4,469	4,256	4,042	3,829	3,616	1,180	0	0	0	0	0	0	0	0	0	0
BR	BR2SAM 0	179	170	162	153	145	47	0	0	0	0	0	0	0	0	0	0
BR	BR3FFP 0	5,082	4,879	4,676	4,474	4,271	4,068	3,865	3,663	3,460	1,405	0	0	0	0	0	0
GH	GH1FFP 0	0	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	0	0
GH	GH2FFP 0	7,165	6,939	6,713	6,486	6,260	6,034	5,808	5,582	5,356	5,130	4,904	4,678	4,452	4,226	4,000	3,489
GH	GH2SAM 0	348	336	324	312	301	289	277	266	254	242	231	219	207	196	0	0
GH	GH3FFP 0	8,183	7,886	7,588	7,291	6,994	6,697	6,400	6,102	5,805	5,508	5,211	4,152	214	0	0	0
GH	GH3SAM 0	677	650	624	598	571	545	518	492	465	405	21	0	0	0	0	0
GH	GH4FFP 0	7,448	7,158	6,867	6,577	6,287	5,996	5,706	5,416	5,125	4,835	0	0	0	0	0	0
GH	GH4SAM 0	673	645	617	589	561	532	504	476	117	0	0	0	0	0	0	0
MC	MC1FGD 0	0	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	0	0
MC	MC1SAM 0	0	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	0	0
MC	MC2FFP 0	0	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	0	0
MC	MC3FGDU 0	0	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	0	0
MC	MC3FFP 0	341	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	0	0
MC	MC4FGD 0	0	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	0	0
MC	MC4FFP 0	0	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	0	0
TC	TC1FFP 0	4,801	4,186	261	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	0	0
CR	CR4SCR 0	0	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	0	0
CR	CR4PAC 0	0	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	0	0
CR	CR5FGD 0	0	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	0	0
CR	CR5FF 0	0	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	0	0
CR	CR5LIME 0	0	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	0	0
CR	CR6SCR 0	0	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	0	0
CR	CR6PAC 0	0	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	0	0
GR	GR3SFF 0	1,634	1,550	1,467	1,384	0	0	0	0	0	0	0	0	0	0	0	0
GR	GR3PAC 0	45	43	41	38	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	0	0
GR	GR4PAC 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Station	Unit	2058	2059
BR	BR1	0	0
BR	BR1	0	0
BR	BR2	0	0
BR	BR2	0	0
BR	BR3	0	0
GH	GH1	0	0
GH	GH1	0	0
GH	GH2	253	0
GH	GH2	0	0
GH	GH3	0	0
GH	GH3	0	0
GH	GH4	0	0
GH	GH4	0	0
MC	MC1	0	0
MC	MC1	0	0
MC	MC1	0	0
MC	MC2	0	0
MC	MC2	0	0
MC	MC2	0	0
MC	MC2	0	0
MC	MC3	0	0
MC	MC3	0	0
MC	MC3	0	0
MC	MC3	0	0
MC	MC4	0	0
MC	MC4	0	0
MC	MC4	0	0
MC	MC4	0	0
MC	MC4	0	0
TC	TC1	0	0
CR	CR4	0	0
CR	CR4	0	0
CR	CR4	0	0
CR	CR4	0	0
CR	CR4	0	0
CR	CR4	0	0
CR	CR5	0	0
CR	CR5	0	0
CR	CR5	0	0
CR	CR5	0	0
CR	CR5	0	0
CR	CR5	0	0
CR	CR6	0	0
CR	CR6	0	0
CR	CR6	0	0
CR	CR6	0	0
GR	GR3	0	0
GR	GR3	0	0
GR	GR4	0	0
GR	GR4	0	0

Retirement Cost		2010	2011	2012	2013	2014	2015	2016	2017	2018
All Units		0	0	0	0	0	0	2100	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
BR	BR2		6,633	7,160	7,253	7,398	7,546	7,697	7,851	8,008
BR	BR3		15,885	20,876	14,904	15,202	15,506	15,816	16,132	16,455
CR	CR4		14,372	9,218	12,029	12,269	12,515	12,765	13,020	13,281
CR	CR5		11,842	9,889	12,791	13,047	13,308	13,574	13,845	14,122
CR	CR6		10,666	11,619	10,173	10,376	10,584	10,795	11,011	11,231
GH	GH1		17,829	19,141	17,966	18,325	18,691	19,065	19,447	19,835
GH	GH2		12,225	18,498	13,429	13,698	13,972	14,251	14,536	14,827
GH	GH3		17,961	13,501	12,475	12,724	12,979	13,238	13,503	13,773
GH	GH4		11,533	13,496	12,105	12,347	12,594	12,846	13,103	13,365
GR	GR3		4,270	5,792	4,360	4,447	4,536	4,627	4,719	4,813
GR	GR4		7,338	6,924	8,633	8,805	8,982	9,161	9,344	9,531
MC	MC1		11,892	17,333	12,669	12,923	13,181	13,445	13,714	13,988
MC	MC2		16,179	11,941	15,201	15,505	15,815	16,131	16,454	16,783
MC	MC3		18,313	14,238	17,221	17,566	17,917	18,275	18,641	19,014
MC	MC4		16,531	18,981	17,245	17,590	17,942	18,300	18,666	19,040
TC	TC1		17,205	15,170	17,403	17,751	18,106	18,468	18,837	19,214
TY	TY3		410	416	418	427	435	444	453	462

RetirementCost_Savings

2019 2020 2021 2022 2023 2024 2025 2026 2027

Retirement Cost

All Units

0

0

0

0

0

0

0

0

0

2% Escalation Rate

Unit Costs (\$000)

BR	4,470	4,559	4,651	4,744	4,838	4,935	5,034	5,135	5,237
BR	8,168	8,331	8,498	8,668	8,841	9,018	9,199	9,383	9,570
BR	16,784	17,120	17,462	17,811	18,167	18,531	18,901	19,279	19,665
CR	13,546	13,817	14,094	14,375	14,663	14,956	15,255	15,560	15,872
CR	14,405	14,693	14,987	15,286	15,592	15,904	16,222	16,546	16,877
CR	11,456	11,685	11,919	12,157	12,400	12,648	12,901	13,159	13,423
GH	20,232	20,637	21,050	21,471	21,900	22,338	22,785	23,240	23,705
GH	15,124	15,426	15,735	16,049	16,370	16,698	17,032	17,372	17,720
GH	14,049	14,330	14,616	14,909	15,207	15,511	15,821	16,138	16,460
GH	13,632	13,905	14,183	14,467	14,756	15,051	15,352	15,659	15,973
GR	4,910	5,008	5,108	5,210	5,314	5,421	5,529	5,640	5,753
GR	9,722	9,916	10,115	10,317	10,523	10,734	10,949	11,167	11,391
MC	14,268	14,553	14,844	15,141	15,444	15,753	16,068	16,389	16,717
MC	17,118	17,461	17,810	18,166	18,530	18,900	19,278	19,664	20,057
MC	19,394	19,782	20,177	20,581	20,993	21,412	21,841	22,278	22,723
MC	19,421	19,809	20,205	20,609	21,021	21,442	21,871	22,308	22,754
TC	19,598	19,990	20,390	20,798	21,214	21,638	22,071	22,512	22,962
TY	471	480	490	500	510	520	530	541	552

RetirementCost_Savings

2028 2029 2030 2031 2032 2033 2034 2035 2036

Retirement Cost

All Units

0

0

0

0

0

0

0

0

0

0

0

0

0

2% Escalation Rate

Unit Costs (\$000)

BR	5,342	5,449	5,558	5,669	5,782	5,898	6,016	6,136	6,259
BR	9,762	9,957	10,156	10,359	10,566	10,778	10,993	11,213	11,437
BR	20,058	20,460	20,869	21,286	21,712	22,146	22,589	23,041	23,502
CR	16,189	16,513	16,843	17,180	17,524	17,874	18,232	18,596	18,968
CR	17,215	17,559	17,910	18,269	18,634	19,007	19,387	19,775	20,170
CR	13,691	13,965	14,244	14,529	14,820	15,116	15,418	15,727	16,041
GH	24,179	24,663	25,156	25,659	26,172	26,696	27,230	27,774	28,330
GH	18,074	18,436	18,804	19,181	19,564	19,955	20,355	20,762	21,177
GH	16,790	17,125	17,468	17,817	18,174	18,537	18,908	19,286	19,672
GH	16,292	16,618	16,950	17,289	17,635	17,988	18,347	18,714	19,089
GR	5,868	5,985	6,105	6,227	6,351	6,478	6,608	6,740	6,875
GR	11,619	11,851	12,088	12,330	12,576	12,828	13,084	13,346	13,613
MC	17,051	17,392	17,740	18,095	18,457	18,826	19,202	19,586	19,978
MC	20,458	20,867	21,285	21,710	22,145	22,587	23,039	23,500	23,970
MC	23,178	23,641	24,114	24,596	25,088	25,590	26,102	26,624	27,156
MC	23,209	23,674	24,147	24,630	25,123	25,625	26,138	26,660	27,194
TC	23,422	23,890	24,368	24,855	25,352	25,859	26,377	26,904	27,442
TY	563	574	586	597	609	622	634	647	660

RetirementCost_Savings

Retirement Cost		2037	2038	2039	2040
All Units		0	0	0	0

2% Escalation Rate

Unit Costs (\$000)

BR					
BR					
BR					
CR					
CR					
CR					
GH					
GH					
GH					
GH					
GR					
GR					
MC					
MC					
MC					
MC					
TC					
TY					
BR1	6,384	6,512	6,642	6,775	
BR2	11,666	11,899	12,137	12,380	
BR3	23,972	24,451	24,940	25,439	
CR4	19,347	19,734	20,129	20,532	
CR5	20,573	20,985	21,405	21,833	
CR6	16,362	16,689	17,023	17,364	
GH1	28,897	29,474	30,064	30,665	
GH2	21,600	22,032	22,473	22,923	
GH3	20,065	20,466	20,876	21,293	
GH4	19,470	19,860	20,257	20,662	
GR3	7,012	7,153	7,296	7,442	
GR4	13,885	14,163	14,446	14,735	
MC1	20,378	20,785	21,201	21,625	
MC2	24,449	24,938	25,437	25,946	
MC3	27,699	28,253	28,818	29,395	
MC4	27,737	28,292	28,858	29,435	
TC1	27,991	28,551	29,122	29,704	
TY3	673	686	700	714	

RetirementCost_Savings

Escalation Rate:		2%	Year \$:	2010	Fixed O&M										
		Year	Equipment	\$/Yr	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Month	Year	Equipment													
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
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
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
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
BR	BR3	5	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	1,227,229
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
GH	GH1	5	2014 SCR Turn-Down		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
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
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
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
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		0	0	0	0	631,870	1,289,014	1,314,795	1,341,091	1,367,912	1,395,271	1,423,176
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		0	0	0	0	-238,642	-219,636	-200,250	-180,476	-160,306	-139,733	-118,749
MC	MC1	5	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
MC	MC1	5	2015 SAM Mitigation		0	0	0	0	22,100	38,643	39,416	40,204	41,008	41,828	42,665
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
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
MC	MC2	4	2015 SAM Mitigation		0	0	0	0	25,257	38,643	39,416	40,204	41,008	41,828	42,665
MC	MC3	11	2014 FGD		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
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
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		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
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
MC	MC4	11	2014 SCR Turn-Down		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
CR	CR4	1	2016 SCR		0	0	0	0	2,107,050	2,149,191	2,192,175	2,236,018	2,280,739	2,326,353	2,372,967
CR	CR4	1	2016 WFGD		0	0	0	0	0	0	0	0	0	0	0
CR	CR4	1	2016 PJFF		0	0	0	0	1,341,259	1,368,085	1,395,446	1,423,355	1,451,822	1,480,859	1,510,461
CR	CR4	1	2016 SAM Mitigation		0	0	0	0	195,952	199,871	203,869	207,946	212,105	216,347	220,677
CR	CR4	1	2016 PAC Injection		0	0	0	0	190,321	194,128	198,010	201,971	206,010	210,130	214,330
CR	CR5	1	2016 SCR		0	0	0	0	2,244,442	2,289,331	2,335,117	2,381,819	2,429,456	2,478,045	2,526,697
CR	CR5	1	2016 WFGD		0	0	0	0	0	0	0	0	0	0	0
CR	CR5	1	2016 PJFF		0	0	0	0	1,408,829	1,437,006	1,465,746	1,495,061	1,524,962	1,555,461	1,585,961
CR	CR5	1	2016 SAM Mitigation		0	0	0	0	199,331	203,317	207,384	211,531	215,762	220,077	224,477
CR	CR5	1	2016 PAC Injection		0	0	0	0	193,700	197,574	201,525	205,556	209,667	213,860	218,127
CR	CR6	1	2016 SCR		0	0	0	0	2,693,781	2,747,656	2,802,609	2,858,661	2,915,835	2,974,151	3,032,627
CR	CR6	1	2016 WFGD		0	0	0	0	0	0	0	0	0	0	0

CR	Month	Year	Equipment	\$/yr	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
CR	1	2016	PJFF	1,632,000	0	0	0	0	0	1,837,897	1,874,655	1,912,148	1,950,391	1,989,399	2,029,187
CR	1	2016	SAM Mitigation	198,000	0	0	0	0	0	222,980	227,440	231,989	236,628	241,361	246,188
CR	1	2016	PAC Injection	191,000	0	0	0	0	0	215,097	219,399	223,787	228,263	232,828	237,484
GR	1	2016	SCR	943,000	0	0	0	0	0	1,061,971	1,083,211	1,104,875	1,126,972	1,149,512	1,172,502
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	4,049,499	4,130,489
GR	1	2016	PAC Injection	141,000	0	0	0	0	0	158,789	161,965	165,204	168,508	171,878	175,316
GR	1	2016	SCR	1,284,000	0	0	0	0	0	1,445,993	1,474,912	1,504,411	1,534,499	1,565,189	1,596,493
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
GR	1	2016	PAC Injection	150,000	0	0	0	0	0	168,924	172,303	175,749	179,264	182,849	186,506

Escalation Rate:	2%	Year	Equipment	2010 Fixed O&M \$/yr	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
					Month	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year
BR	BR1	5	2014 PJFF/PAC	701,686	715,720	730,034	744,635	759,527	774,718	790,212	806,016	822,137	838,580	855,351	
BR	BR1	5	2014 SAM Mitigation	157,752	160,907	164,125	167,408	170,756	174,171	177,655	181,208	184,832	188,529	192,299	
BR	BR2	4	2014 PJFF/PAC	836,761	853,496	870,566	887,978	905,737	923,852	942,329	961,175	980,399	1,000,007	1,020,007	
BR	BR2	4	2014 SAM Mitigation	157,752	160,907	164,125	167,408	170,756	174,171	177,655	181,208	184,832	188,529	192,299	
BR	BR3	5	2015 PJFF/PAC	1,226,290	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	
GH	GH1	5	2014 PJFF/PAC	1,515,052	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	
GH	GH1	5	2014 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	
GH	GH1	2	2013 SAM Mitigation	0	0	0	0	0	0	0	0	0	0	0	
GH	GH2	11	2014 PJFF/PAC	1,822,165	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	
GH	GH2	12	2012 Sorbent Injection	117,956	120,315	122,721	125,175	127,679	130,232	132,837	135,494	138,204	140,968	143,787	
GH	GH3	10	2015 PJFF/PAC	1,498,888	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	
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	1,451,640	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	
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	-121,124	-123,546	-126,017	-128,537	-131,108	-133,730	-136,405	-139,133	-141,916	-144,754	-147,649	
MC	MC1	5	2015 PJFF/PAC	1,661,255	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	
MC	MC1	5	2015 SAM Mitigation	43,518	44,388	45,276	46,182	47,105	48,047	49,008	49,989	50,988	52,008	53,048	
MC	MC2	4	2015 Combined 1&2 FGD	312,528	318,778	325,154	331,657	338,290	345,056	351,957	358,996	366,176	373,499	380,969	
MC	MC2	4	2015 PJFF/PAC	1,629,832	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	
MC	MC2	4	2015 SAM Mitigation	43,518	44,388	45,276	46,182	47,105	48,047	49,008	49,989	50,988	52,008	53,048	
MC	MC3	11	2014 FGD	0	0	0	0	0	0	0	0	0	0	0	
MC	MC3	10	2015 PJFF/PAC	1,485,832	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	
MC	MC3	4	2013 SAM Mitigation	43,145	44,008	44,888	45,786	46,702	47,636	48,588	49,560	50,551	51,562	52,594	
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	1,741,967	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	
MC	MC4	11	2014 SAM Mitigation	43,518	44,388	45,276	46,182	47,105	48,047	49,008	49,989	50,988	52,008	53,048	
MC	MC4	11	2014 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	
TC	TC1	11	2015 PJFF/PAC	1,134,353	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	
CR	CR4	1	2016 SCR	1,871,000	2,372,880	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
CR	CR4	1	2016 WFGD	0	0	0	0	0	0	0	0	0	0	0	
CR	CR4	1	2016 PJFF	1,191,000	1,510,476	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
CR	CR4	1	2016 SAM Mitigation	174,000	220,674	225,088	229,589	234,181	238,865	243,642	248,515	253,485	258,555	263,726	269,000
CR	CR4	1	2016 PAC Injection	169,000	214,333	218,620	222,992	227,452	232,001	236,641	241,374	246,201	251,125	256,148	261,271
CR	CR5	1	2016 SCR	1,993,000	2,527,606	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
CR	CR5	1	2016 WFGD	0	0	0	0	0	0	0	0	0	0	0	
CR	CR5	1	2016 PJFF	1,251,000	1,586,570	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
CR	CR5	1	2016 SAM Mitigation	177,000	224,479	228,968	233,548	238,219	242,983	247,843	252,800	257,856	263,013	268,273	273,638
CR	CR5	1	2016 PAC Injection	172,000	218,138	222,500	226,950	231,489	236,119	240,842	245,658	250,572	255,583	260,695	265,909
CR	CR6	1	2016 SCR	2,392,000	3,033,634	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
CR	CR6	1	2016 WFGD	0	0	0	0	0	0	0	0	0	0	0	

	<u>Month</u>	<u>Year</u>	<u>Equipment</u>	<u>S/yr</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>
CR	CR6	1	2016 PJFF	1,632,000	2,069,771	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
CR	CR6	1	2016 SAM Mitigation	198,000	251,112	256,134	261,257	266,482	271,812	277,248	282,793	288,449	294,218	300,102	306,104
CR	CR6	1	2016 PAC Injection	191,000	242,234	247,079	252,020	257,061	262,202	267,446	272,795	278,251	283,816	289,492	295,282
GR	GR3	1	2016 SCR	943,000	1,195,952	1,219,871	1,244,268	1,269,154	1,294,537	1,320,428	1,346,836	1,373,773	1,401,248	1,429,273	1,457,859
GR	GR3	1	2016 CDS-FF	3,322,000	4,213,099	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
GR	GR3	1	2016 PAC Injection	141,000	178,822	182,399	186,047	189,767	193,563	197,434	201,383	205,410	209,519	213,709	217,983
GR	GR4	1	2016 SCR	1,284,000	1,628,422	1,660,991	1,694,211	1,728,095	1,762,657	1,797,910	1,833,868	1,870,546	1,907,956	1,946,116	1,985,038
GR	GR4	1	2016 CDS-FF	4,309,000	5,464,854	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
GR	GR4	1	2016 PAC Injection	150,000	190,236	194,041	197,922	201,880	205,918	210,036	214,237	218,522	222,892	227,350	231,897

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

	Month	Year	Equipment	2033	2034	2035	2036	2037	2038	2039	2040
BR	BR1	5	2014 PJFF/PAC	872,458	889,907	907,705	925,860	944,377	963,264	982,530	1,002,180
BR	BR1	5	2014 SAM Mitigation	196,145	200,068	204,069	208,151	212,314	216,560	220,891	225,309
BR	BR2	4	2014 PJFF/PAC	1,040,407	1,061,215	1,082,440	1,104,088	1,126,170	1,148,694	1,171,668	1,195,101
BR	BR2	4	2014 SAM Mitigation	196,145	200,068	204,069	208,151	212,314	216,560	220,891	225,309
BR	BR3	5	2015 PJFF/PAC	1,524,738	1,555,233	1,586,337	1,618,064	1,650,425	1,683,434	1,717,103	1,751,445
GH	GH1	5	2014 PJFF/PAC	1,883,776	1,921,452	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	0	0
GH	GH1	2	2013 SAM Mitigation	0	0	0	0	0	0	0	0
GH	GH2	11	2014 PJFF/PAC	2,265,633	2,310,946	2,357,165	2,404,308	2,452,394	2,501,442	2,551,471	2,602,500
GH	GH2	12	2012 Sorbent Injection	146,663	149,596	152,588	155,640	158,753	161,928	165,166	168,470
GH	GH3	10	2015 PJFF/PAC	1,863,678	1,900,952	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	0	0
GH	GH3	2	2013 SAM Mitigation	0	0	0	0	0	0	0	0
GH	GH4	12	2015 PJFF/PAC	1,804,931	1,841,030	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	0	0
GH	GH4	2	2013 SAM Mitigation	0	0	0	0	0	0	0	0
MC	MC1	5	2015 Combined 1&2 FGD	-150,602	-153,614	-156,686	-159,820	-163,017	-166,277	-169,602	-172,994
MC	MC1	5	2015 PJFF/PAC	2,065,562	2,106,873	2,149,010	2,191,991	2,235,831	2,280,547	2,326,158	2,372,681
MC	MC1	5	2015 SAM Mitigation	54,109	55,191	56,295	57,421	58,570	59,741	60,936	62,155
MC	MC2	4	2015 Combined 1&2 FGD	388,589	396,361	404,288	412,374	420,621	429,033	437,614	446,366
MC	MC2	4	2015 PJFF/PAC	2,026,492	2,067,022	2,108,362	2,150,529	2,193,540	2,237,411	2,282,159	2,327,802
MC	MC2	4	2015 SAM Mitigation	54,109	55,191	56,295	57,421	58,570	59,741	60,936	62,155
MC	MC3	11	2014 FGD	0	0	0	0	0	0	0	0
MC	MC3	10	2015 PJFF/PAC	1,847,446	1,884,395	1,922,083	1,960,524	1,999,735	2,039,729	2,080,524	2,122,134
MC	MC3	4	2013 SAM Mitigation	53,645	54,718	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	0	0
MC	MC4	11	2014 FGD	0	0	0	0	0	0	0	0
MC	MC4	11	2014 PJFF/PAC	2,165,918	2,209,236	2,253,421	2,298,489	2,344,459	2,391,348	2,439,175	2,487,958
MC	MC4	11	2014 SAM Mitigation	54,109	55,191	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	0	0
TC	TC1	11	2015 PJFF/PAC	1,410,425	1,438,633	1,467,406	1,496,754	1,526,689	1,557,223	1,588,367	1,620,135
CR	CR4	1	2016 SCR	1,871,000	2,950,379	3,009,386	3,069,574	3,130,965	3,257,456	3,322,605	3,389,058
CR	CR4	1	2016 WFGD	0	0	0	0	0	0	0	0
CR	CR4	1	2016 PJFF	1,191,000	1,878,087	1,915,649	1,953,962	1,993,041	2,032,902	2,073,560	2,115,031
CR	CR4	1	2016 SAM Mitigation	174,000	274,380	279,868	285,465	291,175	296,998	302,938	308,997
CR	CR4	1	2016 PAC Injection	169,000	266,496	271,826	277,262	282,808	288,464	294,233	300,118
CR	CR5	1	2016 SCR	1,993,000	3,142,760	3,205,615	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	0	0
CR	CR5	1	2016 PJFF	1,251,000	1,972,701	2,012,155	2,052,398	2,093,446	2,135,315	2,178,021	2,221,582
CR	CR5	1	2016 SAM Mitigation	177,000	279,111	284,693	290,387	296,195	302,119	308,161	314,325
CR	CR5	1	2016 PAC Injection	172,000	271,227	276,651	282,184	287,828	293,584	299,456	305,445
CR	CR6	1	2016 SCR	2,392,000	3,771,943	3,847,382	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	0	0

	<u>Month</u>	<u>Year</u>	<u>Equipment</u>	<u>\$/yr</u>	<u>2033</u>	<u>2034</u>	<u>2035</u>	<u>2036</u>	<u>2037</u>	<u>2038</u>	<u>2039</u>	<u>2040</u>
CR	1	2016	PJFF	1,632,000	2,573,500	2,624,970	2,677,469	2,731,018	2,785,639	2,841,352	2,898,179	2,956,142
CR6	1	2016	SAM Mitigation	198,000	312,226	318,471	324,840	331,337	337,964	344,723	351,617	358,650
CR	1	2016	PAC Injection	191,000	301,188	307,212	313,356	319,623	326,015	332,536	339,186	345,970
GR	1	2016	SCR	943,000	1,487,016	1,516,756	1,547,091	1,578,033	1,609,594	1,641,786	1,674,622	1,708,114
GR	1	2016	CDS-FF	3,322,000	5,238,459	5,343,229	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	222,343	226,790	231,325	235,952	240,671	245,484	250,394	255,402
GR	1	2016	SCR	1,284,000	2,024,739	2,065,233	2,106,538	2,148,669	2,191,642	2,235,475	2,280,185	2,325,788
GR	1	2016	CDS-FF	4,309,000	6,794,859	6,930,756	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	236,535	241,266	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	1,401	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	5,766	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	497	470	445	422	400	377	354	332	311	288	266		
2018 CR								334	509	482	456	433	409	386	363	339	316	293		
2019 CR									342	517	490	464	440	416	392	368	344	320		
2020 CR										351	525	500	475	450	426	402	378	354		
2021 CR											360	534	509	484	459	434	409	385		
2022 CR												369	543	518	493	468	443	418		
2023 CR													378	552	527	502	477	452		
2024 CR														387	561	536	511	486		
2025 CR															396	570	545	520		
2026 CR																397	571	546		
2027 CR																	407	577		
2028 CR																		417		
2029 CR																			428	
2030 CR																				
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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	2,243	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	2,843	2,702	2,552	2,424	2,304
2024 MC																2,066	3,017	2,861	2,719	2,587
2025 MC																	3,092	3,092	2,933	2,787
2026 MC																	2,171	2,171	3,170	3,006
2027 MC																		2,225	2,225	3,249
2028 MC																				2,281
2029 MC																				
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	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	494	470
2027 TC																			533	506
2028 TC																				546
2029 TC																				417
2030 TC																				428

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	2031 TC		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
	2032 TC			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
	2033 TC				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
	2034 TC					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
	2036 TC						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
	2037 TC							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
	2038 TC								2,390	3,196	3,035	2,889	2,756	2,634	2,518	2,401	2,284	2,167	2,051	1,934
	2039 TC									2,450	3,276	3,111	2,962	2,825	2,700	2,581	2,461	2,341	2,221	2,102
	2040 TC										2,511	3,358	3,189	3,036	2,896	2,768	2,645	2,522	2,400	2,277
	2011 GH																			
	2012 GH																			
	2013 GH																			
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	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
	2021 BR												600	805	762	723	688	657	625	594
	2022 BR													615	825	781	741	706	673	641

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
	2023 BR																				2028
	2024 BR																				690
	2025 BR																				741
	2026 BR																				798
	2027 BR																				862
	2028 BR																				934
	2029 BR																				713
	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	137	130	123	117	111	106	100	95	89	83	78	74	72	69	67	65	
	2013 GR			98	98	141	133	126	120	114	108	103	97	91	86	80	76	73	71	69	
	2014 GR				101	101	144	136	129	123	117	111	105	99	94	88	82	78	75	73	
	2015 GR					103	103	148	140	132	126	120	114	108	102	96	90	84	80	77	
	2016 GR						106	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																132	189	179	169	
	2026 GR																	136	194	183	
	2027 GR																		139	199	
	2028 GR																				143
	2029 GR																				
	2030 GR																				
	2031 GR																				
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	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	
	2012 TY		96	140	140	132	125	119	113	108	102	96	90	85	79	75	72	70	67	65	
	2013 TY			98	98	143	136	129	122	116	110	104	99	93	87	81	77	74	71	69	
	2014 TY				101	101	147	139	132	125	119	113	107	101	95	89	83	79	76	73	

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	2015 TY						103	151	143	135	128	122	116	110	104	97	91	85	81	78
	2016 TY						106	154	146	146	138	131	125	119	112	106	100	93	87	83
	2017 TY						109	109	158	150	142	135	135	128	122	115	109	102	96	89
	2018 TY						111	111	158	162	153	145	145	138	131	125	118	111	105	98
	2019 TY						114	114	166	166	166	157	157	149	142	135	128	121	114	107
	2020 TY						117	117	166	166	166	166	171	161	153	145	138	131	124	117
	2021 TY						120	120	166	166	166	166	171	175	165	157	149	141	134	127
	2022 TY						123	123	166	166	166	166	171	175	179	169	161	152	145	138
	2023 TY						126	126	166	166	166	166	171	175	179	184	174	165	156	149
	2024 TY						129	129	166	166	166	166	171	175	179	184	188	178	169	160
	2025 TY						132	132	166	166	166	166	171	175	179	184	188	193	182	173
	2026 TY						136	136	166	166	166	166	171	175	179	184	188	193	198	187
	2027 TY						139	139	166	166	166	166	171	175	179	184	188	193	198	203
	2028 TY						143	143	166	166	166	166	171	175	179	184	188	193	198	203

Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047
2023 BR		657	624	591	559	526	493	471	459	447	435	423	411	399	388	376	364	352	340	328
2024 BR		707	673	640	606	573	539	505	482	470	458	446	434	422	409	397	385	373	361	349
2025 BR		760	725	690	656	621	587	552	518	495	482	470	457	445	432	420	407	395	382	370
2026 BR		818	779	743	708	672	637	602	566	531	507	494	481	469	456	443	430	417	405	392
2027 BR		884	839	798	761	725	689	653	617	580	544	520	506	493	480	467	454	441	428	415
2028 BR		957	906	860	818	781	743	706	669	632	595	558	533	519	506	492	479	465	452	438
2029 BR		731	981	928	881	839	800	762	724	686	648	610	572	546	532	518	505	491	477	463
2030 BR		749	1,005	952	903	860	820	781	742	703	664	625	586	559	559	545	531	517	503	489
2031 BR		768	1,031	975	926	881	841	801	761	721	681	641	601	561	573	559	545	530	516	502
2032 BR		787	1,056	1,006	956	906	866	826	786	746	706	666	626	586	616	588	573	558	543	529
2033 BR			806	1,083	1,025	973	926	883	841	799	757	715	673	631	673	631	603	603	587	572
2034 BR			827	1,110	1,050	997	949	905	862	819	776	733	690	647	733	690	647	647	618	602
2035 BR			847	1,138	1,077	1,022	973	928	884	840	795	751	707	663	795	751	707	707	663	633
2036 BR			868	1,166	1,104	1,048	997	951	906	861	816	771	726	681	816	771	726	726	681	650
2037 BR			890	1,195	1,131	1,074	1,022	974	928	882	836	790	744	698	836	790	744	744	698	667
2038 BR			912	1,225	1,160	1,101	1,047	999	952	904	857	809	762	715	904	857	809	809	762	731
2039 BR			935	1,256	1,189	1,128	1,074	1,024	975	927	878	829	781	733	927	878	829	829	781	750
2040 BR				959	1,287	1,218	1,156	1,100	1,050	1,000	950	900	850	800	1,000	950	900	900	850	800
2041 GR		58	56	54	52	49	47	45	42	40	38	0	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	0
2043 GR		66	64	61	59	57	54	52	49	47	45	42	40	0	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	0
2045 GR		75	72	70	67	65	62	60	57	54	52	49	47	44	42	0	0	0	0	0
2046 GR		79	77	74	71	69	66	64	61	58	56	53	51	48	45	43	0	0	0	0
2047 GR		84	81	78	76	73	70	68	65	63	60	57	55	52	49	47	44	0	0	0
2048 GR		90	86	83	80	78	75	72	70	67	64	61	59	56	53	50	48	45	0	0
2049 GR		99	93	88	85	82	80	77	74	71	68	66	63	60	57	55	52	49	46	0
2050 GR		108	102	95	90	87	84	82	79	76	73	70	67	64	62	59	56	53	50	47
2051 GR		118	111	104	97	92	90	87	84	81	78	75	72	69	66	63	60	57	54	51
2052 GR		128	121	114	107	100	95	92	89	86	83	80	77	74	71	68	65	62	59	56
2053 GR		139	131	124	117	110	102	97	94	91	88	85	82	79	76	73	70	67	64	61
2054 GR		150	142	135	127	120	112	105	100	96	93	90	87	84	81	78	75	72	69	66
2055 GR		161	153	146	138	130	123	115	107	102	99	96	92	89	86	83	80	77	74	71
2056 GR		174	165	157	149	141	134	126	118	110	105	101	98	95	91	88	85	81	78	75
2057 GR		188	178	169	161	153	145	137	129	121	113	107	104	100	97	94	90	87	83	80
2058 GR		204	193	183	173	165	157	149	140	132	124	116	110	106	103	99	96	92	89	86
2059 GR		146	209	197	187	178	169	161	152	144	135	127	119	113	109	105	102	98	95	91
2060 GR			150	214	202	192	182	173	165	156	148	139	130	122	115	112	108	104	101	97
2061 GR				154	219	207	197	187	178	169	160	151	142	133	125	118	115	111	107	103
2062 GR					157	225	212	201	191	182	173	164	155	146	137	128	121	117	114	110
2063 GR					161	230	218	208	206	196	187	177	168	159	150	140	131	124	120	116
2064 GR						165	223	216	212	202	191	182	172	163	153	144	134	127	123	119
2065 GR							242	229	223	217	206	196	186	177	167	157	147	138	131	127
2066 GR							174	169	174	248	235	222	211	201	191	181	171	161	151	141
2067 GR							178	240	254	261	254	240	228	217	206	196	186	175	165	155
2068 GR							182	261	282	292	282	261	246	234	222	211	201	190	180	169
2069 GR							187	282	302	312	302	282	267	253	239	228	217	206	195	184
2070 GR								192	302	322	332	322	302	287	272	259	245	232	221	200
2071 TY		58	56	53	51	48	46	43	41	0	0	0	0	0	0	0	0	0	0	0
2072 TY		62	60	57	55	52	49	47	44	42	0	0	0	0	0	0	0	0	0	0
2073 TY		66	64	61	59	56	53	51	48	46	43	0	0	0	0	0	0	0	0	0
2074 TY		71	68	65	63	60	57	55	52	49	47	44	0	0	0	0	0	0	0	0

Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047
2015 TY		75	72	70	67	64	61	59	56	53	51	48	45	0	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	0
2017 TY		85	82	79	76	73	70	67	65	62	59	56	53	50	47	0	0	0	0	0
2018 TY		92	87	84	81	78	75	72	69	66	63	60	57	54	52	49	0	0	0	0
2019 TY		101	94	89	86	83	80	77	74	71	68	65	62	59	56	53	50	0	0	0
2020 TY		110	103	96	91	88	85	82	79	76	73	70	66	63	60	57	54	51	0	0
2021 TY		120	113	106	99	93	90	87	84	81	78	74	71	68	65	62	59	55	52	0
2022 TY		130	123	116	108	101	96	93	89	86	83	80	76	73	70	67	63	60	57	54
2023 TY		141	134	126	119	111	104	98	95	92	88	85	82	78	75	72	68	65	62	58
2024 TY		152	145	137	129	122	114	106	101	97	94	90	87	84	80	77	73	70	67	63
2025 TY		164	156	148	140	133	125	117	109	103	100	96	93	89	86	82	79	75	72	68
2026 TY		177	168	160	152	144	136	128	120	112	106	102	99	95	91	88	84	81	77	73
2027 TY		192	182	172	164	156	148	139	131	123	114	108	105	101	97	94	90	86	83	79
2028 TY		208	196	186	177	168	160	151	143	134	126	117	111	107	104	100	96	92	89	85
2029 TY		146	213	201	191	181	172	164	155	146	138	129	120	114	110	106	102	98	95	91
2030 TY			150	218	206	196	186	177	168	159	150	141	132	123	117	113	109	105	101	97
2031 TY				154	224	212	201	190	181	172	163	154	145	135	126	120	116	112	107	103
2032 TY					157	229	217	206	195	186	176	167	158	148	139	129	123	118	114	110
2033 TY						161	235	222	211	200	190	181	171	161	152	142	133	126	121	117
2034 TY							165	241	228	216	205	195	185	175	165	156	146	136	129	124
2035 TY								169	247	234	221	210	200	190	180	170	160	149	139	132
2036 TY									174	253	239	227	215	205	195	184	174	164	153	143
2037 TY										178	259	245	233	221	210	199	189	178	168	157
2038 TY											182	266	252	238	226	215	204	194	183	172
2039 TY												187	273	258	244	232	221	210	198	187
2040 TY													192	279	264	250	238	226	215	203

Unit	Capacity	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
BR1	101	1,770	1,678	1,591	1,510	1,434	1,361	1,290	1,219	1,149	1,080	1,013	946
BR2	167	2,926	2,774	2,631	2,496	2,371	2,251	2,132	2,015	1,900	1,787	1,675	1,564
BR3	416	7,289	6,910	6,553	6,218	5,906	5,607	5,312	5,021	4,733	4,450	4,171	3,897
CR4	155	1,269	1,125	988	859	738	623	511	402	297	194	95	0
CR5	168	1,375	1,219	1,071	931	800	675	554	436	322	211	103	0
CR6	240	1,965	1,741	1,529	1,330	1,143	965	792	623	459	301	148	0
GH1	475	13,375	12,686	12,033	11,415	10,834	10,291	9,770	9,256	8,749	8,249	7,755	7,269
GH2	484	13,628	12,927	12,261	11,631	11,039	10,486	9,956	9,432	8,915	8,405	7,902	7,407
GH3	480	13,516	12,820	12,159	11,535	10,948	10,399	9,873	9,354	8,841	8,336	7,837	7,346
GH4	479	13,488	12,793	12,134	11,511	10,925	10,378	9,853	9,334	8,823	8,318	7,821	7,331
GR3	68	860	801	745	692	643	595	549	504	459	415	373	331
GR4	95	1,201	1,118	1,040	967	898	832	767	704	641	580	521	462
MC1	303	6,531	6,033	5,559	5,110	4,687	4,290	3,910	3,538	3,173	2,817	2,468	2,128
MC2	301	6,488	5,993	5,523	5,077	4,656	4,262	3,884	3,515	3,152	2,798	2,452	2,114
MC3	391	8,428	7,785	7,174	6,595	6,048	5,536	5,046	4,565	4,095	3,635	3,185	2,746
MC4	477	10,282	9,498	8,752	8,045	7,379	6,754	6,156	5,570	4,996	4,434	3,886	3,350
TC1	383	3,101	2,986	2,878	2,777	2,652	2,536	2,425	2,315	2,206	2,099	1,993	1,888
TC2	549	4,445	4,280	4,125	3,980	3,802	3,636	3,476	3,319	3,163	3,009	2,857	2,706
TV3	71	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
2012 CR	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
2014 CR	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
2016 CR	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
2018 CR	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
2020 CR	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
2022 CR	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
2024 CR	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
2026 CR	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
2028 CR	0	0	0	0	0	0	0	0	0	0	0	0	0
2029 CR	0	0	0	0	0	0	0	0	0	0	0	0	0
2030 CR	271	0	0	0	0	0	0	0	0	0	0	0	0
2031 CR	294	278	0	0	0	0	0	0	0	0	0	0	0
2032 CR	319	302	285	0	0	0	0	0	0	0	0	0	0
2033 CR	345	327	309	292	0	0	0	0	0	0	0	0	0
2034 CR	372	353	335	317	299	0	0	0	0	0	0	0	0
2035 CR	400	381	362	344	325	306	0	0	0	0	0	0	0
2036 CR	429	410	390	371	352	333	314	0	0	0	0	0	0
2037 CR	468	439	420	400	381	361	342	322	0	0	0	0	0
2038 CR	518	480	450	430	410	390	370	350	330	0	0	0	0

Unit	Capacity	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
2039 CR	570	531	492	462	441	421	400	379	359	338	317	296	275
2040 CR	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
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	0	0	0	0	0	0	0	0	0	0	0	0	0
2023 MC	879	0	0	0	0	0	0	0	0	0	0	0	0
2024 MC	956	901	0	0	0	0	0	0	0	0	0	0	0
2025 MC	1,035	980	924	0	0	0	0	0	0	0	0	0	0
2026 MC	1,119	1,061	1,004	947	0	0	0	0	0	0	0	0	0
2027 MC	1,205	1,147	1,088	1,029	970	915	856	797	738	679	620	561	502
2028 MC	1,296	1,235	1,175	1,115	1,055	995	936	877	818	759	700	641	582
2029 MC	1,390	1,328	1,266	1,205	1,143	1,081	1,020	959	898	837	776	715	654
2030 MC	1,488	1,424	1,361	1,298	1,235	1,172	1,108	1,045	982	919	856	793	730
2031 MC	1,590	1,525	1,460	1,395	1,330	1,266	1,201	1,136	1,071	1,006	941	876	811
2032 MC	1,696	1,629	1,563	1,497	1,430	1,364	1,297	1,231	1,164	1,098	1,032	965	900
2033 MC	1,806	1,738	1,670	1,602	1,534	1,466	1,398	1,330	1,262	1,194	1,126	1,058	990
2034 MC	1,921	1,852	1,782	1,712	1,642	1,572	1,503	1,433	1,363	1,293	1,223	1,154	1,084
2035 MC	2,041	1,969	1,898	1,826	1,755	1,683	1,612	1,540	1,469	1,397	1,325	1,254	1,182
2036 MC	2,208	2,092	2,019	1,945	1,872	1,799	1,725	1,652	1,579	1,505	1,432	1,359	1,286
2037 MC	2,425	2,263	2,144	2,069	1,994	1,919	1,844	1,768	1,693	1,618	1,543	1,468	1,393
2038 MC	2,652	2,486	2,319	2,198	2,121	2,044	1,967	1,890	1,813	1,736	1,659	1,581	1,504
2039 MC	2,888	2,718	2,548	2,377	2,253	2,174	2,095	2,016	1,937	1,858	1,779	1,700	1,621
2040 MC	3,135	2,961	2,786	2,611	2,437	2,309	2,228	2,147	2,066	1,985	1,904	1,823	1,742
2011 TC	91	87	82	77	0	0	0	0	0	0	0	0	0
2012 TC	98	94	89	84	79	0	0	0	0	0	0	0	0
2013 TC	106	101	96	91	86	81	0	0	0	0	0	0	0
2014 TC	113	108	103	98	93	88	83	0	0	0	0	0	0
2015 TC	121	116	111	106	101	96	91	85	0	0	0	0	0
2016 TC	130	124	119	114	109	103	98	93	88	0	0	0	0
2017 TC	138	133	127	122	117	111	106	101	95	90	0	0	0
2018 TC	147	142	136	131	125	120	114	109	103	98	92	0	0
2019 TC	156	151	145	139	134	128	123	117	111	106	100	94	0
2020 TC	166	160	155	149	143	137	131	126	120	114	108	102	0
2021 TC	176	170	164	158	152	147	141	135	129	123	117	111	0
2022 TC	187	181	175	168	162	156	150	144	138	132	126	120	0
2023 TC	198	191	185	179	173	166	160	154	148	141	135	129	0
2024 TC	209	203	196	190	183	177	171	164	158	151	145	139	0
2025 TC	221	214	208	201	194	188	181	175	168	162	155	149	0
2026 TC	233	226	219	213	206	199	193	186	179	173	166	159	0
2027 TC	246	239	232	225	218	211	204	197	191	184	177	170	0
2028 TC	259	252	245	238	231	224	217	209	202	195	188	181	0
2029 TC	273	265	258	251	244	236	229	222	215	207	200	193	0
2030 TC	287	279	272	265	257	250	242	235	227	220	213	205	0

Unit	Capacity	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
2031 TC	302	294	286	279	271	264	256	248	241	233	226	218	
2032 TC	317	309	301	293	286	278	270	262	255	247	239	231	
2033 TC	333	325	317	309	301	293	285	277	269	261	253	245	
2034 TC	349	341	333	325	317	308	300	292	284	276	267	259	
2035 TC	366	358	350	341	333	324	316	308	299	291	283	274	
2036 TC	392	376	367	358	350	341	333	324	315	307	298	290	
2037 TC	427	402	385	376	367	358	350	341	332	323	314	306	
2038 TC	463	438	412	395	385	376	367	358	349	340	331	322	
2039 TC	501	475	449	422	404	395	386	377	367	358	349	340	
2040 TC	541	514	487	460	433	414	405	396	386	377	367	358	
2011 GH	0	0	0	0	0	0	0	0	0	0	0	0	0
2012 GH	645	0	0	0	0	0	0	0	0	0	0	0	0
2013 GH	700	661	0	0	0	0	0	0	0	0	0	0	0
2014 GH	759	718	677	0	0	0	0	0	0	0	0	0	0
2015 GH	819	778	736	694	0	0	0	0	0	0	0	0	0
2016 GH	882	840	797	754	712	0	0	0	0	0	0	0	0
2017 GH	948	905	861	817	773	729	748	0	0	0	0	0	0
2018 GH	1,017	972	927	882	837	792	812	766	0	0	0	0	0
2019 GH	1,088	1,042	996	950	904	858	880	833	785	0	0	0	0
2020 GH	1,163	1,116	1,068	1,021	974	927	950	902	853	805	0	0	0
2021 GH	1,240	1,192	1,143	1,095	1,047	998	1,023	974	924	875	825	0	0
2022 GH	1,321	1,271	1,222	1,172	1,123	1,073	1,100	1,049	998	947	897	846	0
2023 GH	1,405	1,354	1,303	1,252	1,201	1,151	1,179	1,127	1,075	1,023	971	919	0
2024 GH	1,492	1,440	1,388	1,336	1,283	1,231	1,262	1,209	1,155	1,102	1,049	995	0
2025 GH	1,582	1,529	1,476	1,422	1,369	1,316	1,348	1,294	1,239	1,184	1,130	1,075	0
2026 GH	1,677	1,622	1,567	1,513	1,458	1,403	1,438	1,382	1,326	1,270	1,214	1,158	0
2027 GH	1,775	1,719	1,662	1,606	1,550	1,494	1,532	1,474	1,417	1,359	1,302	1,244	0
2028 GH	1,876	1,819	1,762	1,704	1,647	1,589	1,629	1,570	1,511	1,452	1,393	1,334	0
2029 GH	1,982	1,923	1,864	1,806	1,747	1,688	1,730	1,670	1,609	1,549	1,488	1,428	0
2030 GH	2,092	2,032	1,971	1,911	1,851	1,790	1,835	1,773	1,711	1,649	1,588	1,526	0
2031 GH	2,206	2,144	2,083	2,021	1,959	1,897	1,944	1,881	1,818	1,754	1,691	1,627	0
2032 GH	2,325	2,262	2,198	2,135	2,071	2,008	2,058	1,993	1,928	1,863	1,798	1,733	0
2033 GH	2,448	2,383	2,318	2,253	2,188	2,123	2,176	2,109	2,043	1,976	1,910	1,843	0
2034 GH	2,576	2,509	2,443	2,376	2,309	2,243	2,299	2,231	2,162	2,094	2,026	1,957	0
2035 GH	2,709	2,640	2,572	2,504	2,435	2,367	2,426	2,356	2,286	2,216	2,146	2,076	0
2036 GH	2,905	2,776	2,706	2,636	2,566	2,496	2,559	2,487	2,415	2,343	2,272	2,200	0
2037 GH	3,169	2,977	2,846	2,774	2,702	2,630	2,696	2,623	2,549	2,476	2,402	2,328	0
2038 GH	3,444	3,248	3,052	2,917	2,843	2,770	2,839	2,764	2,688	2,613	2,537	2,462	0
2039 GH	3,731	3,530	3,329	3,128	2,990	2,914	2,987	2,910	2,833	2,755	2,678	2,601	0
2040 GH	4,030	3,824	3,618	3,412	3,206	3,065	3,142	3,065	2,988	2,910	2,833	2,755	0
2011 BR	0	0	0	0	0	0	0	0	0	0	0	0	0
2012 BR	0	0	0	0	0	0	0	0	0	0	0	0	0
2013 BR	154	0	0	0	0	0	0	0	0	0	0	0	0
2014 BR	168	158	0	0	0	0	0	0	0	0	0	0	0
2015 BR	182	172	162	0	0	0	0	0	0	0	0	0	0
2016 BR	196	186	176	166	0	0	0	0	0	0	0	0	0
2017 BR	211	201	191	181	170	0	0	0	0	0	0	0	0
2018 BR	227	217	206	196	185	175	0	0	0	0	0	0	0
2019 BR	244	233	222	211	201	190	179	0	0	0	0	0	0
2020 BR	261	250	239	228	217	206	195	183	0	0	0	0	0
2021 BR	278	267	256	245	233	222	211	199	188	0	0	0	0
2022 BR	297	285	274	262	251	239	228	216	204	193	0	0	0

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

Unit	Capacity	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
2015 TY		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
2017 TY		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
2019 TY		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
2021 TY		0	0	0	0	0	0	0	0	0	0	0	0
2022 TY		0	0	0	0	0	0	0	0	0	0	0	0
2023 TY		55	0	0	0	0	0	0	0	0	0	0	0
2024 TY		60	56	0	0	0	0	0	0	0	0	0	0
2025 TY		65	61	58	0	0	0	0	0	0	0	0	0
2026 TY		70	66	63	59	0	0	0	0	0	0	0	0
2027 TY		75	72	68	64	61	0	0	0	0	0	0	0
2028 TY		81	77	73	70	66	62	0	0	0	0	0	0
2029 TY		87	83	79	75	71	68	64	0	0	0	0	0
2030 TY		93	89	85	81	77	73	69	65	0	0	0	0
2031 TY		99	95	91	87	83	79	75	71	67	0	0	0
2032 TY		106	102	98	94	89	85	81	77	73	69	0	0
2033 TY		113	109	104	100	96	92	87	83	79	75	70	0
2034 TY		120	116	111	107	103	98	94	90	85	81	76	72
2035 TY		128	123	119	114	110	105	101	96	92	87	83	78
2036 TY		135	131	126	122	117	112	108	103	99	94	89	85
2037 TY		146	139	134	129	125	120	115	111	106	101	96	92
2038 TY		161	150	142	137	133	128	123	118	113	108	104	99
2039 TY		176	165	154	146	141	136	131	126	121	116	111	106
2040 TY		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
BR	BR1	101	0	0	0	0	0	441	454	590	616	785
BR	BR2	167	0	0	0	0	0	729	751	975	1,018	1,299
BR	BR3	416	0	0	0	0	0	1,816	1,870	2,430	2,536	3,235
CR	CR4	155	258	840	1,124	1,095	1,216	1,960	1,949	1,644	1,927	2,572
CR	CR5	168	279	910	1,219	1,187	1,318	2,124	2,112	1,782	2,089	2,788
CR	CR6	240	399	1,300	1,741	1,696	1,882	5,221	5,152	4,566	4,899	5,799
GH	GH1	475	0	0	0	0	0	5,620	5,988	6,566	7,371	8,085
GH	GH2	484	0	0	0	0	0	5,727	6,101	6,691	7,510	8,238
GH	GH3	480	0	0	0	0	0	5,680	6,051	6,635	7,448	8,170
GH	GH4	479	0	0	0	0	0	5,668	6,038	6,622	7,433	8,153
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
TC	TC2	549	0	0	0	0	0	2,817	2,961	3,114	3,176	3,240
TY	TY3	71										
	BR Landfill Phase 2 Savings		0	0	0	0	0	0	0	828	908	1,960
	BR Landfill Phase 3 Savings		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
	CR Landfill Capital Savings		936	3,049	4,083	3,979	4,416	4,938	4,772	3,579	4,464	6,617
	CR Landfill O&M Savings		0	0	0	0	0	2,181	2,307	2,393	2,537	2,726
	CR6 Stator Rewind Savings		0	0	0	0	0	2,187	2,135	2,020	1,914	1,816
	GH Landfill Capital Savings		0	0	0	0	0	61	188	1,083	2,805	4,044
	GH Landfill O&M Savings		0	0	0	0	0	22,633	23,991	25,431	26,957	28,601
	TC Landfill Capital Savings		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

LandfillCapital

Unit	Capacity	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
BR1	101	787	789	1,035	1,054	1,357	1,337	1,319	1,301	1,285	1,267	1,122
BR2	167	1,301	1,305	1,711	1,743	2,245	2,211	2,180	2,151	2,124	2,095	1,855
BR3	416	3,242	3,252	4,261	4,342	5,591	5,508	5,431	5,359	5,291	5,219	4,620
CR4	155	2,560	2,096	2,059	2,073	1,531	1,768	1,810	1,869	1,932	2,000	1,861
CR5	168	2,774	2,272	2,232	2,247	1,659	1,916	1,962	2,025	2,094	2,168	2,017
CR6	240	5,682	4,867	4,712	4,637	3,700	3,969	3,960	4,000	4,047	4,101	3,833
GH1	475	8,761	9,219	9,707	10,790	12,508	14,281	15,439	15,604	16,273	16,860	17,332
GH2	484	8,927	9,394	9,891	10,994	12,745	14,551	15,732	15,900	16,581	17,180	17,660
GH3	480	8,854	9,316	9,809	10,904	12,640	14,431	15,602	15,769	16,444	17,038	17,514
GH4	479	8,835	9,297	9,789	10,881	12,614	14,401	15,569	15,736	16,410	17,002	17,478
GR3	68											
GR4	95											
MC1	303											
MC2	301											
MC3	391											
MC4	477											
TC1	383	2,305	2,351	2,398	2,446	2,495	2,545	2,596	2,648	5,363	8,239	8,294
TC2	549	3,304	3,371	3,438	3,507	3,577	3,648	3,721	3,796	7,687	11,809	11,888
TY3	71											
andfill Phase 2 Savings		1,870	1,782	1,697	1,613	1,531	1,451	1,372	1,294	1,215	1,123	156
andfill Phase 3 Savings		0	0	1,638	1,745	3,767	3,594	3,426	3,261	3,101	2,943	2,789
Landfill O&M Savings		3,461	3,564	3,671	3,781	3,895	4,012	4,132	4,256	4,384	4,515	4,651
Landfill Capital Savings		6,353	4,493	4,170	4,023	1,844	2,496	2,513	2,483	2,455	2,429	1,631
Landfill O&M Savings		2,944	3,121	3,308	3,507	3,717	3,925	4,061	4,305	4,563	4,837	5,128
Stator Rewind Savings		1,719	1,621	1,524	1,427	1,329	1,232	1,158	1,106	1,055	1,004	952
Landfill Capital Savings		4,399	4,388	4,387	6,672	11,397	16,206	18,397	18,341	18,358	17,892	16,784
Landfill O&M Savings		30,979	32,838	34,808	36,897	39,110	41,457	43,944	44,668	47,348	50,189	53,201
Landfill Capital Savings		0	0	0	0	0	0	0	0	6,478	13,344	13,344
Landfill O&M Savings		5,610	5,722	5,836	5,953	6,072	6,194	6,318	6,444	6,573	6,704	6,838

