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_San Diego Gas and Electric Company_2020 CGR_Redacted Workpapers

Additional submitted attachment is included below.

2020 California Gas Report Workpapers

Prepared by

SDGE

A Sempra Energy utility℠

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2020 CALIFORNIA GAS REPORT

HISTORICAL DATA

SDG&E Annual Gas Supply and Sendout

SAN DIEGO GAS & ELECTRIC COMPANY

ANNUAL GAS SUPPLY AND SENDOUT (MMCF/DAY)
RECORDED YEARS 2015-2019

LINE				2015	2016	2017	2018	2019
	Actual Deliveries by End-Use							
1	**CORE**		Residential	67	71	72	70	81
2			Commercial	49	51	52	54	57
3			Industrial	0	-	-	-	-
4		*Subtotal -*	*CORE*	116	122	124	124	138
5	**NONCORE**		Commercial	0	-	-	-	-
6			Industrial	11	12	11	12	13
7			Non-EOR Cogen/EG	74	60	71	51	43
8			Electric Utilities	126	99	92	49	33
9		*Subtotal -*	*NONCORE*	211	171	174	112	89
10	**WHOLESALE**		All End Uses	0	-	-	-	-
11		*Subtotal -*	*Co Use & LUAF*	9	(3)	1	3	4
12	**SYSTEM TOTAL THROUGHPUT**			336	290	299	239	230
	Actual Transport & Exchange							
13	**CORE**		Residential	1	1	1	1	1
14			Commercial	12	13	13	14	14
15	**NONCORE**		Industrial	11	12	11	12	13
16			Non-EOR Cogen/EG	74	60	71	51	43
17			Electric Utilities	126	99	92	49	33
18		*Subtotal -*	*RETAIL*	224	185	188	127	103
19	**WHOLESALE**		All End Uses	0	-	-	-	-
20	**TOTAL TRANSPORT & EXCHANGE**			224	185	188	127	103
	Storage							
21			*Storage Injection*	0	-	-	-	-
22			*Storage Withdrawal*	0	-	-	-	-
	Actual Curtailment							
23			Residential	0	-	-	-	-
24			Com/Indl & Cogen	0	-	-	-	-
25			Electric Generation	0	-	-	-	-
26	**TOTAL CURTAILMENT**			0	-	-	-	-
27	**REFUSAL**			0	-	-	-	-
	ACTUAL DELIVERIES BY END-USE includes sales and transportation volumes							
			MMbtu/Mcf:	1.040	1.036	1.040	1.038	1.032

NB: This file and MMCFD Supplies are used in the odd year reports (see P 17-18 of CGR)

MMCFD **SDG&E Annual Gas Supply Taken**

SAN DIEGO GAS & ELECTRIC COMPANY

ANNUAL GAS SUPPLY TAKEN (MMCF/DAY)
RECORDED YEARS 2015 -2019

LINE		2015	2016	2017	2018	2019
	CAPACITY AVAILABLE					
1	**California Sources**					
	Out of State gas					
2	California Offshore (POPCO/PIOC)					
3	El Paso Natural Gas Company					
4	Transwestern Pipeline company					
5	Kern River/Mojave Pipeline Company					
6	TransCanada GTN/PG&E					
7	Other					
8	**TOTAL Output of State**					
9	Underground storage withdrawal					
10	**TOTAL Gas Supply available**					
	Gas Supply Taken	**2015**	**2016**	**2017**	**2018**	**2019**
	California Source Gas					
11	Regular Purchases	0	0	0	0	0
12	Received for Exchange/Transport	0	0	0	0	0
13	**Total California Source Gas**	0	0	0	0	0
14	**Purchases from Other Utilities**	0	0	0	0	0
	Out-of-State Gas					
15	Pacific Interstate Companies	0	0	0	0	0
16	Additional Core Supplies	0	0	0	0	0
17	Supplemental Supplies-Utility	112	105	111	112	127
18	Out-of-State Transport-Others	224	185	188	127	103
19	**Total Out-of-State Gas**	336	290	299	239	230
20	**TOTAL Gas Supply Taken & Transported**	336	290	299	239	230

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2020 CALIFORNIA GAS REPORT

FORECAST OF REQUIREMENTS - SUMMARY

2020 CALIFORNIA GAS REPORT

AVERAGE TEMPERATURE YEAR

TABLE 1-SDGE

SAN DIEGO GAS & ELECTRIC COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED YEARS 2020 THRU 2024

AVERAGE TEMPERATURE YEAR

LINE			2020	2021	2022	2023	2024	LINE
	CAPACITY AVAILABLE [1/ & 2/]							
1	California Source Gas		0	0	0	0	0	1
2	Southern Zone of SoCalGas [1/]		574	574	574	574	574	2
3	TOTAL CAPACITY AVAILABLE		574	574	574	574	574	3
	GAS SUPPLY TAKEN							
4	California Source Gas		0	0	0	0	0	4
5	Southern Zone of SoCalGas		250	251	250	243	231	5
6	TOTAL SUPPLY TAKEN		250	251	250	243	231	6
7	Net Underground Storage Withdrawal		0	0	0	0	0	7
8	TOTAL THROUGHPUT		250	251	250	243	231	8
	REQUIREMENTS FORECAST BY END-USE [3/]							
9	CORE [4/]	Residential	83	83	83	82	81	9
10		Commercial	47	48	48	48	47	10
11		Industrial	4	4	4	4	4	11
12		NGV	6	6	6	6	6	12
13		Subtotal-CORE	140	141	141	140	138	13
14	NONCORE	Commercial	6	6	6	6	6	14
15		Industrial	6	6	6	6	6	15
16		Electric Generation (EG)	96	96	95	89	79	16
17		Subtotal-NONCORE	108	108	107	101	91	17
18		Co. Use & LUAF	2	2	2	2	2	18
19	SYSTEM TOTAL THROUGHPUT		250	251	250	243	231	19
	TRANSPORTATION AND EXCHANGE							
20	CORE	All End Uses	13	14	14	14	14	20
21	NONCORE	Commercial/Industrial	12	12	12	12	12	21
22		Electric Generation (EG)	96	96	95	89	79	22
23	TOTAL TRANSPORTATION & EXCHANGE		121	122	121	115	105	23
	CURTAILMENT							
24		Core	0	0	0	0	0	24
25		Noncore	0	0	0	0	0	25
26		TOTAL - Curtailment	0	0	0	0	0	26

NOTES:

1/ Nominal capacity to receive gas from the Southern Zone of SoCalGas is based on current conditions, and is an annual value based on weighting winter and non-winter season values: 574 = (595 winter) x (151/365) + (560 non-winter) x (214/365).

2/ For 2020 and after, assume capacity at same levels. Actual capacity through the CGR timeframe is subject to change.

3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.

4/ Core end-use demand exclusive of core aggregation transportation (CAT) in MDth/d: 131 131 131 130 128

TABLE 2-SDGE

SAN DIEGO GAS & ELECTRIC COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED YEARS 2025 THRU 2035

AVERAGE TEMPERATURE YEAR

LINE			2025	2026	2027	2030	2035	LINE
	CAPACITY AVAILABLE [1/ & 2/]							
1	California Source Gas		0	0	0	0	0	1
2	Southern Zone of SoCalGas [1/]		574	574	574	574	574	2
3	TOTAL CAPACITY AVAILABLE		574	574	574	574	574	3
	GAS SUPPLY TAKEN							
4	California Source Gas		0	0	0	0	0	4
5	Southern Zone of SoCalGas		231	227	220	212	213	5
6	TOTAL SUPPLY TAKEN		231	227	220	212	213	6
7	Net Underground Storage Withdrawal		0	0	0	0	0	7
8	TOTAL THROUGHPUT		231	227	220	212	213	8
	REQUIREMENTS FORECAST BY END-USE [3/]							
9	CORE [4/]	Residential	81	80	79	77	77	9
10		Commercial	47	47	47	46	46	10
11		Industrial	4	4	4	3	3	11
12		NGV	7	7	7	8	8	12
13		Subtotal-CORE	139	138	137	134	134	13
14	NONCORE	Commercial	6	6	6	6	7	14
15		Industrial	6	6	6	6	6	15
16		Electric Generation (EG)	78	75	69	64	64	16
17		Subtotal-NONCORE	90	87	81	76	77	17
18		Co. Use & LUAF	2	2	2	2	2	18
19	SYSTEM TOTAL THROUGHPUT		231	227	220	212	213	19
	TRANSPORTATION AND EXCHANGE							
20	CORE	All End Uses	14	14	14	15	16	20
21	NONCORE	Commercial/Industrial	12	12	12	12	13	21
22		Electric Generation (EG)	78	75	69	64	64	22
23	TOTAL TRANSPORTATION & EXCHANGE		104	101	95	91	93	23
	CURTAILMENT							
24		Core	0	0	0	0	0	24
25		Noncore	0	0	0	0	0	25
26		TOTAL - Curtailment	0	0	0	0	0	26

NOTES:

1/ Nominal capacity to receive gas from the Southern Zone of SoCalGas is based on current conditions, and is an annual value based on weighting winter and non-winter season values: 574 = (595 winter) x (151/365) + (560 non-winter) x (214/365).

2/ For 2020 and after, assume capacity at same levels. Actual capacity through the CGR timeframe is subject to change.

3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.

4/ Core end-use demand exclusive of core aggregation transportation (CAT) in MDth/d: 129 128 127 123 122

2020 CALIFORNIA GAS REPORT

FORECAST OF REQUIREMENTS – DETAIL

Work Paper: TABLE 1-SDGE

SAN DIEGO GAS & ELECTRIC COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED FOR YEAR: 2020

AVERAGE TEMPERATURE with BASE HYDRO YEAR

LINE			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	LINE
	CAPACITY AVAILABLE [1/ & 2/]															
1	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	1
2	Southern Zone of SoCalGas [1/]		574	574	574	574	574	574	574	574	574	574	574	574	574	2
3	TOTAL CAPACITY AVAILABLE		574	574	574	574	574	574	574	574	574	574	574	574	574	3
	GAS SUPPLY TAKEN															
4	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	4
5	Southern Zone of SoCalGas		309	281	219	189	154	144	247	316	270	250	279	348	250	5
6	TOTAL SUPPLY TAKEN		309	281	219	189	154	144	247	316	270	250	279	348	250	6
7	Net Underground Storage Withdrawal		0	0	0	0	0	0	0	0	0	0	0	0	0	7
8	TOTAL THROUGHPUT		309	281	219	189	154	144	247	316	270	250	279	348	251	8
	REQUIREMENTS FORECAST BY END-USE [3/]															
9	CORE [4/]	Residential	135	126	108	92	66	52	47	47	47	55	90	138	83	9
10		Commercial	62	62	54	50	42	39	36	36	37	39	50	63	47	10
11		Industrial	5	4	4	4	4	4	3	3	3	3	4	4	4	11
12		NGV	5	6	5	6	5	6	6	6	6	6	6	6	6	12
13		Subtotal-CORE	206	198	171	152	116	100	92	92	94	103	150	211	140	13
14	NONCORE	Commercial	6	7	6	6	6	6	6	6	6	6	6	6	6	14
15		Industrial	6	7	6	6	6	6	6	6	6	6	6	6	6	15
16		Electric Generation (EG)	87	68	33	23	25	31	141	210	161	133	115	123	96	16
17		Subtotal-NONCORE	100	81	45	35	37	43	153	221	174	145	127	134	108	17
18		Co. Use & LUAF	3	2	2	2	1	1	2	3	2	2	2	3	2	18
19	SYSTEM TOTAL THROUGHPUT		309	281	219	189	154	144	247	316	270	250	279	348	251	19
	TRANSPORTATION AND EXCHANGE															
20	CORE	All End Uses	16	17	15	14	12	12	11	11	11	11	14	17	13	20
21	NONCORE	Commercial/Industrial	13	13	12	12	12	12	12	12	12	12	12	12	12	21
22		Electric Generation (EG)	87	68	33	23	25	31	141	210	161	133	115	123	96	22
23	TOTAL TRANSPORTATION & EXCHANGE		116	98	60	49	49	55	164	232	185	156	142	151	122	23
	CURTAILMENT															
24		Core	0	0	0	0	0	0	0	0	0	0	0	0	0	24
25		Noncore	0	0	0	0	0	0	0	0	0	0	0	0	0	25
26		TOTAL - Curtailment	0	0	0	0	0	0	0	0	0	0	0	0	0	26

NOTES:
1/ Nominal capacity to receive gas from the Southern Zone of SoCalGas is based on current conditions, and is an annual value based on weighting winter and non-winter season values: 574 = (595 winter) x (151/365) + (560 non-winter) x (214/365).
2/ For 2020 and after, assume capacity at same levels. Actual capacity through the CGR timeframe is subject to change.
3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.
4/ Core end-use demand exclusive of core aggregation transportation (CAT) in MDth/d: 196 187 162 142 107 91 84 84 86 94 140 200 131

Work Paper: **TABLE 1-SDGE**

SAN DIEGO GAS & ELECTRIC COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED FOR YEAR: **2021**

AVERAGE TEMPERATURE with BASE HYDRO YEAR

LINE			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	LINE
	CAPACITY AVAILABLE [1/ & 2/]															
1	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	1
2	Southern Zone of SoCalGas [1/]		574	574	574	574	574	574	574	574	574	574	574	574	574	2
3	TOTAL CAPACITY AVAILABLE		574	574	574	574	574	574	574	574	574	574	574	574	574	3
	GAS SUPPLY TAKEN															
4	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	4
5	Southern Zone of SoCalGas		286	302	227	186	149	145	251	310	281	253	273	339	251	5
6	TOTAL SUPPLY TAKEN		286	302	227	186	149	145	251	310	281	253	273	339	251	6
7	Net Underground Storage Withdrawal		0	0	0	0	0	0	0	0	0	0	0	0	0	7
8	TOTAL THROUGHPUT		286	302	227	186	149	145	251	310	281	253	273	339	250	8
	REQUIREMENTS FORECAST BY END-USE [3/]															
9	CORE [4/]	Residential	134	129	107	91	65	51	47	47	47	55	90	137	83	9
10		Commercial	62	65	54	51	42	39	36	36	38	39	50	63	48	10
11		Industrial	4	4	4	4	3	4	3	3	3	3	4	4	4	11
12		NGV	5	6	5	6	6	6	6	6	6	6	6	6	6	12
13		Subtotal-CORE	205	204	171	151	116	100	92	92	94	103	150	210	140	13
14	NONCORE	Commercial	6	6	6	6	6	6	6	6	6	6	6	6	6	14
15		Industrial	6	6	6	6	6	6	6	6	6	6	6	6	6	15
16		Electric Generation (EG)	67	82	42	21	21	32	145	203	172	136	109	114	96	16
17		Subtotal-NONCORE	79	95	54	33	32	45	157	215	184	148	121	126	108	17
18		Co. Use & LUAF	2	3	2	2	1	1	2	3	2	2	2	3	2	18
19	SYSTEM TOTAL THROUGHPUT		286	302	227	186	149	145	251	310	281	253	273	339	250	19
	TRANSPORTATION AND EXCHANGE															
20	CORE	All End Uses	17	17	15	14	12	12	11	11	12	12	14	17	14	20
21	NONCORE	Commercial/Industrial	11	13	12	12	12	12	12	12	12	12	12	12	12	21
22		Electric Generation (EG)	67	82	42	21	21	32	145	203	172	136	109	114	96	22
23	TOTAL TRANSPORTATION & EXCHANGE		95	112	69	47	45	56	168	226	196	160	135	142	121	23
	CURTAILMENT															
24		Core	0	0	0	0	0	0	0	0	0	0	0	0	0	24
25		Noncore	0	0	0	0	0	0	0	0	0	0	0	0	0	25
26		TOTAL - Curtailment	0	0	0	0	0	0	0	0	0	0	0	0	0	26