LandfillCapital

Unit	Capacity	2032	2033	2034	2035	2036	2037	2038	2039	2040
BR1	101	410	385	360	331	54	46	38	30	23
BR2	167	678	636	595	547	89	76	63	50	39
BR3	416	1,688	1,585	1,482	1,363	222	189	157	124	97
CR4	155	1,810	1,778	1,748	1,719	1,692	1,708	1,727	1,747	1,771
CR5	168	1,962	1,927	1,895	1,864	1,834	1,851	1,872	1,894	1,919
CR6	240	3,704	3,602	2,777	2,662	2,620	2,645	2,674	2,705	2,742
GH1	475	17,856	18,548	19,372	20,254	21,186	21,692	2,492	1,854	1,700
GH2	484	18,195	18,899	19,739	20,637	21,587	22,103	2,539	1,889	1,733
GH3	480	18,044	18,743	19,576	20,467	21,409	21,921	2,518	1,874	1,718
GH4	479	18,007	18,704	19,535	20,424	21,364	21,875	2,513	1,870	1,715
GR3	68									
GR4	95									
MC1	303									
MC2	301									
MC3	391									
MC4	477									
TC1	383	12,354	12,003	11,666	11,343	11,031	10,731	10,442	10,162	9,886
TC2	549	17,709	17,206	16,723	16,259	15,812	15,382	14,967	14,567	14,170
TY3	71									
andfill Phase 2 Savings		138	120	101	83	64	46	28	9	0
andfill Phase 3 Savings		2,638	2,487	2,336	2,158	301	265	230	194	159
Landfill O&M Savings										
Landfill Capital Savings		1,345	1,123	908	695	485	430	384	338	303
Stator Rewind Savings		5,230	5,335	5,441	5,550	5,661	5,774	5,890	6,008	6,128
Landfill Capital Savings		901	850	70	0	0	0	0	0	0
Landfill O&M Savings		15,709	15,118	14,860	14,617	14,352	12,126	9,906	7,329	6,705
Landfill Capital Savings		56,393	59,776	63,363	67,165	71,194	75,466	155	158	161
Landfill O&M Savings		23,088	22,094	21,132	20,199	19,293	18,412	17,554	16,717	15,883
Landfill Capital Savings		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
BR	BR1	101	0	0	0	553	743	703	668	635	606	577	548	519	491	462
BR	BR2	167	0	0	0	915	1,228	1,163	1,104	1,050	1,002	954	907	859	811	764
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
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
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
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
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
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
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
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
GR	GR3	68	0	0	0	586	837	792	751	713	679	645	611	577	544	510
GR	GR4	95	0	0	0	819	1,169	1,106	1,049	996	948	901	854	807	759	712
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
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
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
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
TC	TC1	383	0	0	0	770	1,008	958	912	871	833	797	760	724	688	652
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
TY	TY3	71	0	0	0	586	837	792	751	713	679	645	611	577	544	510
	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
	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
	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
	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
	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
	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

Unit	Capacity	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
BR1	101	433	413	403	393	382	372	361	351	340	330	320	309	299	288	278
BR2	167	716	684	666	649	632	615	597	580	563	546	528	511	494	477	459
BR3	416	1,784	1,703	1,660	1,617	1,574	1,531	1,488	1,445	1,402	1,359	1,316	1,273	1,230	1,187	1,144
CR4	155	859	806	770	735	699	663	627	591	0	0	0	0	0	0	0
CR5	168	931	874	835	796	757	718	679	640	0	0	0	0	0	0	0
CR6	240	1,329	1,249	1,193	1,137	1,082	1,026	970	915	0	0	0	0	0	0	0
GH1	475	1,183	1,111	1,062	1,035	1,008	982	955	928	901	875	848	821	794	767	741
GH2	484	1,205	1,132	1,082	1,055	1,028	1,000	973	946	918	891	864	837	809	782	755
GH3	480	1,195	1,123	1,073	1,046	1,019	992	965	938	911	884	857	830	803	776	748
GH4	479	1,193	1,121	1,071	1,044	1,017	990	963	936	909	882	855	828	801	774	747
GR3	68	476	452	438	423	409	395	380	366	352	337	323	309	294	280	266
GR4	95	665	631	611	591	571	551	531	511	491	471	451	431	411	391	371
MC1	303	1,034	965	915	882	850	818	786	754	722	690	658	626	594	562	530
MC2	301	1,027	959	908	877	845	813	781	749	717	686	654	622	590	558	526
MC3	391	1,335	1,245	1,180	1,139	1,097	1,056	1,015	973	932	891	849	808	766	725	684
MC4	477	1,628	1,519	1,440	1,389	1,339	1,288	1,238	1,187	1,137	1,086	1,036	986	935	885	834
TC1	383	616	579	555	542	529	517	504	491	479	466	453	441	428	415	403
TC2	549	882	830	795	777	759	741	723	704	686	668	650	632	613	595	577
TY3	71	476	452	438	423	409	395	380	366	352	337	323	309	294	280	266
BRWATER		2,933	2,800	2,729	2,659	2,588	2,517	2,447	2,376	2,305	2,235	2,164	2,094	2,023	1,952	1,882
CRWATER		3,118	2,929	2,798	2,668	2,537	2,407	2,277	2,146	0	0	0	0	0	0	0
MCWATER		5,025	4,689	4,443	4,287	4,131	3,976	3,820	3,664	3,508	3,353	3,197	3,041	2,886	2,730	2,574
TCWATER		1,498	1,410	1,350	1,319	1,288	1,258	1,227	1,196	1,165	1,134	1,103	1,072	1,041	1,010	979
GHWATER		4,775	4,487	4,288	4,180	4,072	3,964	3,856	3,748	3,640	3,531	3,423	3,315	3,207	3,099	2,991
GRWATER		1,141	1,083	1,049	1,015	980	946	912	877	843	809	774	740	706	671	637

Unit	Capacity	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
BR1	101	267	257	247	236	226	215	205	194	184	174	0	0	0	0	0
BR2	167	442	425	408	390	373	356	339	321	304	287	0	0	0	0	0
BR3	416	1,101	1,058	1,016	973	930	887	844	801	758	715	0	0	0	0	0
CR4	155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR5	168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR6	240	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GH1	475	714	687	660	634	607	580	553	526	500	473	446	0	0	0	0
GH2	484	727	700	673	646	618	591	564	536	509	482	454	0	0	0	0
GH3	480	721	694	667	640	613	586	559	532	505	478	451	0	0	0	0
GH4	479	720	693	666	639	612	585	558	531	504	477	450	0	0	0	0
GR3	68	251	237	0	0	0	0	0	0	0	0	0	0	0	0	0
GR4	95	351	331	0	0	0	0	0	0	0	0	0	0	0	0	0
MC1	303	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC2	301	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC3	391	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC4	477	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TC1	383	390	377	364	352	339	326	314	301	288	276	263	250	237	225	212
TC2	549	559	541	522	504	486	468	450	431	413	395	377	359	340	322	304
TV3	71	251	237	0	0	0	0	0	0	0	0	0	0	0	0	0

BRWATER	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
CRWATER	0	0	0	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	0	0	0
TCWATER	949	918	887	856	825	794	763	732	701	670	609	640	609	578	547	516
GHWATER	2,883	2,774	2,666	2,558	2,450	2,342	2,234	2,125	2,017	1,909	0	1,801	0	0	0	0
GRWATER	603	568	0	0	0	0	0	0	0	0	0	0	0	0	0	0

WaterCapital

Unit	Capacity	2055	2056	2057	2058	2059
BR1	101	0	0	0	0	0
BR2	167	0	0	0	0	0
BR3	416	0	0	0	0	0
CR4	155	0	0	0	0	0
CR5	168	0	0	0	0	0
CR6	240	0	0	0	0	0
GH1	475	0	0	0	0	0
GH2	484	0	0	0	0	0
GH3	480	0	0	0	0	0
GH4	479	0	0	0	0	0
GR3	68	0	0	0	0	0
GR4	95	0	0	0	0	0
MC1	303	0	0	0	0	0
MC2	301	0	0	0	0	0
MC3	391	0	0	0	0	0
MC4	477	0	0	0	0	0
TC1	383	0	0	0	0	0
TC2	549	0	0	0	0	0
TY3	71	0	0	0	0	0

BRWATER	0	0	0	0	0	0
CRWATER	0	0	0	0	0	0
MCWATER	0	0	0	0	0	0
TCWATER	0	0	0	0	0	0
GHWATER	0	0	0	0	0	0
GRWATER	0	0	0	0	0	0

KU/LGE Supplemental Analysis

Table 5 - PVRR of Installing Controls vs. Retiring and Replacing Capacity, 2011 Wood Mac

Tyrone 3	-10
Green River 3	-88
Brown 3	357
Cane Run 4	-187
Cane Run 6	-145
Brown 1-2	
Cane Run 5	-171
Ghent 3	520
Ghent 1	400
Green River 4	-140
Mill Creek 4	481
Trimble County 1	675
Ghent 4	750
Mill Creek 3	453
Ghent 2	755
Mill Creek 1-2	536

Synapse Re-Analysis

Nominal Wood Mackenzie Gas Price

Tyrone 3	
Green River 3	
Brown 3	
Cane Run 4	
Cane Run 6	
Brown 1-2	
Cane Run 5	
Ghent 3	
Ghent 1	
Green River 4	
Mill Creek 4	
Trimble County 1	
Ghent 4	
Mill Creek 3	
Ghent 2	
Mill Creek 1-2	

*
-59
-66
368
-240
-67
49
-193
529
430
-130
484
654
727
423
728
530

Difference	
Synapse minus KU/LGE	
Tyrone 3	-49
Green River 3	22
Brown 3	11
Cane Run 4	-53
Cane Run 6	78
Brown 1-2	10
Cane Run 5	-22
Ghent 3	9
Ghent 1	30
Green River 4	10
Mill Creek 4	3
Trimble County 1	-21
Ghent 4	-23
Mill Creek 3	-30
Ghent 2	-27
Mill Creek 1-2	-6

Discount Rate 6.71%

	\$M	\$000	2011	2012	2013	2014	2015	2016	2017
<u>New Unit Capital and Production Cost - Nominal Gas Prices</u>									
No Retirements									
Retire Tyrone 3	23,152	926790	996883	1050489	1141318	1263678	1417091	1438173	
Retire Tyrone 3, Green River 3	23,220	926790	996883	1055680	1174116	1298646	1414631	1431108	
Retire Tyrone 3, Green River 3, Brown 3	23,318	926790	996883	1054276	1160541	1274476	1386107	1410466	
Retire Tyrone 3, Green River 3, Cane Run 4	24,081	926790	996883	1055680	1171770	1292018	1442861	1475558	
Retire Tyrone 3, Green River 3, Cane Run 4, Cane Run 6	23,611	926790	996883	1055680	1171428	1295859	1427241	1445712	
Retire Tyrone 3, Green River 3, Cane Run 4, Cane Run 6, Brown 1-2	24,213	926790	996883	1055680	1173007	1298124	1454173	1483367	
Retire Tyrone 3, Green River 3, Cane Run 4-6	24,708	926790	996883	1055680	1169497	1298093	1538019	1614532	
Retire Tyrone 3, Green River 3, Cane Run 4-6, Ghent 3	24,584	926790	996883	1055680	1172767	1297872	1488125	1555934	
Retire Tyrone 3, Green River 3, Cane Run 4-6, Ghent 1	25,660	926791	996883	1060870	1214304	1375608	1639086	1633192	
Retire Tyrone 3, Green River 3, Cane Run 4-6, Ghent 1	25,614	926790	996883	1054841	1203705	1359236	1630287	1637008	
Retire Tyrone 3, Green River 3-4, Cane Run 4-6	24,711	926790	996883	1055680	1167387	1297138	1539744	1613718	
Retire Tyrone 3, Green River 3-4, Cane Run 4-6, Mill Creek 4	25,937	926790	996883	1060870	1206885	1355077	1658524	1656651	
Retire Tyrone 3, Green River 3-4, Cane Run 4-6, Trimble County 1	25,765	926790	996883	1060870	1208925	1370896	1651235	1641798	
Retire Tyrone 3, Green River 3-4, Cane Run 4-6, Ghent 4	25,969	926790	996883	1060871	1208925	1371768	1667564	1657559	
Retire Tyrone 3, Green River 3-4, Cane Run 4-6, Mill Creek 3	25,666	926790	996883	1058595	1205351	1365286	1639282	1639566	
Retire Tyrone 3, Green River 3-4, Cane Run 4-6, Ghent 2	25,982	926790	996756	1059376	1205750	1357538	1664428	1661868	
Retire Tyrone 3, Green River 3-4, Cane Run 4-6, Mill Creek 1-2	26,401	926790	996883	1060870	1208925	1357993	1716284	1692860	

New Unit Capital and Production Cost - Nominal CO2

No Retirements	43,403	926780	1003151	1053760	1149199	1270039	1423977	1446861	
Retire Tyrone 3	43,443	926780	1003151	1058950	1182469	1305576	1420360	1440334	
Retire Tyrone 3, Green River 3	43,533	926780	1003151	1057547	1168920	1281256	1392648	1420671	
Retire Tyrone 3, Green River 3, Brown 3	43,858	926780	1003151	1058950	1180150	1298761	1451939	1491467	
Retire Tyrone 3, Green River 3, Cane Run 4	43,616	926780	1003151	1057547	1168555	1280864	1413967	1470166	
Retire Tyrone 3, Green River 3, Cane Run 4, Cane Run 6	43,901	926780	1003151	1058950	1181336	1304856	1463604	1498691	
Retire Tyrone 3, Green River 3, Cane Run 4, Cane Run 6, Brown 1-2	44,189	926780	1003151	1058950	1177788	1304845	1500872	1635791	
Retire Tyrone 3, Green River 3, Cane Run 4-6	44,136	926780	1003151	1058950	1181074	1304587	1499771	1574630	
Retire Tyrone 3, Green River 3, Cane Run 4-6, Ghent 3	44,741	926780	1003151	1062738	1211382	1360560	1636247	1646449	
Retire Tyrone 3, Green River 3, Cane Run 4-6, Ghent 1	44,732	926779	1003151	1056704	1200752	1344142	1633588	1694119	
Retire Tyrone 3, Green River 3-4, Cane Run 4-6	44,159	926780	1003151	1058950	1175508	1303762	1552488	1633981	
Retire Tyrone 3, Green River 3-4, Cane Run 4-6, Mill Creek 4	45,064	926780	1003151	1064141	1215001	1361596	1678067	1685780	
Retire Tyrone 3, Green River 3-4, Cane Run 4-6, Trimble County 1	44,946	926780	1003151	1062738	1205816	1355760	1649610	1656717	
Retire Tyrone 3, Green River 3-4, Cane Run 4-6, Ghent 4	45,113	926780	1003151	1064141	1217046	1378931	1687924	1686938	
Retire Tyrone 3, Green River 3-4, Cane Run 4-6, Mill Creek 3	44,869	926780	1003151	1060462	1202265	1350138	1637027	1655651	
Retire Tyrone 3, Green River 3-4, Cane Run 4-6, Ghent 2	45,140	926780	1003025	1062646	1213868	1364078	1684151	1690856	
Retire Tyrone 3, Green River 3-4, Cane Run 4-6, Mill Creek 1-2	45,300	926780	1003151	1064141	1217046	1364576	1739191	1725323	

New Unit Cap and Prod Cost

NPVRR	2011	2012	2013	2014	2015	2016	2017
	41,286	996883	1050489	1141318	1263678	1417091	1438173
	41,295	996883	1055680	1174116	1298646	1414631	1431108
	41,331	996883	1054276	1160541	1274476	1386107	1410466
	41,250	996883	1055680	1171770	1292018	1442861	1474009
	41,269	996883	1054276	1160199	1274103	1405877	1457656
	41,317	996883	1055680	1173007	1298124	1454173	1481818
	41,439	996883	1055680	1169497	1298093	1538019	1614532
	41,495	996883	1055680	1172767	1297872	1488125	1555934
	41,695	996883	1059467	1203075	1353852	1617048	1618281
	41,739	996883	1053438	1192476	1337480	1615115	1665383
	41,417	996883	1055680	1167387	1297138	1539744	1613718
	42,002	996883	1060870	1206885	1355077	1658524	1656651
	41,892	996883	1059467	1197696	1349140	1630696	1630582
	42,044	996883	1060871	1208925	1371768	1667564	1657559
	41,828	996883	1057192	1194122	1343530	1618431	1628675
	42,059	996756	1059376	1205750	1357538	1664428	1661868
	42,014	996883	1060870	1208925	1357993	1716284	1691311

New Unit Capital and Production Cost - Nominal Gas & CO2

No Retirements
Retire Tyrone 3
Retire Tyrone 3, Green River 3
Retire Tyrone 3, Green River 3, Brown 3
Retire Tyrone 3, Green River 3, Cane Run 4
Retire Tyrone 3, Green River 3, Cane Run 4, Cane Run 6
Retire Tyrone 3, Green River 3, Cane Run 4, Cane Run 6, Brown 1-2
Retire Tyrone 3, Green River 3, Cane Run 4-6
Retire Tyrone 3, Green River 3, Cane Run 4-6, Ghent 3
Retire Tyrone 3, Green River 3, Cane Run 4-6, Ghent 1
Retire Tyrone 3, Green River 3-4, Cane Run 4-6
Retire Tyrone 3, Green River 3-4, Cane Run 4-6, Mill Creek 4
Retire Tyrone 3, Green River 3-4, Cane Run 4-6, Trimble County 1
Retire Tyrone 3, Green River 3-4, Cane Run 4-6, Ghent 4
Retire Tyrone 3, Green River 3-4, Cane Run 4-6, Mill Creek 3
Retire Tyrone 3, Green River 3-4, Cane Run 4-6, Ghent 2
Retire Tyrone 3, Green River 3-4, Cane Run 4-6, Mill Creek 1-2

926780
1003151
1058950
1175508
1303762
1552488
1633981
2378503
2605369
2836375
3101882
3453568
3759648
3993695
4306826
4623541
4874988
5191086
5540126

	2011	2012	2013	2014	2015	2016	2017
NPVRR	5945818						
	6174488						
	6454825						
	6736666						
	7064425						
	7427835						
	7854016						
	8102049						
	8377688						
	8714965						
	9085256						

New Unit Cap and Prod Cost

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
1505568	1589561	1645123	1738754	1886801	1976332	1978639	2030246	2118170	2120786	2226087	2303070	2416708	2434237	2441159	2554248	
1499408	1585244	1642904	1741186	1892082	1986624	1979957	2028026	2120555	2124564	2246624	2341022	2416708	2434237	2467634	2530925	
1512926	1644159	1700274	1778585	1880026	1954744	2022552	2083320	2164207	2161173	2219502	2256261	2359707	2444874	2549928	2623800	
1589998	1744152	1791568	1871092	1963642	1998576	2059192	2190460	2272518	2266954	2322162	2349733	2422553	2472057	2545845	2664227	
1516320	1619158	1725342	1884133	1964903	1977952	1980099	2043605	2169972	2185074	2302027	2392018	2464654	2478540	2509856	2578098	
1602004	1760064	1804680	1880571	1976228	2009088	2067474	2203330	2318794	2281254	2336552	2366360	2434764	2477458	2557468	2682040	
1680963	1754788	1810108	1905192	2055614	2141872	2143616	2208939	2291848	2290858	2407226	2500569	2571504	2605322	2649172	2714187	
1684674	1777724	1816158	1898714	2001476	2073166	2130753	2186916	2276660	2286342	2579209	2657866	2667720	2696404	2712466	2796294	
1709038	1811208	1926280	2091668	2166208	2184810	2189287	2270272	2388872	2443664	2509502	2620394	2672191	2696404	2730776	2807112	
1703831	1811840	1925165	2080330	2163302	2184810	2194604	2267040	2387820	2409238	2509502	2620394	2672191	2696404	2730776	2807112	
1684410	1756756	1812827	1906190	2051284	2142575	2142039	2209576	2290280	2292105	2362914	2448069	2601210	2605388	2651821	2714098	
1732474	1881124	2000574	2088501	2162434	2203408	2208810	2302484	2454046	2526676	2554756	2587835	2632088	2680416	2730334	2877837	
1720647	1823146	1941237	2106436	2176683	2195026	2207222	2272311	2402723	2422703	2542135	2625984	2695760	2701404	2748232	2806096	
1733945	1872298	1980208	2063516	2145554	2225869	2283840	2342710	2429969	2441436	2561603	2643011	2721914	2736578	2778049	2843476	
1711844	1807413	1931165	2094335	2168024	2186816	2198969	2271907	2390254	2408120	2532028	2618597	2685403	2694850	2738850	2804206	
1740190	1864070	1985884	2065032	2157056	2227878	2291845	2342782	2421750	2445027	2566561	2659590	2720572	2746534	2779494	2839077	
1812989	1969472	2011818	2103203	2197097	2239333	2292488	2419908	2518300	2483394	2556786	2644650	2794520	2797212	2843960	2910852	
2208666	2458618	2694752	2970518	3330748	3638328	3877149	4173237	4513920	4779080	5160920	5529915	5858573	6108794	6421980	6742436	
2203008	2455142	2693199	2972958	3335915	3648771	3878795	4171687	4516774	4781496	5166233	5537124	5859766	6107374	6422672	6744531	
2220168	2519671	2751164	3005772	3317621	3610248	3923468	4230982	4553514	4811296	5135746	5490898	5898418	6162512	6452188	6753966	
2295830	2616662	2836255	3085237	3386078	3637238	3929444	4306036	4625035	4870073	5233952	5586451	5901301	6147791	6440308	6735726	
2270890	2534826	2753332	3022798	3377424	3680222	3924062	4224352	4557030	4819271	5192698	5553308	5880214	6133456	6436150	6740924	
2301856	2624823	2840140	3084379	3385880	3633443	3922248	4300480	4649891	4863084	5227361	5583547	5902203	6153082	6447666	6740111	
2377014	2605681	2836333	3102993	3459694	3763353	3999797	4310302	4630231	4880208	5195752	5547342	5951858	6178414	6457730	6740359	
2382742	2633003	2839066	3093958	3404664	3703158	4017778	4322830	4631548	4882388	5192379	5524537	5905694	6151052	6443720	6739464	
2428410	2745451	2952936	3194044	3489780	3741378	4033302	4419566	4749542	4948930	5299382	5644498	5953450	6197220	6478422	6751328	
2467039	2721534	2935681	3180249	3482952	3737726	4048300	4445600	4768563	4961009	5251306	5536540	5859123	6198102	6571650	6805884	
2378503	2605369	2836375	3101882	3453568	3759648	3993695	4306826	4623541	4874988	5191086	5540126	5945818	6174488	6454825	6736666	
2419002	2714272	2993560	3239243	3522081	3816405	4115054	4428113	4728587	4985502	5335624	5684774	5958611	6208374	6487607	6763882	
2450106	2770450	2975010	3214763	3517171	3817802	4115054	4428113	4728587	4985502	5335624	5684774	5958611	6208374	6487607	6763882	
2421848	2718199	2997648	3241702	3525164	3817802	4119676	4428412	4737458	4988330	5290813	5564038	5888611	6218618	6593736	6824503	
2440348	2749934	2965328	3207916	3510106	3824144	4074610	4473421	4796558	4989892	5284328	5560862	5883123	6214974	6489484	6819276	
2429475	2712062	3005174	3245964	3537975	3824144	4130810	4432965	4736040	4997350	5352103	5695750	5978165	6213246	6491881	6765688	
2500290	2814636	3021481	3268626	3565902	3822068	4118411	4503438	4822528	5017312	5318092	5652092	6038667	6248108	6515071	6779066	

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
2189799	2428096	2660772	2933256	3266797	3556166	3745928	3977441	4254702	4487538	4830938	5172390	5403556	5579946	5880510	6193026	
2183246	2423238	2657840	2934311	3270580	3564882	3745732	3974531	4256004	4488449	4834660	5178482	5404271	5578341	5880982	6194886	
2199102	2486440	2714034	2964487	3246624	3518350	3797151	4037413	4273322	4490832	4770781	5092487	5475564	5647980	5860224	6154022	
2252281	2546598	2757196	3013943	3331673	3608869	3795156	4023422	4266605	4491726	4809602	5127651	5346552	5515054	5789992	6076813	
2246265	2496260	2712240	2978073	3301736	3582736	3777015	4009380	4270744	4494693	4823106	5150640	5379125	5555246	5842336	6138902	
2257933	2553754	2761706	3015894	3334419	3610054	3797858	4029690	4276892	4495728	4811052	5129038	5351150	5523094	5798354	6082310	
2340356	2552525	2778408	3041852	3356698	3631920	3813987	4042387	4280634	4484456	4745175	5052076	5424414	5564122	5763394	6035768	
2345116	2579018	2781208	3033739	3304719	3573616	3844915	4068764	4286727	4490025	4745504	5033064	5381314	5561141	5795547	6082532	
2362670	2648870	2849620	3102684	3407996	3680344	3858171	4083778	4312140	4514482	4808557	5104832	5316200	5481566	5734044	5994250	
2415244	2649640	2861032	3106124	3359844	3579163	3834228	4155257	4385272	4514333	4740098	4968446	5247689	5560229	5913194	6069556	
2341350	2552212	2777931	3040587	3352020	3627860	3810252	4040487	4276474	4481031	4741696	5046100	5418303	5560542	5760806	6032753	
2365992	2637713	2912277	3152496	3390348	3641048	3886334	4105315	4321676	4529543	4827288	5130926	5318168	5489633	5744380	6008842	
2398606	2698352	2895558	3133804	3385276	3601211	3857093	4175700	4406402	4528045	4755428	4982702	5266744	5576782	5933410	6087510	
2367897	2640569	2915066	3153898	3391992	3641279	3888746	4105056	4328805	4531914	4831664	5131922	5331436	5489689	5745577	6010063	
2389472	2680764	2886832	3127946	3379944	3595130	3852006	4172113	4397460	4525666	4753680	4980586	5263812	5573826	5930330	6083364	
2375164	2639044	2922454	3159432	3400474	3647204	3896056	4107756	4326299	4535094	4835231	5136406	5331016	5491820	5747514	6010814	
2428080	2708139	2906942	3163053	3462009	3730697	3901511	4119750	4339178	4526477	4768234	5055208	5406058	5538802	5730042	5980787	

2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033

New Unit Cap and Prod Cost

2034	2035	2036	2037	2038	2039	2040
2651665	2700705	2742173	2789332	2893430	2898812	2990090
2580900	2665842	2732914	2780618	2890732	2894948	2988620
2659272	2703952	2741149	2779101	2870392	2904702	2988370
2786548	2832588	2870219	2905797	2981464	2995124	3069332
2626561	2714797	2779860	2829417	2943711	2944547	3044326
2800384	2845352	2887832	2919471	2987328	3008187	3095891
2749453	2813835	2893328	2933446	3038333	3050516	3146152
2741427	2828282	2896433	2945976	3045094	3060460	3152766
2878206	2952144	3021280	3057487	3140480	3202554	3282982
2852833	2934977	3014616	3058945	3166272	3176890	3275406
2751008	2814673	2890140	2936749	3035810	3052344	3146530
2993086	3032776	3069805	3113408	3163469	3205154	3286839
2870343	2954364	3029243	3069644	3180546	3188636	3291967
2893845	2980137	3035750	3090104	3173965	3225579	3301312
2858352	2936121	3016042	3060699	3167700	3177888	3278307
2899232	2986420	3055531	3091480	3183020	3227246	3292672
2942495	3004947	3081274	3132449	3233471	3247018	3341816
7105892	7474934	7927471	8394444	8682624	8934324	9348180
7119189	7542375	7998392	8259298	8549938	8920663	9336197
7089728	7412256	7798092	8211726	8701585	9175973	9454814
7073064	7449553	7899608	8131120	8407958	8754379	9121378
7090451	7478572	7930899	8180484	8465947	8825524	9227666
7077722	7451572	7891142	8140892	8420804	8768800	9152401
7069503	7432940	7860847	8105919	8381221	8718556	9088116
7092110	7489132	7919304	8172512	8451294	8797491	9180254
7068958	7421735	7838244	8082552	8355380	8681334	9035274
7076662	7353521	7679332	8021374	8452050	8887138	9139246
7064425	7427835	7854016	8102049	8377688	8714965	9085256
7083888	7405695	7763679	8113360	8551293	9000670	9260330
7088817	7365503	7692026	8035034	8467085	8902880	9156338
7086739	7408855	7767029	8115986	8561237	9005382	9259817
7087478	7362528	7690092	8032067	8464380	8899318	9154668
7090106	7412352	7771900	8118286	8565664	9008642	9258012
7087354	7431313	7837455	8080132	8349990	8667202	9010943

2034	2035	2036	2037	2038	2039	2040
6547856	6905862	7342221	7796224	7978048	8166135	8515469
6560840	6972940	7412848	7582618	7799268	8152391	8503478
6482393	6795974	7167454	7571273	8032566	8485615	8624544
6404478	6771236	7195998	7354456	7563851	7897923	8216308
6481106	6860311	7298651	7460642	7673129	8017154	8361108
6412170	6778024	7204362	7371036	7579707	7913282	8247278
6355949	6711608	7126720	7295760	7503542	7826387	8151186
6427107	6816629	7234411	7406080	7614874	7945838	8276664
6301868	6647537	7051891	7226345	7434520	7747222	8062722
6272838	6542970	6856163	7194051	7610334	8031264	8178406
6352222	6708730	7122664	7294214	7502156	7824870	8149700
6318762	6631790	6975994	7318637	7741074	8172126	8314704
6284260	6552888	6865221	7202558	7618180	8039648	8187872
6320876	6634381	6978693	7320420	7746204	8174946	8316254
6283282	6551051	6864268	7201164	7617072	8037885	8187230
6323996	6637291	6982458	7323022	7749201	8176960	8315082
6276400	6610908	7002142	7179850	7389765	7693495	7999288

2034 2035 2036 2037 2038 2039 2040

New Unit Cap and Prod Cost

23,048 915506 993430 1050627 1168640 1296710 1410450 1425844 1493541

1573961 1628228 1715445 1861438 1957715 1952336 2001750 2087207 2099125

2220672 2321600 2391092 2409558 2447552 2513054 2564072 2654905 2728265

2782694 2901235 2912278 3018383

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
BR	BR1	101	0	0	0	553	743	703	668	635	606	577
BR	BR2	167	0	0	0	915	1,228	1,163	1,104	1,050	1,002	954
BR	BR3	416	0	0	0	2,279	3,060	2,897	2,749	2,616	2,496	2,377
CR	CR4	155	0	0	0	980	1,582	1,494	1,413	1,339	1,269	1,201
CR	CR5	168	0	0	0	1,062	1,715	1,619	1,532	1,451	1,376	1,302
CR	CR6	240	0	0	0	1,518	2,449	2,313	2,188	2,073	1,966	1,860
GH	GH1	475	0	0	0	1,462	1,954	1,856	1,767	1,686	1,611	1,540
GH	GH2	484	0	0	0	1,489	1,991	1,891	1,800	1,718	1,642	1,569
GH	GH3	480	0	0	0	1,477	1,975	1,876	1,786	1,703	1,628	1,556
GH	GH4	479	0	0	0	1,474	1,971	1,872	1,782	1,700	1,625	1,553
GR	GR3	68	0	0	0	586	837	792	751	713	679	645
GR	GR4	95	0	0	0	819	1,169	1,106	1,049	996	948	901
MC	MC1	303	0	0	0	1,215	1,774	1,682	1,598	1,521	1,449	1,380
MC	MC2	301	0	0	0	1,207	1,762	1,671	1,588	1,511	1,440	1,371
MC	MC3	391	0	0	0	1,568	2,289	2,171	2,063	1,963	1,870	1,781
MC	MC4	477	0	0	0	1,913	2,792	2,648	2,516	2,394	2,281	2,172
TC	TC1	383	0	0	0	770	1,008	958	912	871	833	797
TC	TC2	549	0	0	0	1,104	1,445	1,373	1,307	1,248	1,194	1,142
TY	TY3	71	0	0	0	586	837	792	751	713	679	645
	BRWATER		0	0	0	3,747	5,032	4,763	4,521	4,302	4,104	3,908
	CRWATER		0	0	0	3,560	5,746	5,427	5,134	4,863	4,611	4,362
	MCWATER		0	0	0	5,902	8,617	8,173	7,765	7,389	7,040	6,704
	TCWATER		0	0	0	1,874	2,453	2,331	2,220	2,119	2,026	1,938
	GHWATER		0	0	0	5,902	7,892	7,495	7,135	6,806	6,505	6,217
	GRWATER		0	0	0	1,405	2,006	1,898	1,799	1,709	1,627	1,546

WaterCapital

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
	548	519	491	462	433	413	403	393	382	372	361	351	340
	907	859	811	764	716	684	666	649	632	615	597	580	563
	2,258	2,140	2,021	1,902	1,784	1,703	1,660	1,617	1,574	1,531	1,488	1,445	1,402
	1,132	1,064	996	927	859	806	770	735	699	663	627	591	0
	1,227	1,153	1,079	1,005	931	874	835	796	757	718	679	640	0
	1,754	1,647	1,541	1,435	1,329	1,249	1,193	1,137	1,082	1,026	970	915	0
	1,468	1,397	1,325	1,254	1,183	1,111	1,062	1,035	1,008	982	955	928	901
	1,496	1,423	1,350	1,278	1,205	1,132	1,082	1,055	1,028	1,000	973	946	918
	1,484	1,411	1,339	1,267	1,195	1,123	1,073	1,046	1,019	992	965	938	911
	1,481	1,409	1,337	1,265	1,193	1,121	1,071	1,044	1,017	990	963	936	909
	611	577	544	510	476	452	438	423	409	395	380	366	352
	854	807	759	712	665	631	611	591	571	551	531	511	491
	1,311	1,242	1,173	1,103	1,034	965	915	882	850	818	786	754	722
	1,302	1,234	1,165	1,096	1,027	959	908	877	845	813	781	749	717
	1,692	1,602	1,513	1,424	1,335	1,245	1,180	1,139	1,097	1,056	1,015	973	932
	2,064	1,955	1,846	1,737	1,628	1,519	1,440	1,389	1,339	1,288	1,238	1,187	1,137
	760	724	688	652	616	579	555	542	529	517	504	491	479
	1,090	1,038	986	934	882	830	795	777	759	741	723	704	686
	611	577	544	510	476	452	438	423	409	395	380	366	352
	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
	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
	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
	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
	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
	1,465	1,384	1,303	1,222	1,141	1,083	1,049	1,015	980	946	912	877	843

WaterCapital

2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
330	320	309	299	288	278	267	257	247	236	226	215	205
546	528	511	494	477	459	442	425	408	390	373	356	339
1,359	1,316	1,273	1,230	1,187	1,144	1,101	1,058	1,016	973	930	887	844
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
875	848	821	794	767	741	714	687	660	634	607	580	553
891	864	837	809	782	755	727	700	673	646	618	591	564
884	857	830	803	776	748	721	694	667	640	613	586	559
882	855	828	801	774	747	720	693	666	639	612	585	558
337	323	309	294	280	266	251	237	0	0	0	0	0
471	451	431	411	391	371	351	331	0	0	0	0	0
690	658	626	594	562	530	0	0	0	0	0	0	0
686	654	622	590	558	526	0	0	0	0	0	0	0
891	849	808	766	725	684	0	0	0	0	0	0	0
1,086	1,036	986	935	885	834	0	0	0	0	0	0	0
466	453	441	428	415	403	390	377	364	352	339	326	314
668	650	632	613	595	577	559	541	522	504	486	468	450
337	323	309	294	280	266	251	237	0	0	0	0	0
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
0	0	0	0	0	0	0	0	0	0	0	0	0
3,353	3,197	3,041	2,886	2,730	2,574	0	0	0	0	0	0	0
1,134	1,103	1,072	1,041	1,010	979	949	918	887	856	825	794	763
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
809	774	740	706	671	637	603	568	0	0	0	0	0

WaterCapital

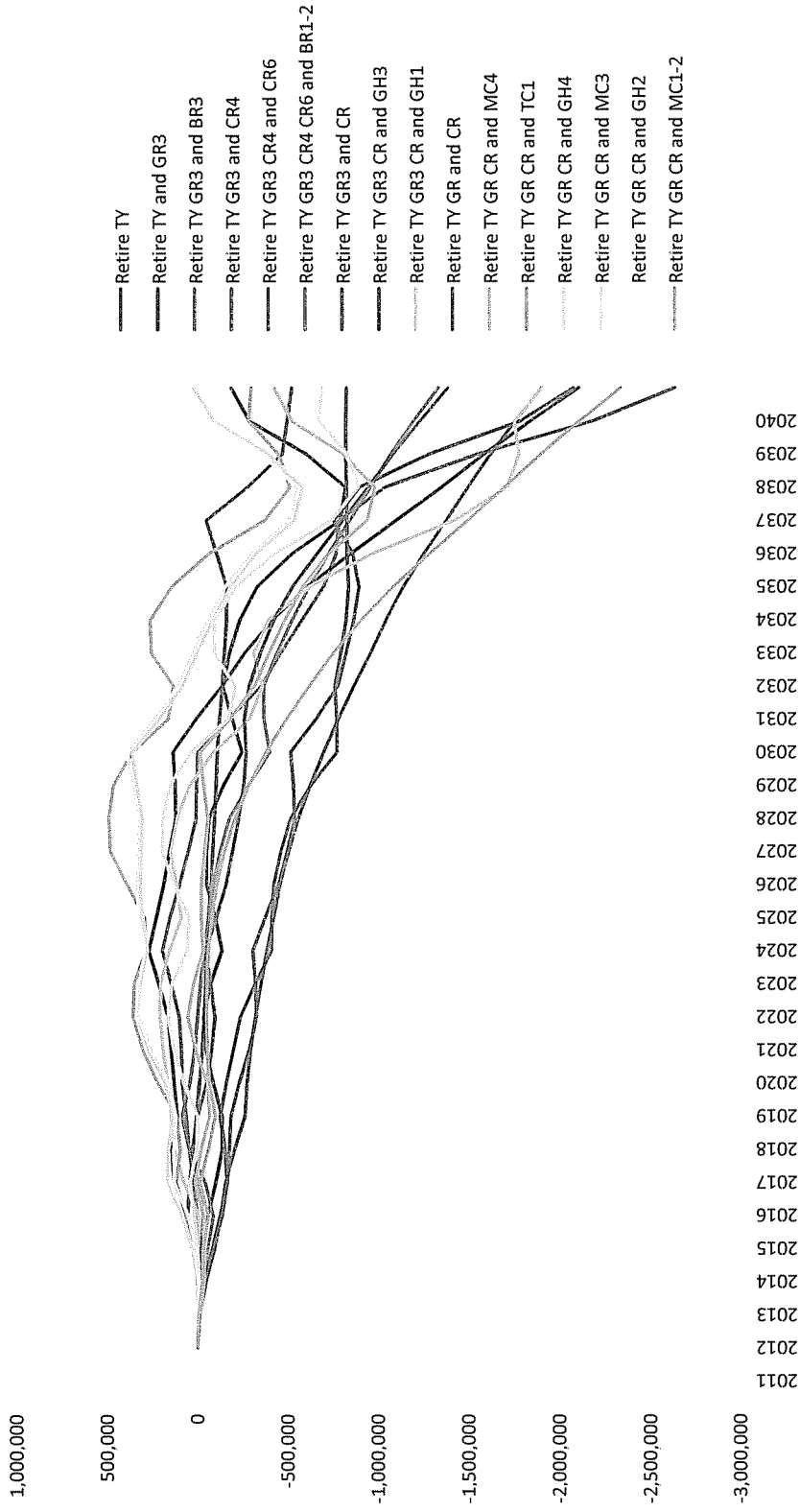
	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
194	184	174	0	0	0	0	0	0	0	0	0	0	0
321	304	287	0	0	0	0	0	0	0	0	0	0	0
801	758	715	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
526	500	473	446	0	0	0	0	0	0	0	0	0	0
536	509	482	454	0	0	0	0	0	0	0	0	0	0
532	505	478	451	0	0	0	0	0	0	0	0	0	0
531	504	477	450	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
301	288	276	263	250	237	225	212	200	200	200	200	200	200
431	413	395	377	359	340	322	304	300	300	300	300	300	300
	0	0	0	0	0	0	0	0	0	0	0	0	0
1,317	1,246	1,175	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
732	701	670	640	609	578	547	516	500	500	500	500	500	500
2,125	2,017	1,909	1,801	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0

WaterCapital

	Delta NPVRR \$M
	Install Controls / (Retire)
Tyrone 3	(118)
Brown 3	(129)
Cane Run 6	(475)
Brown 1-2	(594)
Cane Run 4-5	(621)
Green River 3-4	(324)
Ghent 1-4	(386)
Trimble County 1	(347)
Mill Creek 3-4	(357)
Mill Creek 1-2	(336)

Cumulative Difference in Revenue Requirements

Install Controls vs. Retire/Replace Capacity



Retirement Savings (Deltas)	Capital	O&M	Total
Retire TY	-22	-3	-26
Retire TY and GR3	-13	-50	-62
Retire TY GR3 and BR3	-98	-174	-272
Retire TY GR3 and CR4	-46	-140	-186
Retire TY GR3 CR4 and CR6	-84	-118	-202
Retire TY GR3 CR4 CR6 and BR1-2	-63	-129	-192
Retire TY GR3 and CR	-50	-149	-199
Retire TY GR3 CR and GH3	-203	-145	-348
Retire TY GR3 CR and GH1	-201	-210	-411
Retire TY GR and CR	-18	-100	-118
Retire TY GR CR and MC4	-105	-201	-306
Retire TY GR CR and TC1	-68	-203	-271
Retire TY GR CR and GH4	-203	-141	-343
Retire TY GR CR and MC3	-86	-201	-287
Retire TY GR CR and GH2	-205	-156	-361
Retire TY GR CR and MC1-2	-133	-325	-457

Revenue Requirement Deltas	Prod Cost	Capital	Total	Check
Retire TY	-49	-69	-118	0
Retire TY and GR3	-70	-59	-129	0
Retire TY GR3 and BR3	-267	-208	-475	0
Retire TY GR3 and CR4	-244	-350	-594	0
Retire TY GR3 CR4 and CR6	-125	-496	-621	0
Retire TY GR3 CR4 CR6 and BR1-2	-28	-296	-324	0
Retire TY GR3 and CR	-16	-370	-386	0
Retire TY GR3 CR and GH3	40	-387	-347	0
Retire TY GR3 CR and GH1	17	-373	-357	0
Retire TY GR and CR	-250	-85	-336	0
Retire TY GR CR and MC4	365	-522	-157	0
Retire TY GR CR and TC1	260	-185	75	0
Retire TY GR CR and GH4	472	-376	96	0
Retire TY GR CR and MC3	195	-316	-121	0
Retire TY GR CR and GH2	464	-365	99	0
Retire TY GR CR and MC1-2	236	-799	-563	0

		1	2	3	4	5	6
Retire:							
	<u>No</u>					<u>TY GR3 CR4</u>	<u>TY GR3 CR4</u>
	<u>Retirements</u>	<u>TY</u>	<u>TY GR3</u>	<u>TY GR3 BR3</u>	<u>TY GR3 CR4</u>	<u>CR6</u>	<u>CR6 BR1-2</u>
2010							
2011							
2012							
2013							
2014							
2015							
2016		3x1C(1)	2x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)
2017	3x1C(1)						
2018							3x1C(1)
2019							
2020			2x1C(1)	3x1C(1)		3x1C(1)	
2021							
2022					2x1C(1)		
2023							
2024	3x1C(1)	3x1C(1)					3x1C(1)
2025			3x1C(1)				
2026				3x1C(1)	3x1C(1)	3x1C(1)	
2027							
2028							
2029							
2030	2x1C(1)	3x1C(1)					
2031			SCCT(1)				3x1C(1)
2032					SCCT(1)		
2033			3x1C(1)	3x1C(1)		3x1C(1)	
2034					3x1C(1)		
2035	2x1C(1)						
2036		2x1C(1)					
2037							SCCT(1)
2038							
2039	SCCT(1)						SCCT(1)
2040			SCCT(1)	SCCT(1)		SCCT(1)	
30 Yr PVRR (\$B)	23.6	23.7	23.8	24.7	24.2	24.8	25.5

7 8 9 10 11 12 13

	<u>TY GR3 CR</u>	<u>TY GR3 CR</u> <u>GH3</u>	<u>TY GR3 CR</u> <u>GH1</u>	<u>TY GR CR</u>	<u>TY GR CR</u> <u>MC4</u>	<u>TY GR CR</u> <u>TC1</u>	<u>TY GR CR</u> <u>GH4</u>
2010							
2011							
2012							
2013							
2014							
2015							
2016	3x1C(1)	3x1C(1) 2x1C(1)	3x1C(2)	3x1C(1)	3x1C(2)	3x1C(2)	3x1C(2)
2017							
2018				3x1C(1)			
2019	3x1C(1)						
2020		3x1C(1)					
2021					3x1C(1)		3x1C(1)
2022			3x1C(1)			3x1C(1)	
2023							
2024				3x1C(1)			
2025	3x1C(1)						
2026		3x1C(1)					
2027							
2028			3x1C(1)		3x1C(1)	3x1C(1)	3x1C(1)
2029							
2030							
2031	2x1C(1)			3x1C(1)			
2032							
2033		3x1C(1)					
2034							3x1C(1)
2035			2x1C(1)		3x1C(1)	2x1C(1)	
2036	2x1C(1)						
2037				SCCT(1)			
2038							
2039				SCCT(1)			
2040		SCCT(1)	SCCT(1)			SCCT(1)	

30 Yr PVRR (\$B) 25.3 26.6 26.6 25.4 26.9 26.7 26.9

14

15

16

	<u>TY GR CR</u> <u>MC3</u>	<u>TY GR CR</u> <u>GH2</u>	<u>TY GR CR</u> <u>MC1-2</u>
2010			
2011			
2012			
2013			
2014			
2015			
2016	3x1C(2)	3x1C(2)	3x1C(2)
2017			
2018			
2019			
2020			3x1C(1)
2021		3x1C(1)	
2022	3x1C(1)		
2023			
2024			
2025			
2026			2x1C(1)
2027			
2028	3x1C(1)	3x1C(1)	
2029			
2030			
2031			3x1C(1)
2032			
2033			
2034		3x1C(1)	
2035	2x1C(1)		
2036			
2037			SCCT(1)
2038			
2039			SCCT(1)
2040	SCCT(1)		
30 Yr PVRR (\$B)	26.6	27.0	27.5

Breakeven RR by Year (\$M)

	Year \$										
	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	
TY	-118	-126	-134	-143	-153	-163	-174	-186	-198	-211	
GR3	-129	-137	-146	-156	-167	-178	-190	-203	-216	-231	
BR3	-475	-507	-541	-577	-616	-657	-701	-748	-799	-852	
CR4	-594	-634	-676	-722	-770	-822	-877	-936	-999	-1,066	
CR6	-621	-663	-707	-755	-805	-859	-917	-979	-1,044	-1,114	
BR1-2	-324	-346	-369	-394	-420	-448	-478	-510	-545	-581	
CR5	-386	-412	-439	-469	-500	-534	-570	-608	-649	-692	
GH3	-347	-370	-395	-422	-450	-480	-512	-547	-584	-623	
GH1	-357	-381	-406	-434	-463	-494	-527	-562	-600	-640	
GR4	-336	-358	-382	-408	-435	-464	-495	-529	-564	-602	
MC4	-157	-168	-179	-191	-204	-217	-232	-248	-264	-282	
TC1	75	80	86	91	97	104	111	118	126	135	
GH4	96	102	109	116	124	132	141	151	161	171	
MC3	-121	-129	-138	-147	-157	-167	-178	-190	-203	-217	
GH2	99	106	113	121	129	137	146	156	167	178	
MC1-2	-563	-601	-642	-685	-731	-780	-832	-888	-947	-1,011	

Breakeven Year

Must Op Thru

BR3	2019
BR1-2	2021
GH3	2020
GH1	2021
MC4	2023
TC1	2018
GH4	2018
MC3	2021
GH2	2018
MC1-2	2024

Station	Unit	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
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
BR	BR1SAM	0	0	0	231	521	550	522	497	474	452	429	407	384
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
BR	BR2SAM	0	0	0	231	534	553	525	499	476	453	431	408	385
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
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
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
GH	GH2FFP	0	0	2,787	7,280	15,016	18,298	17,569	16,777	16,056	15,369	14,684	13,998	13,313
GH	GH2SAM	0	11	724	984	935	891	851	814	779	744	709	674	639
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
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
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
GH	GH4SAM	0	122	527	974	1,948	1,967	1,872	1,786	1,707	1,631	1,555	1,479	1,403
MC	MC1FGD	0	0	2,360	7,268	12,372	21,934	23,856	22,601	21,453	20,399	19,360	18,320	17,281
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
MC	MC1SAM	0	0	0	42	560	1,131	1,232	1,168	1,109	1,055	1,001	948	895
MC	MC2FGD	0	0	2,361	7,270	12,377	23,214	24,770	23,450	22,238	21,119	20,015	18,911	17,806
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
MC	MC2SAM	0	0	0	42	560	1,197	1,279	1,211	1,149	1,092	1,035	978	922
MC	MC3FGDU	0	0	646	3,668	6,975	9,472	9,135	8,699	8,295	7,908	7,522	7,135	6,748
MC	MC3FGDR	0	0	0	0	39	175	207	197	187	179	170	162	154
MC	MC3FFP	0	0	0	3,730	8,326	13,896	18,276	17,601	16,757	15,977	15,228	14,480	13,732
MC	MC3SAM	0	0	734	1,992	2,100	1,997	1,901	1,813	1,728	1,642	1,557	1,472	1,387
MC	MC4FGD	0	379	6,987	15,193	21,072	28,573	27,555	26,231	25,008	23,834	22,662	21,491	20,319
MC	MC4SCR	0	105	667	724	688	655	625	596	566	537	508	479	449
MC	MC4FFP	0	377	5,055	10,178	14,629	19,836	19,129	18,210	17,361	16,546	15,733	14,919	14,106
MC	MC4SAM	0	0	0	578	1,620	2,201	2,123	2,022	1,929	1,839	1,749	1,660	1,570
TC	TC1FFP	0	0	0	2,200	5,745	11,967	15,834	15,223	14,502	13,838	13,200	12,564	11,927
CR	CR4FGD	0	394	3,222	13,574	27,295	25,773	24,370	23,071	21,861	20,666	19,471	18,276	17,081
CR	CR4SCR	64	390	2,395	6,163	10,786	10,183	9,627	9,112	8,633	8,160	7,687	7,214	6,740
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
CR	CR4PAC	0	0	0	235	386	365	345	327	310	293	276	259	242
CR	CR4LIME	0	0	0	259	427	403	381	361	342	323	305	286	267
CR	CR5FGD	0	359	3,311	14,658	29,304	27,663	26,148	24,742	23,429	22,132	20,835	19,538	18,241
CR	CR5SCR	63	388	2,719	6,475	11,557	10,908	10,308	9,752	9,234	8,721	8,208	7,696	7,183
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
CR	CR5PAC	0	0	0	251	423	399	378	357	338	320	301	282	263
CR	CR5LIME	0	0	0	278	468	441	417	395	374	353	333	312	291
CR	CR6FGD	0	346	3,887	18,407	35,115	33,170	31,385	29,739	28,213	26,706	25,199	23,692	22,185
CR	CR6SCR	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
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
CR	CR6PAC	0	0	0	352	558	527	499	473	448	424	401	377	353

Station	Unit	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
CR	CR6LIME	0	0	0	391	619	585	553	525	498	471	445	418	391
GR	GR3SFF	0	0	1,323	4,035	5,553	5,254	4,983	4,739	4,516	4,297	4,078	3,859	3,640
GR	GR3PAC	0	0	0	112	154	145	138	131	125	119	113	107	101
GR	GR4SFF	0	0	1,885	5,750	8,517	8,050	7,626	7,237	6,881	6,529	6,177	5,825	5,473
GR	GR4PAC	0	0	0	160	235	223	211	200	190	181	171	161	152

Unit	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
BR1	BR1FFP 0	8,368	7,842	7,483	7,291	7,099	6,908	6,716	6,525	6,333	6,141	5,950	5,758	5,566
BR1	BR1SAM 0	362	339	324	315	307	299	291	282	274	266	257	249	241
BR2	BR2FFP 0	9,062	8,488	8,095	7,881	7,668	7,455	7,242	7,028	6,815	6,602	6,388	6,175	5,962
BR2	BR2SAM 0	362	340	324	315	307	298	290	281	273	264	256	247	239
BR3	BR3FFP 0	9,867	9,290	8,714	8,325	8,122	7,920	7,717	7,514	7,311	7,109	6,906	6,703	6,501
GH1	GH1FFP 0	12,305	11,484	10,897	10,545	10,193	9,841	9,489	9,137	8,785	8,433	8,081	7,729	7,377
GH1	GH1SAM 0	1,362	1,271	1,206	1,167	1,128	1,089	1,050	1,011	972	933	894	855	816
GH2	GH2FFP 0	12,627	11,942	11,257	10,791	10,556	10,330	10,104	9,878	9,652	9,425	9,199	8,973	8,747
GH2	GH2SAM 0	605	570	546	535	523	511	500	488	476	464	453	441	429
GH3	GH3FFP 0	15,708	14,877	14,047	13,216	12,647	12,344	12,047	11,750	11,452	11,155	10,858	10,561	10,263
GH3	GH3SAM 0	1,250	1,177	1,126	1,099	1,073	1,047	1,020	994	967	941	915	888	862
GH4	GH4FFP 0	15,188	14,404	13,619	12,835	12,050	11,513	11,223	10,932	10,642	10,352	10,061	9,771	9,481
GH4	GH4SAM 0	1,328	1,252	1,176	1,124	1,096	1,068	1,039	1,011	983	955	927	899	870
MC1	MC1FGD 0	16,242	15,203	14,164	13,412	12,949	12,485	12,022	11,558	11,095	10,631	10,167	9,704	9,240
MC1	MC1FFP 0	13,190	12,348	11,506	10,896	10,520	10,143	9,767	9,390	9,013	8,637	8,260	7,884	7,507
MC1	MC1SAM 0	841	788	735	696	672	648	624	600	576	552	528	504	480
MC2	MC2FGD 0	16,702	15,598	14,494	13,677	13,148	12,618	12,088	11,558	11,028	10,499	9,969	9,439	8,909
MC2	MC2FFP 0	13,270	12,395	11,519	10,871	10,450	10,029	9,608	9,187	8,766	8,344	7,923	7,502	7,081
MC2	MC2SAM 0	865	808	752	710	682	655	627	600	572	545	517	490	462
MC3	MC3FGDU 0	6,362	5,975	5,589	5,303	5,124	4,950	4,777	4,603	4,429	4,256	4,082	3,909	3,735
MC3	MC3FGDR 0	145	137	128	121	115	111	107	104	100	96	92	88	85
MC3	MC3FFP 0	12,985	12,237	11,489	10,742	10,190	9,844	9,510	9,175	8,841	8,506	8,172	7,837	7,503
MC3	MC3SAM 0	1,302	1,217	1,155	1,116	1,077	1,039	1,000	961	923	884	846	807	768
MC4	MC4FGD 0	19,147	17,976	16,804	15,940	15,402	14,880	14,358	13,836	13,314	12,792	12,270	11,748	11,226
MC4	MC4SCR 0	420	399	386	372	359	346	332	319	306	292	279	266	252
MC4	MC4FFP 0	13,293	12,479	11,666	11,066	10,692	10,330	9,968	9,605	9,243	8,881	8,518	8,156	7,794
MC4	MC4SAM 0	1,480	1,391	1,301	1,235	1,193	1,153	1,112	1,072	1,031	991	951	910	870
TC1	TC1FFP 0	11,291	10,654	10,018	9,381	8,918	8,637	8,363	8,089	7,815	7,541	7,267	6,993	6,719
CR4	CR4FGD 0	15,886	14,691	13,773	13,130	12,488	11,845	11,203	10,560	0	0	0	0	0
CR4	CR4SCR 0	6,267	5,794	5,431	5,177	4,924	4,671	4,417	4,164	0	0	0	0	0
CR4	CR4FF 0	3,207	2,964	2,778	2,648	2,519	2,389	2,260	2,130	0	0	0	0	0
CR4	CR4PAC 0	225	208	195	186	177	168	159	150	0	0	0	0	0
CR4	CR4LIME 0	249	230	216	206	195	185	175	165	0	0	0	0	0
CR5	CR5FGD 0	16,944	15,647	14,641	13,924	13,207	12,490	11,774	0	0	0	0	0	0
CR5	CR5SCR 0	6,670	6,158	5,760	5,478	5,196	4,914	4,632	0	0	0	0	0	0
CR5	CR5FF 0	3,455	3,189	2,983	2,837	2,691	2,545	2,399	0	0	0	0	0	0
CR5	CR5PAC 0	245	226	212	201	191	180	170	0	0	0	0	0	0
CR5	CR5LIME 0	271	250	234	222	211	199	188	0	0	0	0	0	0
CR6	CR6FGD 0	20,678	19,171	18,033	17,265	16,496	15,727	14,959	14,190	13,421	12,653	0	0	0
CR6	CR6SCR 0	8,339	7,727	7,266	6,956	6,646	6,337	6,027	5,717	5,408	5,098	0	0	0
CR6	CR6FF 0	4,257	3,944	3,709	3,551	3,393	3,235	3,077	2,919	2,761	2,602	0	0	0
CR6	CR6PAC 0	329	305	287	275	262	250	238	226	213	201	0	0	0

Unit	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
CR6	365	338	318	305	291	278	264	250	237	223	0	0	0	0
GR3	3,421	3,202	3,050	2,967	2,884	2,800	2,717	2,634	2,550	2,467	2,384	2,300	2,217	2,134
GR3	95	89	85	82	80	78	75	73	71	68	66	64	62	59
GR4	5,122	4,770	4,515	4,356	4,198	4,040	3,881	3,723	3,565	3,407	3,248	3,090	2,932	2,773
GR4	142	132	125	121	116	112	108	103	99	94	90	86	81	77
	CR6LIME 0													
	GR3SFF 0													
	GR3PAC 0													
	GR4SFF 0													
	GR4PAC 0													

Unit	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
BR1	BR1FFP 0	5,183	4,991	4,800	4,608	4,417	4,225	4,033	3,842	3,650	3,458	3,267	3,075	2,883
BR1	BR1SAM 0	224	216	208	199	191	183	174	166	158	150	141	132	123
BR2	BR2FFP 0	5,535	5,322	5,109	4,895	4,682	4,469	4,256	4,042	3,829	3,616	3,403	3,190	2,977
BR2	BR2SAM 0	222	213	205	196	187	179	170	162	153	145	136	127	118
BR3	BR3FFP 0	6,095	5,893	5,690	5,487	5,284	5,082	4,879	4,676	4,474	4,271	4,068	3,865	3,662
GH1	GH1FFP 0	6,673	6,321	5,969	2,424	0	0	0	0	0	0	0	0	0
GH1	GH1SAM 0	738	699	661	268	0	0	0	0	0	0	0	0	0
GH2	GH2FFP 0	8,295	8,069	7,843	7,617	7,391	7,165	6,939	6,713	6,486	6,260	6,034	5,808	5,582
GH2	GH2SAM 0	406	394	383	371	359	348	336	324	312	301	289	277	266
GH3	GH3FFP 0	9,669	9,372	9,075	8,777	8,480	8,183	7,886	7,588	7,291	6,994	6,697	6,400	6,102
GH3	GH3SAM 0	809	782	756	730	703	677	650	624	598	571	545	518	492
GH4	GH4FFP 0	8,900	8,610	8,319	8,029	7,739	7,448	7,158	6,867	6,577	6,287	5,996	5,706	5,416
GH4	GH4SAM 0	814	786	758	730	701	673	645	617	589	561	532	504	476
MC1	MC1FGD 0	8,313	7,850	3,188	0	0	0	0	0	0	0	0	0	0
MC1	MC1FFP 0	6,754	6,377	2,590	0	0	0	0	0	0	0	0	0	0
MC1	MC1SAM 0	431	407	165	0	0	0	0	0	0	0	0	0	0
MC2	MC2FGD 0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC2	MC2FFP 0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC2	MC2SAM 0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC3	MC3FGDU 0	3,388	3,214	3,040	2,653	188	0	0	0	0	0	0	0	0
MC3	MC3FGDR 0	77	73	69	64	44	0	0	0	0	0	0	0	0
MC3	MC3FFP 0	6,834	6,499	6,165	5,830	4,673	341	0	0	0	0	0	0	0
MC3	MC3SAM 0	691	652	213	0	0	0	0	0	0	0	0	0	0
MC4	MC4FGD 0	10,183	9,661	9,139	7,976	573	0	0	0	0	0	0	0	0
MC4	MC4SCR 0	226	92	0	0	0	0	0	0	0	0	0	0	0
MC4	MC4FFP 0	7,069	6,707	6,344	5,537	398	0	0	0	0	0	0	0	0
MC4	MC4SAM 0	789	748	708	618	44	0	0	0	0	0	0	0	0
TC1	TC1FFP 0	6,171	5,897	5,623	5,349	5,075	4,801	4,186	261	0	0	0	0	0
CR4	CR4FGD 0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR4	CR4SCR 0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR4	CR4FF 0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR4	CR4PAC 0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR4	CR4LIME 0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR5	CR5FGD 0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR5	CR5SCR 0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR5	CR5FF 0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR5	CR5PAC 0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR5	CR5LIME 0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR6	CR6FGD 0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR6	CR6SCR 0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR6	CR6FF 0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR6	CR6PAC 0	0	0	0	0	0	0	0	0	0	0	0	0	0

Unit	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
CR6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR3	2,050	1,967	1,884	1,800	1,717	1,634	1,550	1,467	1,384	0	0	0	0	0
GR3	57	55	52	50	48	45	43	41	38	0	0	0	0	0
GR4	2,615	0	0	0	0	0	0	0	0	0	0	0	0	0
GR4	73	0	0	0	0	0	0	0	0	0	0	0	0	0

Unit	2051	2052	2053	2054	2055	2056	2057	2058	2059
BR1	0	0	0	0	0	0	0	0	0
BR1	0	0	0	0	0	0	0	0	0
BR2	0	0	0	0	0	0	0	0	0
BR2	0	0	0	0	0	0	0	0	0
BR3	1,405	0	0	0	0	0	0	0	0
GH1	0	0	0	0	0	0	0	0	0
GH1	0	0	0	0	0	0	0	0	0
GH2	5,130	4,904	4,678	4,452	4,226	4,000	3,489	253	0
GH2	242	231	219	207	196	0	0	0	0
GH3	5,508	5,211	4,152	214	0	0	0	0	0
GH3	405	21	0	0	0	0	0	0	0
GH4	4,835	0	0	0	0	0	0	0	0
GH4	0	0	0	0	0	0	0	0	0
MC1	0	0	0	0	0	0	0	0	0
MC1	0	0	0	0	0	0	0	0	0
MC1	0	0	0	0	0	0	0	0	0
MC2	0	0	0	0	0	0	0	0	0
MC2	0	0	0	0	0	0	0	0	0
MC2	0	0	0	0	0	0	0	0	0
MC3	0	0	0	0	0	0	0	0	0
MC3	0	0	0	0	0	0	0	0	0
MC3	0	0	0	0	0	0	0	0	0
MC3	0	0	0	0	0	0	0	0	0
MC4	0	0	0	0	0	0	0	0	0
MC4	0	0	0	0	0	0	0	0	0
MC4	0	0	0	0	0	0	0	0	0
MC4	0	0	0	0	0	0	0	0	0
TC1	0	0	0	0	0	0	0	0	0
CR4	0	0	0	0	0	0	0	0	0
CR4	0	0	0	0	0	0	0	0	0
CR4	0	0	0	0	0	0	0	0	0
CR4	0	0	0	0	0	0	0	0	0
CR4	0	0	0	0	0	0	0	0	0
CR5	0	0	0	0	0	0	0	0	0
CR5	0	0	0	0	0	0	0	0	0
CR5	0	0	0	0	0	0	0	0	0
CR5	0	0	0	0	0	0	0	0	0
CR6	0	0	0	0	0	0	0	0	0
CR6	0	0	0	0	0	0	0	0	0
CR6	0	0	0	0	0	0	0	0	0
CR6	0	0	0	0	0	0	0	0	0

Unit	2051	2052	2053	2054	2055	2056	2057	2058	2059
CR6	0	0	0	0	0	0	0	0	0
GR3	0	0	0	0	0	0	0	0	0
GR3	0	0	0	0	0	0	0	0	0
GR4	0	0	0	0	0	0	0	0	0
GR4	0	0	0	0	0	0	0	0	0

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

2% Escalation Rate

Unit Costs (\$000)

BR		3,816	4,811	3,969	4,049	4,130	4,212	4,296	4,382
BR		6,633	7,160	7,253	7,398	7,546	7,697	7,851	8,008
BR		15,885	20,876	14,904	15,202	15,506	15,816	16,132	16,455
CR		14,372	9,218	12,029	12,269	12,515	12,765	13,020	13,281
CR		11,842	9,889	12,791	13,047	13,308	13,574	13,845	14,122
CR		10,666	11,619	10,173	10,376	10,584	10,795	11,011	11,231
GH		17,829	19,141	17,966	18,325	18,691	19,065	19,447	19,835
GH		12,225	18,498	13,429	13,698	13,972	14,251	14,536	14,827
GH		17,961	13,501	12,475	12,724	12,979	13,238	13,503	13,773
GH		11,533	13,496	12,105	12,347	12,594	12,846	13,103	13,365
GR		4,270	5,792	4,360	4,447	4,536	4,627	4,719	4,813
GR		7,338	6,924	8,633	8,805	8,982	9,161	9,344	9,531
MC		11,892	17,333	12,669	12,923	13,181	13,445	13,714	13,988
MC		16,179	11,941	15,201	15,505	15,815	16,131	16,454	16,783
MC		18,313	14,238	17,221	17,566	17,917	18,275	18,641	19,014
MC		16,531	18,981	17,245	17,590	17,942	18,300	18,666	19,040
TC		17,205	15,170	17,403	17,751	18,106	18,468	18,837	19,214
TY		410	416	418	427	435	444	453	462

RetirementCost_Savings

2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
0	0	0	0	0	0	0	0	0	0	0	0
4,470	4,559	4,651	4,744	4,838	4,935	5,034	5,135	5,237	5,342	5,449	5,558
8,168	8,331	8,498	8,668	8,841	9,018	9,199	9,383	9,570	9,762	9,957	10,156
16,784	17,120	17,462	17,811	18,167	18,531	18,901	19,279	19,665	20,058	20,460	20,869
13,546	13,817	14,094	14,375	14,663	14,956	15,255	15,560	15,872	16,189	16,513	16,843
14,405	14,693	14,987	15,286	15,592	15,904	16,222	16,546	16,877	17,215	17,559	17,910
11,456	11,685	11,919	12,157	12,400	12,648	12,901	13,159	13,423	13,691	13,965	14,244
20,232	20,637	21,050	21,471	21,900	22,338	22,785	23,240	23,705	24,179	24,663	25,156
15,124	15,426	15,735	16,049	16,370	16,698	17,032	17,372	17,720	18,074	18,436	18,804
14,049	14,330	14,616	14,909	15,207	15,511	15,821	16,138	16,460	16,790	17,125	17,468
13,632	13,905	14,183	14,467	14,756	15,051	15,352	15,659	15,973	16,292	16,618	16,950
4,910	5,008	5,108	5,210	5,314	5,421	5,529	5,640	5,753	5,868	5,985	6,105
9,722	9,916	10,115	10,317	10,523	10,734	10,949	11,167	11,391	11,619	11,851	12,088
14,268	14,553	14,844	15,141	15,444	15,753	16,068	16,389	16,717	17,051	17,392	17,740
17,118	17,461	17,810	18,166	18,530	18,900	19,278	19,664	20,057	20,458	20,867	21,285
19,394	19,782	20,177	20,581	20,993	21,412	21,841	22,278	22,723	23,178	23,641	24,114
19,421	19,809	20,205	20,609	21,021	21,442	21,871	22,308	22,754	23,209	23,674	24,147
19,598	19,990	20,390	20,798	21,214	21,638	22,071	22,512	22,962	23,422	23,890	24,368
471	480	490	500	510	520	530	541	552	563	574	586

RetirementCost_Savings

2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
0	0	0	0	0	0	0	0	0	0
5,669	5,782	5,898	6,016	6,136	6,259	6,384	6,512	6,642	6,775
10,359	10,566	10,778	10,993	11,213	11,437	11,666	11,899	12,137	12,380
21,286	21,712	22,146	22,589	23,041	23,502	23,972	24,451	24,940	25,439
17,180	17,524	17,874	18,232	18,596	18,968	19,347	19,734	20,129	20,532
18,269	18,634	19,007	19,387	19,775	20,170	20,573	20,985	21,405	21,833
14,529	14,820	15,116	15,418	15,727	16,041	16,362	16,689	17,023	17,364
25,659	26,172	26,696	27,230	27,774	28,330	28,897	29,474	30,064	30,665
19,181	19,564	19,955	20,355	20,762	21,177	21,600	22,032	22,473	22,923
17,817	18,174	18,537	18,908	19,286	19,672	20,065	20,466	20,876	21,293
17,289	17,635	17,988	18,347	18,714	19,089	19,470	19,860	20,257	20,662
6,227	6,351	6,478	6,608	6,740	6,875	7,012	7,153	7,296	7,442
12,330	12,576	12,828	13,084	13,346	13,613	13,885	14,163	14,446	14,735
18,095	18,457	18,826	19,202	19,586	19,978	20,378	20,785	21,201	21,625
21,710	22,145	22,587	23,039	23,500	23,970	24,449	24,938	25,437	25,946
24,596	25,088	25,590	26,102	26,624	27,156	27,699	28,253	28,818	29,395
24,630	25,123	25,625	26,138	26,660	27,194	27,737	28,292	28,858	29,435
24,855	25,352	25,859	26,377	26,904	27,442	27,991	28,551	29,122	29,704
597	609	622	634	647	660	673	686	700	714

RetirementCost_Savings

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

	Month	Year Equipment	2011	2012	2013	2014	2015	2016	2017	2018	2019
BR	BR1	5 2014 PJFF/PAC	0	0	0	598,882	610,860	623,077	635,538	648,249	661,214
BR	BR1	5 2014 SAM Mitigation	0	0	0	78,540	137,333	140,079	142,881	145,739	148,653
BR	BR2	4 2014 PJFF/PAC	0	0	0	714,168	728,451	743,020	757,880	773,038	788,499
BR	BR2	4 2014 SAM Mitigation	0	0	0	134,640	137,333	140,079	142,881	145,739	148,653
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
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
GH	GH1	5 2014 SCR Turn-Down	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
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
GH	GH2	12 2012 Sorbent Injection	0	8,064	98,700	100,674	102,687	104,741	106,836	108,973	111,152
GH	GH3	10 2015 PJFF/PAC	0	0	0	0	652,436	1,330,969	1,357,589	1,384,741	1,412,435
GH	GH3	11 2013 SCR Turn-Down	0	0	0	0	0	0	0	0	0
GH	GH3	2 2013 SAM Mitigation	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
GH	GH4	3 2014 SCR Turn-Down	0	0	0	0	0	0	0	0	0
GH	GH4	2 2013 SAM Mitigation	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
MC	MC1	5 2015 PJFF/PAC	0	0	0	0	1,446,222	1,475,147	1,504,650	1,534,743	1,565,438
MC	MC1	5 2015 SAM Mitigation	0	0	0	0	22,100	38,643	39,416	40,204	41,008
MC	MC2	4 2015 Combined 1&2 FGD	0	0	0	0	186,506	205,512	224,899	244,673	264,842
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
MC	MC2	4 2015 SAM Mitigation	0	0	0	0	25,257	38,643	39,416	40,204	41,008
MC	MC3	11 2014 FGD	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
MC	MC3	4 2013 SAM Mitigation	0	0	24,068	36,824	37,560	38,312	39,078	39,859	40,657
MC	MC3	4 2013 SCR Turn-Down	0	0	0	0	0	0	0	0	0
MC	MC4	11 2014 FGD	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
MC	MC4	11 2014 SAM Mitigation	0	0	0	3,095	37,885	38,643	39,416	40,204	41,008
MC	MC4	11 2014 SCR Turn-Down	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
CR	CR4	1 2016 SCR	0	0	0	0	2,107,050	2,149,191	2,192,175	2,236,018	2,280,000
CR	CR4	1 2016 WFGD	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
CR	CR4	1 2016 SAM Mitigation	0	0	0	0	0	195,952	199,871	203,869	207,946
CR	CR4	1 2016 PAC Injection	0	0	0	0	0	190,321	194,128	198,010	201,971
CR	CR5	1 2016 SCR	0	0	0	0	0	2,244,442	2,289,331	2,335,117	2,381,819
CR	CR5	1 2016 WFGD	0	0	0	0	0	0	0	0	0

	Month	Year Equipment	\$/Yr	2011	2012	2013	2014	2015	2016	2017	2018	2019
CR	CR5	1 2016 PJFF	1,251,000	0	0	0	0	0	1,408,829	1,437,006	1,465,746	1,495,061
CR	CR5	1 2016 SAM Mitigation	177,000	0	0	0	0	0	199,331	203,317	207,384	211,531
CR	CR5	1 2016 PAC Injection	172,000	0	0	0	0	0	193,700	197,574	201,525	205,556
CR	CR6	1 2016 SCR	2,392,000	0	0	0	0	0	2,693,781	2,747,656	2,802,609	2,858,661
CR	CR6	1 2016 WFGD		0	0	0	0	0	0	0	0	0
CR	CR6	1 2016 PJFF	1,632,000	0	0	0	0	0	1,837,897	1,874,655	1,912,148	1,950,391
CR	CR6	1 2016 SAM Mitigation	198,000	0	0	0	0	0	222,980	227,440	231,989	236,628
CR	CR6	1 2016 PAC Injection	191,000	0	0	0	0	0	215,097	219,399	223,787	228,263
GR	GR3	1 2016 SCR	943,000	0	0	0	0	0	1,061,971	1,083,211	1,104,875	1,126,972
GR	GR3	1 2016 CDS-FF	3,322,000	0	0	0	0	0	3,741,112	3,815,934	3,892,252	3,970,098
GR	GR3	1 2016 PAC Injection	141,000	0	0	0	0	0	158,789	161,965	165,204	168,508
GR	GR4	1 2016 SCR	1,284,000	0	0	0	0	0	1,445,993	1,474,912	1,504,411	1,534,499
GR	GR4	1 2016 CDS-FF	4,309,000	0	0	0	0	0	4,852,634	4,949,687	5,048,680	5,149,654
GR	GR4	1 2016 PAC Injection	150,000	0	0	0	0	0	168,924	172,303	175,749	179,264

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

	Month	Year	Equipment	2020	2021	2022	2023	2024	2025	2026	2027	2028
BR1	5	2014	PJFF/PAC	674,439	687,927	701,686	715,720	730,034	744,635	759,527	774,718	790,212
BR1	5	2014	SAM Mitigation	151,627	154,659	157,752	160,907	164,125	167,408	170,756	174,171	177,655
BR2	4	2014	PJFF/PAC	804,269	820,354	836,761	853,496	870,566	887,978	905,737	923,852	942,329
BR2	4	2014	SAM Mitigation	151,627	154,659	157,752	160,907	164,125	167,408	170,756	174,171	177,655
BR3	5	2015	PJFF/PAC	1,178,672	1,202,245	1,226,290	1,250,816	1,275,832	1,301,349	1,327,376	1,353,924	1,381,002
GH1	5	2014	PJFF/PAC	1,456,220	1,485,345	1,515,052	1,545,353	1,576,260	1,607,785	1,639,941	1,672,739	1,706,194
GH1	5	2014	SCR Turn-Down	0	0	0	0	0	0	0	0	0
GH1	2	2013	SAM Mitigation	0	0	0	0	0	0	0	0	0
GH2	11	2014	PJFF/PAC	1,751,408	1,786,436	1,822,165	1,858,608	1,895,781	1,933,696	1,972,370	2,011,817	2,052,054
GH2	12	2012	Sorbent Injection	113,375	115,643	117,956	120,315	122,721	125,175	127,679	130,232	132,837
GH3	10	2015	PJFF/PAC	1,440,684	1,469,498	1,498,888	1,528,865	1,559,443	1,590,632	1,622,444	1,654,893	1,687,991
GH3	11	2013	SCR Turn-Down	0	0	0	0	0	0	0	0	0
GH3	2	2013	SAM Mitigation	0	0	0	0	0	0	0	0	0
GH4	12	2015	PJFF/PAC	1,395,271	1,423,176	1,451,640	1,480,672	1,510,286	1,540,491	1,571,301	1,602,727	1,634,782
GH4	3	2014	SCR Turn-Down	0	0	0	0	0	0	0	0	0
GH4	2	2013	SAM Mitigation	0	0	0	0	0	0	0	0	0
MC1	5	2015	Combined 1&2 FGD	-139,733	-118,749	-121,124	-123,546	-126,017	-128,537	-131,108	-133,730	-136,405
MC1	5	2015	PJFF/PAC	1,596,746	1,628,681	1,661,255	1,694,480	1,728,370	1,762,937	1,798,196	1,834,160	1,870,843
MC1	5	2015	SAM Mitigation	41,828	42,665	43,518	44,388	45,276	46,182	47,105	48,047	49,008
MC2	4	2015	Combined 1&2 FGD	285,415	306,400	312,528	318,778	325,154	331,657	338,290	345,056	351,957
MC2	4	2015	PJFF/PAC	1,566,544	1,597,875	1,629,832	1,662,429	1,695,678	1,729,591	1,764,183	1,799,467	1,835,456
MC2	4	2015	SAM Mitigation	41,828	42,665	43,518	44,388	45,276	46,182	47,105	48,047	49,008
MC3	11	2014	FGD	0	0	0	0	0	0	0	0	0
MC3	10	2015	PJFF/PAC	1,428,136	1,456,698	1,485,832	1,515,549	1,545,860	1,576,777	1,608,313	1,640,479	1,673,288
MC3	4	2013	SAM Mitigation	41,470	42,299	43,145	44,008	44,888	45,786	46,702	47,636	48,588
MC3	4	2013	SCR Turn-Down	0	0	0	0	0	0	0	0	0
MC4	11	2014	FGD	0	0	0	0	0	0	0	0	0
MC4	11	2014	PJFF/PAC	1,674,325	1,707,811	1,741,967	1,776,807	1,812,343	1,848,590	1,885,562	1,923,273	1,961,738
MC4	11	2014	SAM Mitigation	41,828	42,665	43,518	44,388	45,276	46,182	47,105	48,047	49,008
MC4	11	2014	SCR Turn-Down	0	0	0	0	0	0	0	0	0
TC1	11	2015	PJFF/PAC	1,090,304	1,112,110	1,134,353	1,157,040	1,180,180	1,203,784	1,227,860	1,252,417	1,277,465
CR4	1	2016	SCR	1,871,000	2,280,739	2,326,353	2,372,880	2,468,745	2,518,120	2,568,482	2,619,852	2,672,249
CR4	1	2016	WFGD	0	0	0	0	0	0	0	0	0
CR4	1	2016	PJFF	1,191,000	1,451,822	1,480,859	1,510,476	1,540,685	1,571,499	1,602,929	1,634,988	1,667,688
CR4	1	2016	SAM Mitigation	174,000	212,105	216,347	220,674	225,088	229,589	234,181	238,865	243,642
CR4	1	2016	PAC Injection	169,000	206,010	210,130	214,333	218,620	222,992	227,452	232,001	236,641
CR5	1	2016	SCR	1,993,000	2,429,456	2,478,045	2,527,606	2,578,158	2,629,721	2,682,316	2,735,962	2,846,495
CR5	1	2016	WFGD	0	0	0	0	0	0	0	0	0

	Month	Year	Equipment	\$/yr	2020	2021	2022	2023	2024	2025	2026	2027	2028
CR5	1	2016	PJFF	1,251,000	1,524,962	1,555,461	1,586,570	1,618,302	1,650,668	1,683,681	1,717,355	1,751,702	1,786,736
CR5	1	2016	SAM Mitigation	177,000	215,762	220,077	224,479	228,968	233,548	238,219	242,983	247,843	252,800
CR5	1	2016	PAC Injection	172,000	209,667	213,860	218,138	222,500	226,950	231,489	236,119	240,842	245,658
CR6	1	2016	SCR	2,392,000	2,915,835	2,974,151	3,033,634	3,094,307	3,156,193	3,219,317	3,283,703	3,349,377	3,416,365
CR6	1	2016	WFGD		0	0	0	0	0	0	0	0	0
CR6	1	2016	PJFF	1,632,000	1,989,399	2,029,187	2,069,771	2,111,166	2,153,389	2,196,457	2,240,386	2,285,194	2,330,898
CR6	1	2016	SAM Mitigation	198,000	241,361	246,188	251,112	256,134	261,257	266,482	271,812	277,248	282,793
CR6	1	2016	PAC Injection	191,000	232,828	237,484	242,234	247,079	252,020	257,061	262,202	267,446	272,795
GR3	1	2016	SCR	943,000	1,149,512	1,172,502	1,195,952	1,219,871	1,244,268	1,269,154	1,294,537	1,320,428	1,346,836
GR3	1	2016	CDS-FF	3,322,000	4,049,499	4,130,489	4,213,099	4,297,361	4,383,308	4,470,975	4,560,394	4,651,602	4,744,634
GR3	1	2016	PAC Injection	141,000	171,878	175,316	178,822	182,399	186,047	189,767	193,563	197,434	201,383
GR4	1	2016	SCR	1,284,000	1,565,189	1,596,493	1,628,422	1,660,991	1,694,211	1,728,095	1,762,657	1,797,910	1,833,868
GR4	1	2016	CDS-FF	4,309,000	5,252,647	5,357,700	5,464,854	5,574,151	5,685,634	5,799,347	5,915,334	6,033,640	6,154,313
GR4	1	2016	PAC Injection	150,000	182,849	186,506	190,236	194,041	197,922	201,880	205,918	210,036	214,237

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

	Month	Year	Equipment	2029	2030	2031	2032	2033	2034	2035	2036	2037
BR1	5	2014	PJFF/PAC	806,016	822,137	838,580	855,351	872,458	889,907	907,705	925,860	944,377
BR1	5	2014	SAM Mitigation	181,208	184,832	188,529	192,299	196,145	200,068	204,069	208,151	212,314
BR2	4	2014	PJFF/PAC	961,175	980,399	1,000,007	1,020,007	1,040,407	1,061,215	1,082,440	1,104,088	1,126,170
BR2	4	2014	SAM Mitigation	181,208	184,832	188,529	192,299	196,145	200,068	204,069	208,151	212,314
BR3	5	2015	PJFF/PAC	1,408,622	1,436,795	1,465,530	1,494,841	1,524,738	1,555,233	1,586,337	1,618,064	1,650,425
GH1	5	2014	PJFF/PAC	1,740,318	1,775,124	1,810,627	1,846,839	1,883,776	1,921,452	1,959,881	1,999,078	2,039,060
GH1	5	2014	SCR Turn-Down	0	0	0	0	0	0	0	0	0
GH1	2	2013	SAM Mitigation	0	0	0	0	0	0	0	0	0
GH2	11	2014	PJFF/PAC	2,093,095	2,134,957	2,177,656	2,221,209	2,265,633	2,310,946	2,357,165	2,404,308	2,452,394
GH2	12	2012	Sorbent Injection	135,494	138,204	140,968	143,787	146,663	149,596	152,588	155,640	158,753
GH3	10	2015	PJFF/PAC	1,721,751	1,756,186	1,791,310	1,827,136	1,863,678	1,900,952	1,938,971	1,977,751	2,017,306
GH3	11	2013	SCR Turn-Down	0	0	0	0	0	0	0	0	0
GH3	2	2013	SAM Mitigation	0	0	0	0	0	0	0	0	0
GH4	12	2015	PJFF/PAC	1,667,477	1,700,827	1,734,844	1,769,540	1,804,931	1,841,030	1,877,850	1,915,407	1,953,716
GH4	3	2014	SCR Turn-Down	0	0	0	0	0	0	0	0	0
GH4	2	2013	SAM Mitigation	0	0	0	0	0	0	0	0	0
MC1	5	2015	Combined 1&2 FGD	-139,133	-141,916	-144,754	-147,649	-150,602	-153,614	-156,686	-159,820	-163,017
MC1	5	2015	PJFF/PAC	1,908,260	1,946,425	1,985,354	2,025,061	2,065,562	2,106,873	2,149,010	2,191,991	2,235,831
MC1	5	2015	SAM Mitigation	49,989	50,988	52,008	53,048	54,109	55,191	56,295	57,421	58,570
MC2	4	2015	Combined 1&2 FGD	358,996	366,176	373,499	380,969	388,589	396,361	404,288	412,374	420,621
MC2	4	2015	PJFF/PAC	1,872,165	1,909,608	1,947,801	1,986,757	2,026,492	2,067,022	2,108,362	2,150,529	2,193,540
MC2	4	2015	SAM Mitigation	49,989	50,988	52,008	53,048	54,109	55,191	56,295	57,421	58,570
MC3	11	2014	FGD	0	0	0	0	0	0	0	0	0
MC3	10	2015	PJFF/PAC	1,706,754	1,740,889	1,775,707	1,811,221	1,847,446	1,884,395	1,922,083	1,960,524	1,999,735
MC3	4	2013	SAM Mitigation	49,560	50,551	51,562	52,594	53,645	54,718	55,813	56,929	58,068
MC3	4	2013	SCR Turn-Down	0	0	0	0	0	0	0	0	0
MC4	11	2014	FGD	0	0	0	0	0	0	0	0	0
MC4	11	2014	PJFF/PAC	2,000,973	2,040,992	2,081,812	2,123,449	2,165,918	2,209,236	2,253,421	2,298,489	2,344,459
MC4	11	2014	SAM Mitigation	49,989	50,988	52,008	53,048	54,109	55,191	56,295	57,421	58,570
MC4	11	2014	SCR Turn-Down	0	0	0	0	0	0	0	0	0
TC1	11	2015	PJFF/PAC	1,303,015	1,329,075	1,355,656	1,382,769	1,410,425	1,438,633	1,467,406	1,496,754	1,526,689
CR4	1	2016	SCR	1,871,000	2,725,694	2,780,208	2,835,812	2,892,528	2,950,379	3,009,386	3,069,574	3,130,965
CR4	1	2016	WFGD	0	0	0	0	0	0	0	0	0
CR4	1	2016	PJFF	1,191,000	1,735,062	1,769,763	1,805,159	1,841,262	1,878,087	1,915,649	1,953,962	1,993,041
CR4	1	2016	SAM Mitigation	174,000	253,485	258,555	263,726	269,000	274,380	279,868	285,465	291,175
CR4	1	2016	PAC Injection	169,000	246,201	251,125	256,148	261,271	266,496	271,826	277,262	282,808
CR5	1	2016	SCR	1,993,000	2,903,425	2,961,493	3,020,723	3,081,137	3,142,760	3,205,615	3,269,728	3,335,122
CR5	1	2016	WFGD	0	0	0	0	0	0	0	0	0

	Month	Year	Equipment	\$/yr	2029	2030	2031	2032	2033	2034	2035	2036	2037
CR5	1	2016	PJFF	1,251,000	1,822,471	1,858,920	1,896,099	1,934,021	1,972,701	2,012,155	2,052,398	2,093,446	2,135,315
CR5	1	2016	SAM Mitigation	177,000	257,856	263,013	268,273	273,638	279,111	284,693	290,387	296,195	302,119
CR5	1	2016	PAC Injection	172,000	250,572	255,583	260,695	265,909	271,227	276,651	282,184	287,828	293,584
CR6	1	2016	SCR	2,392,000	3,484,692	3,554,386	3,625,474	3,697,983	3,771,943	3,847,382	3,924,330	4,002,816	4,082,872
CR6	1	2016	WFGD		0	0	0	0	0	0	0	0	0
CR6	1	2016	PJFF	1,632,000	2,377,516	2,425,066	2,473,567	2,523,039	2,573,500	2,624,970	2,677,469	2,731,018	2,785,639
CR6	1	2016	SAM Mitigation	198,000	288,449	294,218	300,102	306,104	312,226	318,471	324,840	331,337	337,964
CR6	1	2016	PAC Injection	191,000	278,251	283,816	289,492	295,282	301,188	307,212	313,356	319,623	326,015
GR3	1	2016	SCR	943,000	1,373,773	1,401,248	1,429,273	1,457,859	1,487,016	1,516,756	1,547,091	1,578,033	1,609,594
GR3	1	2016	CDS-FF	3,322,000	4,839,527	4,936,317	5,035,044	5,135,744	5,238,459	5,343,229	5,450,093	5,559,095	5,670,277
GR3	1	2016	PAC Injection	141,000	205,410	209,519	213,709	217,983	222,343	226,790	231,325	235,952	240,671
GR4	1	2016	SCR	1,284,000	1,870,546	1,907,956	1,946,116	1,985,038	2,024,739	2,065,233	2,106,538	2,148,669	2,191,642
GR4	1	2016	CDS-FF	4,309,000	6,277,399	6,402,947	6,531,006	6,661,626	6,794,859	6,930,756	7,069,371	7,210,759	7,354,974
GR4	1	2016	PAC Injection	150,000	218,522	222,892	227,350	231,897	236,535	241,266	246,091	251,013	256,033

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

	Month	Year	Equipment	2038	2039	2040
BR1	5	2014	PJFF/PAC	963,264	982,530	1,002,180
BR1	5	2014	SAM Mitigation	216,560	220,891	225,309
BR2	4	2014	PJFF/PAC	1,148,694	1,171,668	1,195,101
BR2	4	2014	SAM Mitigation	216,560	220,891	225,309
BR3	5	2015	PJFF/PAC	1,683,434	1,717,103	1,751,445
GH1	5	2014	PJFF/PAC	2,079,841	2,121,438	2,163,867
GH1	5	2014	SCR Turn-Down	0	0	0
GH1	2	2013	SAM Mitigation	0	0	0
GH2	11	2014	PJFF/PAC	2,501,442	2,551,471	2,602,500
GH2	12	2012	Sorbent Injection	161,928	165,166	168,470
GH3	10	2015	PJFF/PAC	2,057,652	2,098,805	2,140,781
GH3	11	2013	SCR Turn-Down	0	0	0
GH3	2	2013	SAM Mitigation	0	0	0
GH4	12	2015	PJFF/PAC	1,992,790	2,032,646	2,073,299
GH4	3	2014	SCR Turn-Down	0	0	0
GH4	2	2013	SAM Mitigation	0	0	0
MC1	5	2015	Combined 1&2 FGD	-166,277	-169,602	-172,994
MC1	5	2015	PJFF/PAC	2,280,547	2,326,158	2,372,681
MC1	5	2015	SAM Mitigation	59,741	60,936	62,155
MC2	4	2015	Combined 1&2 FGD	429,033	437,614	446,366
MC2	4	2015	PJFF/PAC	2,237,411	2,282,159	2,327,802
MC2	4	2015	SAM Mitigation	59,741	60,936	62,155
MC3	11	2014	FGD	0	0	0
MC3	10	2015	PJFF/PAC	2,039,729	2,080,524	2,122,134
MC3	4	2013	SAM Mitigation	59,229	60,414	61,622
MC3	4	2013	SCR Turn-Down	0	0	0
MC4	11	2014	FGD	0	0	0
MC4	11	2014	PJFF/PAC	2,391,348	2,439,175	2,487,958
MC4	11	2014	SAM Mitigation	59,741	60,936	62,155
MC4	11	2014	SCR Turn-Down	0	0	0
TC1	11	2015	PJFF/PAC	1,557,223	1,588,367	1,620,135
CR4	1	2016	SCR	1,871,000	3,257,456	3,322,605
CR4	1	2016	WFGD	0	0	0
CR4	1	2016	PJFF	1,191,000	2,073,560	2,115,031
CR4	1	2016	SAM Mitigation	174,000	302,938	308,997
CR4	1	2016	PAC Injection	169,000	294,233	300,118
CR5	1	2016	SCR	1,993,000	3,469,861	3,539,258
CR5	1	2016	WFGD	0	0	0

	<u>Month</u>	<u>Year</u>	<u>Equipment</u>	<u>\$/yr</u>	<u>2038</u>	<u>2039</u>	<u>2040</u>
CR5	1	2016	PIFF	1,251,000	2,178,021	2,221,582	2,266,013
CR5	1	2016	SAM Mitigation	177,000	308,161	314,325	320,611
CR5	1	2016	PAC Injection	172,000	299,456	305,445	311,554
CR6	1	2016	SCR	2,392,000	4,164,530	4,247,820	4,332,777
CR6	1	2016	WFGD	0	0	0	0
CR6	1	2016	PIFF	1,632,000	2,841,352	2,898,179	2,956,142
CR6	1	2016	SAM Mitigation	198,000	344,723	351,617	358,650
CR6	1	2016	PAC Injection	191,000	332,536	339,186	345,970
GR3	1	2016	SCR	943,000	1,641,786	1,674,622	1,708,114
GR3	1	2016	CDS-FF	3,322,000	5,783,682	5,899,356	6,017,343
GR3	1	2016	PAC Injection	141,000	245,484	250,394	255,402
GR4	1	2016	SCR	1,284,000	2,235,475	2,280,185	2,325,788
GR4	1	2016	CDS-FF	4,309,000	7,502,073	7,652,115	7,805,157
GR4	1	2016	PAC Injection	150,000	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	221	200	190	180					
2012 CR	288	288	465	439	415	394	373	353	333	313	293	272	252	216	205	195					
2013 CR			295	477	450	426	403	382	362	341	321	300	279	232	221	210					
2014 CR				303	489	461	436	413	392	371	350	329	307	249	238	227					
2015 CR					310	501	473	447	424	402	380	358	337	272	255	244					
2016 CR					318	513	485	459	434	412	390	367	345	301	279	262					
2017 CR						326	497	470	445	422	399	377	354	331	308	286					
2018 CR							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	557				
2027 CR															673	641	608	576			
2028 CR																690	657	625	594		
2029 CR																	708	676	645	614	
2030 CR																		726	695	664	633
2031 CR																			744	713	682
2032 CR																				762	731
2033 CR																				780	749
2034 CR																				798	767
2035 CR																				816	785
2036 CR																				834	803
2037 CR																				852	820
2038 CR																				870	838

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2039 CR																				
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2030 TC																				

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
2031 TC																					
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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	3,608	3,435	3,276	3,121	
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																					
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2036 GH																					
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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	
2021 BR													600	805	762	723	688	657	625	594	
2022 BR																					641

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
	2023 BR																				61
	2024 BR		94	134	127	120	114	108	103	98	92	87	81	76	72	70	68	65	63	61	
	2025 BR			96	137	130	123	117	111	106	100	95	89	83	78	74	72	69	67	65	
	2026 BR				98	141	133	126	120	114	108	103	97	91	86	80	76	73	71	69	
	2027 BR				101	101	144	136	129	123	117	111	105	99	94	88	82	78	75	73	
	2028 BR						103	148	140	132	126	120	114	108	102	96	90	84	80	77	
	2029 BR							106	106	143	136	129	123	117	111	104	98	92	86	82	
	2030 BR								109	155	147	139	132	126	120	113	107	101	94	88	
	2031 BR									111	159	150	143	135	129	123	116	110	103	97	
	2032 BR										114	163	154	146	139	132	126	119	112	106	
	2033 BR											117	167	158	150	142	135	129	122	115	
	2034 BR												120	123	162	154	146	139	132	125	
	2035 BR													123	176	166	157	150	142	135	
	2036 BR														126	180	170	161	153	146	
	2037 BR															129	184	174	165	157	
	2038 BR																132	189	179	169	
	2039 BR																	136	194	183	
	2040 BR																		139	199	
	2011 GR																				143
	2012 GR																				
	2013 GR																				
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	2039 GR																				
	2040 GR																				
	2011 TY		94	137	129	122	116	111	105	99	94	88	83	77	73	71	68	66	63	61	
	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	

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
	2015 TY						103	151	143	135	128	122	116	110	104	97	91	85	81	78	
	2016 TY							106	154	146	138	131	125	119	112	106	100	93	87	83	
	2017 TY								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	166	157	149	142	135	128	121	114	107	
	2020 TY											117	171	161	153	145	138	131	124	117	
	2021 TY												120	175	165	157	149	141	134	127	
	2022 TY													123	179	169	161	152	145	138	
	2023 TY														126	184	174	165	156	149	
	2024 TY															129	188	178	169	160	
	2025 TY																188	178	169	160	
	2026 TY																	193	182	173	
	2027 TY																		198	187	
	2028 TY																			203	
	2029 TY																				143
	2030 TY																				
	2031 TY																				
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	2037 TY																				
	2038 TY																				
	2039 TY																				
	2040 TY																				

Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047
2031 TC		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	629
2032 TC		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	683
2033 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	740
2034 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	799
2035 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	861
2036 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	925
2037 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	992
2038 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	1,062
2039 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	1,134
2040 TC		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	1,210
2041 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	1,289
2042 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	1,370
2043 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	1,455
2044 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	1,544
2045 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	1,636
2046 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	1,731
2047 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	1,831
2048 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	1,934
2049 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	2,041
2050 GH		3,295	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	2,153
2051 GH		3,377	4,516	4,289	4,062	3,895	3,722	3,557	3,392	3,227	3,062	2,897	2,732	2,567	2,402	2,281	2,213	2,152	2,092	2,032
2052 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	2,388	2,324	2,260
2053 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	2,513	2,449	2,384	2,319
2054 GH				4,863	4,619	4,397	4,194	4,008	3,831	3,653	3,475	3,298	3,120	2,942	2,765	2,643	2,578	2,513	2,449	2,384
2055 GH				3,728	3,478	4,984	4,734	4,507	4,299	4,109	3,927	3,744	3,562	3,380	3,198	3,016	2,834	2,652	2,470	2,288
2056 GH									3,821	5,109	4,852	4,619	4,406	4,211	4,025	3,838	3,651	3,465	3,278	3,091
2057 GH										3,917	5,237	4,974	4,735	4,517	4,317	4,125	3,934	3,743	3,551	3,360
2058 GH											4,014	5,368	5,098	4,853	4,629	4,425	4,228	4,032	3,836	3,640
2059 GH												4,115	5,502	5,226	4,974	4,745	4,535	4,334	4,133	3,932
2060 GH													4,218	5,639	5,356	5,099	4,864	4,649	4,443	4,236
2061 BR		297	288	279	271	262	253	244	235	226	218	209	200	191	182	173	165	156	147	0
2062 BR		313	304	295	286	277	268	259	250	241	232	223	214	205	196	187	178	169	160	151
2063 BR		331	321	312	303	293	284	275	266	256	247	238	229	219	210	201	191	182	173	164
2064 BR		348	339	329	320	310	301	291	282	272	263	253	244	234	225	215	206	196	187	177
2065 BR		367	357	347	338	328	318	308	299	289	279	269	260	250	240	230	221	211	201	191
2066 BR		386	376	366	356	346	336	326	316	306	296	286	276	266	256	246	236	226	216	206
2067 BR		406	396	385	375	365	355	344	334	324	314	303	293	283	273	263	252	242	232	222
2068 BR		436	416	406	395	385	374	364	353	343	332	322	311	301	290	280	269	259	248	238
2069 BR		476	447	426	416	405	394	383	373	362	351	340	330	319	308	297	287	276	265	254
2070 BR		519	488	458	437	426	415	404	393	382	371	360	349	338	327	316	305	294	283	272
2071 BR		563	532	500	469	448	437	425	414	403	391	380	369	358	346	335	324	312	301	290
2072 BR		609	577	545	513	481	459	448	436	424	413	401	390	378	367	355	343	332	320	309

Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047
2015 TY		75	72	70	67	64	61	59	56	53	51	48	45	0	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	0
2017 TY		85	82	79	76	73	70	67	65	62	59	56	53	50	47	0	0	0	0	0
2018 TY		92	87	84	81	78	75	72	69	66	63	60	57	54	52	49	0	0	0	0
2019 TY		101	94	89	86	83	80	77	74	71	68	65	62	59	56	53	50	0	0	0
2020 TY		110	103	96	91	88	85	82	79	76	73	70	66	63	60	57	54	51	0	0
2021 TY		120	113	106	99	93	90	87	84	81	78	74	71	68	65	62	59	55	52	0
2022 TY		130	123	116	108	101	96	93	89	86	83	80	76	73	70	67	63	60	57	54
2023 TY		141	134	126	119	111	104	98	95	92	88	85	82	78	75	72	68	65	62	58
2024 TY		152	145	137	129	122	114	106	101	97	94	90	87	84	80	77	73	70	67	63
2025 TY		164	156	148	140	133	125	117	109	103	100	96	93	89	86	82	79	75	72	68
2026 TY		177	168	160	152	144	136	128	120	112	106	102	99	95	91	88	84	81	77	73
2027 TY		192	182	172	164	156	148	139	131	123	114	108	105	101	97	94	90	86	83	79
2028 TY		208	196	186	177	168	160	151	143	134	126	117	111	107	104	100	96	92	89	85
2029 TY		146	213	201	191	181	172	164	155	146	138	129	120	114	110	106	102	98	95	91
2030 TY			150	218	206	196	186	177	168	159	150	141	132	123	117	113	109	105	101	97
2031 TY			154		224	212	201	190	181	172	163	154	145	135	126	120	116	112	107	103
2032 TY			157		157	229	217	206	195	186	176	167	158	148	139	129	123	118	114	110
2033 TY						161	235	222	211	200	190	181	171	161	152	142	133	126	121	117
2034 TY							165	241	228	216	205	195	185	175	165	156	146	136	129	124
2035 TY								169	247	234	221	210	200	190	180	170	160	149	139	132
2036 TY									174	253	239	227	215	205	195	184	174	164	153	143
2037 TY										178	259	245	233	221	210	199	189	178	168	157
2038 TY											182	266	252	238	226	215	204	194	183	172
2039 TY												187	273	258	244	232	221	210	198	187
2040 TY													192	279	264	250	238	226	215	203

Unit	Capacity	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
BR1	101	1,770	1,678	1,591	1,510	1,434	1,361	1,290	1,219	1,149	1,080	1,013	946
BR2	167	2,926	2,774	2,631	2,496	2,371	2,251	2,132	2,015	1,900	1,787	1,675	1,564
BR3	416	7,289	6,910	6,553	6,218	5,906	5,607	5,312	5,021	4,733	4,450	4,171	3,897
CR4	155	1,269	1,125	988	859	738	623	511	402	297	194	95	0
CR5	168	1,375	1,219	1,071	931	800	675	554	436	322	211	103	0
CR6	240	1,965	1,741	1,529	1,330	1,143	965	792	623	459	301	148	0
GH1	475	13,375	12,686	12,033	11,415	10,834	10,291	9,770	9,256	8,749	8,249	7,755	7,269
GH2	484	13,628	12,927	12,261	11,631	11,039	10,486	9,956	9,432	8,915	8,405	7,902	7,407
GH3	480	13,516	12,820	12,159	11,535	10,948	10,399	9,873	9,354	8,841	8,336	7,837	7,346
GH4	479	13,488	12,793	12,134	11,511	10,925	10,378	9,853	9,334	8,823	8,318	7,821	7,331
GR3	68	860	801	745	692	643	595	549	504	459	415	373	331
GR4	95	1,201	1,118	1,040	967	898	832	767	704	641	580	521	462
MC1	303	6,531	6,033	5,559	5,110	4,687	4,290	3,910	3,538	3,173	2,817	2,468	2,128
MC2	301	6,488	5,993	5,523	5,077	4,656	4,262	3,884	3,515	3,152	2,798	2,452	2,114
MC3	391	8,428	7,785	7,174	6,595	6,048	5,536	5,046	4,565	4,095	3,635	3,185	2,746
MC4	477	10,282	9,498	8,752	8,045	7,379	6,754	6,156	5,570	4,996	4,434	3,886	3,350
TC1	383	3,101	2,986	2,878	2,777	2,652	2,536	2,425	2,315	2,206	2,099	1,993	1,888
TC2	549	4,445	4,280	4,125	3,980	3,802	3,636	3,476	3,319	3,163	3,009	2,857	2,706
TV3	71	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
2012 CR	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
2014 CR	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
2016 CR	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
2018 CR	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
2020 CR	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
2022 CR	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
2024 CR	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
2026 CR	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
2028 CR	0	0	0	0	0	0	0	0	0	0	0	0	0
2029 CR	0	0	0	0	0	0	0	0	0	0	0	0	0
2030 CR	271	0	0	0	0	0	0	0	0	0	0	0	0
2031 CR	294	278	0	0	0	0	0	0	0	0	0	0	0
2032 CR	319	302	285	0	0	0	0	0	0	0	0	0	0
2033 CR	345	327	309	292	0	0	0	0	0	0	0	0	0
2034 CR	372	353	335	317	299	0	0	0	0	0	0	0	0
2035 CR	400	381	362	344	325	306	0	0	0	0	0	0	0
2036 CR	429	410	390	371	352	333	314	0	0	0	0	0	0
2037 CR	468	439	420	400	381	361	342	322	302	283	264	245	226
2038 CR	518	480	450	430	410	390	370	350	330	310	290	270	250