NOTES:
1/ Nominal capacity to receive gas from the Southern Zone of SoCalGas is based on current conditions, and is an annual value based on weighting winter and non-winter season values: 574 = (595 winter) x (151/365) + (560 non-winter) x (214/365).
2/ For 2020 and after, assume capacity at same levels. Actual capacity through the CGR timeframe is subject to change.
3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.
4/ Core end-use demand exclusive of core aggregation transportation (CAT) in MDth/d: 195 193 161 142 107 91 84 84 85 94 140 199 131

Work Paper: **TABLE 1-SDGE**

SAN DIEGO GAS & ELECTRIC COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED FOR YEAR: 2022

AVERAGE TEMPERATURE with BASE HYDRO YEAR

LINE			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	LINE
	CAPACITY AVAILABLE [1/ & 2/]															
1	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	1
2	Southern Zone of SoCalGas [1/]		574	574	574	574	574	574	574	574	574	574	574	574	574	2
3	TOTAL CAPACITY AVAILABLE		574	574	574	574	574	574	574	574	574	574	574	574	574	3
	GAS SUPPLY TAKEN															
4	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	4
5	Southern Zone of SoCalGas		320	307	216	188	151	143	251	298	275	234	272	342	250	5
6	TOTAL SUPPLY TAKEN		320	307	216	188	151	143	251	298	275	234	272	342	250	6
7	Net Underground Storage Withdrawal		0	0	0	0	0	0	0	0	0	0	0	0	0	7
8	TOTAL THROUGHPUT		320	307	216	188	151	143	251	298	275	234	272	342	249	8
	REQUIREMENTS FORECAST BY END-USE [3/]															
9	CORE [4/]	Residential	133	129	107	91	65	51	47	47	47	55	89	137	83	9
10		Commercial	62	65	54	51	42	39	36	36	38	39	50	63	48	10
11		Industrial	4	4	4	4	3	4	3	3	3	3	4	4	4	11
12		NGV	5	6	5	6	6	6	6	6	6	6	6	6	6	12
13		Subtotal-CORE	205	204	171	151	116	100	92	92	94	103	150	210	140	13
14	NONCORE	Commercial	6	7	6	6	6	6	6	6	6	6	6	6	6	14
15		Industrial	6	7	6	6	6	6	6	6	6	6	6	6	6	15
16		Electric Generation (EG)	101	86	31	23	22	30	144	192	166	117	108	117	95	16
17		Subtotal-NONCORE	112	100	43	35	34	43	156	204	178	129	120	130	107	17
18		Co. Use & LUAF	3	3	2	2	1	1	2	2	2	2	2	3	2	18
19	SYSTEM TOTAL THROUGHPUT		320	307	216	188	151	143	251	298	275	234	272	342	249	19
	TRANSPORTATION AND EXCHANGE															
20	CORE	All End Uses	17	18	15	15	12	12	11	11	12	12	15	17	14	20
21	NONCORE	Commercial/Industrial	12	13	12	12	12	13	12	12	13	12	13	12	12	21
22		Electric Generation (EG)	101	86	31	23	22	30	144	192	166	117	108	117	95	22
23	TOTAL TRANSPORTATION & EXCHANGE		129	117	58	50	46	55	168	216	190	141	135	147	121	23
	CURTAILMENT															
24		Core	0	0	0	0	0	0	0	0	0	0	0	0	0	24
25		Noncore	0	0	0	0	0	0	0	0	0	0	0	0	0	25
26		TOTAL - Curtailment	0	0	0	0	0	0	0	0	0	0	0	0	0	26

NOTES:
1/ Nominal capacity to receive gas from the Southern Zone of SoCalGas is based on current conditions, and is an annual value based on weighting winter and non-winter season values: 574 = (595 winter) x (151/365) + (560 non-winter) x (214/365).
2/ For 2020 and after, assume capacity at same levels. Actual capacity through the CGR timeframe is subject to change.
3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.
4/ Core end-use demand exclusive of core aggregation transportation (CAT) in MDth/d: 194 192 161 141 107 90 84 83 85 94 139 199 130

Work Paper: **TABLE 1-SDGE**

SAN DIEGO GAS & ELECTRIC COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED FOR YEAR: 2023

AVERAGE TEMPERATURE with BASE HYDRO YEAR

LINE			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	LINE
	CAPACITY AVAILABLE [1/ & 2/]															
1	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	1
2	Southern Zone of SoCalGas [1/]		574	574	574	574	574	574	574	574	574	574	574	574	574	2
3	TOTAL CAPACITY AVAILABLE		574	574	574	574	574	574	574	574	574	574	574	574	574	3
	GAS SUPPLY TAKEN															
4	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	4
5	Southern Zone of SoCalGas		294	281	218	187	151	142	241	294	259	233	284	334	243	5
6	TOTAL SUPPLY TAKEN		294	281	218	187	151	142	241	294	259	233	284	334	243	6
7	Net Underground Storage Withdrawal		0	0	0	0	0	0	0	0	0	0	0	0	0	7
8	TOTAL THROUGHPUT		294	281	218	187	151	142	241	294	259	233	284	334	243	8
	REQUIREMENTS FORECAST BY END-USE [3/]															
9	CORE [4/]	Residential	132	128	106	90	64	50	46	46	46	54	88	135	82	9
10		Commercial	62	64	54	50	42	39	36	36	38	39	50	63	48	10
11		Industrial	4	4	4	4	3	4	3	3	3	3	4	4	4	11
12		NGV	6	6	6	6	6	6	6	6	7	6	7	6	6	12
13		Subtotal-CORE	204	203	170	150	115	99	92	92	94	102	149	208	139	13
14	NONCORE	Commercial	6	7	6	6	6	6	6	6	6	6	7	6	6	14
15		Industrial	6	7	6	6	6	6	6	6	6	6	6	6	6	15
16		Electric Generation (EG)	77	63	34	22	23	29	135	188	150	116	121	111	89	16
17		Subtotal-NONCORE	89	76	46	34	35	42	147	200	163	129	134	123	102	17
18		Co. Use & LUAF	2	2	2	2	1	1	2	2	2	2	2	3	2	18
19	SYSTEM TOTAL THROUGHPUT		294	281	218	187	151	142	241	294	259	233	284	334	243	19
	TRANSPORTATION AND EXCHANGE															
20	CORE	All End Uses	17	18	15	15	13	12	11	11	12	12	15	17	14	20
21	NONCORE	Commercial/Industrial	12	13	12	13	12	13	12	12	13	12	13	12	12	21
22		Electric Generation (EG)	77	63	34	22	23	29	135	188	150	116	121	111	89	22
23	TOTAL TRANSPORTATION & EXCHANGE		106	94	61	49	47	54	158	212	175	141	149	140	116	23
	CURTAILMENT															
24		Core	0	0	0	0	0	0	0	0	0	0	0	0	0	24
25		Noncore	0	0	0	0	0	0	0	0	0	0	0	0	0	25
26		TOTAL - Curtailment	0	0	0	0	0	0	0	0	0	0	0	0	0	26

NOTES:
1/ Nominal capacity to receive gas from the Southern Zone of SoCalGas is based on current conditions, and is an annual value based on weighting winter and non-winter season values: 574 = (595 winter) x (151/365) + (560 non-winter) x (214/365).
2/ For 2020 and after, assume capacity at same levels. Actual capacity through the CGR timeframe is subject to change.
3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.
4/ Core end-use demand exclusive of core aggregation transportation (CAT) in MDth/d: 193 191 159 140 106 90 83 83 85 93 138 197 130

Work Paper: TABLE 1-SDGE

SAN DIEGO GAS & ELECTRIC COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED FOR YEAR: 2024

AVERAGE TEMPERATURE with BASE HYDRO YEAR

LINE			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	LINE
	CAPACITY AVAILABLE [1/ & 2/]															
1	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	1
2	Southern Zone of SoCalGas [1/]		574	574	574	574	574	574	574	574	574	574	574	574	574	2
3	TOTAL CAPACITY AVAILABLE		574	574	574	574	574	574	574	574	574	574	574	574	574	3
	GAS SUPPLY TAKEN															
4	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	4
5	Southern Zone of SoCalGas		291	267	209	189	152	144	231	282	246	216	231	315	231	5
6	TOTAL SUPPLY TAKEN		291	267	209	189	152	144	231	282	246	216	231	315	231	6
7	Net Underground Storage Withdrawal		0	0	0	0	0	0	0	0	0	0	0	0	0	7
8	TOTAL THROUGHPUT		291	267	209	189	152	144	231	282	246	216	231	315	231	8
	REQUIREMENTS FORECAST BY END-USE [3/]															
9	CORE [4/]	Residential	131	122	105	89	64	50	46	46	46	54	88	134	81	9
10		Commercial	61	62	54	50	41	39	36	36	37	38	50	62	47	10
11		Industrial	4	4	4	4	3	4	3	3	3	3	4	4	4	11
12		NGV	6	6	6	6	6	7	6	6	7	7	7	6	6	12
13		Subtotal-CORE	202	194	168	150	115	99	92	91	93	102	148	207	138	13
14	NONCORE	Commercial	6	7	6	6	6	6	6	6	6	6	7	6	6	14
15		Industrial	6	6	6	6	6	6	6	6	6	6	6	6	6	15
16		Electric Generation (EG)	74	58	26	24	24	32	125	176	138	100	69	93	79	16
17		Subtotal-NONCORE	86	70	38	37	37	44	138	188	151	112	81	106	91	17
18		Co. Use & LUAF	2	2	2	2	1	1	2	2	2	2	2	3	2	18
19	SYSTEM TOTAL THROUGHPUT		291	267	209	189	152	144	231	282	246	216	231	315	231	19
	TRANSPORTATION AND EXCHANGE															
20	CORE	All End Uses	17	17	15	15	13	12	11	12	12	12	15	17	14	20
21	NONCORE	Commercial/Industrial	12	13	12	13	12	13	12	12	13	12	13	12	12	21
22		Electric Generation (EG)	74	58	26	24	24	32	125	176	138	100	69	93	79	22
23	TOTAL TRANSPORTATION & EXCHANGE		103	88	53	52	49	57	149	200	163	124	96	123	105	23
	CURTAILMENT															
24		Core	0	0	0	0	0	0	0	0	0	0	0	0	0	24
25		Noncore	0	0	0	0	0	0	0	0	0	0	0	0	0	25
26		TOTAL - Curtailment	0	0	0	0	0	0	0	0	0	0	0	0	0	26

NOTES:
1/ Nominal capacity to receive gas from the Southern Zone of SoCalGas is based on current conditions, and is an annual value based on weighting winter and non-winter season values: 574 = (595 winter) x (151/365) + (560 non-winter) x (214/365).
2/ For 2020 and after, assume capacity at same levels. Actual capacity through the CGR timeframe is subject to change.
3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.
4/ Core end-use demand exclusive of core aggregation transportation (CAT) in MDth/d: 191 183 158 139 105 89 83 82 84 93 137 196 128

Work Paper: **TABLE 2-SDGE**

SAN DIEGO GAS & ELECTRIC COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED FOR YEAR: 2025

AVERAGE TEMPERATURE with BASE HYDRO YEAR

LINE			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	LINE
	CAPACITY AVAILABLE [1/ & 2/]															
1	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	1
2	Southern Zone of SoCalGas [1/]		574	574	574	574	574	574	574	574	574	574	574	574	574	2
3	TOTAL CAPACITY AVAILABLE		574	574	574	574	574	574	574	574	574	574	574	574	574	3
	GAS SUPPLY TAKEN															
4	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	4
5	Southern Zone of SoCalGas		273	267	206	187	153	145	212	262	265	219	260	320	231	5
6	TOTAL SUPPLY TAKEN		273	267	206	187	153	145	212	262	265	219	260	320	231	6
7	Net Underground Storage Withdrawal		0	0	0	0	0	0	0	0	0	0	0	0	0	7
8	TOTAL THROUGHPUT		273	267	206	187	153	145	212	262	265	219	260	320	231	8
	REQUIREMENTS FORECAST BY END-USE [3/]															
9	CORE [4/]	Residential	130	125	104	88	63	50	46	45	46	53	87	133	81	9
10		Commercial	61	64	53	50	41	38	36	36	37	38	49	62	47	10
11		Industrial	4	4	4	4	3	4	3	3	3	3	4	4	4	11
12		NGV	6	7	6	7	6	7	6	7	7	7	7	6	7	12
13		Subtotal-CORE	201	200	167	149	114	98	91	91	93	101	147	205	138	13
14	NONCORE															14
15																15
16																16
17		Subtotal-NONCORE	70	65	36	36	38	45	119	169	170	116	111	111	91	17
18		Co. Use & LUAF	2	2	2	2	1	1	2	2	2	2	2	3	2	18
19	SYSTEM TOTAL THROUGHPUT		273	267	206	187	153	145	212	262	265	219	260	320	231	19
	TRANSPORTATION AND EXCHANGE															
20	CORE	All End Uses	17	18	15	15	13	13	12	12	12	12	15	17	14	20
21																21
22	NONCORE	All End Uses	70	65	36	36	38	45	119	169	170	116	111	111	91	22
23	TOTAL TRANSPORTATION & EXCHANGE		87	83	52	51	51	58	131	181	182	128	126	129	105	23
	CURTAILMENT															
24		Core	0	0	0	0	0	0	0	0	0	0	0	0	0	24
25		Noncore	0	0	0	0	0	0	0	0	0	0	0	0	0	25
26		TOTAL - Curtailment	0	0	0	0	0	0	0	0	0	0	0	0	0	26