Unit	Capacity	2048	2049	2050	2051	2052	2053	2054	2056	2057	2058	2059
2039 CR	570	531	492	462	441	421	400	379	359	338	0	0
2040 CR	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
2012 MC	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
2014 MC	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
2016 MC	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
2018 MC	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
2020 MC	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
2022 MC	0	0	0	0	0	0	0	0	0	0	0	0
2023 MC	879	0	0	0	0	0	0	0	0	0	0	0
2024 MC	956	901	0	0	0	0	0	0	0	0	0	0
2025 MC	1,035	980	924	0	0	0	0	0	0	0	0	0
2026 MC	1,119	1,061	1,004	947	0	0	0	0	0	0	0	0
2027 MC	1,205	1,147	1,088	1,029	970	995	0	0	0	0	0	0
2028 MC	1,296	1,235	1,175	1,115	1,055	1,081	1,020	0	0	0	0	0
2029 MC	1,390	1,328	1,266	1,205	1,143	1,081	1,020	0	0	0	0	0
2030 MC	1,488	1,424	1,361	1,298	1,235	1,172	1,108	1,045	0	0	0	0
2031 MC	1,590	1,525	1,460	1,395	1,330	1,266	1,201	1,136	1,071	1,008	0	0
2032 MC	1,696	1,629	1,563	1,497	1,430	1,364	1,297	1,231	1,164	1,098	0	0
2033 MC	1,806	1,738	1,670	1,602	1,534	1,466	1,398	1,330	1,262	1,194	1,125	0
2034 MC	1,921	1,852	1,782	1,712	1,642	1,572	1,503	1,433	1,363	1,293	1,223	1,154
2035 MC	2,041	1,969	1,898	1,826	1,755	1,683	1,612	1,540	1,469	1,397	1,325	1,254
2036 MC	2,208	2,092	2,019	1,945	1,872	1,799	1,725	1,652	1,579	1,505	1,432	1,359
2037 MC	2,425	2,263	2,144	2,069	1,994	1,919	1,844	1,768	1,693	1,618	1,543	1,468
2038 MC	2,652	2,486	2,319	2,198	2,121	2,044	1,967	1,890	1,813	1,736	1,659	1,581
2039 MC	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	3,135	2,961	2,786	2,611	2,437	2,309	2,228	2,147	2,066	1,985	1,904	1,823
2011 TC	91	87	82	77	0	0	0	0	0	0	0	0
2012 TC	98	94	89	84	79	0	0	0	0	0	0	0
2013 TC	106	101	96	91	86	81	0	0	0	0	0	0
2014 TC	113	108	103	98	93	88	83	0	0	0	0	0
2015 TC	121	116	111	106	101	96	91	85	0	0	0	0
2016 TC	130	124	119	114	109	103	98	93	88	0	0	0
2017 TC	138	133	127	122	117	111	106	101	95	90	0	0
2018 TC	147	142	136	131	125	120	114	109	103	98	92	0
2019 TC	156	151	145	139	134	128	123	117	111	106	100	94
2020 TC	166	160	155	149	143	137	131	126	120	114	108	102
2021 TC	176	170	164	158	152	147	141	135	129	123	117	111
2022 TC	187	181	175	168	162	156	150	144	138	132	126	120
2023 TC	198	191	185	179	173	166	160	154	148	141	135	129
2024 TC	209	203	196	190	183	177	171	164	158	151	145	139
2025 TC	221	214	208	201	194	188	181	175	168	162	155	149
2026 TC	233	226	219	213	206	199	193	186	179	173	166	159
2027 TC	246	239	232	225	218	211	204	197	191	184	177	170
2028 TC	259	252	245	238	231	224	217	209	202	195	188	181
2029 TC	273	265	258	251	244	236	229	222	215	207	200	193
2030 TC	287	279	272	265	257	250	242	235	227	220	213	205

Unit	Capacity	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
2031 TC		302	294	286	279	271	264	256	248	241	233	226	218
2032 TC		317	309	301	293	286	278	270	262	255	247	239	231
2033 TC		333	325	317	309	301	293	285	277	269	261	253	245
2034 TC		349	341	333	325	317	308	300	292	284	276	267	259
2035 TC		366	358	350	341	333	324	316	308	299	291	283	274
2036 TC		392	376	367	358	350	341	333	324	315	307	298	290
2037 TC		427	402	385	376	367	358	350	341	332	323	314	306
2038 TC		463	438	412	395	385	376	367	358	349	340	331	322
2039 TC		501	475	449	422	404	395	386	377	367	358	349	340
2040 TC		541	514	487	460	433	414	405	396	386	377	367	358
2011 GH		0	0	0	0	0	0	0	0	0	0	0	0
2012 GH		645	0	0	0	0	0	0	0	0	0	0	0
2013 GH		700	661	0	0	0	0	0	0	0	0	0	0
2014 GH		759	718	677	0	0	0	0	0	0	0	0	0
2015 GH		819	778	736	694	0	0	0	0	0	0	0	0
2016 GH		882	840	797	754	712	0	0	0	0	0	0	0
2017 GH		948	905	861	817	773	729	0	0	0	0	0	0
2018 GH		1,017	972	927	882	837	792	748	0	0	0	0	0
2019 GH		1,088	1,042	996	950	904	858	812	766	0	0	0	0
2020 GH		1,163	1,116	1,068	1,021	974	927	880	833	785	0	0	0
2021 GH		1,240	1,192	1,143	1,095	1,047	998	950	902	853	805	0	0
2022 GH		1,321	1,271	1,222	1,172	1,123	1,073	1,023	974	924	875	825	0
2023 GH		1,405	1,354	1,303	1,252	1,201	1,151	1,100	1,049	998	947	897	846
2024 GH		1,492	1,440	1,388	1,336	1,283	1,231	1,179	1,127	1,075	1,023	971	919
2025 GH		1,582	1,529	1,476	1,422	1,369	1,316	1,262	1,209	1,155	1,102	1,049	995
2026 GH		1,677	1,622	1,567	1,513	1,458	1,403	1,348	1,294	1,239	1,184	1,130	1,075
2027 GH		1,775	1,719	1,662	1,606	1,550	1,494	1,438	1,382	1,326	1,270	1,214	1,158
2028 GH		1,876	1,819	1,762	1,704	1,647	1,589	1,532	1,474	1,417	1,359	1,302	1,244
2029 GH		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		2,092	2,032	1,971	1,911	1,851	1,790	1,730	1,670	1,609	1,549	1,488	1,428
2031 GH		2,206	2,144	2,083	2,021	1,959	1,897	1,835	1,773	1,711	1,649	1,588	1,526
2032 GH		2,325	2,262	2,198	2,135	2,071	2,008	1,944	1,881	1,818	1,754	1,691	1,627
2033 GH		2,448	2,383	2,318	2,253	2,188	2,123	2,058	1,993	1,928	1,863	1,798	1,733
2034 GH		2,576	2,509	2,443	2,376	2,309	2,243	2,176	2,109	2,043	1,976	1,910	1,843
2035 GH		2,709	2,640	2,572	2,504	2,435	2,367	2,299	2,231	2,162	2,094	2,026	1,957
2036 GH		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		3,169	2,977	2,846	2,774	2,702	2,630	2,559	2,487	2,415	2,343	2,272	2,200
2038 GH		3,444	3,248	3,052	2,917	2,843	2,770	2,696	2,623	2,549	2,476	2,402	2,328
2039 GH		3,731	3,530	3,329	3,128	2,990	2,914	2,839	2,764	2,688	2,613	2,537	2,462
2040 GH		4,030	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
2012 BR		0	0	0	0	0	0	0	0	0	0	0	0
2013 BR		154	0	0	0	0	0	0	0	0	0	0	0
2014 BR		168	158	0	0	0	0	0	0	0	0	0	0
2015 BR		182	172	162	0	0	0	0	0	0	0	0	0
2016 BR		196	186	176	166	0	0	0	0	0	0	0	0
2017 BR		211	201	191	181	170	0	0	0	0	0	0	0
2018 BR		227	217	206	196	185	175	0	0	0	0	0	0
2019 BR		244	233	222	211	201	190	179	0	0	0	0	0
2020 BR		261	250	239	228	217	206	195	183	0	0	0	0
2021 BR		278	267	256	245	233	222	211	199	188	0	0	0
2022 BR		297	285	274	262	251	239	228	216	204	193	0	0

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

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

\$000

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
BR	BR1	101	0	0	0	0	0	441	454	590	616	785
BR	BR2	167	0	0	0	0	0	729	751	975	1,018	1,299
BR	BR3	416	0	0	0	0	0	1,816	1,870	2,430	2,536	3,235
CR	CR4	155	258	840	1,124	1,095	1,216	1,960	1,949	1,644	1,927	2,572
CR	CR5	168	279	910	1,219	1,187	1,318	2,124	2,112	1,782	2,089	2,788
CR	CR6	240	399	1,300	1,741	1,696	1,882	5,221	5,152	4,566	4,899	5,799
GH	GH1	475	0	0	0	0	0	5,620	5,988	6,566	7,371	8,085
GH	GH2	484	0	0	0	0	0	5,727	6,101	6,691	7,510	8,238
GH	GH3	480	0	0	0	0	0	5,680	6,051	6,635	7,448	8,170
GH	GH4	479	0	0	0	0	0	5,668	6,038	6,622	7,433	8,153
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
TC	TC2	549	0	0	0	0	0	2,817	2,961	3,114	3,176	3,240
TY	TY3	71										
	BR Landfill Phase 2 Savings		0	0	0	0	0	0	0	828	908	1,960
	BR Landfill Phase 3 Savings		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
	CR Landfill Capital Savings	936	3,049	3,049	4,083	3,979	4,416	4,938	4,772	3,579	4,464	6,617
	CR Landfill O&M Savings		0	0	0	0	0	2,181	2,307	2,393	2,537	2,726
	CR6 Stator Rewind Savings		0	0	0	0	0	2,187	2,135	2,020	1,914	1,816
	GH Landfill Capital Savings		0	0	0	0	0	61	188	1,083	2,805	4,044
	GH Landfill O&M Savings		0	0	0	0	0	22,633	23,991	25,431	26,957	28,601
	TC Landfill Capital Savings		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

LandfillCapital

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
	787	789	1,035	1,054	1,357	1,337	1,319	1,301	1,285	1,267	1,122	410	385
	1,301	1,305	1,711	1,743	2,245	2,211	2,180	2,151	2,124	2,095	1,855	678	636
	3,242	3,252	4,261	4,342	5,591	5,508	5,431	5,359	5,291	5,219	4,620	1,688	1,585
	2,560	2,096	2,059	2,073	1,531	1,768	1,810	1,869	1,932	2,000	1,861	1,810	1,778
	2,774	2,272	2,232	2,247	1,659	1,916	1,962	2,025	2,094	2,168	2,017	1,962	1,927
	5,682	4,867	4,712	4,637	3,700	3,969	3,960	4,000	4,047	4,101	3,833	3,704	3,602
	8,761	9,219	9,707	10,790	12,508	14,281	15,439	15,604	16,273	16,860	17,332	17,856	18,548
	8,927	9,394	9,891	10,994	12,745	14,551	15,732	15,900	16,581	17,180	17,660	18,195	18,899
	8,854	9,316	9,809	10,904	12,640	14,431	15,602	15,769	16,444	17,038	17,514	18,044	18,743
	8,835	9,297	9,789	10,881	12,614	14,401	15,569	15,736	16,410	17,002	17,478	18,007	18,704
	2,305	2,351	2,398	2,446	2,495	2,545	2,596	2,648	5,363	8,239	8,294	12,354	12,003
	3,304	3,371	3,438	3,507	3,577	3,648	3,721	3,796	7,687	11,809	11,888	17,709	17,206
	1,870	1,782	1,697	1,613	1,531	1,451	1,372	1,294	1,215	1,123	156	138	120
	0	0	1,638	1,745	3,767	3,594	3,426	3,261	3,101	2,943	2,789	2,638	2,487
	3,461	3,564	3,671	3,781	3,895	4,012	4,132	4,256	4,384	4,515	4,651	1,345	1,123
	6,353	4,493	4,170	4,023	1,844	2,496	2,513	2,483	2,455	2,429	1,631	1,345	1,123
	2,944	3,121	3,308	3,507	3,717	3,925	4,061	4,305	4,563	4,837	5,128	5,230	5,335
	1,719	1,621	1,524	1,427	1,329	1,232	1,158	1,106	1,055	1,004	952	901	850
	4,399	4,388	4,387	6,672	11,397	16,206	18,397	18,341	18,358	17,892	16,784	15,709	15,118
	30,979	32,838	34,808	36,897	39,110	41,457	43,944	44,668	47,348	50,189	53,201	56,393	59,776
	0	0	0	0	0	0	0	0	6,478	13,344	13,344	23,088	22,094
	5,610	5,722	5,836	5,953	6,072	6,194	6,318	6,444	6,573	6,704	6,838	6,975	7,115

LandfillCapital

	2034	2035	2036	2037	2038	2039	2040
	2034	2035	2036	2037	2038	2039	2040
	360	331	54	46	38	30	23
	595	547	89	76	63	50	39
	1,482	1,363	222	189	157	124	97
	1,748	1,719	1,692	1,708	1,727	1,747	1,771
	1,895	1,864	1,834	1,851	1,872	1,894	1,919
	2,777	2,662	2,620	2,645	2,674	2,705	2,742
	19,372	20,254	21,186	21,692	2,492	1,854	1,700
	19,739	20,637	21,587	22,103	2,539	1,889	1,733
	19,576	20,467	21,409	21,921	2,518	1,874	1,718
	19,535	20,424	21,364	21,875	2,513	1,870	1,715
	11,666	11,343	11,031	10,731	10,442	10,162	9,886
	16,723	16,259	15,812	15,382	14,967	14,567	14,170
	101	83	64	46	28	9	0
	2,336	2,158	301	265	230	194	159
	908	695	485	430	384	338	303
	5,441	5,550	5,661	5,774	5,890	6,008	6,128
	70	0	0	0	0	0	0
	14,860	14,617	14,352	12,126	9,906	7,329	6,705
	63,363	67,165	71,194	75,466	155	158	161
	21,132	20,199	19,293	18,412	17,554	16,717	15,883
	7,257	7,402	7,550	7,701	7,855	8,012	8,172

LandfillCapital

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
BR	BR1	101	0	0	0	553	743	703	668	635	606	577
BR	BR2	167	0	0	0	915	1,228	1,163	1,104	1,050	1,002	954
BR	BR3	416	0	0	0	2,279	3,060	2,897	2,749	2,616	2,496	2,377
CR	CR4	155	0	0	0	980	1,582	1,494	1,413	1,339	1,269	1,201
CR	CR5	168	0	0	0	1,062	1,715	1,619	1,532	1,451	1,376	1,302
CR	CR6	240	0	0	0	1,518	2,449	2,313	2,188	2,073	1,966	1,860
GH	GH1	475	0	0	0	1,462	1,954	1,856	1,767	1,686	1,611	1,540
GH	GH2	484	0	0	0	1,489	1,991	1,891	1,800	1,718	1,642	1,569
GH	GH3	480	0	0	0	1,477	1,975	1,876	1,786	1,703	1,628	1,556
GH	GH4	479	0	0	0	1,474	1,971	1,872	1,782	1,700	1,625	1,553
GR	GR3	68	0	0	0	586	837	792	751	713	679	645
GR	GR4	95	0	0	0	819	1,169	1,106	1,049	996	948	901
MC	MC1	303	0	0	0	1,215	1,774	1,682	1,598	1,521	1,449	1,380
MC	MC2	301	0	0	0	1,207	1,762	1,671	1,588	1,511	1,440	1,371
MC	MC3	391	0	0	0	1,568	2,289	2,171	2,063	1,963	1,870	1,781
MC	MC4	477	0	0	0	1,913	2,792	2,648	2,516	2,394	2,281	2,172
TC	TC1	383	0	0	0	770	1,008	958	912	871	833	797
TC	TC2	549	0	0	0	1,104	1,445	1,373	1,307	1,248	1,194	1,142
TY	TY3	71	0	0	0	586	837	792	751	713	679	645
	BRWATER		0	0	0	3,747	5,032	4,763	4,521	4,302	4,104	3,908
	CRWATER		0	0	0	3,560	5,746	5,427	5,134	4,863	4,611	4,362
	MCWATER		0	0	0	5,902	8,617	8,173	7,765	7,389	7,040	6,704
	TCWATER		0	0	0	1,874	2,453	2,331	2,220	2,119	2,026	1,938
	GHWATER		0	0	0	5,902	7,892	7,495	7,135	6,806	6,505	6,217
	GRWATER		0	0	0	1,405	2,006	1,898	1,799	1,709	1,627	1,546

WaterCapital

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
548	519	462	433	413	403	393	382	372	361	351	340		
907	859	764	716	684	666	649	632	615	597	580	563		
2,258	2,140	1,902	1,784	1,703	1,660	1,617	1,574	1,531	1,488	1,445	1,402		
1,132	1,064	927	859	806	770	735	699	663	627	591	0		
1,227	1,153	1,005	931	874	835	796	757	718	679	640	0		
1,754	1,647	1,435	1,329	1,249	1,193	1,137	1,082	1,026	970	915	0		
1,468	1,397	1,254	1,183	1,111	1,062	1,035	1,008	982	955	928	901		
1,496	1,423	1,278	1,205	1,132	1,082	1,055	1,028	1,000	973	946	918		
1,484	1,411	1,267	1,195	1,123	1,073	1,046	1,019	992	965	938	911		
1,481	1,409	1,265	1,193	1,121	1,071	1,044	1,017	990	963	936	909		
611	577	510	476	452	438	423	409	395	380	366	352		
854	807	712	665	631	611	591	571	551	531	511	491		
1,311	1,242	1,103	1,034	965	915	882	850	818	786	754	722		
1,302	1,234	1,096	1,027	959	908	877	845	813	781	749	717		
1,692	1,602	1,424	1,335	1,245	1,180	1,139	1,097	1,056	1,015	973	932		
2,064	1,955	1,737	1,628	1,519	1,440	1,389	1,339	1,288	1,238	1,187	1,137		
760	724	652	616	579	555	542	529	517	504	491	479		
1,090	1,038	934	882	830	795	777	759	741	723	704	686		
611	577	510	476	452	438	423	409	395	380	366	352		
3,713	3,518	3,128	2,933	2,800	2,729	2,659	2,588	2,517	2,447	2,376	2,305		
4,113	3,865	3,367	3,118	2,929	2,798	2,668	2,537	2,407	2,277	2,146	0		
6,368	6,032	5,361	5,025	4,689	4,443	4,287	4,131	3,976	3,820	3,664	3,508		
1,850	1,762	1,586	1,498	1,410	1,350	1,319	1,288	1,258	1,227	1,196	1,165		
5,928	5,640	5,063	4,775	4,487	4,288	4,180	4,072	3,964	3,856	3,748	3,640		
1,465	1,384	1,222	1,141	1,083	1,049	1,015	980	946	912	877	843		

WaterCapital

	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
330	320	309	299	288	278	267	257	247	236	226	215	205	
546	528	511	494	477	459	442	425	408	390	373	356	339	
1,359	1,316	1,273	1,230	1,187	1,144	1,101	1,058	1,016	973	930	887	844	
0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	
875	848	821	794	767	741	714	687	660	634	607	580	553	
891	864	837	809	782	755	727	700	673	646	618	591	564	
884	857	830	803	776	748	721	694	667	640	613	586	559	
882	855	828	801	774	747	720	693	666	639	612	585	558	
337	323	309	294	280	266	251	237	0	0	0	0	0	
471	451	431	411	391	371	351	331	0	0	0	0	0	
690	658	626	594	562	530	0	0	0	0	0	0	0	
686	654	622	590	558	526	0	0	0	0	0	0	0	
891	849	808	766	725	684	0	0	0	0	0	0	0	
1,086	1,036	986	935	885	834	0	0	0	0	0	0	0	
466	453	441	428	415	403	390	377	364	352	339	326	314	
668	650	632	613	595	577	559	541	522	504	486	468	450	
337	323	309	294	280	266	251	237	0	0	0	0	0	
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	
0	0	0	0	0	0	0	0	0	0	0	0	0	
3,353	3,197	3,041	2,886	2,730	2,574	0	0	0	0	0	0	0	
1,134	1,103	1,072	1,041	1,010	979	949	918	887	856	825	794	763	
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	
809	774	740	706	671	637	603	568	0	0	0	0	0	

WaterCapital

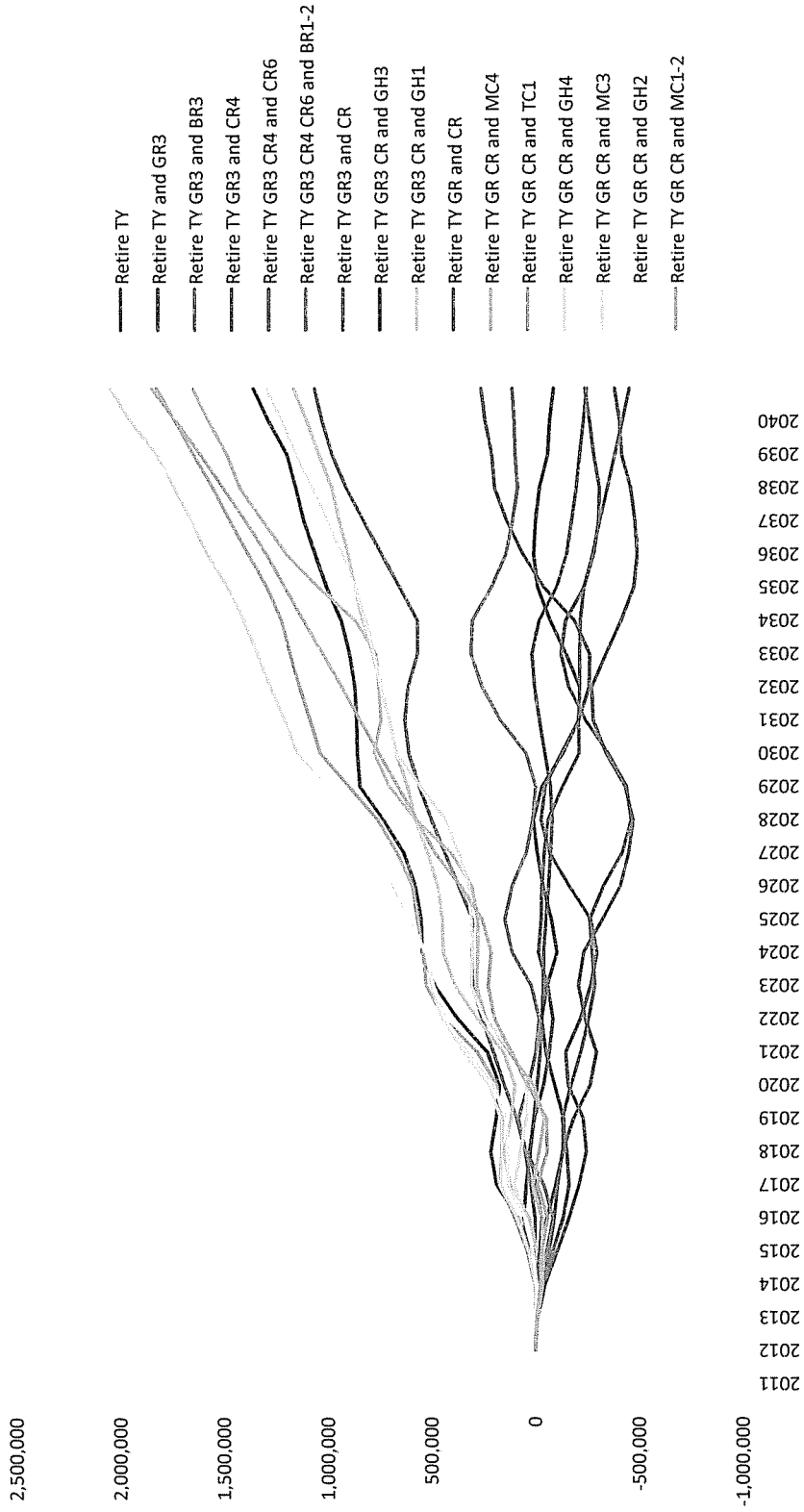
	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
	194	184	174	0	0	0	0	0	0	0	0	0	0
	321	304	287	0	0	0	0	0	0	0	0	0	0
	801	758	715	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	526	500	473	446	0	0	0	0	0	0	0	0	0
	536	509	482	454	0	0	0	0	0	0	0	0	0
	532	505	478	451	0	0	0	0	0	0	0	0	0
	531	504	477	450	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	301	288	276	263	250	237	225	212	0	0	0	0	0
	431	413	395	377	359	340	322	304	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	1,317	1,246	1,175	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	732	701	670	640	609	578	547	516	0	0	0	0	0
	2,125	2,017	1,909	1,801	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0

WaterCapital

	Delta NPVRR \$M
	Install Controls / (Retire)
Tyrone 3	(59)
Brown 3	(66)
Cane Run 6	368
Brown 1-2	(240)
Cane Run 4-5	(67)
Green River 3-4	49
Ghent 1-4	(193)
Trimble County 1	529
Mill Creek 3-4	430
Mill Creek 1-2	(130)

Cumulative Difference in Revenue Requirements

Install Controls vs. Retire/Replace Capacity



Retirement Savings (Deltas)	Capital	O&M	Total
Retire TY	-22	-3	-26
Retire TY and GR3	-13	-50	-62
Retire TY GR3 and BR3	-98	-174	-272
Retire TY GR3 and CR4	-46	-140	-186
Retire TY GR3 CR4 and CR6	-84	-118	-202
Retire TY GR3 CR4 CR6 and BR1-2	-63	-129	-192
Retire TY GR3 and CR	-50	-149	-199
Retire TY GR3 CR and GH3	-203	-145	-348
Retire TY GR3 CR and GH1	-201	-210	-411
Retire TY GR and CR	-18	-100	-118
Retire TY GR CR and MC4	-105	-201	-306
Retire TY GR CR and TC1	-68	-203	-271
Retire TY GR CR and GH4	-203	-141	-343
Retire TY GR CR and MC3	-86	-201	-287
Retire TY GR CR and GH2	-205	-156	-361
Retire TY GR CR and MC1-2	-133	-325	-457

Revenue Requirement Deltas	Prod Cost	Capital	Total	Check
Retire TY	10	-69	-59	0
Retire TY and GR3	-6	-59	-66	0
Retire TY GR3 and BR3	577	-208	368	0
Retire TY GR3 and CR4	111	-350	-240	0
Retire TY GR3 CR4 and CR6	429	-496	-67	0
Retire TY GR3 CR4 CR6 and BR1-2	345	-296	49	0
Retire TY GR3 and CR	177	-370	-193	0
Retire TY GR3 CR and GH3	916	-387	529	0
Retire TY GR3 CR and GH1	803	-373	430	0
Retire TY GR and CR	-45	-85	-130	0
Retire TY GR CR and MC4	1,006	-522	484	0
Retire TY GR CR and TC1	839	-185	654	0
Retire TY GR CR and GH4	1,103	-376	727	0
Retire TY GR CR and MC3	739	-316	423	0
Retire TY GR CR and GH2	1,094	-365	728	0
Retire TY GR CR and MC1-2	1,329	-799	530	0

		1	2	3	4	5	6
	Retire:						
	<u>No</u>					<u>TY GR3 CR4</u>	<u>TY GR3 CR4</u>
	<u>Retirements</u>	<u>TY</u>	<u>TY GR3</u>	<u>TY GR3 BR3</u>	<u>TY GR3 CR4</u>	<u>CR6</u>	<u>CR6 BR1-2</u>
2010							
2011							
2012							
2013							
2014							
2015							
2016		3x1C(1)	2x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)
2017	3x1C(1)						
2018							3x1C(1)
2019							
2020			2x1C(1)	3x1C(1)		3x1C(1)	
2021							
2022					2x1C(1)		
2023							
2024	3x1C(1)	3x1C(1)					3x1C(1)
2025			3x1C(1)				
2026				3x1C(1)	3x1C(1)	3x1C(1)	
2027							
2028							
2029							
2030	2x1C(1)	3x1C(1)					
2031			SCCT(1)				3x1C(1)
2032					SCCT(1)		
2033			3x1C(1)	3x1C(1)		3x1C(1)	
2034					3x1C(1)		
2035	2x1C(1)						
2036		2x1C(1)					
2037							SCCT(1)
2038							
2039	SCCT(1)						SCCT(1)
2040			SCCT(1)	SCCT(1)		SCCT(1)	
30 Yr PVRR (\$B)	23.6	23.7	23.8	24.7	24.2	24.8	25.5

7 8 9 10 11 12 13

	<u>TY GR3 CR</u>	<u>TY GR3 CR</u> <u>GH3</u>	<u>TY GR3 CR</u> <u>GH1</u>	<u>TY GR CR</u>	<u>TY GR CR</u> <u>MC4</u>	<u>TY GR CR</u> <u>TC1</u>	<u>TY GR CR</u> <u>GH4</u>
2010							
2011							
2012							
2013							
2014							
2015							
2016	3x1C(1)	3x1C(1) 2x1C(1)	3x1C(2)	3x1C(1)	3x1C(2)	3x1C(2)	3x1C(2)
2017							
2018				3x1C(1)			
2019	3x1C(1)						
2020		3x1C(1)					
2021					3x1C(1)		3x1C(1)
2022			3x1C(1)			3x1C(1)	
2023							
2024				3x1C(1)			
2025	3x1C(1)						
2026		3x1C(1)					
2027							
2028			3x1C(1)		3x1C(1)	3x1C(1)	3x1C(1)
2029							
2030							
2031	2x1C(1)			3x1C(1)			
2032							
2033		3x1C(1)					
2034							3x1C(1)
2035			2x1C(1)		3x1C(1)	2x1C(1)	
2036	2x1C(1)						
2037				SCCT(1)			
2038							
2039				SCCT(1)			
2040		SCCT(1)	SCCT(1)			SCCT(1)	

30 Yr PVRR (\$B) 25.3 26.6 26.6 25.4 26.9 26.7 26.9

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	<u>TY GR CR</u> <u>MC3</u>	<u>TY GR CR</u> <u>GH2</u>	<u>TY GR CR</u> <u>MC1-2</u>
2010			
2011			
2012			
2013			
2014			
2015			
2016	3x1C(2)	3x1C(2)	3x1C(2)
2017			
2018			
2019			
2020			3x1C(1)
2021		3x1C(1)	
2022	3x1C(1)		
2023			
2024			
2025			
2026			2x1C(1)
2027			
2028	3x1C(1)	3x1C(1)	
2029			
2030			
2031			3x1C(1)
2032			
2033			
2034		3x1C(1)	
2035	2x1C(1)		
2036			
2037			SCCT(1)
2038			
2039			SCCT(1)
2040	SCCT(1)		
30 Yr PVRR (\$B)	26.6	27.0	27.5

Breakeven RR by Year (\$M)

Year \$	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
TY	-59	-63	-67	-72	-76	-81	-87	-93	-99	-106
GR3	-66	-70	-75	-80	-85	-91	-97	-103	-110	-118
BR3	368	393	420	448	478	510	544	581	619	661
CR4	-240	-256	-273	-291	-311	-332	-354	-378	-403	-430
CR6	-67	-71	-76	-81	-87	-93	-99	-106	-113	-120
BR1-2	49	53	56	60	64	68	73	78	83	89
CR5	-193	-206	-220	-235	-251	-268	-286	-305	-325	-347
GH3	529	565	603	643	686	732	782	834	890	950
GH1	430	459	489	522	557	595	635	677	723	771
GR4	-130	-139	-148	-158	-169	-180	-192	-205	-219	-233
MC4	484	517	551	588	628	670	715	763	814	869
TC1	654	698	745	795	848	905	966	1,031	1,100	1,174
GH4	727	776	828	883	943	1,006	1,073	1,145	1,222	1,304
MC3	423	452	482	514	549	586	625	667	712	759
GH2	728	777	829	885	945	1,008	1,076	1,148	1,225	1,307
MC1-2	530	565	603	644	687	733	782	835	891	951

Breakeven Year

Must Op Thru	2019	2021	2020	2021	2023	2018	2018	2021	2018	2024
BR3										
BR1-2										
GH3										
GH1										
MC4										
TC1										
GH4										
MC3										
GH2										
MC1-2										

Station	Unit	GR4SFF	GR4PAC	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
GR	GR4	0	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
GR	GR4	0	0	0	0	0	160	235	223	211	200	190	181	171	161	152	142

Unit		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
GR4	GR4SFF	0	4,515	4,356	4,198	4,040	3,881	3,723	3,565	3,407	3,248	3,090	2,932	2,773	2,615	0
GR4	GR4PAC	0	125	121	116	112	108	103	99	94	90	86	81	77	73	0

Unit	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
BR1	BR1FFP 0	4,800	4,608	4,417	4,225	4,033	3,842	3,650	3,458	3,267	1,327	0	0	0	0
BR1	BR1SAM 0	208	199	191	183	174	166	158	150	141	57	0	0	0	0
BR2	BR2FFP 0	5,109	4,895	4,682	4,469	4,256	4,042	3,829	3,616	1,180	0	0	0	0	0
BR2	BR2SAM 0	205	196	187	179	170	162	153	145	47	0	0	0	0	0
BR3	BR3FFP 0	5,690	5,487	5,284	5,082	4,879	4,676	4,474	4,271	4,068	3,865	3,460	1,405	0	0
GH1	GH1FFP 0	5,969	2,424	0	0	0	0	0	0	0	0	0	0	0	0
GH1	GH1SAM 0	661	268	0	0	0	0	0	0	0	0	0	0	0	0
GH2	GH2FFP 0	7,843	7,617	7,391	7,165	6,939	6,713	6,486	6,260	6,034	5,808	5,356	5,130	4,904	4,678
GH2	GH2SAM 0	383	371	359	348	336	324	312	301	289	277	254	242	231	219
GH3	GH3FFP 0	9,075	8,777	8,480	8,183	7,886	7,588	7,291	6,994	6,697	6,400	5,805	5,508	5,211	4,152
GH3	GH3SAM 0	756	730	703	677	650	624	598	571	545	492	465	405	21	0
GH4	GH4FFP 0	8,319	8,029	7,739	7,448	7,158	6,867	6,577	6,287	5,996	5,706	5,125	4,835	0	0
GH4	GH4SAM 0	758	730	701	673	645	617	589	561	532	476	117	0	0	0
MC1	MC1FGD 0	3,188	0	0	0	0	0	0	0	0	0	0	0	0	0
MC1	MC1FFP 0	2,590	0	0	0	0	0	0	0	0	0	0	0	0	0
MC1	MC1SAM 0	165	0	0	0	0	0	0	0	0	0	0	0	0	0
MC2	MC2FGD 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC2	MC2FFP 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC2	MC2SAM 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC3	MC3FGDU 0	3,040	2,653	188	0	0	0	0	0	0	0	0	0	0	0
MC3	MC3FGDR 0	69	64	44	0	0	0	0	0	0	0	0	0	0	0
MC3	MC3FFP 0	6,165	5,830	4,673	341	0	0	0	0	0	0	0	0	0	0
MC3	MC3SAM 0	213	0	0	0	0	0	0	0	0	0	0	0	0	0
MC4	MC4FGD 0	9,139	7,976	573	0	0	0	0	0	0	0	0	0	0	0
MC4	MC4SCR 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC4	MC4FFP 0	6,344	5,537	398	0	0	0	0	0	0	0	0	0	0	0
MC4	MC4SAM 0	708	618	44	0	0	0	0	0	0	0	0	0	0	0
TC1	TC1FFP 0	5,623	5,349	5,075	4,801	4,186	261	0	0	0	0	0	0	0	0
CR4	CR4FGD 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR4	CR4SCR 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR4	CR4FF 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR4	CR4PAC 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR4	CR4LIME 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR5	CR5FGD 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR5	CR5SCR 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR5	CR5FF 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR5	CR5PAC 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR5	CR5LIME 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR6	CR6FGD 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR6	CR6SCR 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR6	CR6FF 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR6	CR6PAC 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR6	CR6LIME 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR3	GR3FF 0	1,884	1,800	1,717	1,634	1,550	1,467	1,384	0	0	0	0	0	0	0
GR3	GR3PAC 0	52	50	48	45	43	41	38	0	0	0	0	0	0	0

Unit	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
GR4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR4	GR4SFF 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	GR4PAC 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Unit	2054	2055	2056	2057	2058	2059
BR1	0	0	0	0	0	0
BR1	0	0	0	0	0	0
BR2	0	0	0	0	0	0
BR2	0	0	0	0	0	0
BR3	0	0	0	0	0	0
GH1	0	0	0	0	0	0
GH1	0	0	0	0	0	0
GH2	4,452	4,226	4,000	3,489	253	0
GH2	207	196	0	0	0	0
GH3	214	0	0	0	0	0
GH3	0	0	0	0	0	0
GH4	0	0	0	0	0	0
GH4	0	0	0	0	0	0
GH4	0	0	0	0	0	0
MC1	0	0	0	0	0	0
MC1	0	0	0	0	0	0
MC1	0	0	0	0	0	0
MC2	0	0	0	0	0	0
MC2	0	0	0	0	0	0
MC2	0	0	0	0	0	0
MC3	0	0	0	0	0	0
MC3	0	0	0	0	0	0
MC3	0	0	0	0	0	0
MC3	0	0	0	0	0	0
MC4	0	0	0	0	0	0
MC4	0	0	0	0	0	0
MC4	0	0	0	0	0	0
MC4	0	0	0	0	0	0
TC1	0	0	0	0	0	0
CR4	0	0	0	0	0	0
CR4	0	0	0	0	0	0
CR4	0	0	0	0	0	0
CR4	0	0	0	0	0	0
CR4	0	0	0	0	0	0
CR5	0	0	0	0	0	0
CR5	0	0	0	0	0	0
CR5	0	0	0	0	0	0
CR5	0	0	0	0	0	0
CR5	0	0	0	0	0	0
CR6	0	0	0	0	0	0
CR6	0	0	0	0	0	0
CR6	0	0	0	0	0	0
CR6	0	0	0	0	0	0
CR6	0	0	0	0	0	0
GR3	0	0	0	0	0	0
GR3	0	0	0	0	0	0

Unit	2054	2055	2056	2057	2058	2059
GR4	0	0	0	0	0	0
GR4	0	0	0	0	0	0
	GR4SFF	0				
	GR4PAC	0				

2010 2011 2012 2013 2014 2015 2016 2017 2018

Retirement Cost

All Units 0 0 0 0 0 0 2100 0 0

2% Escalation Rate

Unit Costs (\$000)

BR	3,816	4,811	3,969	4,049	4,130	4,212	4,296	4,382
BR	6,633	7,160	7,253	7,398	7,546	7,697	7,851	8,008
BR	15,885	20,876	14,904	15,202	15,506	15,816	16,132	16,455
CR	14,372	9,218	12,029	12,269	12,515	12,765	13,020	13,281
CR	11,842	9,889	12,791	13,047	13,308	13,574	13,845	14,122
CR	10,666	11,619	10,173	10,376	10,584	10,795	11,011	11,231
GH	17,829	19,141	17,966	18,325	18,691	19,065	19,447	19,835
GH	12,225	18,498	13,429	13,698	13,972	14,251	14,536	14,827
GH	17,961	13,501	12,475	12,724	12,979	13,238	13,503	13,773
GH	11,533	13,496	12,105	12,347	12,594	12,846	13,103	13,365
GR	4,270	5,792	4,360	4,447	4,536	4,627	4,719	4,813
GR	7,338	6,924	8,633	8,805	8,982	9,161	9,344	9,531
MC	11,892	17,333	12,669	12,923	13,181	13,445	13,714	13,988
MC	16,179	11,941	15,201	15,505	15,815	16,131	16,454	16,783
MC	18,313	14,238	17,221	17,566	17,917	18,275	18,641	19,014
MC	16,531	18,981	17,245	17,590	17,942	18,300	18,666	19,040
TC	17,205	15,170	17,403	17,751	18,106	18,468	18,837	19,214
TY	410	416	418	427	435	444	453	462

RetirementCost_Savings

2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
0	0	0	0	0	0	0	0	0	0	0	0
4,470	4,559	4,651	4,744	4,838	4,935	5,034	5,135	5,237	5,342	5,449	5,558
8,168	8,331	8,498	8,668	8,841	9,018	9,199	9,383	9,570	9,762	9,957	10,156
16,784	17,120	17,462	17,811	18,167	18,531	18,901	19,279	19,665	20,058	20,460	20,869
13,546	13,817	14,094	14,375	14,663	14,956	15,255	15,560	15,872	16,189	16,513	16,843
14,405	14,693	14,987	15,286	15,592	15,904	16,222	16,546	16,877	17,215	17,559	17,910
11,456	11,685	11,919	12,157	12,400	12,648	12,901	13,159	13,423	13,691	13,965	14,244
20,232	20,637	21,050	21,471	21,900	22,338	22,785	23,240	23,705	24,179	24,663	25,156
15,124	15,426	15,735	16,049	16,370	16,698	17,032	17,372	17,720	18,074	18,436	18,804
14,049	14,330	14,616	14,909	15,207	15,511	15,821	16,138	16,460	16,790	17,125	17,468
13,632	13,905	14,183	14,467	14,756	15,051	15,352	15,659	15,973	16,292	16,618	16,950
4,910	5,008	5,108	5,210	5,314	5,421	5,529	5,640	5,753	5,868	5,985	6,105
9,722	9,916	10,115	10,317	10,523	10,734	10,949	11,167	11,391	11,619	11,851	12,088
14,268	14,553	14,844	15,141	15,444	15,753	16,068	16,389	16,717	17,051	17,392	17,740
17,118	17,461	17,810	18,166	18,530	18,900	19,278	19,664	20,057	20,458	20,867	21,285
19,394	19,782	20,177	20,581	20,993	21,412	21,841	22,278	22,723	23,178	23,641	24,114
19,421	19,809	20,205	20,609	21,021	21,442	21,871	22,308	22,754	23,209	23,674	24,147
19,598	19,990	20,390	20,798	21,214	21,638	22,071	22,512	22,962	23,422	23,890	24,368
471	480	490	500	510	520	530	541	552	563	574	586

RetirementCost_Savings

2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
0	0	0	0	0	0	0	0	0	0
5,669	5,782	5,898	6,016	6,136	6,259	6,384	6,512	6,642	6,775
10,359	10,566	10,778	10,993	11,213	11,437	11,666	11,899	12,137	12,380
21,286	21,712	22,146	22,589	23,041	23,502	23,972	24,451	24,940	25,439
17,180	17,524	17,874	18,232	18,596	18,968	19,347	19,734	20,129	20,532
18,269	18,634	19,007	19,387	19,775	20,170	20,573	20,985	21,405	21,833
14,529	14,820	15,116	15,418	15,727	16,041	16,362	16,689	17,023	17,364
25,659	26,172	26,696	27,230	27,774	28,330	28,897	29,474	30,064	30,665
19,181	19,564	19,955	20,355	20,762	21,177	21,600	22,032	22,473	22,923
17,817	18,174	18,537	18,908	19,286	19,672	20,065	20,466	20,876	21,293
17,289	17,635	17,988	18,347	18,714	19,089	19,470	19,860	20,257	20,662
6,227	6,351	6,478	6,608	6,740	6,875	7,012	7,153	7,296	7,442
12,330	12,576	12,828	13,084	13,346	13,613	13,885	14,163	14,446	14,735
18,095	18,457	18,826	19,202	19,586	19,978	20,378	20,785	21,201	21,625
21,710	22,145	22,587	23,039	23,500	23,970	24,449	24,938	25,437	25,946
24,596	25,088	25,590	26,102	26,624	27,156	27,699	28,253	28,818	29,395
24,630	25,123	25,625	26,138	26,660	27,194	27,737	28,292	28,858	29,435
24,855	25,352	25,859	26,377	26,904	27,442	27,991	28,551	29,122	29,704
597	609	622	634	647	660	673	686	700	714

RetirementCost_Savings

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

	Month	Year Equipment	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
BR	BR1	5 2014 PJFF/PAC	0	0	0	598,882	610,860	623,077	635,538	648,249	661,214	674,439
BR	BR1	5 2014 SAM Mitigation	0	0	0	78,540	137,333	140,079	142,881	145,739	148,653	151,627
BR	BR2	4 2014 PJFF/PAC	0	0	0	714,168	728,451	743,020	757,880	773,038	788,499	804,269
BR	BR2	4 2014 SAM Mitigation	0	0	0	134,640	137,333	140,079	142,881	145,739	148,653	151,627
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
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
GH	GH1	5 2014 SCR Turn-Down	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
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
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
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
GH	GH3	11 2013 SCR Turn-Down	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
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
GH	GH4	3 2014 SCR Turn-Down	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
MC	MC1	5 2015 Combined 1&2 FGD	0	0	0	0	-238,642	-219,636	-200,250	-180,476	-160,306	-139,733
MC	MC1	5 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
MC	MC1	5 2015 SAM Mitigation	0	0	0	0	22,100	38,643	39,416	40,204	41,008	41,828
MC	MC2	4 2015 Combined 1&2 FGD	0	0	0	0	186,506	205,512	224,899	244,673	264,842	285,415
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
MC	MC2	4 2015 SAM Mitigation	0	0	0	0	25,257	38,643	39,416	40,204	41,008	41,828
MC	MC3	11 2014 FGD	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
MC	MC3	4 2013 SAM Mitigation	0	0	24,068	36,824	37,560	38,312	39,078	39,859	40,657	41,470
MC	MC3	4 2013 SCR Turn-Down	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
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
MC	MC4	11 2014 SAM Mitigation	0	0	0	3,095	37,885	38,643	39,416	40,204	41,008	41,828
MC	MC4	11 2014 SCR Turn-Down	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
CR	CR4	1 2016 SCR	0	0	0	0	0	0	0	0	0	0
CR	CR4	1 2016 WFGD	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
CR	CR4	1 2016 SAM Mitigation	0	0	0	0	0	195,952	199,871	203,869	207,946	212,105
CR	CR4	1 2016 PAC Injection	0	0	0	0	0	190,321	194,128	198,010	201,971	206,010
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
CR	CR5	1 2016 WFGD	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
CR	CR5	1 2016 SAM Mitigation	0	0	0	0	0	199,331	203,317	207,384	211,531	215,762

	<u>Month</u>	<u>Year</u>	<u>Equipment</u>	<u>\$/yr</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
CR	1	2016	PAC Injection	172,000	0	0	0	0	0	193,700	197,574	201,525	205,556	209,667
CR	1	2016	SCR	2,392,000	0	0	0	0	0	2,693,781	2,747,656	2,802,609	2,858,661	2,915,835
CR	1	2016	WFGD		0	0	0	0	0	0	0	0	0	0
CR	1	2016	PJFF	1,632,000	0	0	0	0	0	1,837,897	1,874,655	1,912,148	1,950,391	1,989,399
CR	1	2016	SAM Mitigation	198,000	0	0	0	0	0	222,980	227,440	231,989	236,628	241,361
CR	1	2016	PAC Injection	191,000	0	0	0	0	0	215,097	219,399	223,787	228,263	232,828
GR	1	2016	SCR	943,000	0	0	0	0	0	1,061,971	1,083,211	1,104,875	1,126,972	1,149,512
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	4,049,499
GR	1	2016	PAC Injection	141,000	0	0	0	0	0	158,789	161,965	165,204	168,508	171,878
GR	1	2016	SCR	1,284,000	0	0	0	0	0	1,445,993	1,474,912	1,504,411	1,534,499	1,565,189
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
GR	1	2016	PAC Injection	150,000	0	0	0	0	0	168,924	172,303	175,749	179,264	182,849

	<u>Month</u>	<u>Year</u>	<u>Equipment</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>
CR5	1	2016	PAC Injection	213,860	218,138	222,500	226,950	231,489	236,119	240,842	245,658	250,572	255,583	260,695	265,909
CR6	1	2016	SCR	2,974,151	3,033,634	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
CR6	1	2016	WFGD	0	0	0	0	0	0	0	0	0	0	0	0
CR6	1	2016	PJFF	2,029,187	2,069,771	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
CR6	1	2016	SAM Mitigation	246,188	251,112	256,134	261,257	266,482	271,812	277,248	282,793	288,449	294,218	300,102	306,104
CR6	1	2016	PAC Injection	237,484	242,234	247,079	252,020	257,061	262,202	267,446	272,795	278,251	283,816	289,492	295,282
GR3	1	2016	SCR	1,172,502	1,195,952	1,219,871	1,244,268	1,269,154	1,294,537	1,320,428	1,346,836	1,373,773	1,401,248	1,429,273	1,457,859
GR3	1	2016	CDS-FF	4,130,489	4,213,099	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
GR3	1	2016	PAC Injection	175,316	178,822	182,399	186,047	189,767	193,563	197,434	201,383	205,410	209,519	213,709	217,983
GR4	1	2016	SCR	1,596,493	1,628,422	1,660,991	1,694,211	1,728,095	1,762,657	1,797,910	1,833,868	1,870,546	1,907,956	1,946,116	1,985,038
GR4	1	2016	CDS-FF	5,357,700	5,464,854	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
GR4	1	2016	PAC Injection	186,506	190,236	194,041	197,922	201,880	205,918	210,036	214,237	218,522	222,892	227,350	231,897

Escalation Rate: 2% Year \$:

	Month	Year Equipment	2033	2034	2035	2036	2037	2038	2039	2040
BR1	5	2014 PJFF/PAC	872,458	889,907	907,705	925,860	944,377	963,264	982,530	1,002,180
BR1	5	2014 SAM Mitigation	196,145	200,068	204,069	208,151	212,314	216,560	220,891	225,309
BR2	4	2014 PJFF/PAC	1,040,407	1,061,215	1,082,440	1,104,088	1,126,170	1,148,694	1,171,668	1,195,101
BR2	4	2014 SAM Mitigation	196,145	200,068	204,069	208,151	212,314	216,560	220,891	225,309
BR3	5	2015 PJFF/PAC	1,524,738	1,555,233	1,586,337	1,618,064	1,650,425	1,683,434	1,717,103	1,751,445
GH1	5	2014 PJFF/PAC	1,883,776	1,921,452	1,959,881	1,999,078	2,039,060	2,079,841	2,121,438	2,163,867
GH1	5	2014 SCR Turn-Down	0	0	0	0	0	0	0	0
GH1	2	2013 SAM Mitigation	0	0	0	0	0	0	0	0
GH2	11	2014 PJFF/PAC	2,265,633	2,310,946	2,357,165	2,404,308	2,452,394	2,501,442	2,551,471	2,602,500
GH2	12	2012 Sorbent Injector	146,663	149,596	152,588	155,640	158,753	161,928	165,166	168,470
GH3	10	2015 PJFF/PAC	1,863,678	1,900,952	1,938,971	1,977,751	2,017,306	2,057,652	2,098,805	2,140,781
GH3	11	2013 SCR Turn-Down	0	0	0	0	0	0	0	0
GH3	2	2013 SAM Mitigation	0	0	0	0	0	0	0	0
GH4	12	2015 PJFF/PAC	1,804,931	1,841,030	1,877,850	1,915,407	1,953,716	1,992,790	2,032,646	2,073,299
GH4	3	2014 SCR Turn-Down	0	0	0	0	0	0	0	0
GH4	2	2013 SAM Mitigation	0	0	0	0	0	0	0	0
MC1	5	2015 Combined 1&2 F	-150,602	-153,614	-156,686	-159,820	-163,017	-166,277	-169,602	-172,994
MC1	5	2015 PJFF/PAC	2,065,562	2,106,873	2,149,010	2,191,991	2,235,831	2,280,547	2,326,158	2,372,681
MC1	5	2015 SAM Mitigation	54,109	55,191	56,295	57,421	58,570	59,741	60,936	62,155
MC2	4	2015 Combined 1&2 F	388,589	396,361	404,288	412,374	420,621	429,033	437,614	446,366
MC2	4	2015 PJFF/PAC	2,026,492	2,067,022	2,108,362	2,150,529	2,193,540	2,237,411	2,282,159	2,327,802
MC2	4	2015 SAM Mitigation	54,109	55,191	56,295	57,421	58,570	59,741	60,936	62,155
MC3	11	2014 FGD	0	0	0	0	0	0	0	0
MC3	10	2015 PJFF/PAC	1,847,446	1,884,395	1,922,083	1,960,524	1,999,735	2,039,729	2,080,524	2,122,134
MC3	4	2013 SAM Mitigation	53,645	54,718	55,813	56,929	58,068	59,229	60,414	61,622
MC3	4	2013 SCR Turn-Down	0	0	0	0	0	0	0	0
MC4	11	2014 FGD	0	0	0	0	0	0	0	0
MC4	11	2014 PJFF/PAC	2,165,918	2,209,236	2,253,421	2,298,489	2,344,459	2,391,348	2,439,175	2,487,958
MC4	11	2014 SAM Mitigation	54,109	55,191	56,295	57,421	58,570	59,741	60,936	62,155
MC4	11	2014 SCR Turn-Down	0	0	0	0	0	0	0	0
TC1	11	2015 PJFF/PAC	1,410,425	1,438,633	1,467,406	1,496,754	1,526,689	1,557,223	1,588,367	1,620,135
CR4	1	2016 SCR	2,950,379	3,009,386	3,069,574	3,130,965	3,193,585	3,257,456	3,322,605	3,389,058
CR4	1	2016 WFGD	0	0	0	0	0	0	0	0
CR4	1	2016 PJFF	1,878,087	1,915,649	1,953,962	1,993,041	2,032,902	2,073,560	2,115,031	2,157,332
CR4	1	2016 SAM Mitigation	274,380	279,868	285,465	291,175	296,998	302,938	308,997	315,177
CR4	1	2016 PAC Injection	266,496	271,826	277,262	282,808	288,464	294,233	300,118	306,120
CR5	1	2016 SCR	3,142,760	3,205,615	3,269,728	3,335,122	3,401,825	3,469,861	3,539,258	3,610,044
CR5	1	2016 WFGD	0	0	0	0	0	0	0	0
CR5	1	2016 PJFF	1,972,701	2,012,155	2,052,398	2,093,446	2,135,315	2,178,021	2,221,582	2,266,013
CR5	1	2016 SAM Mitigation	279,111	284,693	290,387	296,195	302,119	308,161	314,325	320,611

	Month	Year	Equipment	2033	2034	2035	2036	2037	2038	2039	2040
CR5	1	2016	PAC Injection	271,227	276,651	282,184	287,828	293,584	299,456	305,445	311,554
CR6	1	2016	SCR	3,771,943	3,847,382	3,924,330	4,002,816	4,082,872	4,164,530	4,247,820	4,332,777
CR6	1	2016	WFGD	0	0	0	0	0	0	0	0
CR6	1	2016	PJFF	2,573,500	2,624,970	2,677,469	2,731,018	2,785,639	2,841,352	2,898,179	2,956,142
CR6	1	2016	SAM Mitigation	312,226	318,471	324,840	331,337	337,964	344,723	351,617	358,650
CR6	1	2016	PAC Injection	301,188	307,212	313,356	319,623	326,015	332,536	339,186	345,970
GR3	1	2016	SCR	1,487,016	1,516,756	1,547,091	1,578,033	1,609,594	1,641,786	1,674,622	1,708,114
GR3	1	2016	CDS-FF	5,238,459	5,343,229	5,450,093	5,559,095	5,670,277	5,783,682	5,899,356	6,017,343
GR3	1	2016	PAC Injection	222,343	226,790	231,325	235,952	240,671	245,484	250,394	255,402
GR4	1	2016	SCR	2,024,739	2,065,233	2,106,538	2,148,669	2,191,642	2,235,475	2,280,185	2,325,788
GR4	1	2016	CDS-FF	6,794,859	6,930,756	7,069,371	7,210,759	7,354,974	7,502,073	7,652,115	7,805,157
GR4	1	2016	PAC Injection	236,535	241,266	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	211	200	190	180			
2012 CR		288	465	439	415	394	373	353	333	313	293	272	252	237	216	205	195			
2013 CR			295	477	450	426	403	382	362	341	321	300	279	259	232	221	210			
2014 CR				303	489	461	436	413	392	371	350	329	307	286	265	249	238			
2015 CR					310	501	473	447	424	402	380	358	337	315	293	272	255			
2016 CR						318	513	485	459	434	412	390	367	345	323	301	279			
2017 CR							326	526	497	470	445	422	399	377	354	331	308			
2018 CR								334	539	509	482	456	433	409	386	363	339			
2019 CR									342	553	522	494	468	444	420	396	372			
2020 CR										351	567	535	506	479	455	430	406			
2021 CR											360	581	548	519	491	466	441			
2022 CR												369	595	562	532	504	478			
2023 CR													378	610	576	545	516			
2024 CR														387	625	591	559			
2025 CR															397	625	591			
2026 CR																641	605			
2027 CR																	657			
2028 CR																		657		
2029 CR																			657	
2030 CR																				657
2031 CR																				657
2032 CR																				657
2033 CR																				657
2034 CR																				657
2035 CR																				657
2036 CR																				657
2037 CR																				657
2038 CR																				657