NOTES:
1/ Nominal capacity to receive gas from the Southern Zone of SoCalGas is based on current conditions, and is an annual value based on weighting winter and non-winter season values: 574 = (595 winter) x (151/365) + (560 non-winter) x (214/365).
2/ For 2020 and after, assume capacity at same levels. Actual capacity through the CGR timeframe is subject to change.
3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.
4/ Core end-use demand exclusive of core aggregation transportation (CAT) in MDth/d: 190 188 157 138 104 88 82 82 83 92 136 194 128

Work Paper: TABLE 2-SDGE

SAN DIEGO GAS & ELECTRIC COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED FOR YEAR: 2026

AVERAGE TEMPERATURE with BASE HYDRO YEAR

LINE			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	LINE
	CAPACITY AVAILABLE [1/ & 2/]															
1	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	1
2	Southern Zone of SoCalGas [1/]		574	574	574	574	574	574	574	574	574	574	574	574	574	2
3	TOTAL CAPACITY AVAILABLE		574	574	574	574	574	574	574	574	574	574	574	574	574	3
	GAS SUPPLY TAKEN															
4	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	4
5	Southern Zone of SoCalGas		275	271	205	186	154	142	212	253	257	204	243	322	227	5
6	TOTAL SUPPLY TAKEN		275	271	205	186	154	142	212	253	257	204	243	322	227	6
7	Net Underground Storage Withdrawal		0	0	0	0	0	0	0	0	0	0	0	0	0	7
8	TOTAL THROUGHPUT		275	271	205	186	154	142	212	253	257	204	243	322	227	8
	REQUIREMENTS FORECAST BY END-USE [3/]															
9	CORE [4/]	Residential	128	124	103	87	63	49	45	45	45	53	86	132	80	9
10		Commercial	61	63	53	50	41	38	36	36	37	38	49	62	47	10
11		Industrial	4	4	4	4	3	4	3	3	3	3	4	4	4	11
12		NGV	6	7	6	7	7	7	7	7	7	7	7	7	7	12
13		Subtotal-CORE	199	199	166	148	113	98	91	90	93	101	146	204	137	13
14	NONCORE															14
15																15
16																16
17		Subtotal-NONCORE	73	71	37	36	39	43	119	160	162	102	95	115	88	17
18		Co. Use & LUAF	2	2	2	2	1	1	2	2	2	2	2	3	2	18
19	SYSTEM TOTAL THROUGHPUT		275	271	205	186	154	142	212	253	257	204	243	322	227	19
	TRANSPORTATION AND EXCHANGE															
20	CORE	All End Uses	17	18	15	15	13	13	12	12	12	12	15	17	14	20
21																21
22	NONCORE	All End Uses	73	71	37	36	39	43	119	160	162	102	95	115	88	22
23	TOTAL TRANSPORTATION & EXCHANGE		90	89	52	51	52	56	131	172	175	114	110	132	102	23
	CURTAILMENT															
24		Core	0	0	0	0	0	0	0	0	0	0	0	0	0	24
25		Noncore	0	0	0	0	0	0	0	0	0	0	0	0	0	25
26		TOTAL - Curtailment	0	0	0	0	0	0	0	0	0	0	0	0	0	26

NOTES:
1/ Nominal capacity to receive gas from the Southern Zone of SoCalGas is based on current conditions, and is an annual value based on weighting winter and non-winter season values: 574 = (595 winter) x (151/365) + (560 non-winter) x (214/365).
2/ For 2020 and after, assume capacity at same levels. Actual capacity through the CGR timeframe is subject to change.
3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.
4/ Core end-use demand exclusive of core aggregation transportation (CAT) in MDth/d: 188 186 156 137 104 88 81 81 83 91 135 193 127

Work Paper: **TABLE 2-SDGE**

SAN DIEGO GAS & ELECTRIC COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED FOR YEAR: 2027

AVERAGE TEMPERATURE with BASE HYDRO YEAR

LINE			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	LINE
	CAPACITY AVAILABLE [1/ & 2/]															
1	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	1
2	Southern Zone of SoCalGas [1/]		574	574	574	574	574	574	574	574	574	574	574	574	574	2
3	TOTAL CAPACITY AVAILABLE		574	574	574	574	574	574	574	574	574	574	574	574	574	3
	GAS SUPPLY TAKEN															
4	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	4
5	Southern Zone of SoCalGas		271	251	211	192	159	154	203	256	231	187	222	295	220	5
6	TOTAL SUPPLY TAKEN		271	251	211	192	159	154	203	256	231	187	222	295	220	6
7	Net Underground Storage Withdrawal		0	0	0	0	0	0	0	0	0	0	0	0	0	7
8	TOTAL THROUGHPUT		271	251	211	192	159	154	203	256	231	187	222	295	219	8
	REQUIREMENTS FORECAST BY END-USE [3/]															
9	CORE [4/]	Residential	127	123	102	87	62	49	45	44	45	52	85	131	79	9
10		Commercial	60	63	53	49	41	38	36	35	37	38	49	61	47	10
11		Industrial	4	4	4	4	3	4	3	3	3	3	4	4	4	11
12		NGV	6	7	6	7	7	7	7	7	7	7	8	7	7	12
13		Subtotal-CORE	198	197	165	147	113	97	90	90	92	100	145	203	136	13
14	NONCORE															14
15																15
16																16
17		Subtotal-NONCORE	71	52	44	43	45	56	110	164	137	85	75	90	81	17
18		Co. Use & LUAF	2	2	2	2	1	1	2	2	2	2	2	2	2	18
19	SYSTEM TOTAL THROUGHPUT		271	251	211	192	159	154	203	256	231	187	222	295	219	19
	TRANSPORTATION AND EXCHANGE															
20	CORE	All End Uses	17	18	15	15	13	13	12	12	13	13	15	17	14	20
21																21
22	NONCORE	All End Uses	71	52	44	43	45	56	110	164	137	85	75	90	81	22
23	TOTAL TRANSPORTATION & EXCHANGE		88	70	59	58	58	68	122	176	149	97	90	108	96	23
	CURTAILMENT															
24		Core	0	0	0	0	0	0	0	0	0	0	0	0	0	24
25		Noncore	0	0	0	0	0	0	0	0	0	0	0	0	0	25
26		TOTAL - Curtailment	0	0	0	0	0	0	0	0	0	0	0	0	0	26

NOTES:
1/ Nominal capacity to receive gas from the Southern Zone of SoCalGas is based on current conditions, and is an annual value based on weighting winter and non-winter season values: 574 = (595 winter) x (151/365) + (560 non-winter) x (214/365).
2/ For 2020 and after, assume capacity at same levels. Actual capacity through the CGR timeframe is subject to change.
3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.
4/ Core end-use demand exclusive of core aggregation transportation (CAT) in MDth/d: 187 185 155 136 103 87 81 80 82 91 134 191 126

Work Paper: **TABLE 2-SDGE**

SAN DIEGO GAS & ELECTRIC COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED FOR YEAR: **2030**

AVERAGE TEMPERATURE with BASE HYDRO YEAR

LINE		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	LINE
	CAPACITY AVAILABLE [1/ & 2/]														
1	California Source Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2	Southern Zone of SoCalGas [1/]	574	574	574	574	574	574	574	574	574	574	574	574	574	2
3	TOTAL CAPACITY AVAILABLE	574	574	574	574	574	574	574	574	574	574	574	574	574	3
	GAS SUPPLY TAKEN														
4	California Source Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5	Southern Zone of SoCalGas	265	263	216	196	169	157	190	231	214	166	208	285	212	5
6	TOTAL SUPPLY TAKEN	265	263	216	196	169	157	190	231	214	166	208	285	212	6
7	Net Underground Storage Withdrawal	0	0	0	0	0	0	0	0	0	0	0	0	0	7
8	TOTAL THROUGHPUT	265	263	216	196	169	157	190	231	214	166	208	285	213	8
	REQUIREMENTS FORECAST BY END-USE [3/]														
9	CORE [4/] Residential	124	120	100	85	61	48	44	44	44	51	83	128	77	9
10	Commercial	60	63	53	49	41	38	35	35	37	38	49	61	46	10
11	Industrial	4	4	4	4	3	3	3	3	3	3	3	4	3	11
12	NGV	7	8	7	8	7	8	7	8	8	8	8	7	8	12
13	Subtotal-CORE	195	195	163	145	112	97	90	89	92	100	144	200	135	13
14	NONCORE														14
15															15
16															16
17	Subtotal-NONCORE	68	66	51	49	56	59	98	140	120	65	62	83	77	17
18	Co. Use & LUAF	2	2	2	2	1	1	2	2	2	1	2	2	2	18
19	SYSTEM TOTAL THROUGHPUT	265	263	216	196	169	157	190	231	214	166	208	285	213	19
	TRANSPORTATION AND EXCHANGE														
20	CORE All End Uses	18	19	16	16	14	13	12	13	13	13	16	18	15	20
21															21
22	NONCORE All End Uses	68	66	51	49	56	59	98	140	120	65	62	83	77	22
23	TOTAL TRANSPORTATION & EXCHANGE	85	85	67	64	70	72	111	153	133	78	78	101	92	23
	CURTAILMENT														
24	Core	0	0	0	0	0	0	0	0	0	0	0	0	0	24
25	Noncore	0	0	0	0	0	0	0	0	0	0	0	0	0	25
26	TOTAL - Curtailment	0	0	0	0	0	0	0	0	0	0	0	0	0	26

NOTES:
1/ Nominal capacity to receive gas from the Southern Zone of SoCalGas is based on current conditions, and is an annual value based on weighting winter and non-winter season values: 574 = (595 winter) x (151/365) + (560 non-winter) x (214/365).
2/ For 2020 and after, assume capacity at same levels. Actual capacity through the CGR timeframe is subject to change.
3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.
4/ Core end-use demand exclusive of core aggregation transportation (CAT) in MDth/d: 184 182 152 134 101 86 80 79 81 89 132 188 124

Work Paper: TABLE 2-SDGE

SAN DIEGO GAS & ELECTRIC COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED FOR YEAR: 2035

AVERAGE TEMPERATURE with BASE HYDRO YEAR

LINE			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	LINE
	CAPACITY AVAILABLE [1/ & 2/]															
1	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	1
2	Southern Zone of SoCalGas [1/]		574	574	574	574	574	574	574	574	574	574	574	574	574	2
3	TOTAL CAPACITY AVAILABLE		574	574	574	574	574	574	574	574	574	574	574	574	574	3
	GAS SUPPLY TAKEN															
4	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	4
5	Southern Zone of SoCalGas		265	263	216	196	169	157	191	232	215	167	208	285	213	5
6	TOTAL SUPPLY TAKEN		265	263	216	196	169	157	191	232	215	167	208	285	213	6
7	Net Underground Storage Withdrawal		0	0	0	0	0	0	0	0	0	0	0	0	0	7
8	TOTAL THROUGHPUT		265	263	216	196	169	157	191	232	215	167	208	285	214	8
	REQUIREMENTS FORECAST BY END-USE [3/]															
9	CORE [4/]	Residential	124	120	99	84	60	47	43	43	44	51	83	127	77	9
10		Commercial	60	62	52	49	41	38	35	35	37	38	49	61	46	10
11		Industrial	4	4	4	4	3	3	3	3	3	3	3	4	3	11
12		NGV	8	9	8	8	8	9	8	9	9	9	9	8	8	12
13		Subtotal-CORE	195	195	163	145	112	97	90	90	92	100	144	200	135	13
14	NONCORE															14
15																15
16																16
17		Subtotal-NONCORE	68	66	51	49	56	59	99	140	120	66	62	83	77	17
18		Co. Use & LUAF	2	2	2	2	1	1	2	2	2	1	2	2	2	18
19	SYSTEM TOTAL THROUGHPUT		265	263	216	196	169	157	191	232	215	167	208	285	214	19
	TRANSPORTATION AND EXCHANGE															
20	CORE	All End Uses	18	20	17	17	15	14	13	14	14	14	17	19	16	20
21																21
22	NONCORE	All End Uses	68	66	51	49	56	59	99	140	120	66	62	83	77	22
23	TOTAL TRANSPORTATION & EXCHANGE		86	86	68	66	71	74	112	154	135	80	79	102	93	23
	CURTAILMENT															
24		Core	0	0	0	0	0	0	0	0	0	0	0	0	0	24
25		Noncore	0	0	0	0	0	0	0	0	0	0	0	0	0	25
26		TOTAL - Curtailment	0	0	0	0	0	0	0	0	0	0	0	0	0	26

NOTES:
1/ Nominal capacity to receive gas from the Southern Zone of SoCalGas is based on current conditions, and is an annual value based on weighting winter and non-winter season values: 574 = (595 winter) x (151/365) + (560 non-winter) x (214/365).
2/ For 2020 and after, assume capacity at same levels. Actual capacity through the CGR timeframe is subject to change.
3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.
4/ Core end-use demand exclusive of core aggregation transportation (CAT) in MDth/d: 182 181 151 133 101 85 79 79 80 89 131 187 123

2020 CALIFORNIA GAS REPORT

COLD TEMPERATURE YEAR

TABLE 3-SDGE

SAN DIEGO GAS & ELECTRIC COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED YEARS 2020 THRU 2024

COLD TEMPERATURE YEAR (1 IN 35 COLD YEAR EVENT) & DRY HYDRO YEAR

LINE			2020	2021	2022	2023	2024	LINE
	CAPACITY AVAILABLE [1/ & 2/]							
1	California Source Gas		0	0	0	0	0	1
2	Southern Zone of SoCalGas [1/]		574	574	574	574	574	2
3	TOTAL CAPACITY AVAILABLE		574	574	574	574	574	3
	GAS SUPPLY TAKEN							
4	California Source Gas		0	0	0	0	0	4
5	Southern Zone of SoCalGas		260	270	271	263	251	5
6	TOTAL SUPPLY TAKEN		260	270	271	263	251	6
7	Net Underground Storage Withdrawal		0	0	0	0	0	7
8	TOTAL THROUGHPUT		260	270	271	263	251	8
	REQUIREMENTS FORECAST BY END-USE [3/]							
9	CORE [4/]	Residential	91	91	90	90	89	9
10		Commercial	49	49	49	49	49	10
11		Industrial	4	4	4	4	4	11
12		NGV	6	6	6	6	6	12
13		Subtotal-CORE	150	150	149	149	148	13
14	NONCORE	Commercial	6	6	6	6	6	14
15		Industrial	6	6	6	6	6	15
16		Electric Generation (EG)	96	106	108	100	89	16
17		Subtotal-NONCORE	108	118	120	112	101	17
18		Co. Use & LUAF	2	2	2	2	2	18
19	SYSTEM TOTAL THROUGHPUT		260	270	271	263	251	19
	TRANSPORTATION AND EXCHANGE							
20	CORE	All End Uses	14	14	14	14	14	20
21	NONCORE	Commercial/Industrial	12	12	12	12	12	21
22		Electric Generation (EG)	96	106	108	100	89	22
23	TOTAL TRANSPORTATION & EXCHANGE		122	132	134	126	115	23
	CURTAILMENT							
24		Core	0	0	0	0	0	24
25		Noncore	0	0	0	0	0	25
26		TOTAL - Curtailment	0	0	0	0	0	26

NOTES:

1/ Nominal capacity to receive gas from the Southern Zone of SoCalGas is based on current conditions, and is an annual value based on weighting winter and non-winter season values: 574 = (595 winter) x (151/365) + (560 non-winter) x (214/365).