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
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	2.432	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	2.683	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	2.825	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					2.165	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	3.698	3.521	3.355	
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	378	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	
2021 BR													600	805	762	723	688	657	625	594	
2022 BR														615	825	781	741	706	673	641	

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	2023 BR																			2028
	2024 BR																			690
	2025 BR																			723
	2026 BR																			741
	2027 BR																			798
	2028 BR																			841
	2029 BR																			862
	2030 BR																			934
	2031 BR																			934
	2032 BR																			934
	2033 BR																			934
	2034 BR																			934
	2035 BR																			934
	2036 BR																			934
	2037 BR																			934
	2038 BR																			934
	2039 BR																			934
	2040 BR																			934
	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																132	189	179	169
	2026 GR																	136	194	183
	2027 GR																		139	199
	2028 GR																			143
	2029 GR																			
	2030 GR																			
	2031 GR																			
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	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
	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

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
		2015 TY					103	151	143	135	128	122	116	110	104	97	91	85	81	78
		2016 TY					106	146	154	146	138	131	125	119	112	106	100	93	87	83
		2017 TY					109	158	109	158	150	142	135	128	122	115	109	102	96	89
		2018 TY					111	111	109	111	162	153	145	138	131	125	118	111	105	98
		2019 TY					114	114	109	114	114	166	157	149	142	135	128	121	114	107
		2020 TY					117	117	109	114	166	166	171	161	153	145	138	131	124	117
		2021 TY					120	117	109	114	166	166	171	161	153	145	138	131	124	117
		2022 TY					123	117	109	114	166	166	171	161	153	145	138	131	124	117
		2023 TY					126	117	109	114	166	166	171	161	153	145	138	131	124	117
		2024 TY					129	117	109	114	166	166	171	161	153	145	138	131	124	117
		2025 TY					132	117	109	114	166	166	171	161	153	145	138	131	124	117
		2026 TY					136	117	109	114	166	166	171	161	153	145	138	131	124	117
		2027 TY					139	117	109	114	166	166	171	161	153	145	138	131	124	117
		2028 TY					143	117	109	114	166	166	171	161	153	145	138	131	124	117
		2029 TY																		
		2030 TY																		
		2031 TY																		
		2032 TY																		
		2033 TY																		
		2034 TY																		
		2035 TY																		
		2036 TY																		
		2037 TY																		
		2038 TY																		
		2039 TY																		
		2040 TY																		

Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	
2039 CR																					
2040 CR																					
2011 MC		931	891	851	812	772	733	693	654	0	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	0	
2013 MC		1,061	1,019	978	936	895	853	811	770	728	687	0	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	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	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	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	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	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	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	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	0	
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	858	
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	932	
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	1,010	
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	1,091	
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	1,176	
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	1,264	
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	1,356	
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	1,451	
2030 MC		2,338	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	1,551	
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	1,655	
2032 MC			2,518		2,518	3,676	3,486	3,312	3,152	3,003	2,860	2,716	2,573	2,430	2,287	2,143	2,000	1,895	1,829	1,762	
2033 MC		179	175	170	165	161	156	152	147	142	138	133	128	124	119	114	110	105	101	96	
2012 TC		189	184	179	174	170	165	160	155	151	146	141	136	132	127	122	117	113	108	103	
2013 TC		198	193	188	184	179	174	169	164	159	154	149	145	140	135	130	125	120	115	111	
2014 TC		208	203	198	193	188	183	178	173	168	163	158	153	148	143	138	133	128	123	118	
2015 TC		218	213	208	203	198	193	188	183	178	172	167	162	157	152	147	142	137	131	126	
2016 TC		229	224	219	213	208	203	198	192	187	182	177	171	166	161	156	150	145	140	135	
2017 TC		245	235	230	224	219	213	208	203	197	192	187	181	176	170	165	160	154	149	144	
2018 TC		267	251	241	235	230	224	219	213	208	202	197	191	186	180	175	169	164	158	153	
2019 TC		290	274	258	247	241	235	230	224	219	213	207	202	196	190	185	179	173	168	162	
2020 TC		314	297	281	264	253	247	241	236	230	224	218	212	207	201	195	189	183	178	172	
2021 TC		338	321	305	288	271	259	253	246	240	236	230	224	218	212	206	200	194	188	182	
2022 TC		364	347	329	312	295	277	266	260	254	248	241	235	229	223	217	211	205	199	193	
2023 TC		391	373	355	338	320	302	284	272	266	260	254	247	241	235	229	223	216	210	204	
2024 TC		419	401	383	364	346	328	310	292	279	273	266	260	254	247	241	234	228	222	215	
2025 TC		449	429	411	392	373	355	336	317	299	286	280	273	267	260	253	247	240	234	227	
2026 TC		482	460	440	421	402	383	364	345	325	306	293	287	280	273	266	260	253	246	240	
2027 TC		519	494	472	451	432	412	392	373	353	334	314	301	294	287	280	273	266	259	253	
2028 TC		560	532	507	484	463	442	422	402	382	362	342	322	308	301	294	287	280	273	266	
2029 TC		438	574	545	519	496	474	453	433	412	392	371	350	330	316	309	301	294	287	280	
2030 TC			449	588	559	532	508	486	465	444	423	401	380	359	338	324	316	309	302	294	

Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047
2015 TY		75	72	70	67	64	61	59	56	53	51	48	45	0	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	0
2017 TY		85	82	79	76	73	70	67	65	62	59	56	53	50	47	0	0	0	0	0
2018 TY		92	87	84	81	78	75	72	69	66	63	60	57	54	0	0	0	0	0	0
2019 TY		101	94	89	86	83	80	77	74	71	68	65	62	59	56	53	50	0	0	0
2020 TY		110	103	96	91	88	85	82	79	76	73	70	66	63	60	57	54	51	0	0
2021 TY		120	113	106	99	93	90	87	84	81	78	74	71	68	65	62	59	55	52	0
2022 TY		130	123	116	108	101	96	93	89	86	83	80	76	73	70	67	63	60	57	54
2023 TY		141	134	126	119	111	104	98	95	92	88	85	82	78	75	72	68	65	62	58
2024 TY		152	145	137	129	122	114	106	101	97	94	90	87	84	80	77	73	70	67	63
2025 TY		164	156	148	140	133	125	117	109	103	100	96	93	89	86	82	79	75	72	68
2026 TY		177	168	160	152	144	136	128	120	112	106	102	99	95	91	88	84	81	77	73
2027 TY		192	182	172	164	156	148	139	131	123	114	108	105	101	97	94	90	86	83	79
2028 TY		208	196	186	177	168	160	151	143	134	126	117	111	107	104	100	96	92	89	85
2029 TY		146		201	206	196	186	177	168	159	150	141	132	123	117	113	109	105	101	97
2030 TY			150	218	206	196	186	177	168	159	150	141	132	123	117	113	109	105	101	97
2031 TY			154		224	212	201	190	181	172	163	154	145	135	126	120	116	112	107	103
2032 TY				157	157	229	217	206	195	186	176	167	158	148	139	129	123	118	114	110
2033 TY						161	235	222	211	200	190	181	171	161	152	142	133	126	121	117
2034 TY							165	241	228	216	205	195	185	175	165	156	146	136	129	124
2035 TY								169	247	234	221	210	200	190	180	170	160	149	139	132
2036 TY									174	253	239	227	215	205	195	184	174	164	153	143
2037 TY										178	259	245	233	221	210	199	189	178	168	157
2038 TY											182	266	252	238	226	215	204	194	183	172
2039 TY												187	273	258	244	232	221	210	198	187
2040 TY													192	279	264	250	238	226	215	203

Unit	Capacity	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
BR1	101	1,770	1,678	1,591	1,510	1,434	1,361	1,290	1,219	1,149	1,080	1,013	946
BR2	167	2,926	2,774	2,631	2,496	2,371	2,251	2,132	2,015	1,900	1,787	1,675	1,564
BR3	416	7,289	6,910	6,553	6,218	5,906	5,607	5,312	5,021	4,733	4,450	4,171	3,897
CR4	155	1,269	1,125	988	859	738	623	511	402	297	194	95	0
CR5	168	1,375	1,219	1,071	931	800	675	554	436	322	211	103	0
CR6	240	1,965	1,741	1,529	1,330	1,143	965	792	623	459	301	148	0
GH1	475	13,375	12,686	12,033	11,415	10,834	10,291	9,770	9,256	8,749	8,249	7,755	7,269
GH2	484	13,628	12,927	12,261	11,631	11,039	10,486	9,956	9,432	8,915	8,405	7,902	7,407
GH3	480	13,516	12,820	12,159	11,535	10,948	10,399	9,873	9,354	8,841	8,336	7,837	7,346
GH4	479	13,488	12,793	12,134	11,511	10,925	10,378	9,853	9,334	8,823	8,318	7,821	7,331
GR3	68	860	801	745	692	643	595	549	504	459	415	373	331
GR4	95	1,201	1,118	1,040	967	898	832	767	704	641	580	521	462
MC1	303	6,531	6,033	5,559	5,110	4,687	4,290	3,910	3,538	3,173	2,817	2,468	2,128
MC2	301	6,488	5,993	5,523	5,077	4,656	4,262	3,884	3,515	3,152	2,798	2,452	2,114
MC3	391	8,428	7,785	7,174	6,595	6,048	5,536	5,046	4,565	4,095	3,635	3,185	2,746
MC4	477	10,282	9,498	8,752	8,045	7,379	6,754	6,156	5,570	4,996	4,434	3,886	3,350
TC1	383	3,101	2,986	2,878	2,777	2,652	2,536	2,425	2,315	2,206	2,099	1,993	1,888
TC2	549	4,445	4,280	4,125	3,980	3,802	3,636	3,476	3,319	3,163	3,009	2,857	2,706
TV3	71	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
2012 CR	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
2014 CR	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
2016 CR	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
2018 CR	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
2020 CR	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
2022 CR	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
2024 CR	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
2026 CR	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
2028 CR	0	0	0	0	0	0	0	0	0	0	0	0	0
2029 CR	0	0	0	0	0	0	0	0	0	0	0	0	0
2030 CR	271	0	0	0	0	0	0	0	0	0	0	0	0
2031 CR	294	278	0	0	0	0	0	0	0	0	0	0	0
2032 CR	319	302	285	0	0	0	0	0	0	0	0	0	0
2033 CR	345	327	309	292	0	0	0	0	0	0	0	0	0
2034 CR	372	353	335	317	299	0	0	0	0	0	0	0	0
2035 CR	400	381	362	344	325	306	0	0	0	0	0	0	0
2036 CR	429	410	390	371	352	333	314	0	0	0	0	0	0
2037 CR	468	439	420	400	381	361	342	322	0	0	0	0	0
2038 CR	518	480	450	430	410	390	370	350	330	0	0	0	0

Unit	Capacity	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
2039 CR	570	531	492	462	441	421	400	379	359	338	0	0	0
2040 CR	624	584	544	504	473	452	431	410	389	368	347	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0
2023 MC	879	0	0	0	0	0	0	0	0	0	0	0	0
2024 MC	956	901	0	0	0	0	0	0	0	0	0	0	0
2025 MC	1,035	980	924	0	0	0	0	0	0	0	0	0	0
2026 MC	1,119	1,061	1,004	947	0	0	0	0	0	0	0	0	0
2027 MC	1,205	1,147	1,088	1,029	970	0	0	0	0	0	0	0	0
2028 MC	1,296	1,235	1,175	1,115	1,055	995	0	0	0	0	0	0	0
2029 MC	1,390	1,328	1,266	1,205	1,143	1,081	1,020	0	0	0	0	0	0
2030 MC	1,488	1,424	1,361	1,298	1,235	1,172	1,108	1,045	0	0	0	0	0
2031 MC	1,590	1,525	1,460	1,395	1,330	1,266	1,201	1,136	1,071	0	0	0	0
2032 MC	1,696	1,629	1,563	1,497	1,430	1,364	1,297	1,231	1,164	1,098	0	0	0
2033 MC	1,806	1,738	1,670	1,602	1,534	1,466	1,398	1,330	1,262	1,194	1,125	0	0
2034 MC	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	2,041	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	2,208	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	2,425	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	2,652	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	2,888	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	3,135	2,961	2,786	2,611	2,437	2,309	2,228	2,147	2,066	1,985	1,904	1,823	0
2011 TC	91	87	82	77	0	0	0	0	0	0	0	0	0
2012 TC	98	94	89	84	79	0	0	0	0	0	0	0	0
2013 TC	106	101	96	91	86	81	0	0	0	0	0	0	0
2014 TC	113	108	103	98	93	88	83	0	0	0	0	0	0
2015 TC	121	116	111	106	101	96	91	85	0	0	0	0	0
2016 TC	130	124	119	114	109	103	98	93	88	0	0	0	0
2017 TC	138	133	127	122	117	111	106	101	95	90	0	0	0
2018 TC	147	142	136	131	125	120	114	109	103	98	92	0	0
2019 TC	156	151	145	139	134	128	123	117	111	106	100	94	0
2020 TC	166	160	155	149	143	137	131	126	120	114	108	102	0
2021 TC	176	170	164	158	152	147	141	135	129	123	117	111	0
2022 TC	187	181	175	168	162	156	150	144	138	132	126	120	0
2023 TC	198	191	185	179	173	166	160	154	148	141	135	129	0
2024 TC	209	203	196	190	183	177	171	164	158	151	145	139	0
2025 TC	221	214	208	201	194	188	181	175	168	162	155	149	0
2026 TC	233	226	219	213	206	199	193	186	179	173	166	159	0
2027 TC	246	239	232	225	218	211	204	197	191	184	177	170	0
2028 TC	259	252	245	238	231	224	217	209	202	195	188	181	0
2029 TC	273	265	258	251	244	236	229	222	215	207	200	193	0
2030 TC	287	279	272	265	257	250	242	235	227	220	213	205	0

Unit	Capacity	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
2031 TC	302	294	286	279	271	264	256	248	241	233	226	218	
2032 TC	317	309	301	293	286	278	270	262	255	247	239	231	
2033 TC	333	325	317	309	301	293	285	277	269	261	253	245	
2034 TC	349	341	333	325	317	308	300	292	284	276	267	259	
2035 TC	366	358	350	341	333	324	316	308	299	291	283	274	
2036 TC	392	376	367	358	350	341	333	324	315	307	298	290	
2037 TC	427	402	385	376	367	358	350	341	332	323	314	306	
2038 TC	463	438	412	395	385	376	367	358	349	340	331	322	
2039 TC	501	475	449	422	404	395	386	377	367	358	349	340	
2040 TC	541	514	487	460	433	414	405	396	386	377	367	358	
2011 GH	0	0	0	0	0	0	0	0	0	0	0	0	0
2012 GH	645	0	0	0	0	0	0	0	0	0	0	0	0
2013 GH	700	661	0	0	0	0	0	0	0	0	0	0	0
2014 GH	759	718	677	0	0	0	0	0	0	0	0	0	0
2015 GH	819	778	736	694	0	0	0	0	0	0	0	0	0
2016 GH	882	840	797	754	712	0	0	0	0	0	0	0	0
2017 GH	948	905	861	817	773	729	0	0	0	0	0	0	0
2018 GH	1,017	972	927	882	837	792	748	0	0	0	0	0	0
2019 GH	1,088	1,042	996	950	904	858	812	766	0	0	0	0	0
2020 GH	1,163	1,116	1,068	1,021	974	927	880	833	785	0	0	0	0
2021 GH	1,240	1,192	1,143	1,095	1,047	998	950	902	853	805	0	0	0
2022 GH	1,321	1,271	1,222	1,172	1,123	1,073	1,023	974	924	875	825	0	0
2023 GH	1,405	1,354	1,303	1,252	1,201	1,151	1,100	1,049	998	947	897	846	0
2024 GH	1,492	1,440	1,388	1,336	1,283	1,231	1,179	1,127	1,075	1,023	971	919	0
2025 GH	1,582	1,529	1,476	1,422	1,369	1,316	1,262	1,209	1,155	1,102	1,049	995	0
2026 GH	1,677	1,622	1,567	1,513	1,458	1,403	1,348	1,294	1,239	1,184	1,130	1,075	0
2027 GH	1,775	1,719	1,662	1,606	1,550	1,494	1,438	1,382	1,326	1,270	1,214	1,158	0
2028 GH	1,876	1,819	1,762	1,704	1,647	1,589	1,532	1,474	1,417	1,359	1,302	1,244	0
2029 GH	1,982	1,923	1,864	1,806	1,747	1,688	1,629	1,570	1,511	1,452	1,393	1,334	0
2030 GH	2,092	2,032	1,971	1,911	1,851	1,790	1,730	1,670	1,609	1,549	1,488	1,428	0
2031 GH	2,206	2,144	2,083	2,021	1,959	1,897	1,835	1,773	1,711	1,649	1,588	1,526	0
2032 GH	2,325	2,262	2,198	2,135	2,071	2,008	1,944	1,881	1,818	1,754	1,691	1,627	0
2033 GH	2,448	2,383	2,318	2,253	2,188	2,123	2,058	1,993	1,928	1,863	1,798	1,733	0
2034 GH	2,576	2,509	2,443	2,376	2,309	2,243	2,176	2,109	2,043	1,976	1,910	1,843	0
2035 GH	2,709	2,640	2,572	2,504	2,435	2,367	2,299	2,231	2,162	2,094	2,026	1,957	0
2036 GH	2,905	2,776	2,706	2,636	2,566	2,496	2,426	2,356	2,286	2,216	2,146	2,076	0
2037 GH	3,169	2,977	2,846	2,774	2,702	2,630	2,559	2,487	2,415	2,343	2,272	2,200	0
2038 GH	3,444	3,248	3,052	2,917	2,843	2,770	2,696	2,623	2,549	2,476	2,402	2,328	0
2039 GH	3,731	3,530	3,329	3,128	2,990	2,914	2,839	2,764	2,688	2,613	2,537	2,462	0
2040 GH	4,030	3,824	3,618	3,412	3,206	3,065	2,987	2,910	2,833	2,755	2,678	2,601	0
2011 BR	0	0	0	0	0	0	0	0	0	0	0	0	0
2012 BR	0	0	0	0	0	0	0	0	0	0	0	0	0
2013 BR	154	0	0	0	0	0	0	0	0	0	0	0	0
2014 BR	168	158	0	0	0	0	0	0	0	0	0	0	0
2015 BR	182	172	162	0	0	0	0	0	0	0	0	0	0
2016 BR	196	186	176	166	0	0	0	0	0	0	0	0	0
2017 BR	211	201	191	181	170	0	0	0	0	0	0	0	0
2018 BR	227	217	206	196	185	175	0	0	0	0	0	0	0
2019 BR	244	233	222	211	201	190	179	0	0	0	0	0	0
2020 BR	261	250	239	228	217	206	195	183	0	0	0	0	0
2021 BR	278	267	256	245	233	222	211	199	188	0	0	0	0
2022 BR	297	285	274	262	251	239	228	216	204	193	0	0	0

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

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

\$'000

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
BR	BR1	101	0	0	0	0	0	441	454	590	616	785
BR	BR2	167	0	0	0	0	0	729	751	975	1,018	1,299
BR	BR3	416	0	0	0	0	0	1,816	1,870	2,430	2,536	3,235
CR	CR4	155	258	840	1,124	1,095	1,216	1,960	1,949	1,644	1,927	2,572
CR	CR5	168	279	910	1,219	1,187	1,318	2,124	2,112	1,782	2,089	2,788
CR	CR6	240	399	1,300	1,741	1,696	1,882	5,221	5,152	4,566	4,899	5,799
GH	GH1	475	0	0	0	0	0	5,620	5,988	6,566	7,371	8,085
GH	GH2	484	0	0	0	0	0	5,727	6,101	6,691	7,510	8,238
GH	GH3	480	0	0	0	0	0	5,680	6,051	6,635	7,448	8,170
GH	GH4	479	0	0	0	0	0	5,668	6,038	6,622	7,433	8,153
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
TC	TC2	549	0	0	0	0	0	2,817	2,961	3,114	3,176	3,240
TY	TY3	71										
	BR Landfill Phase 2 Savings		0	0	0	0	0	0	0	828	908	1,960
	BR Landfill Phase 3 Savings		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
	CR Landfill Capital Savings		936	3,049	4,083	3,979	4,416	4,938	4,772	3,579	4,464	6,617
	CR Landfill O&M Savings		0	0	0	0	0	2,181	2,307	2,393	2,537	2,726
	CR6 Stator Rewind Savings		0	0	0	0	0	2,187	2,135	2,020	1,914	1,816
	GH Landfill Capital Savings		0	0	0	0	0	61	188	1,083	2,805	4,044
	GH Landfill O&M Savings		0	0	0	0	0	22,633	23,991	25,431	26,957	28,601
	TC Landfill Capital Savings		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

LandfillCapital

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
	787	789	1,035	1,054	1,357	1,337	1,319	1,301	1,285	1,267	1,122	410	385
	1,301	1,305	1,711	1,743	2,245	2,211	2,180	2,151	2,124	2,095	1,855	678	636
	3,242	3,252	4,261	4,342	5,591	5,508	5,431	5,359	5,291	5,219	4,620	1,688	1,585
	2,560	2,096	2,059	2,073	1,531	1,768	1,810	1,869	1,932	2,000	1,861	1,810	1,778
	2,774	2,272	2,232	2,247	1,659	1,916	1,962	2,025	2,094	2,168	2,017	1,962	1,927
	5,682	4,867	4,712	4,637	3,700	3,969	3,960	4,000	4,047	4,101	3,833	3,704	3,602
	8,761	9,219	9,707	10,790	12,508	14,281	15,439	15,604	16,273	16,860	17,332	17,856	18,548
	8,927	9,394	9,891	10,994	12,745	14,551	15,732	15,900	16,581	17,180	17,660	18,195	18,899
	8,854	9,316	9,809	10,904	12,640	14,431	15,602	15,769	16,444	17,038	17,514	18,044	18,743
	8,835	9,297	9,789	10,881	12,614	14,401	15,569	15,736	16,410	17,002	17,478	18,007	18,704
	2,305	2,351	2,398	2,446	2,495	2,545	2,596	2,648	5,363	8,239	8,294	12,354	12,003
	3,304	3,371	3,438	3,507	3,577	3,648	3,721	3,796	7,687	11,809	11,888	17,709	17,206
	1,870	1,782	1,697	1,613	1,531	1,451	1,372	1,294	1,215	1,123	156	138	120
	0	0	1,638	1,745	3,767	3,594	3,426	3,261	3,101	2,943	2,789	2,638	2,487
	3,461	3,564	3,671	3,781	3,895	4,012	4,132	4,256	4,384	4,515	4,651		
	6,353	4,493	4,170	4,023	1,844	2,496	2,513	2,483	2,455	2,429	1,631	1,345	1,123
	2,944	3,121	3,308	3,507	3,717	3,925	4,061	4,305	4,563	4,837	5,128	5,230	5,335
	1,719	1,621	1,524	1,427	1,329	1,232	1,158	1,106	1,055	1,004	952	901	850
	4,399	4,388	4,387	6,672	11,397	16,206	18,397	18,341	18,358	17,892	16,784	15,709	15,118
	30,979	32,838	34,808	36,897	39,110	41,457	43,944	44,668	47,348	50,189	53,201	56,393	59,776
	0	0	0	0	0	0	0	0	6,478	13,344	13,344	23,088	22,094
	5,610	5,722	5,836	5,953	6,072	6,194	6,318	6,444	6,573	6,704	6,838	6,975	7,115

LandfillCapital

	2034	2035	2036	2037	2038	2039	2040
	360	331	54	46	38	30	23
	595	547	89	76	63	50	39
	1,482	1,363	222	189	157	124	97
	1,748	1,719	1,692	1,708	1,727	1,747	1,771
	1,895	1,864	1,834	1,851	1,872	1,894	1,919
	2,777	2,662	2,620	2,645	2,674	2,705	2,742
	19,372	20,254	21,186	21,692	2,492	1,854	1,700
	19,739	20,637	21,587	22,103	2,539	1,889	1,733
	19,576	20,467	21,409	21,921	2,518	1,874	1,718
	19,535	20,424	21,364	21,875	2,513	1,870	1,715
	11,666	11,343	11,031	10,731	10,442	10,162	9,886
	16,723	16,259	15,812	15,382	14,967	14,567	14,170
	101	83	64	46	28	9	0
	2,336	2,158	301	265	230	194	159
	908	695	485	430	384	338	303
	5,441	5,550	5,661	5,774	5,890	6,008	6,128
	70	0	0	0	0	0	0
	14,860	14,617	14,352	12,126	9,906	7,329	6,705
	63,363	67,165	71,194	75,466	155	158	161
	21,132	20,199	19,293	18,412	17,554	16,717	15,883
	7,257	7,402	7,550	7,701	7,855	8,012	8,172

LandfillCapital

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
BR	BR1	101	0	0	0	553	743	703	668	635	606	577
BR	BR2	167	0	0	0	915	1,228	1,163	1,104	1,050	1,002	954
BR	BR3	416	0	0	0	2,279	3,060	2,897	2,749	2,616	2,496	2,377
CR	CR4	155	0	0	0	980	1,582	1,494	1,413	1,339	1,269	1,201
CR	CR5	168	0	0	0	1,062	1,715	1,619	1,532	1,451	1,376	1,302
CR	CR6	240	0	0	0	1,518	2,449	2,313	2,188	2,073	1,966	1,860
GH	GH1	475	0	0	0	1,462	1,954	1,856	1,767	1,686	1,611	1,540
GH	GH2	484	0	0	0	1,489	1,991	1,891	1,800	1,718	1,642	1,569
GH	GH3	480	0	0	0	1,477	1,975	1,876	1,786	1,703	1,628	1,556
GH	GH4	479	0	0	0	1,474	1,971	1,872	1,782	1,700	1,625	1,553
GR	GR3	68	0	0	0	586	837	792	751	713	679	645
GR	GR4	95	0	0	0	819	1,169	1,106	1,049	996	948	901
MC	MC1	303	0	0	0	1,215	1,774	1,682	1,598	1,521	1,449	1,380
MC	MC2	301	0	0	0	1,207	1,762	1,671	1,588	1,511	1,440	1,371
MC	MC3	391	0	0	0	1,568	2,289	2,171	2,063	1,963	1,870	1,781
MC	MC4	477	0	0	0	1,913	2,792	2,648	2,516	2,394	2,281	2,172
TC	TC1	383	0	0	0	770	1,008	958	912	871	833	797
TC	TC2	549	0	0	0	1,104	1,445	1,373	1,307	1,248	1,194	1,142
TY	TY3	71	0	0	0	586	837	792	751	713	679	645
	BRWATER		0	0	0	3,747	5,032	4,763	4,521	4,302	4,104	3,908
	CRWATER		0	0	0	3,560	5,746	5,427	5,134	4,863	4,611	4,362
	MCWATER		0	0	0	5,902	8,617	8,173	7,765	7,389	7,040	6,704
	TCWATER		0	0	0	1,874	2,453	2,331	2,220	2,119	2,026	1,938
	GHWATER		0	0	0	5,902	7,892	7,495	7,135	6,806	6,505	6,217
	GRWATER		0	0	0	1,405	2,006	1,898	1,799	1,709	1,627	1,546

WaterCapital

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
	548	519	491	462	433	413	403	393	382	372	361	351	340
	907	859	811	764	716	684	666	649	632	615	597	580	563
	2,258	2,140	2,021	1,902	1,784	1,703	1,660	1,617	1,574	1,531	1,488	1,445	1,402
	1,132	1,064	996	927	859	806	770	735	699	663	627	591	0
	1,227	1,153	1,079	1,005	931	874	835	796	757	718	679	640	0
	1,754	1,647	1,541	1,435	1,329	1,249	1,193	1,137	1,082	1,026	970	915	0
	1,468	1,397	1,325	1,254	1,183	1,111	1,062	1,035	1,008	982	955	928	901
	1,496	1,423	1,350	1,278	1,205	1,132	1,082	1,055	1,028	1,000	973	946	918
	1,484	1,411	1,339	1,267	1,195	1,123	1,073	1,046	1,019	992	965	938	911
	1,481	1,409	1,337	1,265	1,193	1,121	1,071	1,044	1,017	990	963	936	909
	611	577	544	510	476	452	438	423	409	395	380	366	352
	854	807	759	712	665	631	611	591	571	551	531	511	491
	1,311	1,242	1,173	1,103	1,034	965	915	882	850	818	786	754	722
	1,302	1,234	1,165	1,096	1,027	959	908	877	845	813	781	749	717
	1,692	1,602	1,513	1,424	1,335	1,245	1,180	1,139	1,097	1,056	1,015	973	932
	2,064	1,955	1,846	1,737	1,628	1,519	1,440	1,389	1,339	1,288	1,238	1,187	1,137
	760	724	688	652	616	579	555	542	529	517	504	491	479
	1,090	1,038	986	934	882	830	795	777	759	741	723	704	686
	611	577	544	510	476	452	438	423	409	395	380	366	352
	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
	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
	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
	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
	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
	1,465	1,384	1,303	1,222	1,141	1,083	1,049	1,015	980	946	912	877	843

WaterCapital

	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
	330	320	309	299	288	278	267	257	247	236	226	215	205
	546	528	511	494	477	459	442	425	408	390	373	356	339
	1,359	1,316	1,273	1,230	1,187	1,144	1,101	1,058	1,016	973	930	887	844
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	875	848	821	794	767	741	714	687	660	634	607	580	553
	891	864	837	809	782	755	727	700	673	646	618	591	564
	884	857	830	803	776	748	721	694	667	640	613	586	559
	882	855	828	801	774	747	720	693	666	639	612	585	558
	337	323	309	294	280	266	251	237	0	0	0	0	0
	471	451	431	411	391	371	351	331	0	0	0	0	0
	690	658	626	594	562	530	0	0	0	0	0	0	0
	686	654	622	590	558	526	0	0	0	0	0	0	0
	891	849	808	766	725	684	0	0	0	0	0	0	0
	1,086	1,036	986	935	885	834	0	0	0	0	0	0	0
	466	453	441	428	415	403	390	377	364	352	339	326	314
	668	650	632	613	595	577	559	541	522	504	486	468	450
	337	323	309	294	280	266	251	237	0	0	0	0	0
	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
	0	0	0	0	0	0	0	0	0	0	0	0	0
	3,353	3,197	3,041	2,886	2,730	2,574	0	0	0	0	0	0	0
	1,134	1,103	1,072	1,041	1,010	979	949	918	887	856	825	794	763
	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
	809	774	740	706	671	637	603	568	0	0	0	0	0

WaterCapital

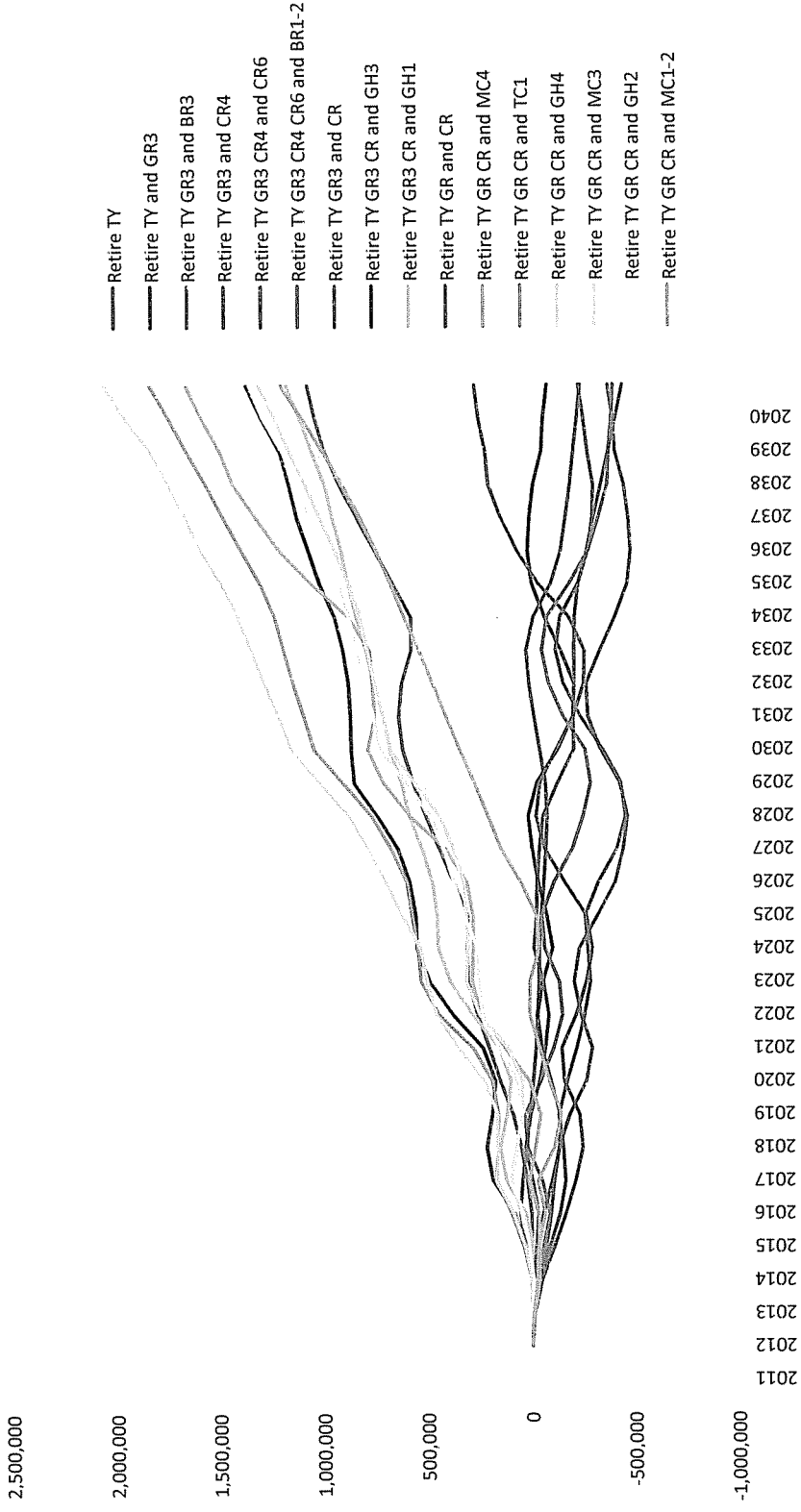
	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
	194	184	174	0	0	0	0	0	0	0	0	0	0
	321	304	287	0	0	0	0	0	0	0	0	0	0
	801	758	715	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	526	500	473	446	0	0	0	0	0	0	0	0	0
	536	509	482	454	0	0	0	0	0	0	0	0	0
	532	505	478	451	0	0	0	0	0	0	0	0	0
	531	504	477	450	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	301	288	276	263	250	237	225	212	0	0	0	0	0
	431	413	395	377	359	340	322	304	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	1,317	1,246	1,175	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	732	701	670	640	609	578	547	516	0	0	0	0	0
	2,125	2,017	1,909	1,801	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0

WaterCapital

	Delta NPVRR \$M
	Install Controls / (Retire)
Tyrone 3	(59)
Brown 3	(66)
Cane Run 6	368
Brown 1-2	(240)
Cane Run 4-5	(67)
Green River 3-4	(146)
Ghent 1-4	(193)
Trimble County 1	529
Mill Creek 3-4	430
Mill Creek 1-2	(130)

Cumulative Difference in Revenue Requirements

Install Controls vs. Retire/Replace Capacity



Retirement Savings (Deltas)	Capital	O&M	Total
Retire TY	-22	-3	-26
Retire TY and GR3	-13	-50	-62
Retire TY GR3 and BR3	-98	-174	-272
Retire TY GR3 and CR4	-46	-140	-186
Retire TY GR3 CR4 and CR6	-84	-118	-202
Retire TY GR3 CR4 CR6 and BR1-2	-63	-129	-192
Retire TY GR3 and CR	-50	-149	-199
Retire TY GR3 CR and GH3	-203	-145	-348
Retire TY GR3 CR and GH1	-201	-210	-411
Retire TY GR and CR	-18	-100	-118
Retire TY GR CR and MC4	-105	-201	-306
Retire TY GR CR and TC1	-68	-203	-271
Retire TY GR CR and GH4	-203	-141	-343
Retire TY GR CR and MC3	-86	-201	-287
Retire TY GR CR and GH2	-205	-156	-361
Retire TY GR CR and MC1-2	-133	-325	-457

Revenue Requirement Deltas	Prod Cost	Capital	Total	Check
Retire TY	10	-69	-59	0
Retire TY and GR3	-6	-59	-66	0
Retire TY GR3 and BR3	577	-208	368	0
Retire TY GR3 and CR4	111	-350	-240	0
Retire TY GR3 CR4 and CR6	429	-496	-67	0
Retire TY GR3 CR4 CR6 and BR1-2	286	-431	-146	0
Retire TY GR3 and CR	177	-370	-193	0
Retire TY GR3 CR and GH3	916	-387	529	0
Retire TY GR3 CR and GH1	803	-373	430	0
Retire TY GR and CR	-45	-85	-130	0
Retire TY GR CR and MC4	1,006	-522	484	0
Retire TY GR CR and TC1	839	-185	654	0
Retire TY GR CR and GH4	1,103	-376	727	0
Retire TY GR CR and MC3	739	-316	423	0
Retire TY GR CR and GH2	1,015	-574	441	0
Retire TY GR CR and MC1-2	1,255	-985	270	0

1 2 3 4 5 6

Retire:

	<u>No</u>					<u>TY GR3 CR4</u>	<u>TY GR3 CR4</u>
	<u>Retirements</u>	<u>TY</u>	<u>TY GR3</u>	<u>TY GR3 BR3</u>	<u>TY GR3 CR4</u>	<u>CR6</u>	<u>CR6 BR1-2</u>
2010							
2011							
2012							
2013							
2014							
2015							
2016		3x1C(1)	2x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)
2017	3x1C(1)						
2018							3x1C(1)
2019							
2020			2x1C(1)	3x1C(1)		3x1C(1)	
2021							
2022					2x1C(1)		
2023							
2024	3x1C(1)	3x1C(1)					3x1C(1)
2025			3x1C(1)				
2026				3x1C(1)	3x1C(1)	3x1C(1)	
2027							
2028							
2029							
2030	2x1C(1)	3x1C(1)					
2031			SCCT(1)				3x1C(1)
2032					SCCT(1)		
2033			3x1C(1)	3x1C(1)		3x1C(1)	
2034					3x1C(1)		
2035	2x1C(1)						
2036		2x1C(1)					
2037							SCCT(1)
2038							
2039	SCCT(1)						SCCT(1)
2040			SCCT(1)	SCCT(1)		SCCT(1)	
30 Yr PVRR (\$B)	23.6	23.7	23.8	24.7	24.2	24.8	25.5

7 8 9 10 11 12 13

	<u>TY GR3 CR</u>	<u>TY GR3 CR</u> <u>GH3</u>	<u>TY GR3 CR</u> <u>GH1</u>	<u>TY GR CR</u>	<u>TY GR CR</u> <u>MC4</u>	<u>TY GR CR</u> <u>TC1</u>	<u>TY GR CR</u> <u>GH4</u>
2010							
2011							
2012							
2013							
2014							
2015							
2016	3x1C(1)	3x1C(1) 2x1C(1)	3x1C(2)	3x1C(1)	3x1C(2)	3x1C(2)	3x1C(2)
2017							
2018				3x1C(1)			
2019	3x1C(1)						
2020		3x1C(1)					
2021					3x1C(1)		3x1C(1)
2022			3x1C(1)			3x1C(1)	
2023							
2024				3x1C(1)			
2025	3x1C(1)						
2026		3x1C(1)					
2027							
2028			3x1C(1)		3x1C(1)	3x1C(1)	3x1C(1)
2029							
2030							
2031	2x1C(1)			3x1C(1)			
2032							
2033		3x1C(1)					
2034							3x1C(1)
2035			2x1C(1)		3x1C(1)	2x1C(1)	
2036	2x1C(1)						
2037				SCCT(1)			
2038							
2039				SCCT(1)			
2040		SCCT(1)	SCCT(1)			SCCT(1)	

30 Yr PVRR (\$B) 25.3 26.6 26.6 25.4 26.9 26.7 26.9

	<u>TY GR CR</u> <u>MC3</u>	<u>TY GR CR</u> <u>GH2</u>	<u>TY GR CR</u> <u>MC1-2</u>
2010			
2011			
2012			
2013			
2014			
2015			
2016	3x1C(2)	3x1C(2)	3x1C(2)
2017			
2018			
2019			
2020			3x1C(1)
2021		3x1C(1)	
2022	3x1C(1)		
2023			
2024			
2025			
2026			2x1C(1)
2027			
2028	3x1C(1)	3x1C(1)	
2029			
2030			
2031			3x1C(1)
2032			
2033			
2034		3x1C(1)	
2035	2x1C(1)		
2036			
2037			SCCT(1)
2038			
2039			SCCT(1)
2040	SCCT(1)		
30 Yr PVRR (\$B)	26.6	27.0	27.5

Breakeven RR by Year (\$M)

Year \$	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
TY	-59	-63	-67	-72	-76	-81	-87	-93	-99	-106
GR3	-66	-70	-75	-80	-85	-91	-97	-103	-110	-118
BR3	368	393	420	448	478	510	544	581	619	661
CR4	-240	-256	-273	-291	-311	-332	-354	-378	-403	-430
CR6	-67	-71	-76	-81	-87	-93	-99	-106	-113	-120
BR1-2	-146	-155	-166	-177	-189	-201	-215	-229	-245	-261
CR5	-193	-206	-220	-235	-251	-268	-286	-305	-325	-347
GH3	529	565	603	643	686	732	782	834	890	950
GH1	430	459	489	522	557	595	635	677	723	771
GR4	-130	-139	-148	-158	-169	-180	-192	-205	-219	-233
MC4	484	517	551	588	628	670	715	763	814	869
TC1	654	698	745	795	848	905	966	1,031	1,100	1,174
GH4	727	776	828	883	943	1,006	1,073	1,145	1,222	1,304
MC3	423	452	482	514	549	586	625	667	712	759
GH2	441	470	502	536	571	610	651	694	741	791
MC1-2	270	288	307	328	350	373	398	425	454	484

Breakeven Year

	Must Op Thru
BR3	2019
BR1-2	2021
GH3	2020
GH1	2021
MC4	2023
TC1	2018
GH4	2018
MC3	2021
GH2	2018
MC1-2	2024

Station	Unit	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
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
BR	BR1SAM 0	0	0	0	231	521	550	522	497	474	452	429	407	384
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
BR	BR2SAM 0	0	0	0	231	534	553	525	499	476	453	431	408	385
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
GH	GH1FFP 0	0	64	4,332	10,157	17,736	19,154	18,156	17,246	16,412	15,591	14,769	13,948	13,127
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
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
GH	GH2SAM 0	0	11	724	984	935	891	851	814	779	744	709	674	639
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
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
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
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
MC	MC1FGD 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
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
MC	MC1SAM 0	0	0	0	42	560	1,131	1,232	1,168	1,109	1,055	1,001	948	895
MC	MC2FGD 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
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
MC	MC2SAM 0	0	0	0	42	560	1,197	1,279	1,211	1,149	1,092	1,035	978	922
MC	MC3FGDU 0	0	0	646	3,668	6,975	9,472	9,135	8,699	8,295	7,908	7,522	7,135	6,748
MC	MC3FGDR 0	0	0	0	0	39	175	207	197	187	179	170	162	154
MC	MC3FFP 0	0	0	0	3,730	8,326	13,896	18,276	17,601	16,757	15,977	15,228	14,480	13,732
MC	MC3SAM 0	0	0	734	1,992	2,100	1,997	1,901	1,813	1,728	1,642	1,557	1,472	1,387
MC	MC4FGD 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
MC	MC4SCR 0	0	105	667	724	688	655	625	596	566	537	508	479	449
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
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
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
CR	CR4FGD 0	0	394	3,222	13,574	27,295	25,773	24,370	23,071	21,861	20,666	19,471	18,276	17,081
CR	CR4SCR 0	64	390	2,395	6,163	10,786	10,183	9,627	9,112	8,633	8,160	7,687	7,214	6,740
CR	CR4FF 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
CR	CR4PAC 0	0	0	0	235	386	365	345	327	310	293	276	259	242
CR	CR4LIME 0	0	0	0	259	427	403	381	361	342	323	305	286	267
CR	CR5FGD 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
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
CR	CR5FF 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
CR	CR5PAC 0	0	0	0	251	423	399	378	357	338	320	301	282	263
CR	CR5LIME 0	0	0	0	278	468	441	417	395	374	353	333	312	291
CR	CR6FGD 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
CR	CR6SCR 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
CR	CR6FF 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
CR	CR6PAC 0	0	0	0	352	558	527	499	473	448	424	401	377	353

Station	Unit	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
CR	CR6	0	0	0	391	619	585	553	525	498	471	445	418	391
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
GR	GR3	0	0	0	112	154	145	138	131	125	119	113	107	101
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
GR	GR4	0	0	0	160	235	223	211	200	190	181	171	161	152

G:\11-051 Sierra Club KY IRP & Coal Plants\CPCN Docket 2011-00162 - LG&E\Discovery Responses - LG&E\Env 26\CER\Additional\SCRs\20110728_CERResults-BR1-Tab GH2MCI-2, Lines 13-15

	Capital RR - CER Output													
GH	GH2	0	0	0	0	1,583	8,073	18,880	31,130	29,577	28,171	26,896	25,733	24,624
MC	MC1	0	0	0	0	80	899	6,779	14,933	14,119	13,378	12,700	12,077	11,462
MC	MC2	0	0	0	87	534	3,281	7,972	15,832	14,959	14,160	13,427	12,749	12,080

G:\11-051 Sierra Club KY IRP & Coal Plants\CPCN Docket 2011-00162 - LG&E\Discovery Responses - LG&E\Env 26\CER\Additional\SCRs\20110728_CERResults-BR1-Tab BR 1-2, Lines 13-14

	Capital RR - CER Output													
BR	BR1	0	0	0	0	76	469	2,884	6,101	8,312	7,863	7,459	7,094	6,763
BR	BR2	0	0	0	0	123	756	4,643	9,824	13,471	12,743	12,087	11,494	10,955

Unit	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
BR1	BR1FFP 0	8,368	7,842	7,483	7,291	7,099	6,908	6,716	6,525	6,333	6,141	5,950	5,758	5,566
BR1	BR1SAM 0	362	339	324	315	307	299	291	282	274	266	257	249	241
BR2	BR2FFP 0	9,062	8,488	8,095	7,881	7,668	7,455	7,242	7,028	6,815	6,602	6,388	6,175	5,962
BR2	BR2SAM 0	362	340	324	315	307	298	290	281	273	264	256	247	239
BR3	BR3FFP 0	9,867	9,290	8,714	8,325	8,122	7,920	7,717	7,514	7,311	7,109	6,906	6,703	6,501
GH1	GH1FFP 0	12,305	11,484	10,897	10,545	10,193	9,841	9,489	9,137	8,785	8,433	8,081	7,729	7,377
GH1	GH1SAM 0	1,362	1,271	1,206	1,167	1,128	1,089	1,050	1,011	972	933	894	855	816
GH2	GH2FFP 0	12,627	11,942	11,257	10,791	10,556	10,330	10,104	9,878	9,652	9,425	9,199	8,973	8,747
GH2	GH2SAM 0	605	570	546	535	523	511	500	488	476	464	453	441	429
GH3	GH3FFP 0	15,708	14,877	14,047	13,216	12,647	12,344	12,047	11,750	11,452	11,155	10,858	10,561	10,263
GH3	GH3SAM 0	1,250	1,177	1,126	1,099	1,073	1,047	1,020	994	967	941	915	888	862
GH4	GH4FFP 0	15,188	14,404	13,619	12,835	12,050	11,513	11,223	10,932	10,642	10,352	10,061	9,771	9,481
GH4	GH4SAM 0	1,328	1,252	1,176	1,124	1,096	1,068	1,039	1,011	983	955	927	899	870
MC1	MC1FGD 0	16,242	15,203	14,164	13,412	12,949	12,485	12,022	11,558	11,095	10,631	10,167	9,704	9,240
MC1	MC1FFP 0	13,190	12,348	11,506	10,896	10,520	10,143	9,767	9,390	9,013	8,637	8,260	7,884	7,507
MC1	MC1SAM 0	841	788	735	696	672	648	624	600	576	552	528	504	480
MC2	MC2FGD 0	16,702	15,598	14,494	13,677	13,148	12,618	12,088	11,558	11,028	10,499	9,969	9,439	8,909
MC2	MC2FFP 0	13,270	12,395	11,519	10,871	10,450	10,029	9,608	9,187	8,766	8,344	7,923	7,502	7,081
MC2	MC2SAM 0	865	808	752	710	682	655	627	600	572	545	517	490	462
MC3	MC3FGDU 0	6,362	5,975	5,589	5,303	5,124	4,950	4,777	4,603	4,429	4,256	4,082	3,909	3,735
MC3	MC3FGDR 0	145	137	128	121	115	111	107	104	100	96	92	88	85
MC3	MC3FFP 0	12,985	12,237	11,489	10,742	10,190	9,844	9,510	9,175	8,841	8,506	8,172	7,837	7,503
MC3	MC3SAM 0	1,302	1,217	1,155	1,116	1,077	1,039	1,000	961	923	884	846	807	768
MC4	MC4FGD 0	19,147	17,976	16,804	15,940	15,402	14,880	14,358	13,836	13,314	12,792	12,270	11,748	11,226
MC4	MC4SCR 0	420	399	386	372	359	346	332	319	306	292	279	266	252
MC4	MC4FFP 0	13,293	12,479	11,666	11,066	10,692	10,330	9,968	9,605	9,243	8,881	8,518	8,156	7,794
MC4	MC4SAM 0	1,480	1,391	1,301	1,235	1,193	1,153	1,112	1,072	1,031	991	951	910	870
TC1	TC1FFP 0	11,291	10,654	10,018	9,381	8,918	8,637	8,363	8,089	7,815	7,541	7,267	6,993	6,719
CR4	CR4FGD 0	15,886	14,691	13,773	13,130	12,488	11,845	11,203	10,560	0	0	0	0	0
CR4	CR4SCR 0	6,267	5,794	5,431	5,177	4,924	4,671	4,417	4,164	0	0	0	0	0
CR4	CR4FF 0	3,207	2,964	2,778	2,648	2,519	2,389	2,260	2,130	0	0	0	0	0
CR4	CR4PAC 0	225	208	195	186	177	168	159	150	0	0	0	0	0
CR4	CR4LIME 0	249	230	216	206	195	185	175	165	0	0	0	0	0
CR5	CR5FGD 0	16,944	15,647	14,641	13,924	13,207	12,490	11,774	0	0	0	0	0	0
CR5	CR5SCR 0	6,670	6,158	5,760	5,478	5,196	4,914	4,632	0	0	0	0	0	0
CR5	CR5FF 0	3,455	3,189	2,983	2,837	2,691	2,545	2,399	0	0	0	0	0	0
CR5	CR5PAC 0	245	226	212	201	191	180	170	0	0	0	0	0	0
CR5	CR5LIME 0	271	250	234	222	211	199	188	0	0	0	0	0	0
CR6	CR6FGD 0	20,678	19,171	18,033	17,265	16,496	15,727	14,959	14,190	13,421	12,653	0	0	0
CR6	CR6SCR 0	8,339	7,727	7,266	6,956	6,646	6,337	6,027	5,717	5,408	5,098	0	0	0
CR6	CR6FF 0	4,257	3,944	3,709	3,551	3,393	3,235	3,077	2,919	2,761	2,602	0	0	0
CR6	CR6PAC 0	329	305	287	275	262	250	238	226	213	201	0	0	0

Unit	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
CR6	CR6LIME 0	365	338	318	291	278	264	250	237	223	0	0	0	0
GR3	GR3SFF 0	3,421	3,202	3,050	2,967	2,884	2,717	2,634	2,550	2,467	2,384	2,300	2,217	2,134
GR3	GR3PAC 0	95	89	85	82	80	75	73	71	68	66	64	62	59
GR4	GR4SFF 0	5,122	4,770	4,515	4,356	4,198	3,881	3,723	3,565	3,407	3,248	3,090	2,932	2,773
GR4	GR4PAC 0	142	132	125	121	116	108	103	99	94	90	86	81	77

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Tab GH2MCI-

Capital RR - Ct

GH2	GH2SCR 0	23,514	22,404	21,295	20,185	19,076	17,966	17,227	16,859	16,121	15,753	15,384	15,015	14,647
MC1	MC1SCR 0	10,848	10,233	9,619	9,004	8,390	7,943	7,665	7,386	6,829	6,551	6,272	5,993	5,715
MC2	MC2SCR 0	11,412	10,743	10,075	9,406	8,737	8,241	7,918	7,595	6,948	6,624	6,301	5,978	5,654

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Tab BR 1-2, Lir

Capital RR - Ct

BR1	BR1 SCR	6,437	6,111	5,786	5,460	5,134	4,808	4,586	4,348	4,230	4,111	3,992	3,873	3,755
BR2	BR2 SCR	10,424	9,894	9,363	8,833	8,303	7,772	7,408	7,211	6,818	6,621	6,424	6,227	6,030

Unit	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
BR1	BR1FFP 0	5,183	4,991	4,800	4,608	4,417	4,225	4,033	3,842	3,650	3,267	1,327	0	0
BR1	BR1SAM 0	224	216	208	199	191	183	174	166	158	141	57	0	0
BR2	BR2FFP 0	5,535	5,322	5,109	4,895	4,682	4,469	4,256	4,042	3,829	1,180	0	0	0
BR2	BR2SAM 0	222	213	205	196	187	179	170	162	153	47	0	0	0
BR3	BR3FFP 0	6,095	5,893	5,690	5,487	5,284	5,082	4,879	4,676	4,474	4,068	3,865	3,663	3,460
GH1	GH1FFP 0	6,673	6,321	5,969	2,424	0	0	0	0	0	0	0	0	0
GH1	GH1SAM 0	738	699	661	268	0	0	0	0	0	0	0	0	0
GH2	GH2FFP 0	8,295	8,069	7,843	7,617	7,391	7,165	6,939	6,713	6,486	6,034	5,808	5,582	5,356
GH2	GH2SAM 0	406	394	383	371	359	348	336	324	312	289	277	266	254
GH3	GH3FFP 0	9,669	9,372	9,075	8,777	8,480	8,183	7,886	7,588	7,291	6,994	6,400	6,102	5,805
GH3	GH3SAM 0	809	782	756	730	703	677	650	624	598	545	518	492	465
GH4	GH4FFP 0	8,900	8,610	8,319	8,029	7,739	7,448	7,158	6,867	6,577	5,996	5,706	5,416	5,125
GH4	GH4SAM 0	814	786	758	730	701	673	645	617	589	532	504	476	117
MC1	MC1FGD 0	8,313	7,850	3,188	0	0	0	0	0	0	0	0	0	0
MC1	MC1FFP 0	6,754	6,377	2,590	0	0	0	0	0	0	0	0	0	0
MC1	MC1SAM 0	431	407	165	0	0	0	0	0	0	0	0	0	0
MC2	MC2FGD 0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC2	MC2FFP 0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC2	MC2SAM 0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC3	MC3FGDU 0	3,388	3,214	3,040	2,653	188	0	0	0	0	0	0	0	0
MC3	MC3FGDR 0	77	73	69	64	44	0	0	0	0	0	0	0	0
MC3	MC3FFP 0	6,834	6,499	6,165	5,830	4,673	341	0	0	0	0	0	0	0
MC3	MC3SAM 0	691	652	213	0	0	0	0	0	0	0	0	0	0
MC4	MC4FGD 0	10,183	9,661	9,139	7,976	573	0	0	0	0	0	0	0	0
MC4	MC4SCR 0	226	92	0	0	0	0	0	0	0	0	0	0	0
MC4	MC4FFP 0	7,069	6,707	6,344	5,537	398	0	0	0	0	0	0	0	0
MC4	MC4SAM 0	789	748	708	618	44	0	0	0	0	0	0	0	0
TC1	TC1FFP 0	6,171	5,897	5,623	5,349	5,075	4,801	4,186	261	0	0	0	0	0
CR4	CR4FGD 0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR4	CR4SCR 0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR4	CR4FF 0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR4	CR4PAC 0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR4	CR4LIME 0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR5	CR5FGD 0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR5	CR5SCR 0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR5	CR5FF 0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR5	CR5PAC 0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR5	CR5LIME 0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR6	CR6FGD 0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR6	CR6SCR 0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR6	CR6FF 0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR6	CR6PAC 0	0	0	0	0	0	0	0	0	0	0	0	0	0

Unit	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
CR6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR3	2,050	1,967	1,884	1,800	1,717	1,634	1,550	1,467	1,384	0	0	0	0	0
GR3	57	55	52	50	48	45	43	41	38	0	0	0	0	0
GR4	2,615	0	0	0	0	0	0	0	0	0	0	0	0	0
GR4	73	0	0	0	0	0	0	0	0	0	0	0	0	0

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Tab GH2MCI-
Capital RR - Cf

GH2	14,278	13,910	13,541	13,172	12,804	12,435	12,066	11,698	11,329	10,960	10,592	10,223	9,855	9,486
MC1	5,436	5,158	4,879	4,601	0	0	0	0	0	0	0	0	0	0
MC2	5,331	0	0	0	0	0	0	0	0	0	0	0	0	0

G:\11-051 Sier
Tab BR 1-2, Lir
Capital RR - Cf

BR1	3,636	3,517	3,399	3,280	3,161	3,043	2,924	2,805	2,686	2,568	2,449	2,330	2,212	2,093
BR2	5,833	5,636	5,439	5,242	5,045	4,848	4,651	4,454	4,258	4,061	3,864	3,667	3,470	3,273

Unit	2051	2052	2053	2054	2055	2056	2057	2058	2059
BR1	0	0	0	0	0	0	0	0	0
BR1	BR1FFP 0	0	0	0	0	0	0	0	0
BR1	BR1SAM 0	0	0	0	0	0	0	0	0
BR2	BR2FFP 0	0	0	0	0	0	0	0	0
BR2	BR2SAM 0	0	0	0	0	0	0	0	0
BR3	BR3FFP 0	0	0	0	0	0	0	0	0
BR3	1,405	0	0	0	0	0	0	0	0
GH1	GH1FFP 0	0	0	0	0	0	0	0	0
GH1	GH1SAM 0	0	0	0	0	0	0	0	0
GH2	GH2FFP 0	4,904	4,678	4,452	4,226	4,000	3,489	253	0
GH2	242	231	219	207	196	0	0	0	0
GH3	GH3FFP 0	5,508	5,211	4,152	0	0	0	0	0
GH3	405	21	0	0	0	0	0	0	0
GH4	GH4FFP 0	4,835	0	0	0	0	0	0	0
GH4	GH4SAM 0	0	0	0	0	0	0	0	0
MC1	MC1FGD 0	0	0	0	0	0	0	0	0
MC1	MC1FFP 0	0	0	0	0	0	0	0	0
MC1	MC1SAM 0	0	0	0	0	0	0	0	0
MC2	MC2FGD 0	0	0	0	0	0	0	0	0
MC2	MC2FFP 0	0	0	0	0	0	0	0	0
MC2	MC2SAM 0	0	0	0	0	0	0	0	0
MC3	MC3FGDU 0	0	0	0	0	0	0	0	0
MC3	MC3FGDR 0	0	0	0	0	0	0	0	0
MC3	MC3FFP 0	0	0	0	0	0	0	0	0
MC3	MC3SAM 0	0	0	0	0	0	0	0	0
MC4	MC4FGD 0	0	0	0	0	0	0	0	0
MC4	MC4SCR 0	0	0	0	0	0	0	0	0
MC4	MC4FFP 0	0	0	0	0	0	0	0	0
MC4	MC4SAM 0	0	0	0	0	0	0	0	0
TC1	TC1FFP 0	0	0	0	0	0	0	0	0
CR4	CR4FGD 0	0	0	0	0	0	0	0	0
CR4	CR4SCR 0	0	0	0	0	0	0	0	0
CR4	CR4FF 0	0	0	0	0	0	0	0	0
CR4	CR4PAC 0	0	0	0	0	0	0	0	0
CR4	CR4LIME 0	0	0	0	0	0	0	0	0
CR5	CR5FGD 0	0	0	0	0	0	0	0	0
CR5	CR5SCR 0	0	0	0	0	0	0	0	0
CR5	CR5FF 0	0	0	0	0	0	0	0	0
CR5	CR5PAC 0	0	0	0	0	0	0	0	0
CR5	CR5LIME 0	0	0	0	0	0	0	0	0
CR6	CR6FGD 0	0	0	0	0	0	0	0	0
CR6	CR6SCR 0	0	0	0	0	0	0	0	0
CR6	CR6FF 0	0	0	0	0	0	0	0	0
CR6	CR6PAC 0	0	0	0	0	0	0	0	0

Unit	2051	2052	2053	2054	2055	2056	2057	2058	2059
CR6	0	0	0	0	0	0	0	0	0
CR6LIME	0	0	0	0	0	0	0	0	0
GR3	0	0	0	0	0	0	0	0	0
GR3SFF	0	0	0	0	0	0	0	0	0
GR3PAC	0	0	0	0	0	0	0	0	0
GR4	0	0	0	0	0	0	0	0	0
GR4SFF	0	0	0	0	0	0	0	0	0
GR4PAC	0	0	0	0	0	0	0	0	0

G:\11-051 Slei									
Tab GH2MC1-									
Capital RR - Cf									
GH2	9,117	8,749	8,380	8,011	7,643	7,274	6,906	6,537	6,168
MC1	0	0	0	0	0	0	0	0	0
MC2	0	0	0	0	0	0	0	0	0

G:\11-051 Slei									
Tab BR 1-2, Lir									
Capital RR - Cf									
BR1	1,974	0	0	0	0	0	0	0	0
BR2	0	0	0	0	0	0	0	0	0

2010 2011 2012 2013 2014 2015 2016 2017 2018

Retirement Cost

All Units 0 0 0 0 0 0 2100 0 0

2% Escalation Rate

Unit Costs (\$000)

BR	3,816	4,811	3,969	4,049	4,130	4,212	4,296	4,382
BR	6,633	7,160	7,253	7,398	7,546	7,697	7,851	8,008
BR	15,885	20,876	14,904	15,202	15,506	15,816	16,132	16,455
CR	14,372	9,218	12,029	12,269	12,515	12,765	13,020	13,281
CR	11,842	9,889	12,791	13,047	13,308	13,574	13,845	14,122
CR	10,666	11,619	10,173	10,376	10,584	10,795	11,011	11,231
GH	17,829	19,141	17,966	18,325	18,691	19,065	19,447	19,835
GH	12,225	18,498	13,429	13,698	13,972	14,251	14,536	14,827
GH	17,961	13,501	12,475	12,724	12,979	13,238	13,503	13,773
GH	11,533	13,496	12,105	12,347	12,594	12,846	13,103	13,365
GR	4,270	5,792	4,360	4,447	4,536	4,627	4,719	4,813
GR	7,338	6,924	8,633	8,805	8,982	9,161	9,344	9,531
MC	11,892	17,333	12,669	12,923	13,181	13,445	13,714	13,988
MC	16,179	11,941	15,201	15,505	15,815	16,131	16,454	16,783
MC	18,313	14,238	17,221	17,566	17,917	18,275	18,641	19,014
MC	16,531	18,981	17,245	17,590	17,942	18,300	18,666	19,040
TC	17,205	15,170	17,403	17,751	18,106	18,468	18,837	19,214
TY	410	416	418	427	435	444	453	462

2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
0	0	0	0	0	0	0	0	0	0	0	0
4,470	4,559	4,651	4,744	4,838	4,935	5,034	5,135	5,237	5,342	5,449	5,558
8,168	8,331	8,498	8,668	8,841	9,018	9,199	9,383	9,570	9,762	9,957	10,156
16,784	17,120	17,462	17,811	18,167	18,531	18,901	19,279	19,665	20,058	20,460	20,869
13,546	13,817	14,094	14,375	14,663	14,956	15,255	15,560	15,872	16,189	16,513	16,843
14,405	14,693	14,987	15,286	15,592	15,904	16,222	16,546	16,877	17,215	17,559	17,910
11,456	11,685	11,919	12,157	12,400	12,648	12,901	13,159	13,423	13,691	13,965	14,244
20,232	20,637	21,050	21,471	21,900	22,338	22,785	23,240	23,705	24,179	24,663	25,156
15,124	15,426	15,735	16,049	16,370	16,698	17,032	17,372	17,720	18,074	18,436	18,804
14,049	14,330	14,616	14,909	15,207	15,511	15,821	16,138	16,460	16,790	17,125	17,468
13,632	13,905	14,183	14,467	14,756	15,051	15,352	15,659	15,973	16,292	16,618	16,950
4,910	5,008	5,108	5,210	5,314	5,421	5,529	5,640	5,753	5,868	5,985	6,105
9,722	9,916	10,115	10,317	10,523	10,734	10,949	11,167	11,391	11,619	11,851	12,088
14,268	14,553	14,844	15,141	15,444	15,753	16,068	16,389	16,717	17,051	17,392	17,740
17,118	17,461	17,810	18,166	18,530	18,900	19,278	19,664	20,057	20,458	20,867	21,285
19,394	19,782	20,177	20,581	20,993	21,412	21,841	22,278	22,723	23,178	23,641	24,114
19,421	19,809	20,205	20,609	21,021	21,442	21,871	22,308	22,754	23,209	23,674	24,147
19,598	19,990	20,390	20,798	21,214	21,638	22,071	22,512	22,962	23,422	23,890	24,368
471	480	490	500	510	520	530	541	552	563	574	586

RetirementCost_Savings

	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
	0	0	0	0	0	0	0	0	0	0
	5,669	5,782	5,898	6,016	6,136	6,259	6,384	6,512	6,642	6,775
	10,359	10,566	10,778	10,993	11,213	11,437	11,666	11,899	12,137	12,380
	21,286	21,712	22,146	22,589	23,041	23,502	23,972	24,451	24,940	25,439
	17,180	17,524	17,874	18,232	18,596	18,968	19,347	19,734	20,129	20,532
	18,269	18,634	19,007	19,387	19,775	20,170	20,573	20,985	21,405	21,833
	14,529	14,820	15,116	15,418	15,727	16,041	16,362	16,689	17,023	17,364
	25,659	26,172	26,696	27,230	27,774	28,330	28,897	29,474	30,064	30,665
	19,181	19,564	19,955	20,355	20,762	21,177	21,600	22,032	22,473	22,923
	17,817	18,174	18,537	18,908	19,286	19,672	20,065	20,466	20,876	21,293
	17,289	17,635	17,988	18,347	18,714	19,089	19,470	19,860	20,257	20,662
	6,227	6,351	6,478	6,608	6,740	6,875	7,012	7,153	7,296	7,442
	12,330	12,576	12,828	13,084	13,346	13,613	13,885	14,163	14,446	14,735
	18,095	18,457	18,826	19,202	19,586	19,978	20,378	20,785	21,201	21,625
	21,710	22,145	22,587	23,039	23,500	23,970	24,449	24,938	25,437	25,946
	24,596	25,088	25,590	26,102	26,624	27,156	27,699	28,253	28,818	29,395
	24,630	25,123	25,625	26,138	26,660	27,194	27,737	28,292	28,858	29,435
	24,855	25,352	25,859	26,377	26,904	27,442	27,991	28,551	29,122	29,704
	597	609	622	634	647	660	673	686	700	714

RetirementCost_Savings

		Escalation Rate:	2%	Year \$:	2010	Fixed O&M										
		Month	Year Equipment		\$/yr	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
BR	BR1	5	2014 PJFF/PAC			0	0	0	598,882	610,860	623,077	635,538	648,249	661,214	674,439	
BR	BR1	5	2014 SAM Mitigation			0	0	0	78,540	137,333	140,079	142,881	145,739	148,653	151,627	
BR	BR2	4	2014 PJFF/PAC			0	0	0	714,168	728,451	743,020	757,880	773,038	788,499	804,269	
BR	BR2	4	2014 SAM Mitigation			0	0	0	134,640	137,333	140,079	142,881	145,739	148,653	151,627	
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	
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	
GH	GH1	5	2014 SCR Turn-Down			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	
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	
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	
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	
GH	GH3	11	2013 SCR Turn-Down			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	
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	
GH	GH4	3	2014 SCR Turn-Down			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	
MC	MC1	5	2015 Combined 1&2 FGD			0	0	0	0	-238,642	-219,636	-200,250	-180,476	-160,306	-139,733	
MC	MC1	5	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	
MC	MC1	5	2015 SAM Mitigation			0	0	0	0	22,100	38,643	39,416	40,204	41,008	41,828	
MC	MC2	4	2015 Combined 1&2 FGD			0	0	0	0	186,506	205,512	224,899	244,673	264,842	285,415	
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	
MC	MC2	4	2015 SAM Mitigation			0	0	0	0	25,257	38,643	39,416	40,204	41,008	41,828	
MC	MC3	11	2014 FGD			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	
MC	MC3	4	2013 SAM Mitigation			0	0	24,068	36,824	37,560	38,312	39,078	39,859	40,657	41,470	
MC	MC3	4	2013 SCR Turn-Down			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	
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	
MC	MC4	11	2014 SAM Mitigation			0	0	0	3,095	37,885	38,643	39,416	40,204	41,008	41,828	
MC	MC4	11	2014 SCR Turn-Down			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	
CR	CR4	1	2016 SCR		1,871,000	0	0	0	0	0	2,107,050	2,149,191	2,192,175	2,236,018	2,280,739	
CR	CR4	1	2016 WFGD			0	0	0	0	0	0	0	0	0	0	
CR	CR4	1	2016 PJFF		1,191,000	0	0	0	0	1,341,259	1,368,085	1,395,446	1,423,355	1,451,822		
CR	CR4	1	2016 SAM Mitigation		174,000	0	0	0	0	195,952	199,871	203,869	207,946	212,105		
CR	CR4	1	2016 PAC Injection		169,000	0	0	0	0	190,321	194,128	198,010	201,971	206,010		
CR	CR5	1	2016 SCR		1,993,000	0	0	0	0	2,244,442	2,289,331	2,335,117	2,381,819	2,429,456		
CR	CR5	1	2016 WFGD			0	0	0	0	0	0	0	0	0	0	
CR	CR5	1	2016 PJFF		1,251,000	0	0	0	0	1,408,829	1,437,006	1,465,746	1,495,061	1,524,962		
CR	CR5	1	2016 SAM Mitigation		177,000	0	0	0	0	199,331	203,317	207,384	211,531	215,762		
CR	CR5	1	2016 PAC Injection		172,000	0	0	0	0	193,700	197,574	201,525	205,556	209,667		
CR	CR6	1	2016 SCR		2,392,000	0	0	0	0	2,693,781	2,747,656	2,802,609	2,858,661	2,915,835		
CR	CR6	1	2016 WFGD			0	0	0	0	0	0	0	0	0	0	

	Month	Year Equipment	\$/yr	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
CR	1	2016 PJFF	1,632,000	0	0	0	0	0	1,837,897	1,874,655	1,912,148	1,950,391	1,989,399
CR	1	2016 SAM Mitigation	198,000	0	0	0	0	0	222,980	227,440	231,989	236,628	241,361
CR	1	2016 PAC Injection	191,000	0	0	0	0	0	215,097	219,399	223,787	228,263	232,828
GR	1	2016 SCR	943,000	0	0	0	0	0	1,061,971	1,083,211	1,104,875	1,126,972	1,149,512
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	4,049,499
GR	1	2016 PAC Injection	141,000	0	0	0	0	0	158,789	161,965	165,204	168,508	171,878
GR	1	2016 SCR	1,284,000	0	0	0	0	0	1,445,993	1,474,912	1,504,411	1,534,499	1,565,189
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
GR	1	2016 PAC Injection	150,000	0	0	0	0	0	168,924	172,303	175,749	179,264	182,849
GH		SCR		0	0	0	0	0	0	0	8,475,784	8,645,300	8,818,206
MC		SCR		0	0	0	0	0	0	0	3,943,805	4,022,682	4,103,135
MC		SCR		0	0	0	0	0	0	0	3,984,814	4,064,510	4,145,800
BR		SCR		0	0	0	0	0	0	0	2,431,193	2,479,817	2,529,413
BR		SCR		0	0	0	0	0	0	0	3,952,007	4,031,047	4,111,668

G:\11-051 Sierra Club KY IRP & Coal Plants\CPCN Docket 2011-00162 - LG&E\Discovery Responses - LG&E\Env 26\CER\Additional\SCRs\20110728_CERRResults-E
 Tab BR 1-2, Lines 17-20

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
O&M										
BR1 SCR	0	0	0	0	0	0	0	2,431	2,480	2,529
BR2 SCR	0	0	0	0	0	0	0	3,952	4,031	4,112

G:\11-051 Sierra Club KY IRP & Coal Plants\CPCN Docket 2011-00162 - LG&E\Discovery Responses - LG&E\Env 26\CER\Additional\SCRs\20110728_CERRResults-E
 Tab GH2MC1-2, Lines 19-21

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
O&M										
GH2SCR 0	0	0	0	0	0	0	0	8,476	8,645	8,818
MC1SCR 0	0	0	0	0	0	0	0	3,944	4,023	4,103
MC2SCR 0	0	0	0	0	0	0	0	3,984.8136	4,064.5098	4,145.8

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

	Month	Year	Equipment	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	
BR1	5	2014	PJFF/PAC	687,927	701,686	715,720	730,034	744,635	759,527	774,718	790,212	806,016	822,137	838,580	
BR1	5	2014	SAM Mitigation	154,659	157,752	160,907	164,125	167,408	170,756	174,171	177,655	181,208	184,832	188,529	
BR2	4	2014	PJFF/PAC	820,354	836,761	853,496	870,566	887,978	905,737	923,852	942,329	961,175	980,399	1,000,007	
BR2	4	2014	SAM Mitigation	154,659	157,752	160,907	164,125	167,408	170,756	174,171	177,655	181,208	184,832	188,529	
BR3	5	2015	PJFF/PAC	1,202,245	1,226,290	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	
GH1	5	2014	PJFF/PAC	1,485,345	1,515,052	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	
GH1	5	2014	SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	
GH1	2	2013	SAM Mitigation	0	0	0	0	0	0	0	0	0	0	0	
GH2	11	2014	PJFF/PAC	1,786,436	1,822,165	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	
GH2	12	2012	Sorbent Injection	115,643	117,956	120,315	122,721	125,175	127,679	130,232	132,837	135,494	138,204	140,968	
GH3	10	2015	PJFF/PAC	1,469,498	1,498,888	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	
GH3	11	2013	SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	
GH3	2	2013	SAM Mitigation	0	0	0	0	0	0	0	0	0	0	0	
GH4	12	2015	PJFF/PAC	1,423,176	1,451,640	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	
GH4	3	2014	SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	
GH4	2	2013	SAM Mitigation	0	0	0	0	0	0	0	0	0	0	0	
MC1	5	2015	Combined 1&2 FGD	-118,749	-121,124	-123,546	-126,017	-128,537	-131,108	-133,730	-136,405	-139,133	-141,916	-144,754	
MC1	5	2015	PJFF/PAC	1,628,681	1,661,255	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	
MC1	5	2015	SAM Mitigation	42,665	43,518	44,388	45,276	46,182	47,105	48,047	49,008	49,989	50,988	52,008	
MC2	4	2015	Combined 1&2 FGD	306,400	312,528	318,778	325,154	331,657	338,290	345,056	351,957	358,996	366,176	373,499	
MC2	4	2015	PJFF/PAC	1,597,875	1,629,832	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	
MC2	4	2015	SAM Mitigation	42,665	43,518	44,388	45,276	46,182	47,105	48,047	49,008	49,989	50,988	52,008	
MC3	11	2014	FGD	0	0	0	0	0	0	0	0	0	0	0	
MC3	10	2015	PJFF/PAC	1,456,698	1,485,832	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	
MC3	4	2013	SAM Mitigation	42,299	43,145	44,008	44,888	45,786	46,702	47,636	48,588	49,560	50,551	51,562	
MC3	4	2013	SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	
MC4	11	2014	FGD	0	0	0	0	0	0	0	0	0	0	0	
MC4	11	2014	PJFF/PAC	1,707,811	1,741,967	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	
MC4	11	2014	SAM Mitigation	42,665	43,518	44,388	45,276	46,182	47,105	48,047	49,008	49,989	50,988	52,008	
MC4	11	2014	SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	
TC1	11	2015	PJFF/PAC	1,112,110	1,134,353	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	
CR4	1	2016	SCR	1,871,000	2,326,353	2,372,880	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
CR4	1	2016	WFGD	0	0	0	0	0	0	0	0	0	0	0	
CR4	1	2016	PJFF	1,191,000	1,480,859	1,510,476	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
CR4	1	2016	SAM Mitigation	174,000	216,347	220,674	225,088	229,589	234,181	238,865	243,642	248,515	253,485	258,555	263,726
CR4	1	2016	PAC Injection	169,000	210,130	214,333	218,620	222,992	227,452	232,001	236,641	241,374	246,201	251,125	256,148
CR5	1	2016	SCR	1,993,000	2,478,045	2,527,606	2,578,158	2,629,721	2,682,316	2,735,962	2,846,495	2,903,425	2,961,493	3,020,723	
CR5	1	2016	WFGD	0	0	0	0	0	0	0	0	0	0	0	
CR5	1	2016	PJFF	1,251,000	1,555,461	1,586,570	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
CR5	1	2016	SAM Mitigation	177,000	220,077	224,479	228,968	233,548	238,219	242,983	247,843	252,800	257,856	263,013	268,273
CR5	1	2016	PAC Injection	172,000	213,860	218,138	222,500	226,950	231,489	236,119	240,842	245,658	250,572	255,583	260,695
CR6	1	2016	SCR	2,392,000	2,974,151	3,033,634	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
CR6	1	2016	WFGD	0	0	0	0	0	0	0	0	0	0	0	

Month	Year	Equipment	\$/yr	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
CR6	1	2016 PJFF	1,632,000	2,029,187	2,069,771	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
CR6	1	2016 SAM Mitigation	198,000	246,188	251,112	256,134	261,257	266,482	271,812	277,248	282,793	288,449	294,218	300,102
CR6	1	2016 PAC Injection	191,000	237,484	242,234	247,079	252,020	257,061	262,202	267,446	272,795	278,251	283,816	289,492
GR3	1	2016 SCR	943,000	1,172,502	1,195,952	1,219,871	1,244,268	1,269,154	1,294,537	1,320,428	1,346,836	1,373,773	1,401,248	1,429,273
GR3	1	2016 CDS-FF	3,322,000	4,130,489	4,213,099	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
GR3	1	2016 PAC Injection	141,000	175,316	178,822	182,399	186,047	189,767	193,563	197,434	201,383	205,410	209,519	213,709
GR4	1	2016 SCR	1,284,000	1,596,493	1,628,422	1,660,991	1,694,211	1,728,095	1,762,657	1,797,910	1,833,868	1,870,546	1,907,956	1,946,116
GR4	1	2016 CDS-FF	4,309,000	5,357,700	5,464,854	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
GR4	1	2016 PAC Injection	150,000	186,506	190,236	194,041	197,922	201,880	205,918	210,036	214,237	218,522	222,892	227,350
GH2		SCR		8,994,570	9,174,461	9,357,950	9,545,109	9,736,012	9,930,732	10,129,346	10,331,933	10,538,572	10,749,343	10,964,330
MC1		SCR		4,185,198	4,268,902	4,354,280	4,441,366	4,530,193	4,620,797	4,713,213	4,807,477	4,903,626	5,001,699	5,101,733
MC2		SCR		4,228,716	4,313,290	4,399,556	4,487,547	4,577,298	4,668,844	4,762,221	4,857,465	4,954,615	5,053,707	5,154,781
BR1		SCR		2,580,002	2,631,602	2,684,234	2,737,918	2,792,677	2,848,530	2,905,501	2,963,611	3,022,883	3,083,341	3,145,008
BR2		SCR		4,193,902	4,277,780	4,363,335	4,450,602	4,539,614	4,630,406	4,723,014	4,817,475	4,913,824	5,012,101	5,112,343
G:\11-051 Sierra Club KY IRP IR1-2_GH2_MCI-2SCRs.xlsx														
Tab BR 1-2, Lines 17-20														
		O&M		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
		BR1 SCR		2,580	2,632	2,684	2,738	2,793	2,849	2,906	2,964	3,023	3,083	3,145
		BR2 SCR		4,194	4,278	4,363	4,451	4,540	4,630	4,723	4,817	4,914	5,012	5,112
G:\11-051 Sierra Club KY IRP IR1-2_GH2_MCI-2SCRs.xlsx														
Tab GH2MCI-2, Lines 19-21														
		O&M		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
		GH2SCR 0		8,995	9,174	9,358	9,545	9,736	9,931	10,129	10,332	10,539	10,749	10,964
		MCI SCR 0		4,185	4,269	4,354	4,441	4,530	4,621	4,713	4,807	4,904	5,002	5,102
		MC2SCR 0		4,228,716	4,313,290	4,399,556	4,487,547	4,577,298	4,668,844	4,762,221	4,857,465	4,954,615	5,053,707	5,154,781

Escalation Rate:	2%	Year \$:	2010	Fixed O&M												
				Month	Year	Equipment	2032	2033	2034	2035	2036	2037	2038	2039	2040	
BR1	5	2014	PJFF/PAC	855,351	872,458	889,907	907,705	925,860	944,377	963,264	982,530	1,002,180				
BR1	5	2014	SAM Mitigation	192,299	196,145	200,068	204,069	208,151	212,314	216,560	220,891	225,309				
BR2	4	2014	PJFF/PAC	1,020,007	1,040,407	1,061,215	1,082,440	1,104,088	1,126,170	1,148,694	1,171,668	1,195,101				
BR2	4	2014	SAM Mitigation	192,299	196,145	200,068	204,069	208,151	212,314	216,560	220,891	225,309				
BR3	5	2015	PJFF/PAC	1,494,841	1,524,738	1,555,233	1,586,337	1,618,064	1,650,425	1,683,434	1,717,103	1,751,445				
GH1	5	2014	PJFF/PAC	1,846,839	1,883,776	1,921,452	1,959,881	1,999,078	2,039,060	2,079,841	2,121,438	2,163,867				
GH1	5	2014	SCR Turn-Down	0	0	0	0	0	0	0	0	0				
GH1	2	2013	SAM Mitigation	0	0	0	0	0	0	0	0	0				
GH2	11	2014	PJFF/PAC	2,221,209	2,265,633	2,310,946	2,357,165	2,404,308	2,452,394	2,501,442	2,551,471	2,602,500				
GH2	12	2012	Sorbent Injection	143,787	146,663	149,596	152,588	155,640	158,753	161,928	165,166	168,470				
GH3	10	2015	PJFF/PAC	1,827,136	1,863,678	1,900,952	1,938,971	1,977,751	2,017,306	2,057,652	2,098,805	2,140,781				
GH3	11	2013	SCR Turn-Down	0	0	0	0	0	0	0	0	0				
GH3	2	2013	SAM Mitigation	0	0	0	0	0	0	0	0	0				
GH4	12	2015	PJFF/PAC	1,769,540	1,804,931	1,841,030	1,877,850	1,915,407	1,953,716	1,992,790	2,032,646	2,073,299				
GH4	3	2014	SCR Turn-Down	0	0	0	0	0	0	0	0	0				
GH4	2	2013	SAM Mitigation	0	0	0	0	0	0	0	0	0				
MC1	5	2015	Combined 1&2 FGD	-147,649	-150,602	-153,614	-156,686	-159,820	-163,017	-166,277	-169,602	-172,994				
MC1	5	2015	PJFF/PAC	2,025,061	2,065,562	2,106,873	2,149,010	2,191,991	2,235,831	2,280,547	2,326,158	2,372,681				
MC1	5	2015	SAM Mitigation	53,048	54,109	55,191	56,295	57,421	58,570	59,741	60,936	62,155				
MC2	4	2015	Combined 1&2 FGD	380,969	388,589	396,361	404,288	412,374	420,621	429,033	437,614	446,366				
MC2	4	2015	PJFF/PAC	1,986,757	2,026,492	2,067,022	2,108,362	2,150,529	2,193,540	2,237,411	2,282,159	2,327,802				
MC2	4	2015	SAM Mitigation	53,048	54,109	55,191	56,295	57,421	58,570	59,741	60,936	62,155				
MC3	11	2014	FGD	0	0	0	0	0	0	0	0	0				
MC3	10	2015	PJFF/PAC	1,811,221	1,847,446	1,884,395	1,922,083	1,960,524	1,999,735	2,039,729	2,080,524	2,122,134				
MC3	4	2013	SAM Mitigation	52,594	53,645	54,718	55,813	56,929	58,068	59,229	60,414	61,622				
MC3	4	2013	SCR Turn-Down	0	0	0	0	0	0	0	0	0				
MC4	11	2014	FGD	0	0	0	0	0	0	0	0	0				
MC4	11	2014	PJFF/PAC	2,123,449	2,165,918	2,209,236	2,253,421	2,298,489	2,344,459	2,391,348	2,439,175	2,487,958				
MC4	11	2014	SAM Mitigation	53,048	54,109	55,191	56,295	57,421	58,570	59,741	60,936	62,155				
MC4	11	2014	SCR Turn-Down	0	0	0	0	0	0	0	0	0				
TC1	11	2015	PJFF/PAC	1,382,769	1,410,425	1,438,633	1,467,406	1,496,754	1,526,689	1,557,223	1,588,367	1,620,135				
CR4	1	2016	SCR	1,871,000	2,892,528	2,950,379	3,009,386	3,069,574	3,130,965	3,193,585	3,257,456	3,322,605	3,389,058			
CR4	1	2016	WFGD	0	0	0	0	0	0	0	0	0				
CR4	1	2016	PJFF	1,191,000	1,841,262	1,878,087	1,915,649	1,953,962	1,993,041	2,032,902	2,073,560	2,115,031	2,157,332			
CR4	1	2016	SAM Mitigation	174,000	269,000	274,380	279,868	285,465	291,175	296,998	302,938	308,997	315,177			
CR4	1	2016	PAC Injection	169,000	261,271	266,496	271,826	277,262	282,808	288,464	294,233	300,118	306,120			
CR5	1	2016	SCR	1,993,000	3,081,137	3,142,760	3,205,615	3,269,728	3,335,122	3,401,825	3,469,861	3,539,258	3,610,044			
CR5	1	2016	WFGD	0	0	0	0	0	0	0	0	0				
CR5	1	2016	PJFF	1,251,000	1,934,021	1,972,701	2,012,155	2,052,398	2,093,446	2,135,315	2,178,021	2,221,582	2,266,013			
CR5	1	2016	SAM Mitigation	177,000	273,638	279,111	284,693	290,387	296,195	302,119	308,161	314,325	320,611			
CR5	1	2016	PAC Injection	172,000	265,909	271,227	276,651	282,184	287,828	293,584	299,456	305,445	311,554			
CR6	1	2016	SCR	2,392,000	3,697,983	3,771,943	3,847,382	3,924,330	4,002,816	4,082,872	4,164,530	4,247,820	4,332,777			
CR6	1	2016	WFGD	0	0	0	0	0	0	0	0	0				

Month	Year Equipment	\$/Yr	2032	2033	2034	2035	2036	2037	2038	2039	2040			
CR6	1	2016 PJFF	1,632,000	2,523,039	2,573,500	2,624,970	2,677,469	2,731,018	2,785,639	2,841,352	2,898,179	2,956,142		
CR6	1	2016 SAM Mitigation	198,000	306,104	312,226	318,471	324,840	331,337	337,964	344,723	351,617	358,650		
CR6	1	2016 PAC Injection	191,000	295,282	301,188	307,212	313,356	319,623	326,015	332,536	339,186	345,970		
GR3	1	2016 SCR	943,000	1,457,859	1,487,016	1,516,756	1,547,091	1,578,033	1,609,594	1,641,786	1,674,622	1,708,114		
GR3	1	2016 CDS-FF	3,322,000	5,135,744	5,238,459	5,343,229	5,450,093	5,559,095	5,670,277	5,783,682	5,899,356	6,017,343		
GR3	1	2016 PAC Injection	141,000	217,983	222,343	226,790	231,325	235,952	240,671	245,484	250,394	255,402		
GR4	1	2016 SCR	1,284,000	1,985,038	2,024,739	2,065,233	2,106,538	2,148,669	2,191,642	2,235,475	2,280,185	2,325,788		
GR4	1	2016 CDS-FF	4,309,000	6,661,626	6,794,859	6,930,756	7,069,371	7,210,759	7,354,974	7,502,073	7,652,115	7,805,157		
GR4	1	2016 PAC Injection	150,000	231,897	236,535	241,266	246,091	251,013	256,033	261,154	266,377	271,704		
GH2		SCR	11,183,617	11,407,289	11,635,435	11,868,144	12,105,507	12,347,617	12,594,569	12,846,460	13,103,390			
MC1		SCR	5,203,768	5,307,843	5,414,000	5,522,280	5,632,725	5,745,380	5,860,287	5,977,493	6,097,043			
MC2		SCR	5,257,877	5,363,034	5,470,295	5,579,701	5,691,295	5,805,121	5,921,223	6,039,648	6,160,441			
BR1		SCR	3,207,908	3,272,066	3,337,507	3,404,257	3,472,343	3,541,789	3,612,625	3,684,878	3,758,575			
BR2		SCR	5,214,589	5,318,881	5,425,259	5,533,764	5,644,439	5,757,328	5,872,475	5,989,924	6,109,723			
		G:\11-051 Sierra Club KY IRP												
		Tab BR 1-2, Lines 17-20	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
		O&M												
		BR1 SCR	3,208	3,272	3,338	3,404	3,472	3,542	3,613	3,685	3,759	3,833,747	3,910,422	3,988.63
		BR2 SCR	5,215	5,319	5,425	5,534	5,644	5,757	5,872	5,990	6,110	6,231,917	6,356,555	6,483.687
		G:\11-051 Sierra Club KY IRP												
		Tab GH2MC1-2, Lines 19-21	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
		O&M												
		GH2SCR 0	11,184	11,407	11,635	11,868	12,106	12,348	12,595	12,846	13,103	13,365.46	13,632.77	13,905.42
		MC1SCR 0	5,204	5,308	5,414	5,522	5,633	5,745	5,860	5,977	6,097	6,218,984	6,343,364	6,470.231
		MC2SCR 0	5,257,8769	5,363,0344	5,470,2951	5,579,701	5,691,295	5,805,1209	5,921,2233	6,039,6478	6,160,4407	6,283.65	6,409.323	6,537.509

	Escalation Rate:	2%	Year \$:	2010	Fixed O&M
BR1	5	2014	PJFF/PAC		
BR1	5	2014	SAM Mitigation		
BR2	4	2014	PJFF/PAC		
BR2	4	2014	SAM Mitigation		
BR3	5	2015	PJFF/PAC		
GH1	5	2014	PJFF/PAC		
GH1	5	2014	SCR Turn-Down		
GH1	2	2013	SAM Mitigation		
GH2	11	2014	PJFF/PAC		
GH2	12	2012	Sorbent Injection		
GH3	10	2015	PJFF/PAC		
GH3	11	2013	SCR Turn-Down		
GH3	2	2013	SAM Mitigation		
GH4	12	2015	PJFF/PAC		
GH4	3	2014	SCR Turn-Down		
GH4	2	2013	SAM Mitigation		
MC1	5	2015	Combined 1&2 FGD		
MC1	5	2015	PJFF/PAC		
MC1	5	2015	SAM Mitigation		
MC2	4	2015	Combined 1&2 FGD		
MC2	4	2015	PJFF/PAC		
MC2	4	2015	SAM Mitigation		
MC3	11	2014	FGD		
MC3	10	2015	PJFF/PAC		
MC3	4	2013	SAM Mitigation		
MC3	4	2013	SCR Turn-Down		
MC4	11	2014	FGD		
MC4	11	2014	PJFF/PAC		
MC4	11	2014	SAM Mitigation		
MC4	11	2014	SCR Turn-Down		
TC1	11	2015	PJFF/PAC		
CR4	1	2016	SCR	1,871,000	
CR4	1	2016	WFGD		
CR4	1	2016	PJFF	1,191,000	
CR4	1	2016	SAM Mitigation	174,000	
CR4	1	2016	PAC Injection	169,000	
CR5	1	2016	SCR	1,993,000	
CR5	1	2016	WFGD		
CR5	1	2016	PJFF	1,251,000	
CR5	1	2016	SAM Mitigation	177,000	
CR5	1	2016	PAC Injection	172,000	
CR6	1	2016	SCR	2,392,000	
CR6	1	2016	WFGD		

	Month	Year	Equipment	\$/Yr
CR6	1	2016	PJFF	1,632,000
CR6	1	2016	SAM Mitigation	198,000
CR6	1	2016	PAC Injection	191,000
GR3	1	2016	SCR	943,000
GR3	1	2016	CDS-FF	3,322,000
GR3	1	2016	PAC Injection	141,000
GR4	1	2016	SCR	1,284,000
GR4	1	2016	CDS-FF	4,309,000
GR4	1	2016	PAC Injection	150,000

GH2			SCR	
MC1			SCR	
MC2			SCR	

BR1			SCR	
BR2			SCR	

G:\11-051 Sierra Club KY IRP
Tab BR 1-2, Lines 17-20

	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056
O&M													
BR1 SCR	4068.403	4149.771	4232.766	4317.422	4403.77	4491.845	4581.682	4673.316	4766.782	4862.118	4959.36	5058.547	5159.718
BR2 SCR	6613.36	6745.627	6880.54	7018.151	7158.514	7301.684	7447.718	7596.672	7748.606	7903.578	8061.649	8222.882	8387.34

G:\11-051 Sierra Club KY IRP
Tab GH2MC1-2, Lines 19-21

	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056
O&M													
GH2SCR 0	14183.53	14467.2	14756.55	15051.68	15352.71	15659.76	15972.96	16292.42	16618.27	16950.63	17289.64	17635.44	17988.15
MC1SCR 0	6599.636	6731.628	6866.261	7003.586	7143.658	7286.531	7432.262	7580.907	7732.525	7887.175	8044.919	8205.817	8369.934
MC2SCR 0	6668.259	6801.624	6937.657	7076.41	7217.938	7362.297	7509.543	7659.734	7812.928	7969.187	8128.571	8291.142	8456.965

Escalation Rate:	2%	Year \$:	2010	Fixed O&M
	<u>Month</u>	<u>Year</u>	<u>Equipment</u>	<u>\$/yr</u>
BR1	5	2014	PJFF/PAC	
BR1	5	2014	SAM Mitigation	
BR2	4	2014	PJFF/PAC	
BR2	4	2014	SAM Mitigation	
BR3	5	2015	PJFF/PAC	
GH1	5	2014	PJFF/PAC	
GH1	5	2014	SCR Turn-Down	
GH1	2	2013	SAM Mitigation	
GH2	11	2014	PJFF/PAC	
GH2	12	2012	Sorbent Injection	
GH3	10	2015	PJFF/PAC	
GH3	11	2013	SCR Turn-Down	
GH3	2	2013	SAM Mitigation	
GH4	12	2015	PJFF/PAC	
GH4	3	2014	SCR Turn-Down	
GH4	2	2013	SAM Mitigation	
MC1	5	2015	Combined 1&2 FGD	
MC1	5	2015	PJFF/PAC	
MC1	5	2015	SAM Mitigation	
MC2	4	2015	Combined 1&2 FGD	
MC2	4	2015	PJFF/PAC	
MC2	4	2015	SAM Mitigation	
MC3	11	2014	FGD	
MC3	10	2015	PJFF/PAC	
MC3	4	2013	SAM Mitigation	
MC3	4	2013	SCR Turn-Down	
MC4	11	2014	FGD	
MC4	11	2014	PJFF/PAC	
MC4	11	2014	SAM Mitigation	
MC4	11	2014	SCR Turn-Down	
TC1	11	2015	PJFF/PAC	
CR4	1	2016	SCR	1,871,000
CR4	1	2016	WFGD	
CR4	1	2016	PJFF	1,191,000
CR4	1	2016	SAM Mitigation	174,000
CR4	1	2016	PAC Injection	169,000
CR5	1	2016	SCR	1,993,000
CR5	1	2016	WFGD	
CR5	1	2016	PJFF	1,251,000
CR5	1	2016	SAM Mitigation	177,000
CR5	1	2016	PAC Injection	172,000
CR6	1	2016	SCR	2,392,000
CR6	1	2016	WFGD	

	<u>Month</u>	<u>Year</u>	<u>Equipment</u>	<u>\$/yr</u>				
CR6	1	2016	PJFF	1,632,000				
CR6	1	2016	SAM Mitigation	198,000				
CR6	1	2016	PAC Injection	191,000				
GR3	1	2016	SCR	943,000				
GR3	1	2016	CDS-FF	3,322,000				
GR3	1	2016	PAC Injection	141,000				
GR4	1	2016	SCR	1,284,000				
GR4	1	2016	CDS-FF	4,309,000				
GR4	1	2016	PAC Injection	150,000				
GH2			SCR					
MCI			SCR					
MC2			SCR					
BR1			SCR					
BR2			SCR					
			G:\11-051 Sierra Club KY IRP					
			Tab BR 1-2, Lines 17-20		2057	2058	2059	
			O&M					
			BR1 SCR		5262.913	5368.171	5475.534	
			BR2 SCR		8555.087	8726.188	8900.712	
			G:\11-051 Sierra Club KY IRP					
			Tab GH2MCI-2, Lines 19-21		2057	2058	2059	
			O&M					
			GH2SCR 0		18347.91	18714.87	19089.16	
			MCI SCR 0		8537.332	8708.079	8882.24	
			MC2SCR 0		8626.104	8798.626	8974.599	

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	384	364	344	325	305	285	266	246	231	221	211	200	190	180
2012 CR	288	288	465	415	394	373	353	333	313	293	272	252	237	226	216	205	195
2013 CR			295	450	426	403	382	362	341	321	300	279	259	243	232	221	210
2014 CR				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									553	522	506	479	455	430	406	381	357
2021 CR									351	567	535	506	479	451	426	401	376
2022 CR									360	360	581	548	519	491	466	441	416
2023 CR										369	369	595	562	532	504	478	452
2024 CR												378	610	576	545	516	490
2025 CR													387	625	591	559	529
2026 CR														397	641	605	573
2027 CR															407	657	621
2028 CR																673	637
2029 CR																	417
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	
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	
2021 BR													600	805	762	723	688	657	625	594	
2022 BR														615	825	781	741	706	673	641	

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		
	2023 BR																				61	
	2024 BR																					65
	2025 BR																					69
	2026 BR																					71
	2027 BR																					73
	2028 BR																					75
	2029 BR																					77
	2030 BR																					79
	2031 BR																					81
	2032 BR																					83
	2033 BR																					85
	2034 BR																					87
	2035 BR																					89
	2036 BR																					91
	2037 BR																					93
	2038 BR																					95
	2039 BR																					97
	2040 BR																					99
	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										163	163	154	146	139	132	126	119	112		106	
	2020 GR										114	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																132	189	179		169	
	2026 GR																	136	194		183	
	2027 GR																		139		199	
	2028 GR																				143	
	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	125	122	116	111	105	99	94	88	83	77	73	71	68	66	63		61	
	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	

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	2015 TY						103	151	143	135	128	122	116	110	104	97	91	85	81	78
	2016 TY							106	154	146	138	131	125	119	112	106	100	93	87	83
	2017 TY								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	166	157	149	142	135	128	121	114	107
	2020 TY											117	171	161	153	145	138	131	124	117
	2021 TY												120	175	165	157	149	141	134	127
	2022 TY													123	179	169	161	152	145	138
	2023 TY														126	184	174	165	156	149
	2024 TY															129	188	178	169	160
	2025 TY																182	178	169	160
	2026 TY																193	182	173	173
	2027 TY																198	182	173	173
	2028 TY																198	182	173	173
	2029 TY																198	182	173	173
	2030 TY																198	182	173	173
	2031 TY																198	182	173	173
	2032 TY																198	182	173	173
	2033 TY																198	182	173	173
	2034 TY																198	182	173	173
	2035 TY																198	182	173	173
	2036 TY																198	182	173	173
	2037 TY																198	182	173	173
	2038 TY																198	182	173	173
	2039 TY																198	182	173	173
	2040 TY																198	182	173	173

Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047
2015 TY		75	72	70	67	64	61	59	56	53	51	48	45	0	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	0
2017 TY		85	82	79	76	73	70	67	65	62	59	56	53	50	47	0	0	0	0	0
2018 TY		92	87	84	81	78	75	72	69	66	63	60	57	54	0	0	0	0	0	0
2019 TY		101	94	89	86	83	80	77	74	71	68	65	62	59	56	53	50	0	0	0
2020 TY		110	103	96	91	88	85	82	79	76	73	70	66	63	60	57	54	51	0	0
2021 TY		120	113	106	99	93	90	87	84	81	78	74	71	68	65	62	59	55	52	0
2022 TY		130	123	116	108	101	96	93	89	86	83	80	76	73	70	67	63	60	57	54
2023 TY		141	134	126	119	111	104	98	95	92	88	85	82	78	75	72	68	65	62	58
2024 TY		152	145	137	129	122	114	106	101	97	94	90	87	84	80	77	73	70	67	63
2025 TY		164	156	148	140	133	125	117	109	103	100	96	93	89	86	82	79	75	72	68
2026 TY		177	168	160	152	144	136	128	120	112	106	102	99	95	91	88	84	81	77	73
2027 TY		192	182	172	164	156	148	139	131	123	114	108	105	101	97	94	90	86	83	79
2028 TY		208	196	186	177	168	160	151	143	134	126	117	111	107	104	100	96	92	89	85
2029 TY		146	213	201	191	181	172	164	155	146	138	129	120	114	110	106	102	98	95	91
2030 TY		150	150	218	206	196	186	177	168	159	150	141	132	123	117	113	109	105	101	97
2031 TY		154	154	224	224	212	201	190	181	172	163	154	145	135	126	120	116	112	107	103
2032 TY		157	157	229	229	229	217	206	195	186	176	167	158	148	139	129	123	118	114	110
2033 TY			161	235	211	200	190	181	171	161	151	141	131	121	111	101	91	81	71	61
2034 TY			165	241	228	216	205	195	185	175	165	155	145	135	125	115	105	95	85	75
2035 TY			169	247	234	221	210	200	190	180	170	160	150	140	130	120	110	100	90	80
2036 TY			174	253	240	227	215	205	195	185	175	165	155	145	135	125	115	105	95	85
2037 TY			178	259	245	232	220	209	199	189	179	169	159	149	139	129	119	109	99	89
2038 TY			182	266	252	239	226	214	202	190	178	166	154	142	130	118	106	94	82	70
2039 TY			187	273	259	245	232	219	206	193	180	167	154	141	128	115	102	89	76	63
2040 TY			192	279	266	252	238	224	210	196	182	168	154	140	126	112	98	84	70	56

Unit	Capacity	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
BR1	101	1,770	1,678	1,591	1,510	1,434	1,361	1,290	1,219	1,149	1,080	1,013	946
BR2	167	2,926	2,774	2,631	2,496	2,371	2,251	2,132	2,015	1,900	1,787	1,675	1,564
BR3	416	7,289	6,910	6,553	6,218	5,906	5,607	5,312	5,021	4,733	4,450	4,171	3,897
CR4	155	1,269	1,125	988	859	738	623	511	402	297	194	95	0
CR5	168	1,375	1,219	1,071	931	800	675	554	436	322	211	103	0
CR6	240	1,965	1,741	1,529	1,330	1,143	965	792	623	459	301	148	0
GH1	475	13,375	12,686	12,033	11,415	10,834	10,291	9,770	9,256	8,749	8,249	7,755	7,269
GH2	484	13,628	12,927	12,261	11,631	11,039	10,486	9,956	9,432	8,915	8,405	7,902	7,407
GH3	480	13,516	12,820	12,159	11,535	10,948	10,399	9,873	9,354	8,841	8,336	7,837	7,346
GH4	479	13,488	12,793	12,134	11,511	10,925	10,378	9,853	9,334	8,823	8,318	7,821	7,331
GR3	68	860	801	745	692	643	595	549	504	459	415	373	331
GR4	95	1,201	1,118	1,040	967	898	832	767	704	641	580	521	462
MC1	303	6,531	6,033	5,559	5,110	4,687	4,290	3,910	3,538	3,173	2,817	2,468	2,128
MC2	301	6,488	5,993	5,523	5,077	4,656	4,262	3,884	3,515	3,152	2,798	2,452	2,114
MC3	391	8,428	7,785	7,174	6,595	6,048	5,536	5,046	4,565	4,095	3,635	3,185	2,746
MC4	477	10,282	9,498	8,752	8,045	7,379	6,754	6,156	5,570	4,996	4,434	3,886	3,350
TC1	383	3,101	2,986	2,878	2,777	2,652	2,536	2,425	2,315	2,206	2,099	1,993	1,888
TC2	549	4,445	4,280	4,125	3,980	3,802	3,636	3,476	3,319	3,163	3,009	2,857	2,706
TY3	71	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
2012 CR	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
2014 CR	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
2016 CR	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
2018 CR	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
2020 CR	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
2022 CR	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
2024 CR	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
2026 CR	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
2028 CR	0	0	0	0	0	0	0	0	0	0	0	0	0
2029 CR	0	0	0	0	0	0	0	0	0	0	0	0	0
2030 CR	271	0	0	0	0	0	0	0	0	0	0	0	0
2031 CR	294	278	0	0	0	0	0	0	0	0	0	0	0
2032 CR	319	302	285	0	0	0	0	0	0	0	0	0	0
2033 CR	345	327	309	292	0	0	0	0	0	0	0	0	0
2034 CR	372	353	335	317	299	0	0	0	0	0	0	0	0
2035 CR	400	381	362	344	325	306	0	0	0	0	0	0	0
2036 CR	429	410	390	371	352	333	314	0	0	0	0	0	0
2037 CR	468	439	420	400	381	361	342	322	303	284	265	246	227
2038 CR	518	480	450	430	410	390	370	350	330	310	290	270	250