2/ For 2020 and after, assume capacity at same levels. Actual capacity through the CGR timeframe is subject to change.

3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.

4/ Core end-use demand exclusive of core aggregation transportation (CAT) in MDth/d: 140 140 139 139 138

TABLE 4-SDGE

SAN DIEGO GAS & ELECTRIC COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED YEARS 2025 THRU 2035

COLD TEMPERATURE YEAR (1 IN 35 COLD YEAR EVENT) & DRY HYDRO YEAR

LINE			2025	2026	2027	2030	2035	LINE
	CAPACITY AVAILABLE [1/ & 2/]							
1	California Source Gas		0	0	0	0	0	1
2	Southern Zone of SoCalGas [1/]		574	574	574	574	574	2
3	TOTAL CAPACITY AVAILABLE		574	574	574	574	574	3
	GAS SUPPLY TAKEN							
4	California Source Gas		0	0	0	0	0	4
5	Southern Zone of SoCalGas		253	248	242	230	229	5
6	TOTAL SUPPLY TAKEN		253	248	242	230	229	6
7	Net Underground Storage Withdrawal		0	0	0	0	0	7
8	TOTAL THROUGHPUT		253	248	242	230	229	8
	REQUIREMENTS FORECAST BY END-USE [3/]							
9	CORE [4/]	Residential	88	87	87	85	84	9
10		Commercial	49	48	48	48	48	10
11		Industrial	4	4	4	4	3	11
12		NGV	7	7	7	8	8	12
13		Subtotal-CORE	148	146	146	145	143	13
14	NONCORE	Commercial	6	6	6	6	7	14
15		Industrial	6	6	6	6	6	15
16		Electric Generation (EG)	91	88	82	71	71	16
17		Subtotal-NONCORE	103	100	94	83	84	17
18		Co. Use & LUAF	2	2	2	2	2	18
19	SYSTEM TOTAL THROUGHPUT		253	248	242	230	229	19
	TRANSPORTATION AND EXCHANGE							
20	CORE	All End Uses	15	15	15	15	16	20
21	NONCORE	Commercial/Industrial	12	12	12	12	13	21
22		Electric Generation (EG)	91	88	82	71	71	22
23	TOTAL TRANSPORTATION & EXCHANGE		118	115	109	98	100	23
	CURTAILMENT							
24		Core	0	0	0	0	0	24
25		Noncore	0	0	0	0	0	25
26		TOTAL - Curtailment	0	0	0	0	0	26

NOTES:

1/ Nominal capacity to receive gas from the Southern Zone of SoCalGas is based on current conditions, and is an annual value based on weighting winter and non-winter season values: 574 = (595 winter) x (151/365) + (560 non-winter) x (214/365).

2/ For 2020 and after, assume capacity at same levels. Actual capacity through the CGR timeframe is subject to change.

3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.

4/ Core end-use demand exclusive of core aggregation transportation (CAT) in MDth/d: 137 135 135 134 131

2020 CALIFORNIA GAS REPORT

FORECAST OF REQUIREMENTS – DETAIL

Work Paper: TABLE 3-SDGE

SAN DIEGO GAS & ELECTRIC COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED FOR YEAR: 2020

COLD TEMPERATURE with DRY HYDRO YEAR

LINE			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	LINE
	CAPACITY AVAILABLE [1/ & 2/]															
1	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	1
2	Southern Zone of SoCalGas [1/]		574	574	574	574	574	574	574	574	574	574	574	574	574	2
3	TOTAL CAPACITY AVAILABLE		574	574	574	574	574	574	574	574	574	574	574	574	574	3
	GAS SUPPLY TAKEN															
4	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	4
5	Southern Zone of SoCalGas		331	303	234	199	159	145	248	316	270	252	290	371	260	5
6	TOTAL SUPPLY TAKEN		331	303	234	199	159	145	248	316	270	252	290	371	260	6
7	Net Underground Storage Withdrawal		0	0	0	0	0	0	0	0	0	0	0	0	0	7
8	TOTAL THROUGHPUT		331	303	234	199	159	145	248	316	270	252	290	371	260	8
	REQUIREMENTS FORECAST BY END-USE [3/]															
9	CORE [4/]	Residential	153	143	121	100	69	52	47	47	48	57	99	157	91	9
10		Commercial	65	66	56	52	42	39	36	36	37	39	52	67	49	10
11		Industrial	5	4	4	4	4	4	3	3	3	3	4	4	4	11
12		NGV	5	6	5	6	5	6	6	6	6	6	6	6	6	12
13		Subtotal-CORE	228	219	187	162	121	101	93	92	94	105	160	234	149	13
14	NONCORE	Commercial	6	7	6	6	6	6	6	6	6	6	6	6	6	14
15		Industrial	6	7	6	6	6	6	6	6	6	6	6	6	6	15
16		Electric Generation (EG)	87	68	33	23	25	31	141	210	161	133	115	123	96	16
17		Subtotal-NONCORE	100	81	45	35	37	43	153	221	174	145	127	134	108	17
18		Co. Use & LUAF	3	3	2	2	1	1	2	3	2	2	2	3	2	18
19	SYSTEM TOTAL THROUGHPUT		331	303	234	199	159	145	248	316	270	252	290	371	260	19
	TRANSPORTATION AND EXCHANGE															
20	CORE	All End Uses	17	17	15	15	12	12	11	11	11	12	15	17	14	20
21	NONCORE	Commercial/Industrial	13	13	12	12	12	12	12	12	12	12	12	12	12	21
22		Electric Generation (EG)	87	68	33	23	25	31	141	210	161	133	115	123	96	22
23	TOTAL TRANSPORTATION & EXCHANGE		117	99	61	50	49	55	164	232	185	156	142	152	122	23
	CURTAILMENT															
24		Core	0	0	0	0	0	0	0	0	0	0	0	0	0	24
25		Noncore	0	0	0	0	0	0	0	0	0	0	0	0	0	25
26		TOTAL - Curtailment	0	0	0	0	0	0	0	0	0	0	0	0	0	26

NOTES:
1/ Nominal capacity to receive gas from the Southern Zone of SoCalGas is based on current conditions, and is an annual value based on weighting winter and non-winter season values: 574 = (595 winter) x (151/365) + (560 non-winter) x (214/365).
2/ For 2020 and after, assume capacity at same levels. Actual capacity through the CGR timeframe is subject to change.
3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.
4/ Core end-use demand exclusive of core aggregation transportation (CAT) in MDth/d: 218 208 177 152 112 92 84 84 86 97 151 223 140

Work Paper: TABLE 3-SDGE

SAN DIEGO GAS & ELECTRIC COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED FOR YEAR: 2021

COLD TEMPERATURE with DRY HYDRO YEAR

LINE			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	LINE
	CAPACITY AVAILABLE [1/ & 2/]															
1	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	1
2	Southern Zone of SoCalGas [1/]		574	574	574	574	574	574	574	574	574	574	574	574	574	2
3	TOTAL CAPACITY AVAILABLE		574	574	574	574	574	574	574	574	574	574	574	574	574	3
	GAS SUPPLY TAKEN															
4	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	4
5	Southern Zone of SoCalGas		316	325	244	205	157	166	270	330	302	262	290	372	270	5
6	TOTAL SUPPLY TAKEN		316	325	244	205	157	166	270	330	302	262	290	372	270	6
7	Net Underground Storage Withdrawal		0	0	0	0	0	0	0	0	0	0	0	0	0	7
8	TOTAL THROUGHPUT		316	325	244	205	157	166	270	330	302	262	290	372	270	8
	REQUIREMENTS FORECAST BY END-USE [3/]															
9	CORE [4/]	Residential	152	147	120	99	69	52	47	47	47	57	98	157	91	9
10		Commercial	66	68	57	52	42	39	36	36	38	39	52	67	49	10
11		Industrial	5	4	4	4	4	4	3	3	3	3	4	4	4	11
12		NGV	5	6	5	6	6	6	6	6	6	6	6	6	6	12
13		Subtotal-CORE	228	226	186	162	120	100	92	92	94	105	160	233	150	13
14	NONCORE	Commercial	6	6	6	6	6	6	6	6	6	6	6	6	6	14
15		Industrial	6	6	6	6	6	6	6	6	6	6	6	6	6	15
16		Electric Generation (EG)	74	83	45	29	24	53	164	223	193	143	115	124	106	16
17		Subtotal-NONCORE	85	96	56	41	36	65	176	235	205	155	127	136	118	17
18		Co. Use & LUAF	3	3	2	2	1	1	2	3	3	2	2	3	2	18
19	SYSTEM TOTAL THROUGHPUT		316	325	244	205	157	166	270	330	302	262	290	372	270	19
	TRANSPORTATION AND EXCHANGE															
20	CORE	All End Uses	17	18	15	15	12	12	11	11	12	12	15	18	14	20
21	NONCORE	Commercial/Industrial	11	13	12	12	12	12	12	12	12	12	12	12	12	21
22		Electric Generation (EG)	74	83	45	29	24	53	164	223	193	143	115	124	106	22
23	TOTAL TRANSPORTATION & EXCHANGE		102	114	72	56	48	77	187	246	217	166	142	154	132	23
	CURTAILMENT															
24		Core	0	0	0	0	0	0	0	0	0	0	0	0	0	24
25		Noncore	0	0	0	0	0	0	0	0	0	0	0	0	0	25
26		TOTAL - Curtailment	0	0	0	0	0	0	0	0	0	0	0	0	0	26

NOTES:
1/ Nominal capacity to receive gas from the Southern Zone of SoCalGas is based on current conditions, and is an annual value based on weighting winter and non-winter season values: 574 = (595 winter) x (151/365) + (560 non-winter) x (214/365).
2/ For 2020 and after, assume capacity at same levels. Actual capacity through the CGR timeframe is subject to change.
3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.
4/ Core end-use demand exclusive of core aggregation transportation (CAT) in MDth/d: 217 214 176 152 111 91 84 84 85 96 150 222 140

Work Paper: TABLE 3-SDGE

SAN DIEGO GAS & ELECTRIC COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED FOR YEAR: 2022

COLD TEMPERATURE with DRY HYDRO YEAR

LINE			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	LINE
	CAPACITY AVAILABLE [1/ & 2/]															
1	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	1
2	Southern Zone of SoCalGas [1/]		574	574	574	574	574	574	574	574	574	574	574	574	574	2
3	TOTAL CAPACITY AVAILABLE		574	574	574	574	574	574	574	574	574	574	574	574	574	3
	GAS SUPPLY TAKEN															
4	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	4
5	Southern Zone of SoCalGas		351	334	237	199	161	161	269	327	308	250	295	378	271	5
6	TOTAL SUPPLY TAKEN		351	334	237	199	161	161	269	327	308	250	295	378	271	6
7	Net Underground Storage Withdrawal		0	0	0	0	0	0	0	0	0	0	0	0	0	7
8	TOTAL THROUGHPUT		351	334	237	199	161	161	269	327	308	250	295	378	272	8
	REQUIREMENTS FORECAST BY END-USE [3/]															
9	CORE [4/]	Residential	152	147	120	99	69	52	47	47	47	56	98	156	90	9
10		Commercial	66	68	57	52	42	39	36	36	38	39	52	67	49	10
11		Industrial	5	4	4	4	4	4	3	3	3	3	4	4	4	11
12		NGV	5	6	5	6	6	6	6	6	6	6	6	6	6	12
13		Subtotal-CORE	227	225	186	162	120	101	92	92	94	105	160	233	149	13
14	NONCORE	Commercial	6	7	6	6	6	6	6	6	6	6	6	6	6	14
15		Industrial	6	7	6	6	6	6	6	6	6	6	6	6	6	15
16		Electric Generation (EG)	109	93	37	23	28	47	162	219	198	131	120	130	108	16
17		Subtotal-NONCORE	121	106	49	36	40	60	174	232	211	143	133	142	121	17
18		Co. Use & LUAF	3	3	2	2	1	1	2	3	3	2	2	3	2	18
19	SYSTEM TOTAL THROUGHPUT		351	334	237	199	161	161	269	327	308	250	295	378	272	19
	TRANSPORTATION AND EXCHANGE															
20	CORE	All End Uses	18	18	16	15	13	12	11	11	12	12	15	18	14	20
21	NONCORE	Commercial/Industrial	12	13	12	12	12	13	12	12	13	12	13	12	12	21
22		Electric Generation (EG)	109	93	37	23	28	47	162	219	198	131	120	130	108	22
23	TOTAL TRANSPORTATION & EXCHANGE		139	124	65	51	53	72	185	243	222	155	148	160	135	23
	CURTAILMENT															
24		Core	0	0	0	0	0	0	0	0	0	0	0	0	0	24
25		Noncore	0	0	0	0	0	0	0	0	0	0	0	0	0	25
26		TOTAL - Curtailment	0	0	0	0	0	0	0	0	0	0	0	0	0	26

NOTES:
1/ Nominal capacity to receive gas from the Southern Zone of SoCalGas is based on current conditions, and is an annual value based on weighting winter and non-winter season values: 574 = (595 winter) x (151/365) + (560 non-winter) x (214/365).
2/ For 2020 and after, assume capacity at same levels. Actual capacity through the CGR timeframe is subject to change.
3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.
4/ Core end-use demand exclusive of core aggregation transportation (CAT) in MDth/d: 216 214 176 151 111 91 84 83 85 96 150 222 140

Work Paper: TABLE 3-SDGE

SAN DIEGO GAS & ELECTRIC COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED FOR YEAR: 2023

COLD TEMPERATURE with DRY HYDRO YEAR

LINE			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	LINE
	CAPACITY AVAILABLE [1/ & 2/]															
1	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	1
2	Southern Zone of SoCalGas [1/]		574	574	574	574	574	574	574	574	574	574	574	574	574	2
3	TOTAL CAPACITY AVAILABLE		574	574	574	574	574	574	574	574	574	574	574	574	574	3
	GAS SUPPLY TAKEN															
4	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	4
5	Southern Zone of SoCalGas		323	310	238	201	158	163	257	323	280	242	299	370	263	5
6	TOTAL SUPPLY TAKEN		323	310	238	201	158	163	257	323	280	242	299	370	263	6
7	Net Underground Storage Withdrawal		0	0	0	0	0	0	0	0	0	0	0	0	0	7
8	TOTAL THROUGHPUT		323	310	238	201	158	163	257	323	280	242	299	370	263	8
	REQUIREMENTS FORECAST BY END-USE [3/]															
9	CORE [4/]	Residential	150	146	118	98	68	51	46	46	47	56	97	155	90	9
10		Commercial	65	68	56	52	42	39	36	36	38	39	52	67	49	10
11		Industrial	5	4	4	4	4	4	3	3	3	3	4	4	4	11
12		NGV	6	6	6	6	6	6	6	6	7	6	7	6	6	12
13		Subtotal-CORE	226	224	185	161	120	100	92	92	94	104	159	231	149	13
14	NONCORE	Commercial	6	7	6	6	6	6	6	6	6	6	7	6	6	14
15		Industrial	6	7	6	6	6	6	6	6	6	6	6	6	6	15
16		Electric Generation (EG)	82	69	39	26	25	50	150	216	172	124	125	124	100	16
17		Subtotal-NONCORE	94	83	51	38	37	62	163	228	184	136	138	136	113	17
18		Co. Use & LUAF	3	3	2	2	1	1	2	3	2	2	2	3	2	18
19	SYSTEM TOTAL THROUGHPUT		323	310	238	201	158	163	257	323	280	242	299	370	263	19
	TRANSPORTATION AND EXCHANGE															
20	CORE	All End Uses	18	19	16	15	13	12	11	11	12	12	15	18	14	20
21	NONCORE	Commercial/Industrial	12	13	12	13	12	13	12	12	13	12	13	12	12	21
22		Electric Generation (EG)	82	69	39	26	25	50	150	216	172	124	125	124	100	22
23	TOTAL TRANSPORTATION & EXCHANGE		111	101	67	53	50	75	174	240	196	148	153	154	127	23
	CURTAILMENT															
24		Core	0	0	0	0	0	0	0	0	0	0	0	0	0	24
25		Noncore	0	0	0	0	0	0	0	0	0	0	0	0	0	25
26		TOTAL - Curtailment	0	0	0	0	0	0	0	0	0	0	0	0	0	26

NOTES:
1/ Nominal capacity to receive gas from the Southern Zone of SoCalGas is based on current conditions, and is an annual value based on weighting winter and non-winter season values: 574 = (595 winter) x (151/365) + (560 non-winter) x (214/365).
2/ For 2020 and after, assume capacity at same levels. Actual capacity through the CGR timeframe is subject to change.
3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.
4/ Core end-use demand exclusive of core aggregation transportation (CAT) in MDth/d: 215 212 175 150 110 91 83 83 85 95 149 220 139

Work Paper: **TABLE 3-SDGE**

SAN DIEGO GAS & ELECTRIC COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED FOR YEAR: 2024

COLD TEMPERATURE with DRY HYDRO YEAR

LINE			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	LINE
	CAPACITY AVAILABLE [1/ & 2/]															
1	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	1
2	Southern Zone of SoCalGas [1/]		574	574	574	574	574	574	574	574	574	574	574	574	574	2
3	TOTAL CAPACITY AVAILABLE		574	574	574	574	574	574	574	574	574	574	574	574	574	3
	GAS SUPPLY TAKEN															
4	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	4
5	Southern Zone of SoCalGas		328	291	227	199	158	154	252	297	268	228	254	353	251	5
6	TOTAL SUPPLY TAKEN		328	291	227	199	158	154	252	297	268	228	254	353	251	6
7	Net Underground Storage Withdrawal		0	0	0	0	0	0	0	0	0	0	0	0	0	7
8	TOTAL THROUGHPUT		328	291	227	199	158	154	252	297	268	228	254	353	251	8
	REQUIREMENTS FORECAST BY END-USE [3/]															
9	CORE [4/]	Residential	149	139	118	97	67	51	46	46	46	55	96	153	89	9
10		Commercial	65	65	56	52	42	39	36	36	37	39	51	66	49	10
11		Industrial	5	4	4	4	3	4	3	3	3	3	4	4	4	11
12		NGV	6	6	6	6	6	7	6	6	7	7	7	6	6	12
13		Subtotal-CORE	224	215	184	160	119	100	92	91	93	104	158	230	147	13
14	NONCORE	Commercial	6	7	6	6	6	6	6	6	6	6	7	6	6	14
15		Industrial	6	6	6	6	6	6	6	6	6	6	6	6	6	15
16		Electric Generation (EG)	88	61	29	25	25	41	146	192	160	110	81	108	89	16
17		Subtotal-NONCORE	100	74	41	37	38	53	158	204	172	122	93	120	101	17
18		Co. Use & LUAF	3	2	2	2	1	1	2	2	2	2	2	3	2	18
19	SYSTEM TOTAL THROUGHPUT		328	291	227	199	158	154	252	297	268	228	254	353	251	19
	TRANSPORTATION AND EXCHANGE															
20	CORE	All End Uses	18	18	16	15	13	12	12	12	12	12	15	18	14	20
21	NONCORE	Commercial/Industrial	12	13	12	13	12	13	12	12	13	12	13	12	12	21
22		Electric Generation (EG)	88	61	29	25	25	41	146	192	160	110	81	108	89	22
23	TOTAL TRANSPORTATION & EXCHANGE		118	92	57	52	50	66	169	216	185	135	109	138	116	23
	CURTAILMENT															
24		Core	0	0	0	0	0	0	0	0	0	0	0	0	0	24
25		Noncore	0	0	0	0	0	0	0	0	0	0	0	0	0	25
26		TOTAL - Curtailment	0	0	0	0	0	0	0	0	0	0	0	0	0	26

NOTES:
1/ Nominal capacity to receive gas from the Southern Zone of SoCalGas is based on current conditions, and is an annual value based on weighting winter and non-winter season values: 574 = (595 winter) x (151/365) + (560 non-winter) x (214/365).
2/ For 2020 and after, assume capacity at same levels. Actual capacity through the CGR timeframe is subject to change.
3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.
4/ Core end-use demand exclusive of core aggregation transportation (CAT) in MDth/d: 213 203 173 149 110 90 83 82 84 95 148 219 137

Work Paper: **TABLE 4-SDGE**

SAN DIEGO GAS & ELECTRIC COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED FOR YEAR: 2025

COLD TEMPERATURE with DRY HYDRO YEAR

LINE			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	LINE
	CAPACITY AVAILABLE [1/ & 2/]															
1	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	1
2	Southern Zone of SoCalGas [1/]		574	574	574	574	574	574	574	574	574	574	574	574	574	2
3	TOTAL CAPACITY AVAILABLE		574	574	574	574	574	574	574	574	574	574	574	574	574	3
	GAS SUPPLY TAKEN															
4	California Source Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	4
5	Southern Zone of SoCalGas		308	294	222	197	159	153	241	291	287	243	281	355	253	5
6	TOTAL SUPPLY TAKEN		308	294	222	197	159	153	241	291	287	243	281	355	253	6
7	Net Underground Storage Withdrawal		0	0	0	0	0	0	0	0	0	0	0	0	0	7
8	TOTAL THROUGHPUT		308	294	222	197	159	153	241	291	287	243	281	355	253	8
	REQUIREMENTS FORECAST BY END-USE [3/]															
9	CORE [4/]	Residential	148	143	117	97	67	50	46	45	46	55	95	152	88	9
10		Commercial	65	67	56	51	42	38	36	36	37	38	51	66	49	10
11		Industrial	5	4	4	4	3	4	3	3	3	3	4	4	4	11
12		NGV	6	7	6	7	6	7	6	7	7	7	7	6	7	12
13		Subtotal-CORE	223	222	183	159	119	99	91	91	93	103	157	229	147	13
14	NONCORE															14
15																15
16																16
17		Subtotal-NONCORE	82	71	37	36	39	53	148	198	192	138	122	123	104	17
18		Co. Use & LUAF	3	2	2	2	1	1	2	2	2	2	2	3	2	18
19	SYSTEM TOTAL THROUGHPUT		308	294	222	197	159	153	241	291	287	243	281	355	253	19
	TRANSPORTATION AND EXCHANGE															
20	CORE	All End Uses	18	19	16	15	13	13	12	12	12	12	16	18	15	20
21																21
22	NONCORE	All End Uses	82	71	37	36	39	53	148	198	192	138	122	123	104	22
23	TOTAL TRANSPORTATION & EXCHANGE		100	90	53	52	52	65	160	210	205	150	138	141	118	23
	CURTAILMENT															
24		Core	0	0	0	0	0	0	0	0	0	0	0	0	0	24
25		Noncore	0	0	0	0	0	0	0	0	0	0	0	0	0	25
26		TOTAL - Curtailment	0	0	0	0	0	0	0	0	0	0	0	0	0	26

NOTES:
1/ Nominal capacity to receive gas from the Southern Zone of SoCalGas is based on current conditions, and is an annual value based on weighting winter and non-winter season values: 574 = (595 winter) x (151/365) + (560 non-winter) x (214/365).
2/ For 2020 and after, assume capacity at same levels. Actual capacity through the CGR timeframe is subject to change.
3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.
4/ Core end-use demand exclusive of core aggregation transportation (CAT) in MDth/d: 212 209 172 148 109 89 82 82 83 94 146 217 137

Work Paper: TABLE 4-SDGE

SAN DIEGO GAS & ELECTRIC COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED FOR YEAR: 2026

COLD TEMPERATURE with DRY HYDRO YEAR

LINE		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	LINE
	CAPACITY AVAILABLE [1/ & 2/]														
1	California Source Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2	Southern Zone of SoCalGas [1/]	574	574	574	574	574	574	574	574	574	574	574	574	574	2
3	TOTAL CAPACITY AVAILABLE	574	574	574	574	574	574	574	574	574	574	574	574	574	3
	GAS SUPPLY TAKEN														
4	California Source Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5	Southern Zone of SoCalGas	304	307	224	196	160	151	231	293	275	224	263	360	248	5
6	TOTAL SUPPLY TAKEN	304	307	224	196	160	151	231	293	275	224	263	360	248	6
7	Net Underground Storage Withdrawal	0	0	0	0	0	0	0	0	0	0	0	0	0	7
8	TOTAL THROUGHPUT	304	307	224	196	160	151	231	293	275	224	263	360	249	8
	REQUIREMENTS FORECAST BY END-USE [3/]														
9	CORE [4/] Residential	147	142	116	96	66	50	45	45	45	54	95	151	87	9
10	Commercial	64	67	55	51	42	38	36	36	37	38	51	65	48	10
11	Industrial	5	4	4	4	3	4	3	3	3	3	4	4	4	11
12	NGV	6	7	6	7	7	7	7	7	7	7	7	7	7	12
13	Subtotal-CORE	222	220	181	158	118	99	91	90	93	103	157	227	146	13
14	NONCORE														14
15															15
16															16
17	Subtotal-NONCORE	79	84	40	36	41	52	138	201	180	119	105	130	101	17
18	Co. Use & LUAF	3	3	2	2	1	1	2	2	2	2	2	3	2	18
19	SYSTEM TOTAL THROUGHPUT	304	307	224	196	160	151	231	293	275	224	263	360	249	19
	TRANSPORTATION AND EXCHANGE														
20	CORE All End Uses	18	19	16	15	13	13	12	12	12	13	16	18	15	20
21															21
22	NONCORE All End Uses	79	84	40	36	41	52	138	201	180	119	105	130	101	22
23	TOTAL TRANSPORTATION & EXCHANGE	97	103	56	52	54	65	150	213	192	131	120	148	115	23
	CURTAILMENT														
24	Core	0	0	0	0	0	0	0	0	0	0	0	0	0	24
25	Noncore	0	0	0	0	0	0	0	0	0	0	0	0	0	25
26	TOTAL - Curtailment	0	0	0	0	0	0	0	0	0	0	0	0	0	26

NOTES:
1/ Nominal capacity to receive gas from the Southern Zone of SoCalGas is based on current conditions, and is an annual value based on weighting winter and non-winter season values: 574 = (595 winter) x (151/365) + (560 non-winter) x (214/365).
2/ For 2020 and after, assume capacity at same levels. Actual capacity through the CGR timeframe is subject to change.
3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.
4/ Core end-use demand exclusive of core aggregation transportation (CAT) in MDth/d: 210 208 171 147 108 89 81 81 83 93 145 216 136

Work Paper: TABLE 4-SDGE

SAN DIEGO GAS & ELECTRIC COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED FOR YEAR: 2027

COLD TEMPERATURE with DRY HYDRO YEAR

LINE		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	LINE
	CAPACITY AVAILABLE [1/ & 2/]														
1	California Source Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2	Southern Zone of SoCalGas [1/]	574	574	574	574	574	574	574	574	574	574	574	574	574	2
3	TOTAL CAPACITY AVAILABLE	574	574	574	574	574	574	574	574	574	574	574	574	574	3
	GAS SUPPLY TAKEN														
4	California Source Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5	Southern Zone of SoCalGas	308	290	230	202	164	159	222	282	252	211	246	337	242	5
6	TOTAL SUPPLY TAKEN	308	290	230	202	164	159	222	282	252	211	246	337	242	6
7	Net Underground Storage Withdrawal	0	0	0	0	0	0	0	0	0	0	0	0	0	7
8	TOTAL THROUGHPUT	308	290	230	202	164	159	222	282	252	211	246	337	242	8
	REQUIREMENTS FORECAST BY END-USE [3/]														
9	CORE [4/] Residential	146	141	115	95	66	49	45	44	45	54	94	150	87	9
10	Commercial	64	66	55	51	41	38	36	35	37	38	51	65	48	10
11	Industrial	4	4	4	4	3	4	3	3	3	3	4	4	4	11
12	NGV	6	7	6	7	7	7	7	7	7	7	8	7	7	12
13	Subtotal-CORE	220	219	180	157	117	98	90	90	92	102	156	226	145	13
14	NONCORE														14
15															15
16															16
17	Subtotal-NONCORE	85	69	47	43	46	60	130	190	158	107	89	108	95	17
18	Co. Use & LUAF	3	2	2	2	1	1	2	2	2	2	2	3	2	18
19	SYSTEM TOTAL THROUGHPUT	308	290	230	202	164	159	222	282	252	211	246	337	242	19
	TRANSPORTATION AND EXCHANGE														
20	CORE All End Uses	18	19	16	16	13	13	12	12	13	13	16	18	15	20
21															21
22	NONCORE All End Uses	85	69	47	43	46	60	130	190	158	107	89	108	95	22
23	TOTAL TRANSPORTATION & EXCHANGE	103	88	63	59	59	73	141	202	170	120	105	127	109	23
	CURTAILMENT														
24	Core	0	0	0	0	0	0	0	0	0	0	0	0	0	24
25	Noncore	0	0	0	0	0	0	0	0	0	0	0	0	0	25
26	TOTAL - Curtailment	0	0	0	0	0	0	0	0	0	0	0	0	0	26