Unit	Capacity	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
2039 CR	570	531	492	544	0	0	0	0	0	0	0	0	0
2040 CR	624	584	544	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0
2023 MC	879	0	0	0	0	0	0	0	0	0	0	0	0
2024 MC	956	901	0	0	0	0	0	0	0	0	0	0	0
2025 MC	1,035	980	924	0	0	0	0	0	0	0	0	0	0
2026 MC	1,119	1,061	1,004	947	0	0	0	0	0	0	0	0	0
2027 MC	1,205	1,147	1,088	1,029	970	0	0	0	0	0	0	0	0
2028 MC	1,296	1,235	1,175	1,115	1,055	995	0	0	0	0	0	0	0
2029 MC	1,390	1,328	1,266	1,205	1,143	1,081	1,020	0	0	0	0	0	0
2030 MC	1,488	1,424	1,361	1,298	1,235	1,172	1,108	1,045	0	0	0	0	0
2031 MC	1,590	1,525	1,460	1,395	1,330	1,266	1,201	1,136	1,071	0	0	0	0
2032 MC	1,696	1,629	1,563	1,497	1,430	1,364	1,297	1,231	1,164	1,098	0	0	0
2033 MC	1,806	1,738	1,670	1,602	1,534	1,466	1,398	1,330	1,262	1,194	1,125	0	0
2034 MC	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	2,041	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	2,208	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	2,425	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	2,652	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	2,888	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	3,135	2,961	2,786	2,611	2,437	2,309	2,228	2,147	2,066	1,985	1,904	1,823	0
2011 TC	91	87	82	77	0	0	0	0	0	0	0	0	0
2012 TC	98	94	89	84	79	0	0	0	0	0	0	0	0
2013 TC	106	101	96	91	86	81	0	0	0	0	0	0	0
2014 TC	113	108	103	98	93	88	83	0	0	0	0	0	0
2015 TC	121	116	111	106	101	96	91	85	0	0	0	0	0
2016 TC	130	124	119	114	109	103	98	93	88	0	0	0	0
2017 TC	138	133	127	122	117	111	106	101	95	90	0	0	0
2018 TC	147	142	136	131	125	120	114	109	103	98	92	0	0
2019 TC	156	151	145	139	134	128	123	117	111	106	100	94	0
2020 TC	166	160	155	149	143	137	131	126	120	114	108	102	0
2021 TC	176	170	164	158	152	147	141	135	129	123	117	111	0
2022 TC	187	181	175	168	162	156	150	144	138	132	126	120	0
2023 TC	198	191	185	179	173	166	160	154	148	141	135	129	0
2024 TC	209	203	196	190	183	177	171	164	158	151	145	139	0
2025 TC	221	214	208	201	194	188	181	175	168	162	155	149	0
2026 TC	233	226	219	213	206	199	193	186	179	173	166	159	0
2027 TC	246	239	232	225	218	211	204	197	191	184	177	170	0
2028 TC	259	252	245	238	231	224	217	209	202	195	188	181	0
2029 TC	273	265	258	251	244	236	229	222	215	207	200	193	0
2030 TC	287	279	272	265	257	250	242	235	227	220	213	205	0

Unit	Capacity	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
2031 TC	302	294	286	279	271	264	256	248	241	233	226	218	
2032 TC	317	309	301	293	286	278	270	262	255	247	239	231	
2033 TC	333	325	317	309	301	293	285	277	269	261	253	245	
2034 TC	349	341	333	325	317	308	300	292	284	276	267	259	
2035 TC	366	358	350	341	333	324	316	308	299	291	283	274	
2036 TC	392	376	367	358	350	341	333	324	315	307	298	290	
2037 TC	427	402	385	376	367	358	350	341	332	323	314	306	
2038 TC	463	438	412	395	385	376	367	358	349	340	331	322	
2039 TC	501	475	449	422	404	395	386	377	367	358	349	340	
2040 TC	541	514	487	460	433	414	405	396	386	377	367	358	
2011 GH	0	0	0	0	0	0	0	0	0	0	0	0	0
2012 GH	645	0	0	0	0	0	0	0	0	0	0	0	0
2013 GH	700	661	0	0	0	0	0	0	0	0	0	0	0
2014 GH	759	718	677	0	0	0	0	0	0	0	0	0	0
2015 GH	819	778	736	694	0	0	0	0	0	0	0	0	0
2016 GH	882	840	797	754	712	0	0	0	0	0	0	0	0
2017 GH	948	905	861	817	773	729	729	0	0	0	0	0	0
2018 GH	1,017	972	927	882	837	792	748	0	0	0	0	0	0
2019 GH	1,088	1,042	996	950	904	858	812	766	0	0	0	0	0
2020 GH	1,163	1,116	1,068	1,021	974	927	880	833	785	0	0	0	0
2021 GH	1,240	1,192	1,143	1,095	1,047	998	950	902	853	805	0	0	0
2022 GH	1,321	1,271	1,222	1,172	1,123	1,073	1,023	974	924	875	825	0	0
2023 GH	1,405	1,354	1,303	1,252	1,201	1,151	1,100	1,049	998	947	897	846	0
2024 GH	1,492	1,440	1,388	1,336	1,283	1,231	1,179	1,127	1,075	1,023	971	919	0
2025 GH	1,582	1,529	1,476	1,422	1,369	1,316	1,262	1,209	1,155	1,102	1,049	995	0
2026 GH	1,677	1,622	1,567	1,513	1,458	1,403	1,348	1,294	1,239	1,184	1,130	1,075	0
2027 GH	1,775	1,719	1,662	1,606	1,550	1,494	1,438	1,382	1,326	1,270	1,214	1,158	0
2028 GH	1,876	1,819	1,762	1,704	1,647	1,589	1,532	1,474	1,417	1,359	1,302	1,244	0
2029 GH	1,982	1,923	1,864	1,806	1,747	1,688	1,629	1,570	1,511	1,452	1,393	1,334	0
2030 GH	2,092	2,032	1,971	1,911	1,851	1,790	1,730	1,670	1,609	1,549	1,488	1,428	0
2031 GH	2,206	2,144	2,083	2,021	1,959	1,897	1,835	1,773	1,711	1,649	1,588	1,526	0
2032 GH	2,325	2,262	2,198	2,135	2,071	2,008	1,944	1,881	1,818	1,754	1,691	1,627	0
2033 GH	2,448	2,383	2,318	2,253	2,188	2,123	2,058	1,993	1,928	1,863	1,798	1,733	0
2034 GH	2,576	2,509	2,443	2,376	2,309	2,243	2,176	2,109	2,043	1,976	1,910	1,843	0
2035 GH	2,709	2,640	2,572	2,504	2,435	2,367	2,299	2,231	2,162	2,094	2,026	1,957	0
2036 GH	2,905	2,776	2,706	2,636	2,566	2,496	2,426	2,356	2,286	2,216	2,146	2,076	0
2037 GH	3,169	2,977	2,846	2,774	2,702	2,630	2,559	2,487	2,415	2,343	2,272	2,200	0
2038 GH	3,444	3,248	3,052	2,917	2,843	2,770	2,696	2,623	2,549	2,476	2,402	2,328	0
2039 GH	3,731	3,530	3,329	3,128	2,990	2,914	2,839	2,764	2,688	2,613	2,537	2,462	0
2040 GH	4,030	3,824	3,618	3,412	3,206	3,065	2,987	2,910	2,833	2,755	2,678	2,601	0
2011 BR	0	0	0	0	0	0	0	0	0	0	0	0	0
2012 BR	0	0	0	0	0	0	0	0	0	0	0	0	0
2013 BR	154	0	0	0	0	0	0	0	0	0	0	0	0
2014 BR	168	158	0	0	0	0	0	0	0	0	0	0	0
2015 BR	182	172	162	0	0	0	0	0	0	0	0	0	0
2016 BR	196	186	176	166	0	0	0	0	0	0	0	0	0
2017 BR	211	201	191	181	170	0	0	0	0	0	0	0	0
2018 BR	227	217	206	196	185	175	0	0	0	0	0	0	0
2019 BR	244	233	222	211	201	190	179	0	0	0	0	0	0
2020 BR	261	250	239	228	217	206	195	183	0	0	0	0	0
2021 BR	278	267	256	245	233	222	211	199	188	0	0	0	0
2022 BR	297	285	274	262	251	239	228	216	204	193	0	0	0

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

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

\$'000

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
BR	BR1	101	0	0	0	0	0	441	454	590	616	785
BR	BR2	167	0	0	0	0	0	729	751	975	1,018	1,299
BR	BR3	416	0	0	0	0	0	1,816	1,870	2,430	2,536	3,235
CR	CR4	155	258	840	1,124	1,095	1,216	1,960	1,949	1,644	1,927	2,572
CR	CR5	168	279	910	1,219	1,187	1,318	2,124	2,112	1,782	2,089	2,788
CR	CR6	240	399	1,300	1,741	1,696	1,882	5,221	5,152	4,566	4,899	5,799
GH	GH1	475	0	0	0	0	0	5,620	5,988	6,566	7,371	8,085
GH	GH2	484	0	0	0	0	0	5,727	6,101	6,691	7,510	8,238
GH	GH3	480	0	0	0	0	0	5,680	6,051	6,635	7,448	8,170
GH	GH4	479	0	0	0	0	0	5,668	6,038	6,622	7,433	8,153
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
TC	TC2	549	0	0	0	0	0	2,817	2,961	3,114	3,176	3,240
TY	TY3	71										
	BR Landfill Phase 2 Savings		0	0	0	0	0	0	0	828	908	1,960
	BR Landfill Phase 3 Savings		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
	CR Landfill Capital Savings	936	3,049	3,049	4,083	3,979	4,416	4,938	4,772	3,579	4,464	6,617
	CR Landfill O&M Savings		0	0	0	0	0	2,181	2,307	2,393	2,537	2,726
	CR6 Stator Rewind Savings		0	0	0	0	0	2,187	2,135	2,020	1,914	1,816
	GH Landfill Capital Savings		0	0	0	0	0	61	188	1,083	2,805	4,044
	GH Landfill O&M Savings		0	0	0	0	0	22,633	23,991	25,431	26,957	28,601
	TC Landfill Capital Savings		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

LandfillCapital

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
	787	789	1,035	1,054	1,357	1,337	1,319	1,301	1,285	1,267	1,122	410	385
	1,301	1,305	1,711	1,743	2,245	2,211	2,180	2,151	2,124	2,095	1,855	678	636
	3,242	3,252	4,261	4,342	5,591	5,508	5,431	5,359	5,291	5,219	4,620	1,688	1,585
	2,560	2,096	2,059	2,073	1,531	1,768	1,810	1,869	1,932	2,000	1,861	1,810	1,778
	2,774	2,272	2,232	2,247	1,659	1,916	1,962	2,025	2,094	2,168	2,017	1,962	1,927
	5,682	4,867	4,712	4,637	3,700	3,969	3,960	4,000	4,047	4,101	3,833	3,704	3,602
	8,761	9,219	9,707	10,790	12,508	14,281	15,439	15,604	16,273	16,860	17,332	17,856	18,548
	8,927	9,394	9,891	10,994	12,745	14,551	15,732	15,900	16,581	17,180	17,660	18,195	18,899
	8,854	9,316	9,809	10,904	12,640	14,431	15,602	15,769	16,444	17,038	17,514	18,044	18,743
	8,835	9,297	9,789	10,881	12,614	14,401	15,569	15,736	16,410	17,002	17,478	18,007	18,704
	2,305	2,351	2,398	2,446	2,495	2,545	2,596	2,648	5,363	8,239	8,294	12,354	12,003
	3,304	3,371	3,438	3,507	3,577	3,648	3,721	3,796	7,687	11,809	11,888	17,709	17,206
	1,870	1,782	1,697	1,613	1,531	1,451	1,372	1,294	1,215	1,123	156	138	120
	0	0	1,638	1,745	3,767	3,594	3,426	3,261	3,101	2,943	2,789	2,638	2,487
	3,461	3,564	3,671	3,781	3,895	4,012	4,132	4,256	4,384	4,515	4,651	1,345	1,123
	6,353	4,493	4,170	4,023	1,844	2,496	2,513	2,483	2,455	2,429	1,631	5,230	5,335
	2,944	3,121	3,308	3,507	3,717	3,925	4,061	4,305	4,563	4,837	5,128	901	850
	1,719	1,621	1,524	1,427	1,329	1,232	1,158	1,106	1,055	1,004	952	15,709	15,118
	4,399	4,388	4,387	6,672	11,397	16,206	18,397	18,341	18,358	17,892	16,784	56,393	59,776
	30,979	32,838	34,808	36,897	39,110	41,457	43,944	44,668	47,348	50,189	53,201	23,088	22,094
	0	0	0	0	0	0	0	0	6,478	13,344	13,344	23,088	22,094
	5,610	5,722	5,836	5,953	6,072	6,194	6,318	6,444	6,573	6,704	6,838	6,975	7,115

LandfillCapital

	2034	2035	2036	2037	2038	2039	2040
	2034	2035	2036	2037	2038	2039	2040
	360	331	54	46	38	30	23
	595	547	89	76	63	50	39
	1,482	1,363	222	189	157	124	97
	1,748	1,719	1,692	1,708	1,727	1,747	1,771
	1,895	1,864	1,834	1,851	1,872	1,894	1,919
	2,777	2,662	2,620	2,645	2,674	2,705	2,742
	19,372	20,254	21,186	21,692	2,492	1,854	1,700
	19,739	20,637	21,587	22,103	2,539	1,889	1,733
	19,576	20,467	21,409	21,921	2,518	1,874	1,718
	19,535	20,424	21,364	21,875	2,513	1,870	1,715
	11,666	11,343	11,031	10,731	10,442	10,162	9,886
	16,723	16,259	15,812	15,382	14,967	14,567	14,170
	101	83	64	46	28	9	0
	2,336	2,158	301	265	230	194	159
	908	695	485	430	384	338	303
	5,441	5,550	5,661	5,774	5,890	6,008	6,128
	70	0	0	0	0	0	0
	14,860	14,617	14,352	12,126	9,906	7,329	6,705
	63,363	67,165	71,194	75,466	155	158	161
	21,132	20,199	19,293	18,412	17,554	16,717	15,883
	7,257	7,402	7,550	7,701	7,855	8,012	8,172

LandfillCapital

\$'000

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
BR	BR1	101	0	0	0	553	743	703	668	635	606	577
BR	BR2	167	0	0	0	915	1,228	1,163	1,104	1,050	1,002	954
BR	BR3	416	0	0	0	2,279	3,060	2,897	2,749	2,616	2,496	2,377
CR	CR4	155	0	0	0	980	1,582	1,494	1,413	1,339	1,269	1,201
CR	CR5	168	0	0	0	1,062	1,715	1,619	1,532	1,451	1,376	1,302
CR	CR6	240	0	0	0	1,518	2,449	2,313	2,188	2,073	1,966	1,860
GH	GH1	475	0	0	0	1,462	1,954	1,856	1,767	1,686	1,611	1,540
GH	GH2	484	0	0	0	1,489	1,991	1,891	1,800	1,718	1,642	1,569
GH	GH3	480	0	0	0	1,477	1,975	1,876	1,786	1,703	1,628	1,556
GH	GH4	479	0	0	0	1,474	1,971	1,872	1,782	1,700	1,625	1,553
GR	GR3	68	0	0	0	586	837	792	751	713	679	645
GR	GR4	95	0	0	0	819	1,169	1,106	1,049	996	948	901
MC	MC1	303	0	0	0	1,215	1,774	1,682	1,598	1,521	1,449	1,380
MC	MC2	301	0	0	0	1,207	1,762	1,671	1,588	1,511	1,440	1,371
MC	MC3	391	0	0	0	1,568	2,289	2,171	2,063	1,963	1,870	1,781
MC	MC4	477	0	0	0	1,913	2,792	2,648	2,516	2,394	2,281	2,172
TC	TC1	383	0	0	0	770	1,008	958	912	871	833	797
TC	TC2	549	0	0	0	1,104	1,445	1,373	1,307	1,248	1,194	1,142
TY	TY3	71	0	0	0	586	837	792	751	713	679	645
	BRWATER		0	0	0	3,747	5,032	4,763	4,521	4,302	4,104	3,908
	CRWATER		0	0	0	3,560	5,746	5,427	5,134	4,863	4,611	4,362
	MCWATER		0	0	0	5,902	8,617	8,173	7,765	7,389	7,040	6,704
	TCWATER		0	0	0	1,874	2,453	2,331	2,220	2,119	2,026	1,938
	GHWATER		0	0	0	5,902	7,892	7,495	7,135	6,806	6,505	6,217
	GRWATER		0	0	0	1,405	2,006	1,898	1,799	1,709	1,627	1,546

WaterCapital

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
	548	519	491	462	433	413	403	393	382	372	361	351	340
	907	859	811	764	716	684	666	649	632	615	597	580	563
	2,258	2,140	2,021	1,902	1,784	1,703	1,660	1,617	1,574	1,531	1,488	1,445	1,402
	1,132	1,064	996	927	859	806	770	735	699	663	627	591	0
	1,227	1,153	1,079	1,005	931	874	835	796	757	718	679	640	0
	1,754	1,647	1,541	1,435	1,329	1,249	1,193	1,137	1,082	1,026	970	915	0
	1,468	1,397	1,325	1,254	1,183	1,111	1,062	1,035	1,008	982	955	928	901
	1,496	1,423	1,350	1,278	1,205	1,132	1,082	1,055	1,028	1,000	973	946	918
	1,484	1,411	1,339	1,267	1,195	1,123	1,073	1,046	1,019	992	965	938	911
	1,481	1,409	1,337	1,265	1,193	1,121	1,071	1,044	1,017	990	963	936	909
	611	577	544	510	476	452	438	423	409	395	380	366	352
	854	807	759	712	665	631	611	591	571	551	531	511	491
	1,311	1,242	1,173	1,103	1,034	965	915	882	850	818	786	754	722
	1,302	1,234	1,165	1,096	1,027	959	908	877	845	813	781	749	717
	1,692	1,602	1,513	1,424	1,335	1,245	1,180	1,139	1,097	1,056	1,015	973	932
	2,064	1,955	1,846	1,737	1,628	1,519	1,440	1,389	1,339	1,288	1,238	1,187	1,137
	760	724	688	652	616	579	555	542	529	517	504	491	479
	1,090	1,038	986	934	882	830	795	777	759	741	723	704	686
	611	577	544	510	476	452	438	423	409	395	380	366	352
	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
	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
	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
	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
	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
	1,465	1,384	1,303	1,222	1,141	1,083	1,049	1,015	980	946	912	877	843

WaterCapital

2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
330	320	309	299	288	278	267	257	247	236	226	215	205
546	528	511	494	477	459	442	425	408	390	373	356	339
1,359	1,316	1,273	1,230	1,187	1,144	1,101	1,058	1,016	973	930	887	844
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
875	848	821	794	767	741	714	687	660	634	607	580	553
891	864	837	809	782	755	727	700	673	646	618	591	564
884	857	830	803	776	748	721	694	667	640	613	586	559
882	855	828	801	774	747	720	693	666	639	612	585	558
337	323	309	294	280	266	251	237	0	0	0	0	0
471	451	431	411	391	371	351	331	0	0	0	0	0
690	658	626	594	562	530	0	0	0	0	0	0	0
686	654	622	590	558	526	0	0	0	0	0	0	0
891	849	808	766	725	684	0	0	0	0	0	0	0
1,086	1,036	986	935	885	834	0	0	0	0	0	0	0
466	453	441	428	415	403	390	377	364	352	339	326	314
668	650	632	613	595	577	559	541	522	504	486	468	450
337	323	309	294	280	266	251	237	0	0	0	0	0
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
0	0	0	0	0	0	0	0	0	0	0	0	0
3,353	3,197	3,041	2,886	2,730	2,574	0	0	0	0	0	0	0
1,134	1,103	1,072	1,041	1,010	979	949	918	887	856	825	794	763
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
809	774	740	706	671	637	603	568	0	0	0	0	0

WaterCapital

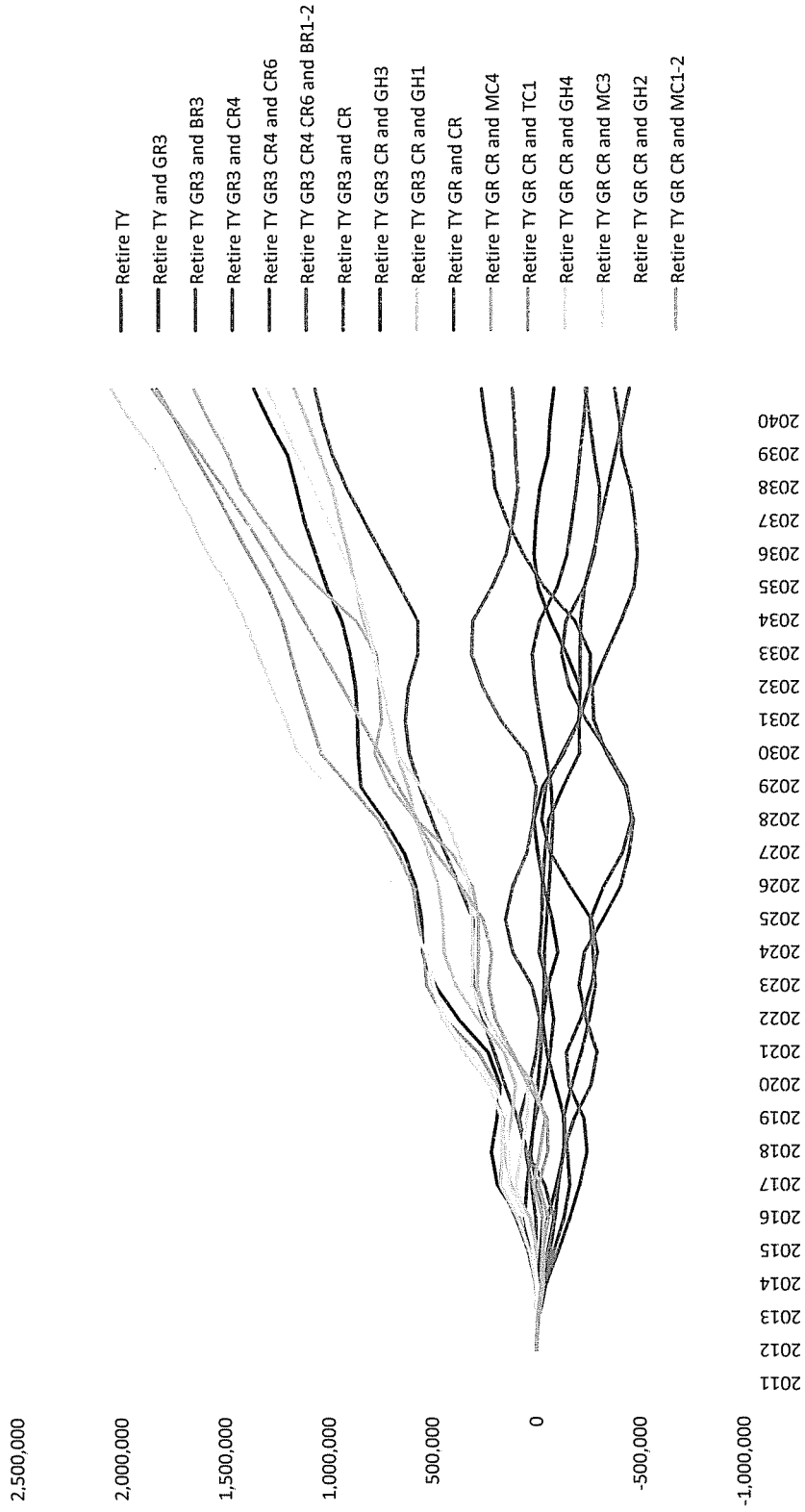
	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
	194	184	174	0	0	0	0	0	0	0	0	0	0
	321	304	287	0	0	0	0	0	0	0	0	0	0
	801	758	715	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	526	500	473	446	0	0	0	0	0	0	0	0	0
	536	509	482	454	0	0	0	0	0	0	0	0	0
	532	505	478	451	0	0	0	0	0	0	0	0	0
	531	504	477	450	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	301	288	276	263	250	237	225	212	0	0	0	0	0
	431	413	395	377	359	340	322	304	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	1,317	1,246	1,175	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	732	701	670	640	609	578	547	516	0	0	0	0	0
	2,125	2,017	1,909	1,801	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0

WaterCapital

	Delta NPVRR \$M
	Install Controls / (Retire)
Tyrone 3	(59)
Brown 3	(66)
Cane Run 6	368
Brown 1-2	(240)
Cane Run 4-5	(67)
Green River 3-4	49
Ghent 1-4	(193)
Trimble County 1	529
Mill Creek 3-4	430
Mill Creek 1-2	(130)

Cumulative Difference in Revenue Requirements

Install Controls vs. Retire/Replace Capacity



Retirement Savings (Deltas)	Capital	O&M	Total
Retire TY	-22	-3	-26
Retire TY and GR3	-13	-50	-62
Retire TY GR3 and BR3	-98	-174	-272
Retire TY GR3 and CR4	-46	-140	-186
Retire TY GR3 CR4 and CR6	-84	-118	-202
Retire TY GR3 CR4 CR6 and BR1-2	-63	-129	-192
Retire TY GR3 and CR	-50	-149	-199
Retire TY GR3 CR and GH3	-203	-145	-348
Retire TY GR3 CR and GH1	-201	-210	-411
Retire TY GR and CR	-18	-100	-118
Retire TY GR CR and MC4	-105	-201	-306
Retire TY GR CR and TC1	-68	-203	-271
Retire TY GR CR and GH4	-203	-141	-343
Retire TY GR CR and MC3	-86	-201	-287
Retire TY GR CR and GH2	-205	-156	-361
Retire TY GR CR and MC1-2	-133	-325	-457

Revenue Requirement Deltas	Prod Cost	Capital	Total	Check
Retire TY	10	-69	-59	0
Retire TY and GR3	-6	-59	-66	0
Retire TY GR3 and BR3	577	-208	368	0
Retire TY GR3 and CR4	111	-350	-240	0
Retire TY GR3 CR4 and CR6	429	-496	-67	0
Retire TY GR3 CR4 CR6 and BR1-2	345	-296	49	0
Retire TY GR3 and CR	177	-370	-193	0
Retire TY GR3 CR and GH3	916	-387	529	0
Retire TY GR3 CR and GH1	803	-373	430	0
Retire TY GR and CR	-45	-85	-130	0
Retire TY GR CR and MC4	1,006	-522	484	0
Retire TY GR CR and TC1	839	-185	654	0
Retire TY GR CR and GH4	1,103	-376	727	0
Retire TY GR CR and MC3	739	-316	423	0
Retire TY GR CR and GH2	1,094	-365	728	0
Retire TY GR CR and MC1-2	1,329	-799	530	0

1 2 3 4 5 6

Retire:

	<u>No</u>					<u>TY GR3 CR4</u>	<u>TY GR3 CR4</u>
	<u>Retirements</u>	<u>TY</u>	<u>TY GR3</u>	<u>TY GR3 BR3</u>	<u>TY GR3 CR4</u>	<u>CR6</u>	<u>CR6 BR1-2</u>
2010							
2011							
2012							
2013							
2014							
2015							
2016		3x1C(1)	2x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)	3x1C(1)
2017	3x1C(1)						
2018							3x1C(1)
2019							
2020			2x1C(1)	3x1C(1)		3x1C(1)	
2021							
2022					2x1C(1)		
2023							
2024	3x1C(1)	3x1C(1)					3x1C(1)
2025			3x1C(1)				
2026				3x1C(1)	3x1C(1)	3x1C(1)	
2027							
2028							
2029							
2030	2x1C(1)	3x1C(1)					
2031			SCCT(1)				3x1C(1)
2032					SCCT(1)		
2033			3x1C(1)	3x1C(1)		3x1C(1)	
2034					3x1C(1)		
2035	2x1C(1)						
2036		2x1C(1)					
2037							SCCT(1)
2038							
2039	SCCT(1)						SCCT(1)
2040			SCCT(1)	SCCT(1)		SCCT(1)	
30 Yr PVRR (\$B)	23.6	23.7	23.8	24.7	24.2	24.8	25.5

7 8 9 10 11 12 13

	<u>TY GR3 CR</u>	<u>TY GR3 CR</u> <u>GH3</u>	<u>TY GR3 CR</u> <u>GH1</u>	<u>TY GR CR</u>	<u>TY GR CR</u> <u>MC4</u>	<u>TY GR CR</u> <u>TC1</u>	<u>TY GR CR</u> <u>GH4</u>
2010							
2011							
2012							
2013							
2014							
2015							
2016	3x1C(1)	3x1C(1) 2x1C(1)	3x1C(2)	3x1C(1)	3x1C(2)	3x1C(2)	3x1C(2)
2017							
2018				3x1C(1)			
2019	3x1C(1)						
2020		3x1C(1)					
2021					3x1C(1)		3x1C(1)
2022			3x1C(1)			3x1C(1)	
2023							
2024				3x1C(1)			
2025	3x1C(1)						
2026		3x1C(1)					
2027							
2028			3x1C(1)		3x1C(1)	3x1C(1)	3x1C(1)
2029							
2030							
2031	2x1C(1)			3x1C(1)			
2032							
2033		3x1C(1)					
2034							3x1C(1)
2035			2x1C(1)		3x1C(1)	2x1C(1)	
2036	2x1C(1)						
2037				SCCT(1)			
2038							
2039				SCCT(1)			
2040		SCCT(1)	SCCT(1)			SCCT(1)	

30 Yr PVRR (\$B) 25.3 26.6 26.6 25.4 26.9 26.7 26.9

14

15

16

	<u>TY GR CR</u> <u>MC3</u>	<u>TY GR CR</u> <u>GH2</u>	<u>TY GR CR</u> <u>MC1-2</u>
2010			
2011			
2012			
2013			
2014			
2015			
2016	3x1C(2)	3x1C(2)	3x1C(2)
2017			
2018			
2019			
2020			3x1C(1)
2021		3x1C(1)	
2022	3x1C(1)		
2023			
2024			
2025			
2026			2x1C(1)
2027			
2028	3x1C(1)	3x1C(1)	
2029			
2030			
2031			3x1C(1)
2032			
2033			
2034		3x1C(1)	
2035	2x1C(1)		
2036			
2037			SCCT(1)
2038			
2039			SCCT(1)
2040	SCCT(1)		

30 Yr PVRR (\$B)	26.6	27.0	27.5
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Breakeven RR by Year (\$M)

	Year \$										
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
TY	-59	-63	-67	-72	-76	-81	-87	-93	-99	-106	
GR3	-66	-70	-75	-80	-85	-91	-97	-103	-110	-118	
BR3	368	393	420	448	478	510	544	581	619	661	
CR4	-240	-256	-273	-291	-311	-332	-354	-378	-403	-430	
CR6	-67	-71	-76	-81	-87	-93	-99	-106	-113	-120	
BR1-2	49	53	56	60	64	68	73	78	83	89	
CR5	-193	-206	-220	-235	-251	-268	-286	-305	-325	-347	
GH3	529	565	603	643	686	732	782	834	890	950	
GH1	430	459	489	522	557	595	635	677	723	771	
GR4	-130	-139	-148	-158	-169	-180	-192	-205	-219	-233	
MC4	484	517	551	588	628	670	715	763	814	869	
TC1	654	698	745	795	848	905	966	1,031	1,100	1,174	
GH4	727	776	828	883	943	1,006	1,073	1,145	1,222	1,304	
MC3	423	452	482	514	549	586	625	667	712	759	
GH2	728	777	829	885	945	1,008	1,076	1,148	1,225	1,307	
MC1-2	530	565	603	644	687	733	782	835	891	951	

Breakeven Year

	Must Op Thru
BR3	2019
BR1-2	2021
GH3	2020
GH1	2021
MC4	2023
TC1	2018
GH4	2018
MC3	2021
GH2	2018
MC1-2	2024

Station	Unit	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
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
BR	BR1SAM 0	0	0	0	231	521	550	522	497	474	452	429	407	384	362
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
BR	BR2SAM 0	0	0	0	231	534	553	525	499	476	453	431	408	385	362
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
GH	GH1FFP 0	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
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	1,362
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
GH	GH2SAM 0	0	11	724	984	935	891	851	814	779	744	709	674	639	605
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
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	1,250
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
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
MC	MC1FGD 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
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
MC	MC1SAM 0	0	0	0	42	560	1,131	1,232	1,168	1,109	1,055	1,001	948	895	841
MC	MC2FGD 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
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
MC	MC2SAM 0	0	0	0	42	560	1,197	1,279	1,211	1,149	1,092	1,035	978	922	865
MC	MC3FGDU 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
MC	MC3FGDR 0	0	0	0	0	39	175	207	197	187	179	170	162	154	145
MC	MC3FFP 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
MC	MC3SAM 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
MC	MC4FGD 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
MC	MC4SCR 0	0	105	667	724	688	655	625	596	566	537	508	479	449	420
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
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
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
CR	CR4FGD 0	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
CR	CR4SCR 0	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
CR	CR4FF 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
CR	CR4PAC 0	0	0	0	235	386	365	345	327	310	293	276	259	242	225
CR	CR4LIME 0	0	0	0	259	427	403	381	361	342	323	305	286	267	249
CR	CR5FGD 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
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
CR	CR5FF 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
CR	CR5PAC 0	0	0	0	251	423	399	378	357	338	320	301	282	263	245
CR	CR5LIME 0	0	0	0	278	468	441	417	395	374	353	333	312	291	271
CR	CR6FGD 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
CR	CR6SCR 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
CR	CR6FF 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
CR	CR6PAC 0	0	0	0	352	558	527	499	473	448	424	401	377	353	329
CR	CR6LIME 0	0	0	0	391	619	585	553	525	498	471	445	418	391	365
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
GR	GR3PAC 0	0	0	0	112	154	145	138	131	125	119	113	107	101	95

Station	Unit	GR4SFF	GR4PAC	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
GR	GR4	0	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
GR	GR4	0	0	0	0	0	160	235	223	211	200	190	181	171	161	152	142

NewControlsCapital

Unit	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
BR1	BR1FFP 0	7,842	7,483	7,291	7,099	6,908	6,716	6,525	6,333	6,141	5,950	5,758	5,566	5,375	4,991
BR1	BR1SAM 0	339	324	315	307	299	291	282	274	266	257	249	241	232	216
BR2	BR2FFP 0	8,488	8,095	7,881	7,668	7,455	7,242	7,028	6,815	6,602	6,388	6,175	5,962	5,749	5,322
BR2	BR2SAM 0	340	324	315	307	298	290	281	273	264	256	247	239	230	213
BR3	BR3FFP 0	9,290	8,714	8,325	8,122	7,920	7,717	7,514	7,311	7,109	6,906	6,703	6,501	6,298	5,893
GH1	GH1FFP 0	11,484	10,897	10,545	10,193	9,841	9,489	9,137	8,785	8,433	8,081	7,729	7,377	7,025	6,321
GH1	GH1SAM 0	1,271	1,206	1,167	1,128	1,089	1,050	1,011	972	933	894	855	816	777	699
GH2	GH2FFP 0	11,942	11,257	10,791	10,556	10,330	10,104	9,878	9,652	9,425	9,199	8,973	8,747	8,521	8,069
GH2	GH2SAM 0	570	546	535	523	511	500	488	476	464	453	441	429	418	394
GH3	GH3FFP 0	14,877	14,047	13,216	12,647	12,344	12,047	11,750	11,452	11,155	10,858	10,561	10,263	9,966	9,372
GH3	GH3SAM 0	1,177	1,126	1,099	1,073	1,047	1,020	994	967	941	915	888	862	835	782
GH4	GH4FFP 0	14,404	13,619	12,835	12,050	11,513	11,223	10,932	10,642	10,352	10,061	9,771	9,481	9,190	8,610
GH4	GH4SAM 0	1,252	1,176	1,124	1,096	1,068	1,039	1,011	983	955	927	899	870	842	786
MC1	MC1FGD 0	15,203	14,164	13,412	12,949	12,485	12,022	11,558	11,095	10,631	10,167	9,704	9,240	8,777	7,850
MC1	MC1FFP 0	12,348	11,506	10,896	10,520	10,143	9,767	9,390	9,013	8,637	8,260	7,884	7,507	7,130	6,377
MC1	MC1SAM 0	788	735	696	672	648	624	600	576	552	528	504	480	455	407
MC2	MC2FGD 0	15,598	14,494	13,677	13,148	12,618	12,088	11,558	11,028	10,499	9,969	9,439	8,909	2,908	0
MC2	MC2FFP 0	12,395	11,519	10,871	10,450	10,029	9,608	9,187	8,766	8,344	7,923	7,502	7,081	2,311	0
MC2	MC2SAM 0	808	752	710	682	655	627	600	572	545	517	490	462	151	0
MC3	MC3FGDU 0	5,975	5,589	5,303	5,124	4,950	4,777	4,603	4,429	4,256	4,082	3,909	3,735	3,561	3,214
MC3	MC3FGDR 0	137	128	121	115	111	107	104	100	96	92	88	85	81	73
MC3	MC3FFP 0	12,237	11,489	10,742	10,190	9,844	9,510	9,175	8,841	8,506	8,172	7,837	7,503	7,168	6,499
MC3	MC3SAM 0	1,217	1,155	1,116	1,077	1,039	1,000	961	923	884	846	807	768	730	652
MC4	MC4FGD 0	17,976	16,804	15,940	15,402	14,880	14,358	13,836	13,314	12,792	12,270	11,748	11,226	10,705	9,661
MC4	MC4SCR 0	399	386	372	359	346	332	319	306	292	279	266	252	239	92
MC4	MC4FFP 0	12,479	11,666	11,066	10,692	10,330	9,968	9,605	9,243	8,881	8,518	8,156	7,794	7,431	6,707
MC4	MC4SAM 0	1,391	1,301	1,235	1,193	1,153	1,112	1,072	1,031	991	951	910	870	829	748
TC1	TC1FFP 0	10,654	10,018	9,381	8,918	8,637	8,363	8,089	7,815	7,541	7,267	6,993	6,719	6,445	5,897
CR4	CR4FGD 0	14,691	13,773	13,130	12,488	11,845	11,203	10,560	0	0	0	0	0	0	0
CR4	CR4SCR 0	5,794	5,431	5,177	4,924	4,671	4,417	4,164	0	0	0	0	0	0	0
CR4	CR4FF 0	2,964	2,778	2,648	2,519	2,389	2,260	2,130	0	0	0	0	0	0	0
CR4	CR4PAC 0	208	195	186	177	168	159	150	0	0	0	0	0	0	0
CR4	CR4LIME 0	230	216	206	195	185	175	165	0	0	0	0	0	0	0
CR5	CR5FGD 0	15,647	14,641	13,924	13,207	12,490	11,774	0	0	0	0	0	0	0	0
CR5	CR5SCR 0	6,158	5,760	5,478	5,196	4,914	4,632	0	0	0	0	0	0	0	0
CR5	CR5FF 0	3,189	2,983	2,837	2,691	2,545	2,399	0	0	0	0	0	0	0	0
CR5	CR5PAC 0	226	212	201	191	180	170	0	0	0	0	0	0	0	0
CR5	CR5LIME 0	250	234	222	211	199	188	0	0	0	0	0	0	0	0
CR6	CR6FGD 0	19,171	18,033	17,265	16,496	15,727	14,959	14,190	13,421	12,653	0	0	0	0	0
CR6	CR6SCR 0	7,727	7,266	6,956	6,646	6,337	6,027	5,717	5,408	5,098	0	0	0	0	0
CR6	CR6FF 0	3,944	3,709	3,551	3,393	3,235	3,077	2,919	2,761	2,602	0	0	0	0	0
CR6	CR6PAC 0	305	287	275	262	250	238	226	213	201	0	0	0	0	0
CR6	CR6LIME 0	338	318	305	291	278	264	250	237	223	0	0	0	0	0
GR3	GR3SFF 0	3,202	3,050	2,967	2,884	2,800	2,717	2,634	2,550	2,467	2,384	2,300	2,217	2,134	1,967
GR3	GR3PAC 0	89	85	82	80	78	75	73	71	68	66	64	62	59	55

Unit	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
GR4	4,770	4,515	4,356	4,198	4,040	3,881	3,723	3,565	3,407	3,248	3,090	2,932	2,773	2,615	0
GR4	132	125	121	116	112	108	103	99	94	90	86	81	77	73	0
	GR4SFF 0														
	GR4PAC 0														

Unit	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
BR1	BR1FFP 0	4,800	4,608	4,417	4,225	4,033	3,842	3,650	3,458	1,327	0	0	0	0	0
BR1	BR1SAM 0	208	199	191	183	174	166	158	150	57	0	0	0	0	0
BR2	BR2FFP 0	5,109	4,895	4,682	4,469	4,256	4,042	3,829	3,616	0	0	0	0	0	0
BR2	BR2SAM 0	205	196	187	179	170	162	153	145	0	0	0	0	0	0
BR3	BR3FFP 0	5,690	5,487	5,284	5,082	4,879	4,676	4,474	4,271	3,865	3,663	3,460	1,405	0	0
GH1	GH1FFP 0	5,969	2,424	0	0	0	0	0	0	0	0	0	0	0	0
GH1	GH1SAM 0	661	268	0	0	0	0	0	0	0	0	0	0	0	0
GH2	GH2FFP 0	7,843	7,617	7,391	7,165	6,939	6,713	6,486	6,260	5,808	5,582	5,356	5,130	4,904	4,678
GH2	GH2SAM 0	383	371	359	348	336	324	312	301	277	266	254	242	231	219
GH3	GH3FFP 0	9,075	8,777	8,480	8,183	7,886	7,588	7,291	6,994	6,400	6,102	5,805	5,508	5,211	4,152
GH3	GH3SAM 0	756	730	703	677	650	624	598	571	518	492	465	405	21	0
GH4	GH4FFP 0	8,319	8,029	7,739	7,448	7,158	6,867	6,577	6,287	5,706	5,416	5,125	4,835	0	0
GH4	GH4SAM 0	758	730	701	673	645	617	589	561	504	476	117	0	0	0
MC1	MC1FGD 0	3,188	0	0	0	0	0	0	0	0	0	0	0	0	0
MC1	MC1FFP 0	2,590	0	0	0	0	0	0	0	0	0	0	0	0	0
MC1	MC1SAM 0	165	0	0	0	0	0	0	0	0	0	0	0	0	0
MC2	MC2FGD 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC2	MC2FFP 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC2	MC2SAM 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC3	MC3FGDU 0	3,040	2,653	188	0	0	0	0	0	0	0	0	0	0	0
MC3	MC3FGDR 0	69	64	44	0	0	0	0	0	0	0	0	0	0	0
MC3	MC3FFP 0	6,165	5,830	4,673	341	0	0	0	0	0	0	0	0	0	0
MC3	MC3SAM 0	213	0	0	0	0	0	0	0	0	0	0	0	0	0
MC4	MC4FGD 0	9,139	7,976	573	0	0	0	0	0	0	0	0	0	0	0
MC4	MC4SCR 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MC4	MC4FFP 0	6,344	5,537	398	0	0	0	0	0	0	0	0	0	0	0
MC4	MC4SAM 0	708	618	44	0	0	0	0	0	0	0	0	0	0	0
TC1	TC1FFP 0	5,623	5,349	5,075	4,801	4,186	261	0	0	0	0	0	0	0	0
CR4	CR4FGD 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR4	CR4SCR 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR4	CR4FF 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR4	CR4PAC 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR4	CR4LIME 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR5	CR5FGD 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR5	CR5SCR 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR5	CR5FF 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR5	CR5PAC 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR5	CR5LIME 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR6	CR6FGD 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR6	CR6SCR 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR6	CR6FF 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR6	CR6PAC 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CR6	CR6LIME 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR3	GR3SFF 0	1,884	1,800	1,717	1,634	1,550	1,467	1,384	0	0	0	0	0	0	0
GR3	GR3PAC 0	52	50	48	45	43	41	38	0	0	0	0	0	0	0

NewControlsCapital

Unit	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
GR4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR4	GR4SFF 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GR4	GR4PAC 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Unit	2054	2055	2056	2057	2058	2059
BR1FFP 0	0	0	0	0	0	0
BR1SAM 0	0	0	0	0	0	0
BR2FFP 0	0	0	0	0	0	0
BR2SAM 0	0	0	0	0	0	0
BR3FFP 0	0	0	0	0	0	0
GH1FFP 0	0	0	0	0	0	0
GH1SAM 0	0	0	0	0	0	0
GH2FFP 0	4,452	4,226	4,000	3,489	253	0
GH2SAM 0	207	196	0	0	0	0
GH3FFP 0	214	0	0	0	0	0
GH3SAM 0	0	0	0	0	0	0
GH4FFP 0	0	0	0	0	0	0
GH4SAM 0	0	0	0	0	0	0
MC1FGD 0	0	0	0	0	0	0
MC1FFP 0	0	0	0	0	0	0
MC1SAM 0	0	0	0	0	0	0
MC2FGD 0	0	0	0	0	0	0
MC2FFP 0	0	0	0	0	0	0
MC2SAM 0	0	0	0	0	0	0
MC3FGDU 0	0	0	0	0	0	0
MC3FGDR 0	0	0	0	0	0	0
MC3FFP 0	0	0	0	0	0	0
MC3SAM 0	0	0	0	0	0	0
MC4FGD 0	0	0	0	0	0	0
MC4SCR 0	0	0	0	0	0	0
MC4FFP 0	0	0	0	0	0	0
MC4SAM 0	0	0	0	0	0	0
TC1FFP 0	0	0	0	0	0	0
CR4FGD 0	0	0	0	0	0	0
CR4SCR 0	0	0	0	0	0	0
CR4FF 0	0	0	0	0	0	0
CR4PAC 0	0	0	0	0	0	0
CR4LIME 0	0	0	0	0	0	0
CR5FGD 0	0	0	0	0	0	0
CR5SCR 0	0	0	0	0	0	0
CR5FF 0	0	0	0	0	0	0
CR5PAC 0	0	0	0	0	0	0
CR5LIME 0	0	0	0	0	0	0
CR6FGD 0	0	0	0	0	0	0
CR6SCR 0	0	0	0	0	0	0
CR6FF 0	0	0	0	0	0	0
CR6PAC 0	0	0	0	0	0	0
CR6LIME 0	0	0	0	0	0	0
GR3FF 0	0	0	0	0	0	0
GR3PAC 0	0	0	0	0	0	0

Unit	2054	2055	2056	2057	2058	2059
GR4	0	0	0	0	0	0
GR4	0	0	0	0	0	0
	GR4SFF	0	0	0	0	0
	GR4PAC	0	0	0	0	0

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

2% Escalation Rate

Unit Costs (\$000)

BR		3,816	4,811	3,969	4,049	4,130	4,212	4,296	4,382
BR		6,633	7,160	7,253	7,398	7,546	7,697	7,851	8,008
BR		15,885	20,876	14,904	15,202	15,506	15,816	16,132	16,455
CR		14,372	9,218	12,029	12,269	12,515	12,765	13,020	13,281
CR		11,842	9,889	12,791	13,047	13,308	13,574	13,845	14,122
CR		10,666	11,619	10,173	10,376	10,584	10,795	11,011	11,231
GH		17,829	19,141	17,966	18,325	18,691	19,065	19,447	19,835
GH		12,225	18,498	13,429	13,698	13,972	14,251	14,536	14,827
GH		17,961	13,501	12,475	12,724	12,979	13,238	13,503	13,773
GH		11,533	13,496	12,105	12,347	12,594	12,846	13,103	13,365
GR		4,270	5,792	4,360	4,447	4,536	4,627	4,719	4,813
GR		7,338	6,924	8,633	8,805	8,982	9,161	9,344	9,531
MC		11,892	17,333	12,669	12,923	13,181	13,445	13,714	13,988
MC		16,179	11,941	15,201	15,505	15,815	16,131	16,454	16,783
MC		18,313	14,238	17,221	17,566	17,917	18,275	18,641	19,014
MC		16,531	18,981	17,245	17,590	17,942	18,300	18,666	19,040
TC		17,205	15,170	17,403	17,751	18,106	18,468	18,837	19,214
TY		410	416	418	427	435	444	453	462

RetirementCost_Savings

2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
0	0	0	0	0	0	0	0	0	0	0	0
4,470	4,559	4,651	4,744	4,838	4,935	5,034	5,135	5,237	5,342	5,449	5,558
8,168	8,331	8,498	8,668	8,841	9,018	9,199	9,383	9,570	9,762	9,957	10,156
16,784	17,120	17,462	17,811	18,167	18,531	18,901	19,279	19,665	20,058	20,460	20,869
13,546	13,817	14,094	14,375	14,663	14,956	15,255	15,560	15,872	16,189	16,513	16,843
14,405	14,693	14,987	15,286	15,592	15,904	16,222	16,546	16,877	17,215	17,559	17,910
11,456	11,685	11,919	12,157	12,400	12,648	12,901	13,159	13,423	13,691	13,965	14,244
20,232	20,637	21,050	21,471	21,900	22,338	22,785	23,240	23,705	24,179	24,663	25,156
15,124	15,426	15,735	16,049	16,370	16,698	17,032	17,372	17,720	18,074	18,436	18,804
14,049	14,330	14,616	14,909	15,207	15,511	15,821	16,138	16,460	16,790	17,125	17,468
13,632	13,905	14,183	14,467	14,756	15,051	15,352	15,659	15,973	16,292	16,618	16,950
4,910	5,008	5,108	5,210	5,314	5,421	5,529	5,640	5,753	5,868	5,985	6,105
9,722	9,916	10,115	10,317	10,523	10,734	10,949	11,167	11,391	11,619	11,851	12,088
14,268	14,553	14,844	15,141	15,444	15,753	16,068	16,389	16,717	17,051	17,392	17,740
17,118	17,461	17,810	18,166	18,530	18,900	19,278	19,664	20,057	20,458	20,867	21,285
19,394	19,782	20,177	20,581	20,993	21,412	21,841	22,278	22,723	23,178	23,641	24,114
19,421	19,809	20,205	20,609	21,021	21,442	21,871	22,308	22,754	23,209	23,674	24,147
19,598	19,990	20,390	20,798	21,214	21,638	22,071	22,512	22,962	23,422	23,890	24,368
471	480	490	500	510	520	530	541	552	563	574	586

RetirementCost_Savings

2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
0	0	0	0	0	0	0	0	0	0
5,669	5,782	5,898	6,016	6,136	6,259	6,384	6,512	6,642	6,775
10,359	10,566	10,778	10,993	11,213	11,437	11,666	11,899	12,137	12,380
21,286	21,712	22,146	22,589	23,041	23,502	23,972	24,451	24,940	25,439
17,180	17,524	17,874	18,232	18,596	18,968	19,347	19,734	20,129	20,532
18,269	18,634	19,007	19,387	19,775	20,170	20,573	20,985	21,405	21,833
14,529	14,820	15,116	15,418	15,727	16,041	16,362	16,689	17,023	17,364
25,659	26,172	26,696	27,230	27,774	28,330	28,897	29,474	30,064	30,665
19,181	19,564	19,955	20,355	20,762	21,177	21,600	22,032	22,473	22,923
17,817	18,174	18,537	18,908	19,286	19,672	20,065	20,466	20,876	21,293
17,289	17,635	17,988	18,347	18,714	19,089	19,470	19,860	20,257	20,662
6,227	6,351	6,478	6,608	6,740	6,875	7,012	7,153	7,296	7,442
12,330	12,576	12,828	13,084	13,346	13,613	13,885	14,163	14,446	14,735
18,095	18,457	18,826	19,202	19,586	19,978	20,378	20,785	21,201	21,625
21,710	22,145	22,587	23,039	23,500	23,970	24,449	24,938	25,437	25,946
24,596	25,088	25,590	26,102	26,624	27,156	27,699	28,253	28,818	29,395
24,630	25,123	25,625	26,138	26,660	27,194	27,737	28,292	28,858	29,435
24,855	25,352	25,859	26,377	26,904	27,442	27,991	28,551	29,122	29,704
597	609	622	634	647	660	673	686	700	714

RetirementCost_Savings

		Escalation Rate:	2%	Year \$:	2010	Fixed O&M									
		Month	Year Equipment		\$/yr	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
BR	BR1	5	2014 PJFF/PAC			0	0	0	598,882	610,860	623,077	635,538	648,249	661,214	674,439
BR	BR1	5	2014 SAM Mitigation			0	0	0	78,540	137,333	140,079	142,881	145,739	148,653	151,627
BR	BR2	4	2014 PJFF/PAC			0	0	0	714,168	728,451	743,020	757,880	773,038	788,499	804,269
BR	BR2	4	2014 SAM Mitigation			0	0	0	134,640	137,333	140,079	142,881	145,739	148,653	151,627
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
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
GH	GH1	5	2014 SCR Turn-Down			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
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
GH	GH2	12	2012 Sorbent Injection			8,064	98,700	0	100,674	102,687	104,741	106,836	108,973	111,152	113,375
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
GH	GH3	11	2013 SCR Turn-Down			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
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
GH	GH4	3	2014 SCR Turn-Down			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
MC	MC1	5	2015 Combined 1&2 FGD			0	0	0	0	-238,642	-219,636	-200,250	-180,476	-160,306	-139,733
MC	MC1	5	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
MC	MC1	5	2015 SAM Mitigation			0	0	0	0	22,100	38,643	39,416	40,204	41,008	41,828
MC	MC2	4	2015 Combined 1&2 FGD			0	0	0	0	186,506	205,512	224,899	244,673	264,842	285,415
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
MC	MC2	4	2015 SAM Mitigation			0	0	0	0	25,257	38,643	39,416	40,204	41,008	41,828
MC	MC3	11	2014 FGD			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
MC	MC3	4	2013 SAM Mitigation			0	0	24,068	36,824	37,560	38,312	39,078	39,859	40,657	41,470
MC	MC3	4	2013 SCR Turn-Down			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
MC	MC4	11	2014 PJFF/PAC			0	0	0	0	0	0	0	0	0	0
MC	MC4	11	2014 SAM Mitigation			0	0	0	743,376	1,516,487	1,546,817	1,577,754	1,609,309	1,641,495	1,674,325
MC	MC4	11	2014 SCR Turn-Down			0	0	0	3,095	37,885	38,643	39,416	40,204	41,008	41,828
MC	MC4	11	2015 PJFF/PAC			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
CR	CR4	1	2016 SCR		1,871,000	0	0	0	0	0	2,107,050	2,149,191	2,192,175	2,236,018	2,280,739
CR	CR4	1	2016 WFGD			0	0	0	0	0	0	0	0	0	0
CR	CR4	1	2016 PJFF		1,191,000	0	0	0	0	0	1,341,259	1,368,085	1,395,446	1,423,355	1,451,822
CR	CR4	1	2016 SAM Mitigation		174,000	0	0	0	0	0	195,952	199,871	203,869	207,946	212,105
CR	CR4	1	2016 PAC Injection		169,000	0	0	0	0	0	190,321	194,128	198,010	201,971	206,010
CR	CR5	1	2016 SCR		1,993,000	0	0	0	0	0	2,244,442	2,289,331	2,335,117	2,381,819	2,429,456
CR	CR5	1	2016 WFGD			0	0	0	0	0	0	0	0	0	0
CR	CR5	1	2016 PJFF		1,251,000	0	0	0	0	0	1,408,829	1,437,006	1,465,746	1,495,061	1,524,962
CR	CR5	1	2016 SAM Mitigation		177,000	0	0	0	0	0	199,331	203,317	207,384	211,531	215,762