NOTES:
1/ Nominal capacity to receive gas from the Southern Zone of SoCalGas is based on current conditions, and is an annual value based on weighting winter and non-winter season values: 574 = (595 winter) x (151/365) + (560 non-winter) x (214/365).
2/ For 2020 and after, assume capacity at same levels. Actual capacity through the CGR timeframe is subject to change.
3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.
4/ Core end-use demand exclusive of core aggregation transportation (CAT) in MDth/d: 209 206 170 146 107 88 81 80 82 93 144 214 135

Work Paper: TABLE 4-SDGE

SAN DIEGO GAS & ELECTRIC COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED FOR YEAR: 2030

COLD TEMPERATURE with DRY HYDRO YEAR

LINE		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	LINE
	CAPACITY AVAILABLE [1/ & 2/]														
1	California Source Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2	Southern Zone of SoCalGas [1/]	574	574	574	574	574	574	574	574	574	574	574	574	574	2
3	TOTAL CAPACITY AVAILABLE	574	574	574	574	574	574	574	574	574	574	574	574	574	3
	GAS SUPPLY TAKEN														
4	California Source Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5	Southern Zone of SoCalGas	291	286	232	206	174	159	200	247	237	178	222	318	230	5
6	TOTAL SUPPLY TAKEN	291	286	232	206	174	159	200	247	237	178	222	318	230	6
7	Net Underground Storage Withdrawal	0	0	0	0	0	0	0	0	0	0	0	0	0	7
8	TOTAL THROUGHPUT	291	286	232	206	174	159	200	247	237	178	222	318	229	8
	REQUIREMENTS FORECAST BY END-USE [3/]														
9	CORE [4/] Residential	143	138	112	93	64	48	44	44	44	53	92	147	85	9
10	Commercial	64	66	55	51	41	38	35	35	37	38	50	65	48	10
11	Industrial	4	4	4	4	3	3	3	3	3	3	4	4	4	11
12	NGV	7	8	7	8	7	8	7	8	8	8	8	7	8	12
13	Subtotal-CORE	217	216	178	155	116	97	90	89	92	102	154	223	144	13
14	NONCORE														14
15															15
16															16
17	Subtotal-NONCORE	71	68	52	49	57	60	108	155	144	75	66	93	83	17
18	Co. Use & LUAF	2	2	2	2	1	1	2	2	2	1	2	3	2	18
19	SYSTEM TOTAL THROUGHPUT	291	286	232	206	174	159	200	247	237	178	222	318	229	19
	TRANSPORTATION AND EXCHANGE														
20	CORE All End Uses	18	20	16	16	14	13	12	13	13	13	16	19	15	20
21															21
22	NONCORE All End Uses	71	68	52	49	57	60	108	155	144	75	66	93	83	22
23	TOTAL TRANSPORTATION & EXCHANGE	90	87	68	65	71	74	120	168	157	88	82	111	99	23
	CURTAILMENT														
24	Core	0	0	0	0	0	0	0	0	0	0	0	0	0	24
25	Noncore	0	0	0	0	0	0	0	0	0	0	0	0	0	25
26	TOTAL - Curtailment	0	0	0	0	0	0	0	0	0	0	0	0	0	26

NOTES:
1/ Nominal capacity to receive gas from the Southern Zone of SoCalGas is based on current conditions, and is an annual value based on weighting winter and non-winter season values: 574 = (595 winter) x (151/365) + (560 non-winter) x (214/365).
2/ For 2020 and after, assume capacity at same levels. Actual capacity through the CGR timeframe is subject to change.
3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.
4/ Core end-use demand exclusive of core aggregation transportation (CAT) in MDth/d: 205 203 167 144 106 87 80 79 81 91 142 211 133

Work Paper: TABLE 4-SDGE

SAN DIEGO GAS & ELECTRIC COMPANY

ANNUAL GAS SUPPLY AND REQUIREMENTS - MMCF/DAY
ESTIMATED FOR YEAR: 2035

COLD TEMPERATURE with DRY HYDRO YEAR

LINE		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	LINE
	CAPACITY AVAILABLE [1/ & 2/]														
1	California Source Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2	Southern Zone of SoCalGas [1/]	574	574	574	574	574	574	574	574	574	574	574	574	574	2
3	TOTAL CAPACITY AVAILABLE	574	574	574	574	574	574	574	574	574	574	574	574	574	3
	GAS SUPPLY TAKEN														
4	California Source Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5	Southern Zone of SoCalGas	290	286	232	207	175	160	200	248	238	179	223	318	229	5
6	TOTAL SUPPLY TAKEN	290	286	232	207	175	160	200	248	238	179	223	318	229	6
7	Net Underground Storage Withdrawal	0	0	0	0	0	0	0	0	0	0	0	0	0	7
8	TOTAL THROUGHPUT	290	286	232	207	175	160	200	248	238	179	223	318	230	8
	REQUIREMENTS FORECAST BY END-USE [3/]														
9	CORE [4/] Residential	142	137	112	93	64	48	44	43	44	52	91	146	84	9
10	Commercial	63	66	55	51	41	38	35	35	37	38	50	65	48	10
11	Industrial	4	4	4	4	3	3	3	3	3	3	3	4	3	11
12	NGV	8	9	8	8	8	9	8	9	9	9	9	8	8	12
13	Subtotal-CORE	217	216	178	156	117	98	90	90	92	102	154	222	144	13
14	NONCORE														14
15															15
16															16
17	Subtotal-NONCORE	71	68	52	49	57	61	108	156	144	76	66	93	84	17
18	Co. Use & LUAF	2	2	2	2	1	1	2	2	2	1	2	3	2	18
19	SYSTEM TOTAL THROUGHPUT	290	286	232	207	175	160	200	248	238	179	223	318	230	19
	TRANSPORTATION AND EXCHANGE														
20	CORE All End Uses	19	21	17	17	15	14	13	14	14	14	17	20	16	20
21															21
22	NONCORE All End Uses	71	68	52	49	57	61	108	156	144	76	66	93	84	22
23	TOTAL TRANSPORTATION & EXCHANGE	90	88	69	66	72	75	122	169	158	90	84	113	100	23
	CURTAILMENT														
24	Core	0	0	0	0	0	0	0	0	0	0	0	0	0	24
25	Noncore	0	0	0	0	0	0	0	0	0	0	0	0	0	25
26	TOTAL - Curtailment	0	0	0	0	0	0	0	0	0	0	0	0	0	26

NOTES:
1/ Nominal capacity to receive gas from the Southern Zone of SoCalGas is based on current conditions, and is an annual value based on weighting winter and non-winter season values: 574 = (595 winter) x (151/365) + (560 non-winter) x (214/365).
2/ For 2020 and after, assume capacity at same levels. Actual capacity through the CGR timeframe is subject to change.
3/ Requirement forecast by end-use includes sales, transportation, and exchange volumes.
4/ Core end-use demand exclusive of core aggregation transportation (CAT) in MDth/d: 204 202 166 143 105 86 79 79 81 91 141 209 132

2020 CALIFORNIA GAS REPORT

CUSTOMER FORECAST

Meter forecast, SDGE
Recorded Values through 2019. Forecast 2020-2035

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Residential	845,289	847,994	853,812	859,937	865,119	871,443	878,262	885,762	893,427	901,182
Core C/I	30,018	30,277	30,527	30,712	30,512	30,380	30,767	31,007	31,112	31,159
NGV	25	26	26	27	27	28	28	29	29	30
Non-Core C/I	50	49	47	46	46	46	46	43	43	43
Electric Generation	80	89	96	96	96	96	96	99	99	99
TOTAL	875,462	878,435	884,508	890,818	895,800	901,993	909,199	916,940	924,710	932,513
Customer Growth	5,260	2,973	6,074	6,309	4,983	6,193	7,205	7,741	7,770	7,803
Customer Growth Rate	0.60%	0.34%	0.69%	0.71%	0.56%	0.69%	0.80%	0.85%	0.85%	0.84%

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Residential	908,762	916,052	923,057	929,859	936,538	943,107	949,557	956,000	962,458	968,925
Core C/I	31,188	31,224	31,280	31,346	31,401	31,444	31,499	31,559	31,610	31,652
NGV	30	36	37	38	38	39	39	40	40	41
Non-Core C/I	43	40	40	40	40	37	37	37	37	37
Electric Generation	104	104	104	104	104	104	104	104	104	104
TOTAL	940,127	947,456	954,518	961,387	968,121	974,732	981,236	987,740	994,249	1,000,759
Customer Growth	7,614	7,329	7,062	6,869	6,734	6,611	6,505	6,504	6,509	6,511
Customer Growth Rate	0.82%	0.78%	0.75%	0.72%	0.70%	0.68%	0.67%	0.66%	0.66%	0.65%

** Actuals reported through 2019. Forecast begins in 2020.

2020 CALIFORNIA GAS REPORT

EUFORECASTER

Refer to the 2020 California Gas Report workpapers of Southern California Gas Company for documentation of the EUForecaster model. This model is used to forecast gas demands for the residential, core commercial and core industrial markets.

2020 CALIFORNIA GAS REPORT

RESIDENTIAL DEMAND FORECAST

San Diego Gas & Electric Residential End-Use Model

I. Residential End-Use Model Description

Introduction:

San Diego Gas & Electric (SDG&E) used the End Use Forecaster model to generate annual gas demand forecasts for the residential market. The software's market segmentation and end-use modeling framework analyzes the impacts of competitive strategies (gas vs. electricity) and market scenarios on gas demand and market shares. The model separates the residential market into five building types (B-level).

These groups are identified by the premise code classification found in the company billing files. The four residential groups are:

- Single-Family(SF);
- Multi-Family (MF);
- Master Metered (MM); and
- Sub-Metered (SM).

The residential model identifies eight end-uses (N-level) that are the primary drivers of natural gas demand:

- Space heating;
- Water heating;
- Cooking;
- Drying;
- Pool heating;
- Spa heating;
- Fireplace; and
- Barbeque.

The model assumes two fuel choices (F-level) for end-uses:

- Natural gas; and
- Electricity.

The model assumes up to four efficiency levels (E-level) for the various end-uses. In general, the efficiency levels are:

- Stock;
- Standard;
- High efficiency; and
- Premium efficiency.

See Figure 1 for a classification of the number of efficiency levels for each end-use by customer segment type.

II. Residential End-Use Model Data

San Diego Gas & Electric

Figure 1: Number of Efficiency Levels by End Use by Customer Segment

	Space Heating		Water Heating		Cooking		Drying		Pool		Spa		Fireplace		BBQ	
	Gas	Electric	Gas	Electric	Gas	Electric	Gas	Electric	Gas	Electric	Gas	Electric	Gas	Electric	Gas	Electric
Single Family	4	4	4	4	2	2	2	2	1	1	1	1	1	1	1	1
Multi-Family	4	4	4	4	2	2	2	2	0	0	0	0	0	0	1	1
Master Meter	4	4	4	4	2	2	2	2	0	0	0	0	0	0	1	1
Sub-Meter	4	4	4	4	2	2	2	2	0	0	0	0	0	0	1	1

ResAvg

San Diego Gas & Electric
Residential Gas Demand
Figure 2: Average Year Forecast (in Mdth)

YEAR	MDTH1	MDTH2	MDTH3	MDTH4	MDTH5	MDTH6	MDTH7	MDTH8	MDTH9	MDTH10	MDTH11	MDTH12	TOTAL
2019	4,390	3,838	3,523	2,889	2,139	1,625	1,541	1,533	1,496	1,800	2,844	4,505	**32,124**
2020	4,306	3,765	3,456	2,835	2,099	1,596	1,514	1,506	1,469	1,768	2,791	4,418	**31,523**
2021	4,278	3,740	3,434	2,817	2,086	1,585	1,504	1,496	1,460	1,756	2,773	4,390	**31,320**
2022	4,259	3,724	3,418	2,804	2,076	1,578	1,497	1,490	1,453	1,748	2,761	4,370	**31,178**
2023	4,218	3,688	3,385	2,777	2,056	1,563	1,483	1,475	1,439	1,731	2,734	4,328	**30,876**
2024	4,181	3,656	3,356	2,753	2,039	1,549	1,470	1,462	1,427	1,716	2,710	4,290	**30,611**
2025	4,145	3,624	3,327	2,729	2,021	1,536	1,457	1,450	1,414	1,701	2,687	4,253	**30,343**
2026	4,109	3,593	3,298	2,706	2,003	1,523	1,445	1,437	1,402	1,687	2,663	4,216	**30,081**
2027	4,070	3,558	3,267	2,680	1,984	1,508	1,431	1,423	1,389	1,671	2,638	4,176	**29,793**
2028	4,029	3,523	3,234	2,653	1,965	1,493	1,417	1,409	1,375	1,654	2,612	4,134	**29,499**
2029	3,990	3,489	3,203	2,627	1,945	1,479	1,403	1,396	1,362	1,638	2,586	4,094	**29,212**
2030	3,983	3,482	3,197	2,623	1,942	1,476	1,400	1,393	1,359	1,635	2,582	4,087	**29,157**
2031	3,975	3,476	3,191	2,618	1,938	1,473	1,398	1,390	1,356	1,632	2,577	4,079	**29,102**
2032	3,966	3,468	3,183	2,612	1,934	1,470	1,394	1,387	1,353	1,628	2,571	4,070	**29,036**
2033	3,962	3,464	3,180	2,609	1,932	1,468	1,393	1,386	1,352	1,627	2,568	4,066	**29,008**
2034	3,959	3,461	3,178	2,607	1,930	1,467	1,392	1,385	1,351	1,625	2,566	4,062	**28,982**
2035	3,957	3,459	3,176	2,605	1,929	1,466	1,391	1,384	1,350	1,624	2,565	4,060	**28,966**

ResCol

San Diego Gas & Electric
Residential Gas Demand
Figure 3: Cold Year Forecast (in Mdth)

YEAR	MDTH1	MDTH2	MDTH3	MDTH4	MDTH5	MDTH6	MDTH7	MDTH8	MDTH9	MDTH10	MDTH11	MDTH12	TOTAL
2019	4,978	4,357	3,927	3,153	2,257	1,647	1,543	1,534	1,498	1,855	3,114	5,123	**34,985**
2020	4,894	4,283	3,860	3,099	2,218	1,617	1,515	1,506	1,471	1,822	3,060	5,036	**34,382**
2021	4,866	4,259	3,838	3,081	2,205	1,607	1,505	1,496	1,461	1,811	3,043	5,008	**34,180**
2022	4,848	4,243	3,823	3,069	2,195	1,600	1,499	1,490	1,455	1,803	3,031	4,990	**34,046**
2023	4,806	4,206	3,790	3,041	2,175	1,585	1,484	1,475	1,441	1,786	3,003	4,946	**33,738**
2024	4,769	4,174	3,760	3,017	2,157	1,571	1,471	1,463	1,428	1,771	2,980	4,909	**33,472**
2025	4,733	4,142	3,731	2,993	2,139	1,558	1,458	1,450	1,416	1,756	2,956	4,871	**33,203**
2026	4,697	4,111	3,702	2,969	2,122	1,545	1,446	1,437	1,404	1,742	2,933	4,834	**32,940**
2027	4,657	4,075	3,670	2,943	2,103	1,530	1,432	1,424	1,390	1,725	2,907	4,793	**32,649**
2028	4,615	4,040	3,637	2,916	2,083	1,515	1,418	1,409	1,377	1,709	2,880	4,751	**32,350**
2029	4,575	4,005	3,605	2,890	2,064	1,500	1,404	1,396	1,363	1,693	2,855	4,710	**32,059**
2030	4,567	3,997	3,598	2,885	2,060	1,498	1,402	1,393	1,361	1,689	2,849	4,701	**32,001**
2031	4,559	3,990	3,592	2,879	2,056	1,495	1,399	1,391	1,358	1,686	2,844	4,693	**31,942**
2032	4,549	3,981	3,584	2,873	2,051	1,491	1,396	1,387	1,355	1,682	2,838	4,683	**31,872**
2033	4,545	3,978	3,581	2,870	2,049	1,490	1,394	1,386	1,354	1,681	2,835	4,678	**31,842**
2034	4,540	3,974	3,577	2,868	2,048	1,489	1,393	1,385	1,353	1,679	2,833	4,674	**31,812**
2035	4,538	3,972	3,575	2,866	2,046	1,488	1,392	1,384	1,352	1,678	2,831	4,671	**31,793**

ResHot

San Diego Gas & Electric
Residential Gas Demand
Figure 4: Hot Year Forecast (in Mdth)

YEAR	MDTH1	MDTH2	MDTH3	MDTH4	MDTH5	MDTH6	MDTH7	MDTH8	MDTH9	MDTH10	MDTH11	MDTH12	TOTAL
2019	3,802	3,320	3,119	2,626	2,020	1,603	1,540	1,533	1,494	1,745	2,575	3,886	**29,262**
2020	3,718	3,247	3,052	2,572	1,981	1,574	1,512	1,506	1,467	1,713	2,522	3,800	**28,664**
2021	3,690	3,222	3,030	2,553	1,967	1,563	1,503	1,496	1,458	1,701	2,503	3,771	**28,459**
2022	3,669	3,204	3,013	2,540	1,957	1,556	1,496	1,489	1,451	1,693	2,490	3,750	**28,311**
2023	3,629	3,169	2,981	2,513	1,938	1,541	1,481	1,475	1,437	1,677	2,464	3,709	**28,014**
2024	3,593	3,138	2,952	2,490	1,920	1,527	1,469	1,462	1,425	1,662	2,441	3,672	**27,750**
2025	3,557	3,106	2,923	2,465	1,902	1,514	1,456	1,450	1,412	1,647	2,417	3,635	**27,482**
2026	3,521	3,075	2,894	2,442	1,885	1,501	1,443	1,437	1,400	1,632	2,394	3,598	**27,222**
2027	3,483	3,041	2,863	2,417	1,866	1,486	1,429	1,423	1,387	1,616	2,369	3,559	**26,938**
2028	3,443	3,006	2,832	2,390	1,846	1,471	1,415	1,409	1,373	1,600	2,343	3,518	**26,647**
2029	3,405	2,973	2,801	2,365	1,827	1,457	1,402	1,396	1,360	1,584	2,318	3,479	**26,365**
2030	3,398	2,967	2,795	2,360	1,824	1,454	1,399	1,393	1,357	1,581	2,314	3,472	**26,314**
2031	3,391	2,961	2,790	2,356	1,820	1,451	1,396	1,390	1,355	1,578	2,309	3,465	**26,262**
2032	3,383	2,954	2,783	2,350	1,816	1,448	1,393	1,387	1,351	1,574	2,304	3,457	**26,199**
2033	3,380	2,951	2,780	2,348	1,814	1,447	1,392	1,386	1,350	1,572	2,301	3,453	**26,174**
2034	3,377	2,948	2,778	2,346	1,813	1,445	1,391	1,385	1,349	1,571	2,299	3,450	**26,152**
2035	3,376	2,947	2,777	2,345	1,812	1,444	1,390	1,384	1,348	1,570	2,298	3,449	**26,140**

ResBas

San Diego Gas & Electric
Residential Gas Demand
Figure 5: Base Year Forecast (in Mdth)

YEAR	MDTH1	MDTH2	MDTH3	MDTH4	MDTH5	MDTH6	MDTH7	MDTH8	MDTH9	MDTH10	MDTH11	MDTH12	TOTAL
2019	1,371	1,283	1,371	1,327	1,371	1,327	1,371	1,371	1,327	1,371	1,327	1,371	**16,192**
2020	1,326	1,241	1,326	1,283	1,326	1,283	1,326	1,326	1,283	1,326	1,283	1,326	**15,657**
2021	1,310	1,226	1,310	1,268	1,310	1,268	1,310	1,310	1,268	1,310	1,268	1,310	**15,471**
2022	1,298	1,214	1,298	1,256	1,298	1,256	1,298	1,298	1,256	1,298	1,256	1,298	**15,319**
2023	1,277	1,195	1,277	1,236	1,277	1,236	1,277	1,277	1,236	1,277	1,236	1,277	**15,075**
2024	1,257	1,176	1,257	1,217	1,257	1,217	1,257	1,257	1,217	1,257	1,217	1,257	**14,843**
2025	1,237	1,157	1,237	1,197	1,237	1,197	1,237	1,237	1,197	1,237	1,197	1,237	**14,605**
2026	1,218	1,139	1,218	1,178	1,218	1,178	1,218	1,218	1,178	1,218	1,178	1,218	**14,377**
2027	1,197	1,120	1,197	1,159	1,197	1,159	1,197	1,197	1,159	1,197	1,159	1,197	**14,136**
2028	1,177	1,101	1,177	1,139	1,177	1,139	1,177	1,177	1,139	1,177	1,139	1,177	**13,891**
2029	1,156	1,082	1,156	1,119	1,156	1,119	1,156	1,156	1,119	1,156	1,119	1,156	**13,652**
2030	1,156	1,081	1,156	1,118	1,156	1,118	1,156	1,156	1,118	1,156	1,118	1,156	**13,645**
2031	1,155	1,080	1,155	1,118	1,155	1,118	1,155	1,155	1,118	1,155	1,118	1,155	**13,634**
2032	1,153	1,079	1,153	1,116	1,153	1,116	1,153	1,153	1,116	1,153	1,116	1,153	**13,616**
2033	1,154	1,080	1,154	1,117	1,154	1,117	1,154	1,154	1,117	1,154	1,117	1,154	**13,628**
2034	1,156	1,081	1,156	1,119	1,156	1,119	1,156	1,156	1,119	1,156	1,119	1,156	**13,649**
2035	1,158	1,084	1,158	1,121	1,158	1,121	1,158	1,158	1,121	1,158	1,121	1,158	**13,678**

San Diego Gas & Electric
Residential Base Year Historical Data: 2019

Segment	2019 Therm Sales	2019 Meter Count	2019 Meter Count pre-78 customers	2019 Meter Count post-78 till "new" customers	2019 Meter Count New Customers	Average Annual Consumption pre-78 customers	Average Annual Consumption post-78 till "new" customers	Average Annual Consumption New Customers	Price Elasticity
Single_Family	228,626,110	652,014	550,259	98,853	2,902	338	418	363	**-0.1053**
MF2_2_TO_4_Units	-	-	-	-	-	-	-	-	**0.0000**
MF3_GE_5_Units	51,266,378	186,136	139,980	43,129	3,027	262	319	268	**-0.0715**
MM_Master_Meter	32,091,414	11,521	11,121	392	8	2,639	6,835	7,020	**-0.0688**
SM_Sub_Meter	9,252,095	464	459	5	-	20,020	12,708	-	**-0.1053**

SAN DIEGO GAS & ELECTRIC
RESIDENTIAL MARKET
INCREMENTAL METER GROWTH BY MARKET SEGMENT

Year	SF Meters	MF2 Meters	MF3 Meters	MM Meters	SM Meters
2018	4032	0	1151	0	0
2019	4920	0	1404	0	0
2020	5304	0	1514	0	0
2021	5835	0	1666	0	0
2022	5962	0	1702	0	0
2023	6033	0	1722	0	0
2024	5897	0	1683	0	0
2025	5671	0	1619	0	0
2026	5449	0	1556	0	0
2027	5292	0	1511	0	0
2028	5196	0	1483	0	0
2029	5110	0	1459	0	0
2030	5018	0	1432	0	0
2031	5012	0	1431	0	0
2032	5024	0	1434	0	0
2033	5031	0	1436	0	0
2034	5799	0	1655	0	0
2035	6041	0	1725	0	0

San Diego Gas & Electric

Figure 8: Appliance Unit Energy Consumption (Gas in Therms, Electric in Kwh)

		Single Family		Multi-Family		Master Meter		Sub-Meter	
End-Use	Vintage	Gas	Electric	Gas	Electric	Gas	Electric	Gas	Electric
Space Heating	Stock	250	4,110	140	730	110	730	230	1,340
	Standard	230	3,730	130	670	100	670	210	1,210
	High	220	3,450	120	620	100	620	200	1,120
	Premium	200	3,170	110	570	90	570	180	1,030
Water Heating	Stock	150	2,440	150	2,440	120	2,440	150	2,010
	Standard	140	2,220	140	2,220	110	2,220	140	1,830
	High	130	2,110	130	2,110	100	2,110	130	1,740
	Premium	130	2,050	130	2,050	100	2,050	130	1,690
Cooking	Stock	28	574	26	465	26	465	27	514
	Standard	24	488	22	395	22	395	23	437
Drying	Stock	39	1,442	33	1,442	33	1,442	35	873
	Standard	37	1,370	31	1,370	31	1,370	33	830
Pool	Stock	110	3,431	-	-	-	-	-	-
Spa	Stock	100	290	-	-	-	-	-	-
Fireplace	Stock	17	0	-	-	-	-	-	-
BBQ	Stock	16	0	13	0	14	0	16	0

SAN DIEGO GAS & ELECTRIC
RESIDENTIAL
AVERAGE GAS PRICES ($/THERM)

Year	R SF Average Price	R MF2 Average Price	R MF3 Average Price	R MM Average Price	R SM Average Price
2019	1.5192	0.0000	1.4903	1.4703	1.4811
2020	1.4834	0.0000	1.4486	1.4245	1.4375
2021	1.4813	0.0000	1.4460	1.4215	1.4347
2022	1.4622	0.0000	1.4272	1.4029	1.4160
2023	1.5318	0.0000	1.4952	1.4699	1.4836
2024	1.5771	0.0000	1.5394	1.5133	1.5275
2025	1.6232	0.0000	1.5845	1.5576	1.5722
2026	1.6697	0.0000	1.6296	1.6019	1.6169
2027	1.7311	0.0000	1.6894	1.6605	1.6761
2028	1.7951	0.0000	1.7519	1.7220	1.7382
2029	1.8592	0.0000	1.8146	1.7838	1.8005
2030	1.9248	0.0000	1.8788	1.8470	1.8642
2031	1.9903	0.0000	1.9430	1.9103	1.9280
2032	2.0576	0.0000	2.0082	1.9740	1.9925
2033	2.1249	0.0000	2.0752	2.0409	2.0595
2034	2.2009	0.0000	2.1498	2.1144	2.1335
2035	2.2765	0.0000	2.2240	2.1876	2.2073

SAN DIEGO GAS & ELECTRIC
RESIDENTIAL
MARGINAL GAS PRICES ($/THERM)

Year	R SF Marginal Price	R MF2 Marginal Price	R MF3 Marginal Price	R MM Marginal Price	R SM Marginal Price
2019	1.6334	0.0000	1.6334	1.6334	1.6334
2020	1.6210	0.0000	1.6210	1.6210	1.6210
2021	1.6211	0.0000	1.6211	1.6211	1.6211
2022	1.6009	0.0000	1.6009	1.6009	1.6009
2023	1.6769	0.0000	1.6769	1.6769	1.6769
2024	1.7263	0.0000	1.7263	1.7263	1.7263
2025	1.7766	0.0000	1.7766	1.7766	1.7766
2026	1.8283	0.0000	1.8283	1.8283	1.8283
2027	1.8962	0.0000	1.8962	1.8962	1.8962
2028	1.9661	0.0000	1.9661	1.9661	1.9661
2029	2.0354	0.0000	2.0354	2.0354	2.0354
2030	2.1067	0.0000	2.1067	2.1067	2.1067
2031	2.1776	0.0000	2.1776	2.1776	2.1776
2032	2.2532	0.0000	2.2532	2.2532	2.2532
2033	2.3215	0.0000	2.3215	2.3215	2.3215
2034	2.4032	0.0000	2.4032	2.4032	2.4032
2035	2.4846	0.0000	2.4846	2.4846	2.4846

SAN DIEGO GAS & ELECTRIC
RESIDENTIAL
AVERAGE ELECTRIC PRICES (CENTS/KWH)

Year	R SF Average Price	R MF2 Average Price	R MF3 Average Price	R MM Average Price	R SM Average Price
2019	23.63	0.00	23.18	22.87	23.04
2020	26.21	0.00	25.59	25.17	25.40
2021	27.21	0.00	26.56	26.12	26.36
2022	28.05	0.00	27.38	26.92	27.17
2023	28.92	0.00	28.23	27.75	28.01
2024	29.66	0.00	28.95	28.46	28.72
2025	30.33	0.00	29.61	29.10	29.37
2026	31.00	0.00	30.26	29.74	30.02
2027	31.68	0.00	30.92	30.39	30.68
2028	32.38	0.00	31.60	31.06	31.35
2029	33.13	0.00	32.34	31.79	32.09
2030	33.95	0.00	33.14	32.58	32.88
2031	34.59	0.00	33.77	33.20	33.51
2032	35.24	0.00	34.39	33.80	34.12
2033	35.86	0.00	35.02	34.44	34.76
2034	36.51	0.00	35.66	35.07	35.39
2035	37.17	0.00	36.31	35.72	36.04

SAN DIEGO GAS & ELECTRIC
RESIDENTIAL
MARGINAL ELECTRIC PRICES (CENTS/KWH)