	<u>Month</u>	<u>Year</u>	<u>Equipment</u>	<u>\$/Yr</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
CR	CR5	1	2016 PAC Injection	172,000	0	0	0	0	0	193,700	197,574	201,525	205,556	209,667
CR	CR6	1	2016 SCR	2,392,000	0	0	0	0	0	2,693,781	2,747,656	2,802,609	2,858,661	2,915,835
CR	CR6	1	2016 WFGD		0	0	0	0	0	0	0	0	0	0
CR	CR6	1	2016 PJFF	1,632,000	0	0	0	0	0	1,837,897	1,874,655	1,912,148	1,950,391	1,989,399
CR	CR6	1	2016 SAM Mitigation	198,000	0	0	0	0	0	222,980	227,440	231,989	236,628	241,361
CR	CR6	1	2016 PAC Injection	191,000	0	0	0	0	0	215,097	219,399	223,787	228,263	232,828
GR	GR3	1	2016 SCR	943,000	0	0	0	0	0	1,061,971	1,083,211	1,104,875	1,126,972	1,149,512
GR	GR3	1	2016 CDS-FF	3,322,000	0	0	0	0	0	3,741,112	3,815,934	3,892,252	3,970,098	4,049,499
GR	GR3	1	2016 PAC Injection	141,000	0	0	0	0	0	158,789	161,965	165,204	168,508	171,878
GR	GR4	1	2016 SCR	1,284,000	0	0	0	0	0	1,445,993	1,474,912	1,504,411	1,534,499	1,565,189
GR	GR4	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
GR	GR4	1	2016 PAC Injection	150,000	0	0	0	0	0	168,924	172,303	175,749	179,264	182,849

Escalation Rate: 2% Year \$:

Month	Year Equipment	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
BR1	2014 PJFF/PAC	687,927	701,686	715,720	730,034	744,635	759,527	774,718	790,212	806,016	822,137	838,580	855,351
BR1	2014 SAM Mitigation	154,659	157,752	160,907	164,125	167,408	170,756	174,171	177,655	181,208	184,832	188,529	192,299
BR2	2014 PJFF/PAC	820,354	836,761	853,496	870,566	887,978	905,737	923,852	942,329	961,175	980,399	1,000,007	1,020,007
BR2	2014 SAM Mitigation	154,659	157,752	160,907	164,125	167,408	170,756	174,171	177,655	181,208	184,832	188,529	192,299
BR3	2015 PJFF/PAC	1,202,245	1,226,290	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
GH1	2014 PJFF/PAC	1,485,345	1,515,052	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
GH1	2014 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	0
GH1	2013 SAM Mitigation	0	0	0	0	0	0	0	0	0	0	0	0
GH2	2014 PJFF/PAC	1,786,436	1,822,165	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
GH2	2012 Sorbent Injector	115,643	117,956	120,315	122,721	125,175	127,679	130,232	132,837	135,494	138,204	140,968	143,787
GH3	2015 PJFF/PAC	1,469,498	1,498,888	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
GH3	2013 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	0
GH3	2013 SAM Mitigation	0	0	0	0	0	0	0	0	0	0	0	0
GH4	2015 PJFF/PAC	1,423,176	1,451,640	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
GH4	2014 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	0
GH4	2013 SAM Mitigation	0	0	0	0	0	0	0	0	0	0	0	0
MC1	2015 Combined 1&2 F	-118,749	-121,124	-123,546	-126,017	-128,537	-131,108	-133,730	-136,405	-139,133	-141,916	-144,754	-147,649
MC1	2015 PJFF/PAC	1,628,681	1,661,255	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
MC1	2015 SAM Mitigation	42,665	43,518	44,388	45,276	46,182	47,105	48,047	49,008	49,989	50,988	52,008	53,048
MC2	2015 Combined 1&2 F	306,400	312,528	318,778	325,154	331,657	338,290	345,056	351,957	358,996	366,176	373,499	380,969
MC2	2015 PJFF/PAC	1,597,875	1,629,832	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
MC2	2015 SAM Mitigation	42,665	43,518	44,388	45,276	46,182	47,105	48,047	49,008	49,989	50,988	52,008	53,048
MC3	2014 FGD	0	0	0	0	0	0	0	0	0	0	0	0
MC3	2015 PJFF/PAC	1,456,698	1,485,832	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
MC3	2013 SAM Mitigation	42,299	43,145	44,008	44,888	45,786	46,702	47,636	48,588	49,560	50,551	51,562	52,594
MC3	2013 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	0
MC4	2014 FGD	0	0	0	0	0	0	0	0	0	0	0	0
MC4	2014 PJFF/PAC	1,707,811	1,741,967	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
MC4	2014 SAM Mitigation	42,665	43,518	44,388	45,276	46,182	47,105	48,047	49,008	49,989	50,988	52,008	53,048
MC4	2014 SCR Turn-Down	0	0	0	0	0	0	0	0	0	0	0	0
TC1	2015 PJFF/PAC	1,112,110	1,134,353	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
CR4	2016 SCR	2,326,353	2,372,880	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
CR4	2016 WFGD	0	0	0	0	0	0	0	0	0	0	0	0
CR4	2016 PJFF	1,480,859	1,510,476	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
CR4	2016 SAM Mitigation	216,347	220,674	225,088	229,589	234,181	238,865	243,642	248,515	253,485	258,555	263,726	269,000
CR4	2016 PAC Injection	210,130	214,333	218,620	222,992	227,452	232,001	236,641	241,374	246,201	251,125	256,148	261,271
CR5	2016 SCR	2,478,045	2,527,606	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
CR5	2016 WFGD	0	0	0	0	0	0	0	0	0	0	0	0
CR5	2016 PJFF	1,555,461	1,586,570	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
CR5	2016 SAM Mitigation	220,077	224,479	228,968	233,548	238,219	242,983	247,843	252,800	257,856	263,013	268,273	273,638

Month	Year	Equipment	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
CR5	1	2016 PAC Injection	213,860	218,138	222,500	226,950	231,489	236,119	240,842	245,658	250,572	255,583	260,695	265,909
CR6	1	2016 SCR	2,974,151	3,033,634	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
CR6	1	2016 WFGD	0	0	0	0	0	0	0	0	0	0	0	0
CR6	1	2016 PJFF	2,029,187	2,069,771	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
CR6	1	2016 SAM Mitigation	246,188	251,112	256,134	261,257	266,482	271,812	277,248	282,793	288,449	294,218	300,102	306,104
CR6	1	2016 PAC Injection	237,484	242,234	247,079	252,020	257,061	262,202	267,446	272,795	278,251	283,816	289,492	295,282
GR3	1	2016 SCR	1,172,502	1,195,952	1,219,871	1,244,268	1,269,154	1,294,537	1,320,428	1,346,836	1,373,773	1,401,248	1,429,273	1,457,859
GR3	1	2016 CDS-FF	4,130,489	4,213,099	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
GR3	1	2016 PAC Injection	175,316	178,822	182,399	186,047	189,767	193,563	197,434	201,383	205,410	209,519	213,709	217,983
GR4	1	2016 SCR	1,596,493	1,628,422	1,660,991	1,694,211	1,728,095	1,762,657	1,797,910	1,833,868	1,870,546	1,907,956	1,946,116	1,985,038
GR4	1	2016 CDS-FF	5,357,700	5,464,854	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
GR4	1	2016 PAC Injection	186,506	190,236	194,041	197,922	201,880	205,918	210,036	214,237	218,522	222,892	227,350	231,897

Escalation Rate: 2% Year \$:

	Month	Year	Equipment	2033	2034	2035	2036	2037	2038	2039	2040
BR1	5	2014	PJFF/PAC	872,458	889,907	907,705	925,860	944,377	963,264	982,530	1,002,180
BR1	5	2014	SAM Mitigation	196,145	200,068	204,069	208,151	212,314	216,560	220,891	225,309
BR2	4	2014	PJFF/PAC	1,040,407	1,061,215	1,082,440	1,104,088	1,126,170	1,148,694	1,171,668	1,195,101
BR2	4	2014	SAM Mitigation	196,145	200,068	204,069	208,151	212,314	216,560	220,891	225,309
BR3	5	2015	PJFF/PAC	1,524,738	1,555,233	1,586,337	1,618,064	1,650,425	1,683,434	1,717,103	1,751,445
GH1	5	2014	PJFF/PAC	1,883,776	1,921,452	1,959,881	1,999,078	2,039,060	2,079,841	2,121,438	2,163,867
GH1	5	2014	SCR Turn-Down	0	0	0	0	0	0	0	0
GH1	2	2013	SAM Mitigation	0	0	0	0	0	0	0	0
GH2	11	2014	PJFF/PAC	2,265,633	2,310,946	2,357,165	2,404,308	2,452,394	2,501,442	2,551,471	2,602,500
GH2	12	2012	Sorbent Injector	146,663	149,596	152,588	155,640	158,753	161,928	165,166	168,470
GH3	10	2015	PJFF/PAC	1,863,678	1,900,952	1,938,971	1,977,751	2,017,306	2,057,652	2,098,805	2,140,781
GH3	11	2013	SCR Turn-Down	0	0	0	0	0	0	0	0
GH3	2	2013	SAM Mitigation	0	0	0	0	0	0	0	0
GH4	12	2015	PJFF/PAC	1,804,931	1,841,030	1,877,850	1,915,407	1,953,716	1,992,790	2,032,646	2,073,299
GH4	3	2014	SCR Turn-Down	0	0	0	0	0	0	0	0
GH4	2	2013	SAM Mitigation	0	0	0	0	0	0	0	0
MC1	5	2015	Combined 1&2 F	-150,602	-153,614	-156,686	-159,820	-163,017	-166,277	-169,602	-172,994
MC1	5	2015	PJFF/PAC	2,065,562	2,106,873	2,149,010	2,191,991	2,235,831	2,280,547	2,326,158	2,372,681
MC1	5	2015	SAM Mitigation	54,109	55,191	56,295	57,421	58,570	59,741	60,936	62,155
MC2	4	2015	Combined 1&2 F	388,589	396,361	404,288	412,374	420,621	429,033	437,614	446,366
MC2	4	2015	PJFF/PAC	2,026,492	2,067,022	2,108,362	2,150,529	2,193,540	2,237,411	2,282,159	2,327,802
MC2	4	2015	SAM Mitigation	54,109	55,191	56,295	57,421	58,570	59,741	60,936	62,155
MC3	11	2014	FGD	0	0	0	0	0	0	0	0
MC3	10	2015	PJFF/PAC	1,847,446	1,884,395	1,922,083	1,960,524	1,999,735	2,039,729	2,080,524	2,122,134
MC3	4	2013	SAM Mitigation	53,645	54,718	55,813	56,929	58,068	59,229	60,414	61,622
MC3	4	2013	SCR Turn-Down	0	0	0	0	0	0	0	0
MC4	11	2014	FGD	0	0	0	0	0	0	0	0
MC4	11	2014	PJFF/PAC	2,165,918	2,209,236	2,253,421	2,298,489	2,344,459	2,391,348	2,439,175	2,487,958
MC4	11	2014	SAM Mitigation	54,109	55,191	56,295	57,421	58,570	59,741	60,936	62,155
MC4	11	2014	SCR Turn-Down	0	0	0	0	0	0	0	0
TC1	11	2015	PJFF/PAC	1,410,425	1,438,633	1,467,406	1,496,754	1,526,689	1,557,223	1,588,367	1,620,135
CR4	1	2016	SCR	2,950,379	3,009,386	3,069,574	3,130,965	3,193,585	3,257,456	3,322,605	3,389,058
CR4	1	2016	WFGD	0	0	0	0	0	0	0	0
CR4	1	2016	PJFF	1,878,087	1,915,649	1,953,962	1,993,041	2,032,902	2,073,560	2,115,031	2,157,332
CR4	1	2016	SAM Mitigation	274,380	279,868	285,465	291,175	296,998	302,938	308,997	315,177
CR4	1	2016	PAC Injection	266,496	271,826	277,262	282,808	288,464	294,233	300,118	306,120
CR5	1	2016	SCR	3,142,760	3,205,615	3,269,728	3,335,122	3,401,825	3,469,861	3,539,258	3,610,044
CR5	1	2016	WFGD	0	0	0	0	0	0	0	0
CR5	1	2016	PJFF	1,972,701	2,012,155	2,052,398	2,093,446	2,135,315	2,178,021	2,221,582	2,266,013
CR5	1	2016	SAM Mitigation	279,111	284,693	290,387	296,195	302,119	308,161	314,325	320,611

	Month	Year Equipment	2033	2034	2035	2036	2037	2038	2039	2040
CR5	1	2016 PAC Injection	271,227	276,651	282,184	287,828	293,584	299,456	305,445	311,554
CR6	1	2016 SCR	3,771,943	3,847,382	3,924,330	4,002,816	4,082,872	4,164,530	4,247,820	4,332,777
CR6	1	2016 WFGD	0	0	0	0	0	0	0	0
CR6	1	2016 PJFF	2,573,500	2,624,970	2,677,469	2,731,018	2,785,639	2,841,352	2,898,179	2,956,142
CR6	1	2016 SAM Mitigation	312,226	318,471	324,840	331,337	337,964	344,723	351,617	358,650
CR6	1	2016 PAC Injection	301,188	307,212	313,356	319,623	326,015	332,536	339,186	345,970
GR3	1	2016 SCR	1,487,016	1,516,756	1,547,091	1,578,033	1,609,594	1,641,786	1,674,622	1,708,114
GR3	1	2016 CDS-FF	5,238,459	5,343,229	5,450,093	5,559,095	5,670,277	5,783,682	5,899,356	6,017,343
GR3	1	2016 PAC Injection	222,343	226,790	231,325	235,952	240,671	245,484	250,394	255,402
GR4	1	2016 SCR	2,024,739	2,065,233	2,106,538	2,148,669	2,191,642	2,235,475	2,280,185	2,325,788
GR4	1	2016 CDS-FF	6,794,859	6,930,756	7,069,371	7,210,759	7,354,974	7,502,073	7,652,115	7,805,157
GR4	1	2016 PAC Injection	236,535	241,266	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										553	522	494	468	444	420	396	372	348		
2021 CR											567	535	506	479	455	430	406	381		
2022 CR												581	548	519	491	466	441	416		
2023 CR													595	562	532	504	478	452		
2024 CR														610	576	545	516	490		
2025 CR															625	591	559	529		
2026 CR																641	605	573		
2027 CR																	657	621		
2028 CR																		673		
2029 CR																			417	
2030 CR																				428
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																	3,092	2,933	2,787	2,645
2026 MC																	2,118	3,170	3,006	2,864
2027 MC																		2,171	3,249	3,086
2028 MC																			2,225	2,062
2029 MC																				
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												448	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	481	456
2027 TC																			533	506
2028 TC																				546
2029 TC																				428
2030 TC																				

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
	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												3,189	3,036	2,896	2,768	2,645	2,522	2,400	2,277	
	2022 GH												3,442	3,269	3,112	2,968	2,837	2,711	2,585	2,460	
	2023 GH												3,442	3,269	3,112	2,968	2,837	2,711	2,585	2,460	
	2024 GH												3,442	3,269	3,112	2,968	2,837	2,711	2,585	2,460	
	2025 GH												3,442	3,269	3,112	2,968	2,837	2,711	2,585	2,460	
	2026 GH												3,442	3,269	3,112	2,968	2,837	2,711	2,585	2,460	
	2027 GH												3,442	3,269	3,112	2,968	2,837	2,711	2,585	2,460	
	2028 GH												3,442	3,269	3,112	2,968	2,837	2,711	2,585	2,460	
	2029 GH												3,442	3,269	3,112	2,968	2,837	2,711	2,585	2,460	
	2030 GH												3,442	3,269	3,112	2,968	2,837	2,711	2,585	2,460	
	2031 GH												3,442	3,269	3,112	2,968	2,837	2,711	2,585	2,460	
	2032 GH												3,442	3,269	3,112	2,968	2,837	2,711	2,585	2,460	
	2033 GH												3,442	3,269	3,112	2,968	2,837	2,711	2,585	2,460	
	2034 GH												3,442	3,269	3,112	2,968	2,837	2,711	2,585	2,460	
	2035 GH												3,442	3,269	3,112	2,968	2,837	2,711	2,585	2,460	
	2036 GH												3,442	3,269	3,112	2,968	2,837	2,711	2,585	2,460	
	2037 GH												3,442	3,269	3,112	2,968	2,837	2,711	2,585	2,460	
	2038 GH												3,442	3,269	3,112	2,968	2,837	2,711	2,585	2,460	
	2039 GH												3,442	3,269	3,112	2,968	2,837	2,711	2,585	2,460	
	2040 GH												3,442	3,269	3,112	2,968	2,837	2,711	2,585	2,460	
	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	
	2021 BR												600	805	762	723	688	657	625	594	
	2022 BR													615	825	781	741	706	673	641	

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
	2023 BR																				690
	2024 BR																				741
	2025 BR																				798
	2026 BR																				862
	2027 BR																				934
	2028 BR																				713
	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																132	189	179	169	
	2026 GR																	136	194	183	
	2027 GR																		139	199	
	2028 GR																			143	
	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	
	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	

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	2015 TY						103	151	143	135	128	122	116	110	104	97	91	85	81	78
	2016 TY						106	154	146	138	131	122	125	119	112	106	100	93	87	83
	2017 TY						109	158	150	142	135	128	135	128	122	115	109	102	96	89
	2018 TY						111	162	153	145	138	131	145	138	131	125	118	111	105	98
	2019 TY						114	166	162	153	145	138	157	149	142	135	128	121	114	107
	2020 TY						117	166	162	153	145	138	171	161	153	145	138	131	124	117
	2021 TY							166	162	153	145	138	171	161	153	145	138	131	124	117
	2022 TY							166	162	153	145	138	171	161	153	145	138	131	124	117
	2023 TY							166	162	153	145	138	171	161	153	145	138	131	124	117
	2024 TY							166	162	153	145	138	171	161	153	145	138	131	124	117
	2025 TY							166	162	153	145	138	171	161	153	145	138	131	124	117
	2026 TY							166	162	153	145	138	171	161	153	145	138	131	124	117
	2027 TY							166	162	153	145	138	171	161	153	145	138	131	124	117
	2028 TY							166	162	153	145	138	171	161	153	145	138	131	124	117
	2029 TY							166	162	153	145	138	171	161	153	145	138	131	124	117
	2030 TY							166	162	153	145	138	171	161	153	145	138	131	124	117
	2031 TY							166	162	153	145	138	171	161	153	145	138	131	124	117
	2032 TY							166	162	153	145	138	171	161	153	145	138	131	124	117
	2033 TY							166	162	153	145	138	171	161	153	145	138	131	124	117
	2034 TY							166	162	153	145	138	171	161	153	145	138	131	124	117
	2035 TY							166	162	153	145	138	171	161	153	145	138	131	124	117
	2036 TY							166	162	153	145	138	171	161	153	145	138	131	124	117
	2037 TY							166	162	153	145	138	171	161	153	145	138	131	124	117
	2038 TY							166	162	153	145	138	171	161	153	145	138	131	124	117
	2039 TY							166	162	153	145	138	171	161	153	145	138	131	124	117
	2040 TY							166	162	153	145	138	171	161	153	145	138	131	124	117

Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047
2023 BR		657	624	591	559	526	493	471	459	447	435	423	411	399	388	376	364	352	340	328
2024 BR		707	673	640	606	573	539	505	482	470	458	446	434	422	409	397	385	373	361	349
2025 BR		760	725	690	656	621	587	552	518	495	482	470	457	445	432	420	407	395	382	370
2026 BR		818	779	743	708	672	637	602	566	531	507	494	481	469	456	443	430	417	405	392
2027 BR		884	839	798	761	725	689	653	617	580	544	520	506	493	480	467	454	441	428	415
2028 BR		957	906	860	818	781	743	706	669	632	595	558	533	519	506	492	479	465	452	438
2029 BR		731	981	928	881	839	800	762	724	686	648	610	572	546	532	518	505	491	477	463
2030 BR		749	749	1,005	952	903	860	820	781	742	703	664	625	586	559	545	531	517	503	489
2031 BR			768		1,031	975	926	881	841	801	761	721	681	641	601	573	559	545	530	516
2032 BR					787	1,056	1,000	949	903	862	821	780	739	698	657	616	588	573	558	543
2033 BR						806	1,083	1,025	973	926	883	841	799	757	715	673	631	603	587	572
2034 BR							827	1,110	1,050	997	949	905	862	819	776	733	690	647	618	602
2035 BR								847	1,138	1,077	1,022	973	928	884	840	795	751	707	663	633
2036 BR									868	1,166	1,104	1,048	997	951	906	861	815	770	725	680
2037 BR										890	1,195	1,131	1,074	1,022	975	928	882	836	789	743
2038 BR											912	1,225	1,160	1,101	1,047	999	952	904	857	809
2039 BR												935	1,256	1,189	1,128	1,074	1,024	975	927	878
2040 BR													959	1,287	1,218	1,156	1,100	1,050	1,000	950
2011 GR		58	56	54	52	49	47	45	42	40	38	0	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	0
2013 GR		66	64	61	59	57	54	52	49	47	45	42	40	0	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	0
2015 GR		75	72	70	67	65	62	60	57	54	52	49	47	44	42	0	0	0	0	0
2016 GR		79	77	74	71	69	66	64	61	58	56	53	51	48	45	43	0	0	0	0
2017 GR		84	81	78	76	73	70	68	65	63	60	57	55	52	49	47	44	0	0	0
2018 GR		90	86	83	80	78	75	72	70	67	64	61	59	56	53	50	48	45	0	0
2019 GR		99	93	88	85	82	80	77	74	71	68	66	63	60	57	55	52	49	46	0
2020 GR		108	102	95	90	87	84	82	79	76	73	70	67	64	62	59	56	53	50	47
2021 GR		118	111	104	97	92	90	87	84	81	78	75	72	69	66	63	60	57	54	51
2022 GR		128	121	114	107	100	95	92	89	86	83	80	77	74	71	68	65	62	59	56
2023 GR		139	131	124	117	110	102	97	94	91	88	85	82	79	76	72	69	66	63	60
2024 GR		150	142	135	127	120	112	105	100	96	93	90	87	84	81	77	74	71	68	65
2025 GR		161	153	146	138	130	123	115	107	102	99	96	92	89	86	83	79	76	73	70
2026 GR		174	165	157	149	141	134	126	118	110	105	101	98	95	91	88	85	81	78	75
2027 GR		188	178	169	161	153	145	137	129	121	113	107	104	100	97	94	90	87	83	80
2028 GR		204	193	183	173	165	157	149	140	132	124	116	110	106	103	99	96	92	89	86
2029 GR		146	209	197	187	178	169	161	152	144	135	127	119	113	109	105	102	98	95	91
2030 GR			150	214	202	192	182	173	165	156	148	139	130	122	115	112	108	104	101	97
2031 GR				154	219	207	197	187	178	169	160	151	142	133	125	118	115	111	107	103
2032 GR					157	225	212	201	191	182	173	164	155	146	137	128	121	117	114	110
2033 GR						161	230	218	206	196	187	177	168	159	150	140	131	124	120	116
2034 GR							165	236	223	212	201	191	182	172	163	153	144	134	127	123
2035 GR								236	242	229	217	206	196	186	177	167	157	147	138	131
2036 GR								169	242	229	217	206	196	186	177	167	157	147	138	131
2037 GR									174	248	235	222	211	201	191	181	171	161	151	141
2038 GR									178		254	240	228	217	206	196	186	175	165	155
2039 GR										182		261	246	234	222	211	201	190	180	169
2040 GR											187		267	253	239	228	217	206	195	184
2011 TY		58	56	53	51	48	46	43	41	0	0	0	0	0	0	0	0	0	0	0
2012 TY		62	60	57	55	52	49	47	44	42	0	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	0
2014 TY		71	68	65	63	60	57	55	52	49	47	44	0	0	0	0	0	0	0	0

Unit	Capacity	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047
2015 TY	72	75	70	67	64	61	59	56	53	51	48	45	45	0	0	0	0	0	0	0
2016 TY	77	80	74	71	69	66	63	60	57	55	52	49	49	46	0	0	0	0	0	0
2017 TY	82	85	79	76	73	70	67	65	62	59	56	53	53	50	47	0	0	0	0	0
2018 TY	87	92	84	81	78	75	72	69	66	63	60	57	57	54	52	49	0	0	0	0
2019 TY	94	101	89	86	83	80	77	74	71	68	65	62	62	59	56	53	50	0	0	0
2020 TY	103	110	96	91	88	85	82	79	76	73	70	66	66	63	60	57	54	51	0	0
2021 TY	113	120	106	99	93	90	87	84	81	78	74	70	71	68	65	62	59	55	52	0
2022 TY	123	130	116	108	101	96	93	89	86	83	80	76	76	73	70	67	63	60	57	54
2023 TY	134	141	126	119	111	104	98	95	92	88	85	82	82	78	75	72	68	65	62	58
2024 TY	145	152	137	129	122	114	106	101	97	94	90	87	87	84	80	77	73	70	67	63
2025 TY	156	164	148	140	133	125	117	109	103	100	96	93	93	89	86	82	79	75	72	68
2026 TY	168	177	160	152	144	136	128	120	112	106	102	99	99	95	91	88	84	81	77	73
2027 TY	182	192	172	164	156	148	139	131	123	114	108	105	105	101	97	94	90	86	83	79
2028 TY	196	208	186	177	168	160	151	143	134	126	117	111	111	107	104	100	96	92	89	85
2029 TY	213	246	201	191	181	172	164	155	146	138	129	129	120	114	110	106	102	98	95	91
2030 TY	150	150	218	206	196	186	177	168	159	150	141	141	132	123	117	113	109	105	101	97
2031 TY			154	224	212	201	190	181	172	163	154	145	145	135	126	120	116	112	107	103
2032 TY				157	229	217	206	195	186	176	167	158	158	148	139	129	123	118	114	110
2033 TY					161	235	222	211	200	190	181	171	171	161	152	142	133	126	121	117
2034 TY						165	241	228	216	205	195	185	185	175	165	156	146	136	129	124
2035 TY							169	247	234	221	210	200	200	190	180	170	160	149	139	132
2036 TY								174	253	239	227	215	215	205	195	184	174	164	153	143
2037 TY									178	259	245	233	233	221	210	199	189	178	168	157
2038 TY										182	266	252	252	238	226	215	204	194	183	172
2039 TY											187	273	273	258	244	232	221	210	198	187
2040 TY												192	192	279	264	250	238	226	215	203

Unit	Capacity	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
BR1	101	1,770	1,678	1,591	1,510	1,434	1,361	1,290	1,219	1,149	1,080	1,013	946
BR2	167	2,926	2,774	2,631	2,496	2,371	2,251	2,132	2,015	1,900	1,787	1,675	1,564
BR3	416	7,289	6,910	6,553	6,218	5,906	5,607	5,312	5,021	4,733	4,450	4,171	3,897
CR4	155	1,269	1,125	988	859	738	623	511	402	297	194	95	0
CR5	168	1,375	1,219	1,071	931	800	675	554	436	322	211	103	0
CR6	240	1,965	1,741	1,529	1,330	1,143	965	792	623	459	301	148	0
GH1	475	13,375	12,686	12,033	11,415	10,834	10,291	9,770	9,256	8,749	8,249	7,755	7,269
GH2	484	13,628	12,927	12,261	11,631	11,039	10,486	9,956	9,432	8,915	8,405	7,902	7,407
GH3	480	13,516	12,820	12,159	11,535	10,948	10,399	9,873	9,354	8,841	8,336	7,837	7,346
GH4	479	13,488	12,793	12,134	11,511	10,925	10,378	9,853	9,334	8,823	8,318	7,821	7,331
GR3	68	860	801	745	692	643	595	549	504	459	415	373	331
GR4	95	1,201	1,118	1,040	967	898	832	767	704	641	580	521	462
MC1	303	6,531	6,033	5,559	5,110	4,687	4,290	3,910	3,538	3,173	2,817	2,468	2,128
MC2	301	6,488	5,993	5,523	5,077	4,656	4,262	3,884	3,515	3,152	2,798	2,452	2,114
MC3	391	8,428	7,785	7,174	6,595	6,048	5,536	5,046	4,565	4,095	3,635	3,185	2,746
MC4	477	10,282	9,498	8,752	8,045	7,379	6,754	6,156	5,570	4,996	4,434	3,886	3,350
TC1	383	3,101	2,986	2,878	2,777	2,652	2,536	2,425	2,315	2,206	2,099	1,993	1,888
TC2	549	4,445	4,280	4,125	3,980	3,802	3,636	3,476	3,319	3,163	3,009	2,857	2,706
TV3	71	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
2012 CR	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
2014 CR	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
2016 CR	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
2018 CR	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
2020 CR	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
2022 CR	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
2024 CR	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
2026 CR	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
2028 CR	0	0	0	0	0	0	0	0	0	0	0	0	0
2029 CR	0	0	0	0	0	0	0	0	0	0	0	0	0
2030 CR	271	0	0	0	0	0	0	0	0	0	0	0	0
2031 CR	294	278	0	0	0	0	0	0	0	0	0	0	0
2032 CR	319	302	285	0	0	0	0	0	0	0	0	0	0
2033 CR	345	327	309	292	0	0	0	0	0	0	0	0	0
2034 CR	372	353	335	317	299	0	0	0	0	0	0	0	0
2035 CR	400	381	362	344	325	306	0	0	0	0	0	0	0
2036 CR	429	410	390	371	352	333	314	0	0	0	0	0	0
2037 CR	468	439	420	400	381	361	342	322	309	292	275	258	241
2038 CR	518	480	450	430	410	390	370	350	330	310	290	270	250

Unit	Capacity	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
2039 CR	570	531	492	441	421	400	379	359	338	0	0	0	0
2040 CR	624	584	544	473	452	431	410	389	368	347	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0
2023 MC	879	0	0	0	0	0	0	0	0	0	0	0	0
2024 MC	956	901	0	0	0	0	0	0	0	0	0	0	0
2025 MC	1,035	980	924	0	0	0	0	0	0	0	0	0	0
2026 MC	1,119	1,061	1,004	947	0	0	0	0	0	0	0	0	0
2027 MC	1,205	1,147	1,088	1,029	970	0	0	0	0	0	0	0	0
2028 MC	1,296	1,235	1,175	1,115	1,055	995	0	0	0	0	0	0	0
2029 MC	1,390	1,328	1,266	1,205	1,143	1,081	1,020	0	0	0	0	0	0
2030 MC	1,488	1,424	1,361	1,298	1,235	1,172	1,108	1,045	0	0	0	0	0
2031 MC	1,590	1,525	1,460	1,395	1,330	1,266	1,201	1,136	1,071	0	0	0	0
2032 MC	1,696	1,629	1,563	1,497	1,430	1,364	1,297	1,231	1,164	1,098	0	0	0
2033 MC	1,806	1,738	1,670	1,602	1,534	1,466	1,398	1,330	1,262	1,194	1,125	0	0
2034 MC	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	2,041	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	2,208	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	2,425	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	2,652	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	2,888	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	3,135	2,961	2,786	2,611	2,437	2,309	2,228	2,147	2,066	1,985	1,904	1,823	0
2011 TC	91	87	82	77	0	0	0	0	0	0	0	0	0
2012 TC	98	94	89	84	79	0	0	0	0	0	0	0	0
2013 TC	106	101	96	91	86	81	0	0	0	0	0	0	0
2014 TC	113	108	103	98	93	88	83	0	0	0	0	0	0
2015 TC	121	116	111	106	101	96	91	85	0	0	0	0	0
2016 TC	130	124	119	114	109	103	98	93	88	0	0	0	0
2017 TC	138	133	127	122	117	111	106	101	95	90	0	0	0
2018 TC	147	142	136	131	125	120	114	109	103	98	92	0	0
2019 TC	156	151	145	139	134	128	123	117	111	106	100	94	0
2020 TC	166	160	155	149	143	137	131	126	120	114	108	102	0
2021 TC	176	170	164	158	152	147	141	135	129	123	117	111	0
2022 TC	187	181	175	168	162	156	150	144	138	132	126	120	0
2023 TC	198	191	185	179	173	166	160	154	148	141	135	129	0
2024 TC	209	203	196	190	183	177	171	164	158	151	145	139	0
2025 TC	221	214	208	201	194	188	181	175	168	162	155	149	0
2026 TC	233	226	219	213	206	199	193	186	179	173	166	159	0
2027 TC	246	239	232	225	218	211	204	197	191	184	177	170	0
2028 TC	259	252	245	238	231	224	217	209	202	195	188	181	0
2029 TC	273	265	258	251	244	236	229	222	215	207	200	193	0
2030 TC	287	279	272	265	257	250	242	235	227	220	213	205	0

Unit	Capacity	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
2031 TC	302	294	286	279	271	264	256	248	241	233	226	218	
2032 TC	317	309	301	293	286	278	270	262	255	247	239	231	
2033 TC	333	325	317	309	301	293	285	277	269	261	253	245	
2034 TC	349	341	333	325	317	308	300	292	284	276	267	259	
2035 TC	366	358	350	341	333	324	316	308	299	291	283	274	
2036 TC	392	376	367	358	350	341	333	324	315	307	298	290	
2037 TC	427	402	385	376	367	358	350	341	332	323	314	306	
2038 TC	463	438	412	395	385	376	367	358	349	340	331	322	
2039 TC	501	475	449	422	404	395	386	377	367	358	349	340	
2040 TC	541	514	487	460	433	414	405	396	386	377	367	358	
2011 GH	0	0	0	0	0	0	0	0	0	0	0	0	
2012 GH	645	0	0	0	0	0	0	0	0	0	0	0	
2013 GH	700	661	0	0	0	0	0	0	0	0	0	0	
2014 GH	759	718	677	0	0	0	0	0	0	0	0	0	
2015 GH	819	778	736	694	0	0	0	0	0	0	0	0	
2016 GH	882	840	797	754	712	0	0	0	0	0	0	0	
2017 GH	948	905	861	817	773	729	0	0	0	0	0	0	
2018 GH	1,017	972	927	882	837	792	748	0	0	0	0	0	
2019 GH	1,088	1,042	996	950	904	858	812	766	0	0	0	0	
2020 GH	1,163	1,116	1,068	1,021	974	927	880	833	785	0	0	0	
2021 GH	1,240	1,192	1,143	1,095	1,047	998	950	902	853	805	0	0	
2022 GH	1,321	1,271	1,222	1,172	1,123	1,073	1,023	974	924	875	825	0	
2023 GH	1,405	1,354	1,303	1,252	1,201	1,151	1,100	1,049	998	947	897	846	
2024 GH	1,492	1,440	1,388	1,336	1,283	1,231	1,179	1,127	1,075	1,023	971	919	
2025 GH	1,582	1,529	1,476	1,422	1,369	1,316	1,262	1,209	1,155	1,102	1,049	995	
2026 GH	1,677	1,622	1,567	1,513	1,458	1,403	1,348	1,294	1,239	1,184	1,130	1,075	
2027 GH	1,775	1,719	1,662	1,606	1,550	1,494	1,438	1,382	1,326	1,270	1,214	1,158	
2028 GH	1,876	1,819	1,762	1,704	1,647	1,589	1,532	1,474	1,417	1,359	1,302	1,244	
2029 GH	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	2,092	2,032	1,971	1,911	1,851	1,790	1,730	1,670	1,609	1,549	1,488	1,428	
2031 GH	2,206	2,144	2,083	2,021	1,959	1,897	1,835	1,773	1,711	1,649	1,588	1,526	
2032 GH	2,325	2,262	2,198	2,135	2,071	2,008	1,944	1,881	1,818	1,754	1,691	1,627	
2033 GH	2,448	2,383	2,318	2,253	2,188	2,123	2,058	1,993	1,928	1,863	1,798	1,733	
2034 GH	2,576	2,509	2,443	2,376	2,309	2,243	2,176	2,109	2,043	1,976	1,910	1,843	
2035 GH	2,709	2,640	2,572	2,504	2,435	2,367	2,299	2,231	2,162	2,094	2,026	1,957	
2036 GH	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	3,169	2,977	2,846	2,774	2,702	2,630	2,559	2,487	2,415	2,343	2,272	2,200	
2038 GH	3,444	3,248	3,052	2,917	2,843	2,770	2,696	2,623	2,549	2,476	2,402	2,328	
2039 GH	3,731	3,530	3,329	3,128	2,990	2,914	2,839	2,764	2,688	2,613	2,537	2,462	
2040 GH	4,030	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	
2012 BR	0	0	0	0	0	0	0	0	0	0	0	0	
2013 BR	154	0	0	0	0	0	0	0	0	0	0	0	
2014 BR	168	158	0	0	0	0	0	0	0	0	0	0	
2015 BR	182	172	162	0	0	0	0	0	0	0	0	0	
2016 BR	196	186	176	166	0	0	0	0	0	0	0	0	
2017 BR	211	201	191	181	170	0	0	0	0	0	0	0	
2018 BR	227	217	206	196	185	175	0	0	0	0	0	0	
2019 BR	244	233	222	211	201	190	179	0	0	0	0	0	
2020 BR	261	250	239	228	217	206	195	183	0	0	0	0	
2021 BR	278	267	256	245	233	222	211	199	188	0	0	0	
2022 BR	297	285	274	262	251	239	228	216	204	193	0	0	

Unit	Capacity	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
2023 BR	316	281	293	300	307	315	323	331	339	347	355	363	371
2024 BR	336	300	312	320	328	336	344	352	360	368	376	384	392
2025 BR	357	345	332	320	307	295	282	270	257	245	233	221	209
2026 BR	379	366	353	341	328	315	302	290	277	264	251	238	226
2027 BR	402	388	375	362	349	336	323	310	297	284	271	258	245
2028 BR	425	412	398	385	371	358	344	331	318	304	291	277	264
2029 BR	449	436	422	408	394	381	367	353	339	326	312	298	284
2030 BR	475	461	447	432	418	404	390	376	362	348	334	320	306
2031 BR	501	487	472	458	443	429	414	400	385	371	356	342	327
2032 BR	529	514	499	484	469	454	440	425	410	395	380	365	350
2033 BR	557	542	527	511	496	481	466	451	435	420	405	390	375
2034 BR	586	571	555	540	524	509	493	477	462	446	431	415	400
2035 BR	617	602	585	569	553	537	521	505	489	473	457	441	425
2036 BR	649	632	616	600	583	567	551	534	518	502	485	469	452
2037 BR	697	665	648	632	615	598	581	564	548	531	514	497	480
2038 BR	762	714	682	664	647	630	613	596	579	561	544	527	510
2039 BR	829	781	732	699	681	663	646	628	611	593	575	558	540
2040 BR	900	850	800	750	716	698	680	662	644	626	608	590	572
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	0	0	0	0	0	0	0	0	0	0	0	0	0
2021 GR	48	0	0	0	0	0	0	0	0	0	0	0	0
2022 GR	53	50	0	0	0	0	0	0	0	0	0	0	0
2023 GR	57	54	51	0	0	0	0	0	0	0	0	0	0
2024 GR	62	59	55	52	0	0	0	0	0	0	0	0	0
2025 GR	66	63	60	57	54	0	0	0	0	0	0	0	0
2026 GR	71	68	65	61	58	55	0	0	0	0	0	0	0
2027 GR	77	73	70	66	63	60	56	0	0	0	0	0	0
2028 GR	82	79	75	72	68	65	61	58	0	0	0	0	0
2029 GR	88	84	81	77	73	70	66	63	59	0	0	0	0
2030 GR	93	90	86	83	79	75	72	68	64	61	0	0	0
2031 GR	100	96	92	88	85	81	77	73	70	66	62	0	0
2032 GR	106	102	98	94	91	87	83	79	75	71	67	64	0
2033 GR	113	109	105	101	97	93	89	85	81	77	73	69	65
2034 GR	119	115	111	107	103	99	95	91	87	83	79	75	71
2035 GR	126	122	118	114	110	106	102	98	93	89	85	81	77
2036 GR	134	130	125	121	117	113	108	104	100	96	91	87	83
2037 GR	145	137	133	129	124	120	115	111	107	102	98	94	90
2038 GR	159	148	141	136	132	127	123	118	114	109	105	101	97
2039 GR	173	163	152	144	140	135	130	126	121	117	112	108	104
2040 GR	189	178	167	156	148	143	138	134	129	124	120	115	111
2011 TY	0	0	0	0	0	0	0	0	0	0	0	0	0
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

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

\$000

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
BR	BR1	101	0	0	0	0	0	441	454	590	616	785
BR	BR2	167	0	0	0	0	0	729	751	975	1,018	1,299
BR	BR3	416	0	0	0	0	0	1,816	1,870	2,430	2,536	3,235
CR	CR4	155	258	840	1,124	1,095	1,216	1,960	1,949	1,644	1,927	2,572
CR	CR5	168	279	910	1,219	1,187	1,318	2,124	2,112	1,782	2,089	2,788
CR	CR6	240	399	1,300	1,741	1,696	1,882	5,221	5,152	4,566	4,899	5,799
GH	GH1	475	0	0	0	0	0	5,620	5,988	6,566	7,371	8,085
GH	GH2	484	0	0	0	0	0	5,727	6,101	6,691	7,510	8,238
GH	GH3	480	0	0	0	0	0	5,680	6,051	6,635	7,448	8,170
GH	GH4	479	0	0	0	0	0	5,668	6,038	6,622	7,433	8,153
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
TC	TC2	549	0	0	0	0	0	2,817	2,961	3,114	3,176	3,240
TY	TY3	71										
	BR Landfill Phase 2 Savings		0	0	0	0	0	0	0	828	908	1,960
	BR Landfill Phase 3 Savings		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
	CR Landfill Capital Savings		936	3,049	4,083	3,979	4,416	4,938	4,772	3,579	4,464	6,617
	CR Landfill O&M Savings		0	0	0	0	0	2,181	2,307	2,393	2,537	2,726
	CR6 Stator Rewind Savings		0	0	0	0	0	2,187	2,135	2,020	1,914	1,816
	GH Landfill Capital Savings		0	0	0	0	0	61	188	1,083	2,805	4,044
	GH Landfill O&M Savings		0	0	0	0	0	22,633	23,991	25,431	26,957	28,601
	TC Landfill Capital Savings		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

LandfillCapital

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
	787	789	1,035	1,054	1,357	1,337	1,319	1,301	1,285	1,267	1,122	410	385
	1,301	1,305	1,711	1,743	2,245	2,211	2,180	2,151	2,124	2,095	1,855	678	636
	3,242	3,252	4,261	4,342	5,591	5,508	5,431	5,359	5,291	5,219	4,620	1,688	1,585
	2,560	2,096	2,059	2,073	1,531	1,768	1,810	1,869	1,932	2,000	1,861	1,810	1,778
	2,774	2,272	2,232	2,247	1,659	1,916	1,962	2,025	2,094	2,168	2,017	1,962	1,927
	5,682	4,867	4,712	4,637	3,700	3,969	3,960	4,000	4,047	4,101	3,833	3,704	3,602
	8,761	9,219	9,707	10,790	12,508	14,281	15,439	15,604	16,273	16,860	17,332	17,856	18,548
	8,927	9,394	9,891	10,994	12,745	14,551	15,732	15,900	16,581	17,180	17,660	18,195	18,899
	8,854	9,316	9,809	10,904	12,640	14,431	15,602	15,769	16,444	17,038	17,514	18,044	18,743
	8,835	9,297	9,789	10,881	12,614	14,401	15,569	15,736	16,410	17,002	17,478	18,007	18,704
	2,305	2,351	2,398	2,446	2,495	2,545	2,596	2,648	5,363	8,239	8,294	12,354	12,003
	3,304	3,371	3,438	3,507	3,577	3,648	3,721	3,796	7,687	11,809	11,888	17,709	17,206
	1,870	1,782	1,697	1,613	1,531	1,451	1,372	1,294	1,215	1,123	156	138	120
	0	0	1,638	1,745	3,767	3,594	3,426	3,261	3,101	2,943	2,789	2,638	2,487
	3,461	3,564	3,671	3,781	3,895	4,012	4,132	4,256	4,384	4,515	4,651	1,345	1,123
	6,353	4,493	4,170	4,023	1,844	2,496	2,513	2,483	2,455	2,429	1,631	1,345	1,123
	2,944	3,121	3,308	3,507	3,717	3,925	4,061	4,305	4,563	4,837	5,128	5,230	5,335
	1,719	1,621	1,524	1,427	1,329	1,232	1,158	1,106	1,055	1,004	952	901	850
	4,399	4,388	4,387	6,672	11,397	16,206	18,397	18,341	18,358	17,892	16,784	15,709	15,118
	30,979	32,838	34,808	36,897	39,110	41,457	43,944	44,668	47,348	50,189	53,201	56,393	59,776
	0	0	0	0	0	0	0	0	6,478	13,344	13,344	23,088	22,094
	5,610	5,722	5,836	5,953	6,072	6,194	6,318	6,444	6,573	6,704	6,838	6,975	7,115

LandfillCapital

	2034	2035	2036	2037	2038	2039	2040
	2034	2035	2036	2037	2038	2039	2040
	360	331	54	46	38	30	23
	595	547	89	76	63	50	39
	1,482	1,363	222	189	157	124	97
	1,748	1,719	1,692	1,708	1,727	1,747	1,771
	1,895	1,864	1,834	1,851	1,872	1,894	1,919
	2,777	2,662	2,620	2,645	2,674	2,705	2,742
	19,372	20,254	21,186	21,692	2,492	1,854	1,700
	19,739	20,637	21,587	22,103	2,539	1,889	1,733
	19,576	20,467	21,409	21,921	2,518	1,874	1,718
	19,535	20,424	21,364	21,875	2,513	1,870	1,715
	11,666	11,343	11,031	10,731	10,442	10,162	9,886
	16,723	16,259	15,812	15,382	14,967	14,567	14,170
	101	83	64	46	28	9	0
	2,336	2,158	301	265	230	194	159
	908	695	485	430	384	338	303
	5,441	5,550	5,661	5,774	5,890	6,008	6,128
	70	0	0	0	0	0	0
	14,860	14,617	14,352	12,126	9,906	7,329	6,705
	63,363	67,165	71,194	75,466	155	158	161
	21,132	20,199	19,293	18,412	17,554	16,717	15,883
	7,257	7,402	7,550	7,701	7,855	8,012	8,172

LandfillCapital

Station	Unit	Capacity	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
BR	BR1	101	0	0	0	553	743	703	668	635	606	577
BR	BR2	167	0	0	0	915	1,228	1,163	1,104	1,050	1,002	954
BR	BR3	416	0	0	0	2,279	3,060	2,897	2,749	2,616	2,496	2,377
CR	CR4	155	0	0	0	980	1,582	1,494	1,413	1,339	1,269	1,201
CR	CR5	168	0	0	0	1,062	1,715	1,619	1,532	1,451	1,376	1,302
CR	CR6	240	0	0	0	1,518	2,449	2,313	2,188	2,073	1,966	1,860
GH	GH1	475	0	0	0	1,462	1,954	1,856	1,767	1,686	1,611	1,540
GH	GH2	484	0	0	0	1,489	1,991	1,891	1,800	1,718	1,642	1,569
GH	GH3	480	0	0	0	1,477	1,975	1,876	1,786	1,703	1,628	1,556
GH	GH4	479	0	0	0	1,474	1,971	1,872	1,782	1,700	1,625	1,553
GR	GR3	68	0	0	0	586	837	792	751	713	679	645
GR	GR4	95	0	0	0	819	1,169	1,106	1,049	996	948	901
MC	MC1	303	0	0	0	1,215	1,774	1,682	1,598	1,521	1,449	1,380
MC	MC2	301	0	0	0	1,207	1,762	1,671	1,588	1,511	1,440	1,371
MC	MC3	391	0	0	0	1,568	2,289	2,171	2,063	1,963	1,870	1,781
MC	MC4	477	0	0	0	1,913	2,792	2,648	2,516	2,394	2,281	2,172
TC	TC1	383	0	0	0	770	1,008	958	912	871	833	797
TC	TC2	549	0	0	0	1,104	1,445	1,373	1,307	1,248	1,194	1,142
TY	TY3	71	0	0	0	586	837	792	751	713	679	645
	BRWATER		0	0	0	3,747	5,032	4,763	4,521	4,302	4,104	3,908
	CRWATER		0	0	0	3,560	5,746	5,427	5,134	4,863	4,611	4,362
	MCWATER		0	0	0	5,902	8,617	8,173	7,765	7,389	7,040	6,704
	TCWATER		0	0	0	1,874	2,453	2,331	2,220	2,119	2,026	1,938
	GHWATER		0	0	0	5,902	7,892	7,495	7,135	6,806	6,505	6,217
	GRWATER		0	0	0	1,405	2,006	1,898	1,799	1,709	1,627	1,546

WaterCapital

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
548	519	462	491	462	433	413	403	393	382	372	361	351	340
907	859	764	811	764	716	684	666	649	632	615	597	580	563
2,258	2,140	1,902	2,021	1,902	1,784	1,703	1,660	1,617	1,574	1,531	1,488	1,445	1,402
1,132	1,064	927	996	927	859	806	770	735	699	663	627	591	0
1,227	1,153	1,005	1,079	1,005	931	874	835	796	757	718	679	640	0
1,754	1,647	1,435	1,541	1,435	1,329	1,249	1,193	1,137	1,082	1,026	970	915	0
1,468	1,397	1,254	1,325	1,254	1,183	1,111	1,062	1,035	1,008	982	955	928	901
1,496	1,423	1,278	1,350	1,278	1,205	1,132	1,082	1,055	1,028	1,000	973	946	918
1,484	1,411	1,267	1,339	1,267	1,195	1,123	1,073	1,046	1,019	992	965	938	911
1,481	1,409	1,265	1,337	1,265	1,193	1,121	1,071	1,044	1,017	990	963	936	909
611	577	510	544	510	476	452	438	423	409	395	380	366	352
854	807	712	759	712	665	631	611	591	571	551	531	511	491
1,311	1,242	1,103	1,173	1,103	1,034	965	915	882	850	818	786	754	722
1,302	1,234	1,096	1,165	1,096	1,027	959	908	877	845	813	781	749	717
1,692	1,602	1,424	1,513	1,424	1,335	1,245	1,180	1,139	1,097	1,056	1,015	973	932
2,064	1,955	1,737	1,846	1,737	1,628	1,519	1,440	1,389	1,339	1,288	1,238	1,187	1,137
760	724	652	688	652	616	579	555	542	529	517	504	491	479
1,090	1,038	934	986	934	882	830	795	777	759	741	723	704	686
611	577	510	544	510	476	452	438	423	409	395	380	366	352
3,713	3,518	3,128	3,323	3,128	2,933	2,800	2,729	2,659	2,588	2,517	2,447	2,376	2,305
4,113	3,865	3,367	3,616	3,367	3,118	2,929	2,798	2,668	2,537	2,407	2,277	2,146	0
6,368	6,032	5,361	5,696	5,361	5,025	4,689	4,443	4,287	4,131	3,976	3,820	3,664	3,508
1,850	1,762	1,586	1,674	1,586	1,498	1,410	1,350	1,319	1,288	1,258	1,227	1,196	1,165
5,928	5,640	5,063	5,352	5,063	4,775	4,487	4,288	4,180	4,072	3,964	3,856	3,748	3,640
1,465	1,384	1,222	1,303	1,222	1,141	1,083	1,049	1,015	980	946	912	877	843

WaterCapital

	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
	330	320	309	299	288	278	267	257	247	236	226	215	205
	546	528	511	494	477	459	442	425	408	390	373	356	339
	1,359	1,316	1,273	1,230	1,187	1,144	1,101	1,058	1,016	973	930	887	844
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	875	848	821	794	767	741	714	687	660	634	607	580	553
	891	864	837	809	782	755	727	700	673	646	618	591	564
	884	857	830	803	776	748	721	694	667	640	613	586	559
	882	855	828	801	774	747	720	693	666	639	612	585	558
	337	323	309	294	280	266	251	237	0	0	0	0	0
	471	451	431	411	391	371	351	331	0	0	0	0	0
	690	658	626	594	562	530	0	0	0	0	0	0	0
	686	654	622	590	558	526	0	0	0	0	0	0	0
	891	849	808	766	725	684	0	0	0	0	0	0	0
	1,086	1,036	986	935	885	834	0	0	0	0	0	0	0
	466	453	441	428	415	403	390	377	364	352	339	326	314
	668	650	632	613	595	577	559	541	522	504	486	468	450
	337	323	309	294	280	266	251	237	0	0	0	0	0
	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
	0	0	0	0	0	0	0	0	0	0	0	0	0
	3,353	3,197	3,041	2,886	2,730	2,574	0	0	0	0	0	0	0
	1,134	1,103	1,072	1,041	1,010	979	949	918	887	856	825	794	763
	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
	809	774	740	706	671	637	603	568	0	0	0	0	0

WaterCapital

	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059
	194	184	174	0	0	0	0	0	0	0	0	0	0
	321	304	287	0	0	0	0	0	0	0	0	0	0
	801	758	715	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	526	500	473	446	0	0	0	0	0	0	0	0	0
	536	509	482	454	0	0	0	0	0	0	0	0	0
	532	505	478	451	0	0	0	0	0	0	0	0	0
	531	504	477	450	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	301	288	276	263	250	237	225	212	0	0	0	0	0
	431	413	395	377	359	340	322	304	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	1,317	1,246	1,175	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
	732	701	670	640	609	578	547	516	0	0	0	0	0
	2,125	2,017	1,909	1,801	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0

WaterCapital