Year	R SF Marginal Price	R MF2 Marginal Price	R MF3 Marginal Price	R MM Marginal Price	R SM Marginal Price
2019	35.76	0.00	35.08	23.65	25.93
2020	39.66	0.00	38.73	26.02	28.58
2021	41.18	0.00	40.20	27.00	29.66
2022	42.45	0.00	41.43	27.83	30.57
2023	43.76	0.00	42.71	28.69	31.52
2024	44.88	0.00	43.80	29.43	32.32
2025	45.89	0.00	44.80	30.09	33.06
2026	46.91	0.00	45.78	30.75	33.78
2027	47.94	0.00	46.79	31.42	34.52
2028	48.99	0.00	47.81	32.11	35.28
2029	50.13	0.00	48.93	32.87	36.11
2030	51.38	0.00	50.15	33.69	37.01
2031	52.35	0.00	51.10	34.33	37.71
2032	53.32	0.00	52.04	34.96	38.40
2033	54.27	0.00	53.00	35.62	39.12
2034	55.25	0.00	53.96	36.27	39.83
2035	56.24	0.00	54.94	36.93	40.55

San Diego Gas & Electric
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Figure 11: Gas Appliance Equipment Cost (Nominal $)

End-Use	Customer Class	Stock Efficiency	Standard Efficiency	High Efficiency	Premium Efficiency
Space Heating	Single Family	4,000	4,600	4,800	5,000
	Multi-Family	1,600	1,840	1,920	1,980
	Master Meter	1,000	1,150	1,200	1,250
	Sub-metered	1,600	1,840	1,920	1,980
Water Heating	Single Family	550	650	700	750
	Multi-Family	330	390	420	450
	Master Meter	330	390	420	450
	Sub-metered	330	390	420	450
Cooking	Single Family	500	1,400	-	-
	Multi-Family	250	1,400	-	-
	Master Meter	250	1,400	-	-
	Sub-metered	250	1,400	-	-
Drying	Single Family	328	482	-	-
	Multi-Family	328	482	-	-
	Master Meter	328	482	-	-
	Sub-metered	328	482	-	-
Pool	Single Family	1,200	-	-	-
Spa	Single Family	2,000	-	-	-
Fireplace	Single Family	150	-	-	-
Barbecue	Single Family	1,000	-	-	-
	Multi-Family	600	-	-	-
	Master Meter	600	-	-	-
	Sub-metered	600	-	-	-

San Diego Gas & Electric
2020 California Gas Report
Figure 12: Electric Appliance Equipment Cost (Nominal $)

End-Use	Customer Class	Stock Efficiency	Standard Efficiency	High Efficiency	Premium Efficiency
Space Heating	Single Family	4,100	-	-	-
	Multi-Family	1,640	-	-	-
	Master Meter	1,025	-	-	-
	Sub-metered	1,640	-	-	-
Water Heating	Single Family	550	650	700	750
	Multi-Family	330	390	420	450
	Master Meter	330	390	420	450
	Sub-metered	330	390	420	450
Cooking	Single Family	500	1,400	-	-
	Multi-Family	250	1,400	-	-
	Master Meter	250	1,400	-	-
	Sub-metered	250	1,400	-	-
Drying	Single Family	328	482	-	-
	Multi-Family	328	482	-	-
	Master Meter	328	482	-	-
	Sub-metered	328	482	-	-
Pool	Single Family	1,200	-	-	-
Spa	Single Family	2,000	-	-	-
Fireplace	Single Family	150	-	-	-
Barbecue	Single Family	1,000	-	-	-
	Multi-Family	600	-	-	-
	Master Meter	600	-	-	-
	Sub-metered	600	-	-	-

San Diego Gas & Electric
2020 California Gas Report
Figure 13: Building Lives and Decay Rate

Building Type	Building Decay Rate
Single Family	0.003
Multi-Family	0.006
Master Meter	0.008
Sub-metered	0.008

San Diego Gas & Electric
2020 California Gas Report
Figure 14: Gas Appliance Age (Years)

		Single Family		Multi-Family		Master Meter		Sub-metered	
End-Use	**Vintage**	**Average**	**Max**	**Average**	**Max**	**Average**	**Max**	**Average**	**Max**
Space Heating	Pre-1979	16	16	23	23	20	20	16	16
	1979-2004	15	16	16	23	15	20	15	16
	2005-Current	5	16	4	23	4	20	5	16
Water Heating	Pre-1979	9	9	12	12	10	10	9	9
	1979-2004	9	9	10	12	10	10	9	9
	2005-Current	5	9	4	12	4	10	5	9
Cooking	Pre-1979	9	9	9	9	9	9	9	9
	1979-2004	9	9	9	9	8	9	9	9
	2005-Current	4	9	4	9	4	9	4	9
Drying	Pre-1979	7	7	6	7	7	7	7	7
	1979-2004	6	7	7	7	7	7	6	7
	2005-Current	4	7	3	7	3	7	4	7
Pool	Pre-1979	13	13	-	-	-	-	-	-
	1979-2004	9	13	-	-	-	-	-	-
	2005-Current	3	13	-	-	-	-	-	-
Spa	Pre-1979	11	11	-	-	-	-	-	-
	1979-2004	8	11	-	-	-	-	-	-
	2005-Current	3	11	-	-	-	-	-	-
Fireplace	Pre-1979	15	15	-	-	-	-	-	-
	1979-2004	15	15	-	-	-	-	-	-
	2005-Current	15	15	-	-	-	-	-	-
Barbecue	Pre-1979	7	7	5	7	5	6	7	7
	1979-2004	6	7	7	7	6	6	6	7
	2005-Current	4	7	3	7	4	6	4	7
Other	Pre-1979	15	15	15	15	15	15	15	15
	1979-2004	15	15	15	15	15	15	15	15
	2005-Current	15	15	15	15	15	15	15	15

San Diego Gas & Electric
2020 California Gas Report
Figure 14: Gas Appliance Age (Years)

		Single Family		Multi-Family		Master Meter		Sub-metered	
End-Use	**Vintage**	**Average**	**Max**	**Average**	**Max**	**Average**	**Max**	**Average**	**Max**
Space Heating	Pre-1979	16	16	23	23	20	20	16	16
	1979-2004	15	16	16	23	15	20	15	16
	2005-Current	5	16	4	23	4	20	5	16
Water Heating	Pre-1979	9	9	12	12	10	10	9	9
	1979-2004	9	9	10	12	10	10	9	9
	2005-Current	5	9	4	12	4	10	5	9
Cooking	Pre-1979	9	9	9	9	9	9	9	9
	1979-2004	9	9	9	9	8	9	9	9
	2005-Current	4	9	4	9	4	9	4	9
Drying	Pre-1979	7	7	6	7	7	7	7	7
	1979-2004	6	7	7	7	7	7	6	7
	2005-Current	4	7	3	7	3	7	4	7
Pool	Pre-1979	13	13	-	-	-	-	-	-
	1979-2004	9	13	-	-	-	-	-	-
	2005-Current	3	13	-	-	-	-	-	-
Spa	Pre-1979	11	11	-	-	-	-	-	-
	1979-2004	8	11	-	-	-	-	-	-
	2005-Current	3	11	-	-	-	-	-	-
Fireplace	Pre-1979	15	15	-	-	-	-	-	-
	1979-2004	15	15	-	-	-	-	-	-
	2005-Current	15	15	-	-	-	-	-	-
Barbecue	Pre-1979	7	7	5	7	5	6	7	7
	1979-2004	6	7	7	7	6	6	6	7
	2005-Current	4	7	3	7	4	6	4	7
Other	Pre-1979	15	15	15	15	15	15	15	15
	1979-2004	15	15	15	15	15	15	15	15
	2005-Current	15	15	15	15	15	15	15	15

San Diego Gas & Electric
Figure 15: End-Use Saturations

End-Use	Vintage	Single Family	Multi-Family	Master Meter	Sub-metered
Space Heating	Pre-1979	1.00000	1.00000	1.00000	1.00000
	1979-2004	1.00000	1.00000	1.00000	1.00000
	2005-Current	1.00000	1.00000	1.00000	0.00000
Water Heating	Pre-1979	1.00000	1.00000	1.00000	1.00000
	1979-2004	1.00000	1.00000	1.00000	1.00000
	2005-Current	1.00000	1.00000	1.00000	0.00000
Cooking	Pre-1979	1.00000	0.99633	1.00000	1.00000
	1979-2004	1.00000	1.00000	1.00000	1.00000
	2005-Current	1.00000	1.00000	1.00000	0.00000
Drying	Pre-1979	0.85795	0.20040	0.47158	0.47158
	1979-2004	0.89516	0.42764	0.57182	0.57182
	2005-Current	0.92508	0.74161	0.74768	0.00000
Pool	Pre-1979	0.15644	-	-	-
	1979-2004	0.17913	-	-	-
	2005-Current	0.16916	-	-	-
Spa	Pre-1979	0.12651	-	-	-
	1979-2004	0.21695	-	-	-
	2005-Current	0.19134	-	-	-
Fireplace	Pre-1979	0.22973	-	-	-
	1979-2004	0.27252	-	-	-
	2005-Current	0.26269	-	-	-
Barbecue	Pre-1979	0.13716	0.04723	0.07424	0.07424
	1979-2004	0.25180	0.06165	0.10179	0.10179
	2005-Current	0.31442	0.07818	0.16198	0.00000
Other	Pre-1979	1.00000	1.00000	1.00000	1.00000
	1979-2004	1.00000	1.00000	1.00000	1.00000
	2005-Current	1.00000	1.00000	1.00000	NA

San Diego Gas & Electric
Figure 16: Gas Fuel Shares (average)

End-Use	Single Family	Multi-Family	Master Meter	Sub-metered
Space Heating	0.98200	0.91179	0.92461	0.92461
Water Heating	0.97630	0.89871	0.92997	0.92997
Cooking	0.83890	0.82622	0.81058	0.81058
Drying	0.80258	0.59654	0.70306	0.70306
Pool	0.49003	-	-	-
Spa	0.60804	-	-	-
Fireplace	0.56361	-	-	-
Barbecue	0.95008	0.85803	0.89234	0.89234
Other	1.00000	1.00000	1.00000	1.00000

San Diego Gas & Electric
Figure 17: Gas Efficiency Shares

End-Use	Customer Class	Stock Existing	Stock New	Standard Existing	Standard New	High Existing	High New	Premium Existing	Premium New
Space Heating	Single Family	0.06	0.06	0.78	0.78	0.14	0.14	0.02	0.02
	Multi-Family	0.41	0.41	0.46	0.46	0.01	0.01	0.04	0.04
	Master Meter	0.17	0.17	0.69	0.69	0.11	0.11	0.03	0.03
	Sub-metered	0.06	0.06	0.78	0.78	0.14	0.14	0.02	0.02
Water Heating	Single Family	0.00	0.00	0.64	0.64	0.34	0.34	0.02	0.02
	Multi-Family	0.00	0.00	0.61	0.61	0.37	0.37	0.02	0.02
	Master Meter	0.00	0.00	0.59	0.59	0.39	0.39	0.02	0.02
	Sub-metered	0.00	0.00	0.64	0.64	0.34	0.34	0.02	0.02
Cooking	Single Family	0.17	0.17	0.83	0.83	-	-	-	-
	Multi-Family	0.18	0.18	0.82	0.82	-	-	-	-
	Master Meter	0.17	0.17	0.83	0.83	-	-	-	-
	Sub-metered	0.17	0.17	0.83	0.83	-	-	-	-
Drying	Single Family	0.07	0.07	0.93	0.93	-	-	-	-
	Multi-Family	0.06	0.06	0.94	0.94	-	-	-	-
	Master Meter	0.06	0.06	0.94	0.94	-	-	-	-
	Sub-metered	0.07	0.07	0.93	0.93	-	-	-	-
Pool	Single Family	1.00	1.00	-	-	-	-	-	-
Spa	Single Family	1.00	1.00	-	-	-	-	-	-
Fireplace	Single Family	1.00	1.00	-	-	-	-	-	-
Barbecue	Single Family	1.00	1.00	-	-	-	-	-	-
	Multi-Family	1.00	1.00	-	-	-	-	-	-
	Master Meter	1.00	1.00	-	-	-	-	-	-
	Sub-metered	1.00	1.00	-	-	-	-	-	-
Other	Single Family	1.00	1.00	-	-	-	-	-	-
	Multi-Family	1.00	1.00	-	-	-	-	-	-
	Master Meter	1.00	1.00	-	-	-	-	-	-
	Sub-metered	1.00	1.00	-	-	-	-	-	-

San Diego Gas & Electric
Figure 18: Electric Efficiency Shares

End-Use	Customer Class	Stock Existing	Stock New	Standard Existing	Standard New	High Existing	High New	Premium Existing	Premium New
Space Heating	Single Family	1.00	1.00	-	-	-	-	-	-
	Multi-Family	1.00	1.00	-	-	-	-	-	-
	Master Meter	1.00	1.00	-	-	-	-	-	-
	Sub-metered	1.00	1.00	-	-	-	-	-	-
Water Heating	Single Family	0.10	0.10	0.68	0.68	0.21	0.21	0.01	0.01
	Multi-Family	0.13	0.13	0.76	0.76	0.10	0.10	0.01	0.01
	Master Meter	0.13	0.13	0.76	0.76	0.10	0.10	0.01	0.01
	Sub-metered	0.10	0.10	0.68	0.68	0.21	0.21	0.01	0.01
Cooking	Single Family	0.90	0.90	0.10	0.10	-	-	-	-
	Multi-Family	0.95	0.95	0.05	0.05	-	-	-	-
	Master Meter	0.95	0.95	0.05	0.05	-	-	-	-
	Sub-metered	0.95	0.95	0.05	0.05	-	-	-	-
Drying	Single Family	0.75	0.75	0.25	0.25	-	-	-	-
	Multi-Family	0.75	0.75	0.25	0.25	-	-	-	-
	Master Meter	0.75	0.75	0.25	0.25	-	-	-	-
	Sub-metered	0.75	0.75	0.25	0.25	-	-	-	-
Pool	Single Family	1.00	1.00	-	-	-	-	-	-
Spa	Single Family	1.00	1.00	-	-	-	-	-	-
Fireplace	Single Family	1.00	1.00	-	-	-	-	-	-
Barbecue	Single Family	1.00	1.00	-	-	-	-	-	-
	Multi-Family	1.00	1.00	-	-	-	-	-	-
	Master Meter	1.00	1.00	-	-	-	-	-	-
	Sub-metered	1.00	1.00	-	-	-	-	-	-

2020 CALIFORNIA GAS REPORT

CORE COMMERCIAL AND INDUSTRIAL DEMAND FORECAST

The level of employment in each business type is used as a measure of economic activity in the core commercial and industrial GN-3 demand forecast models. The employment data series matches the NAICS categories used to develop the historical consumption data. The employment data was compiled and totaled for the SDG&E service territory. The forecast data comes from Global Insight.

Building and Equipment Decay Rates

Building decay rates are based on the building lifetimes, where the lifetime is defined as the length of time it takes for either a demolition or a major renovation where major systems are replaced. For existing core buildings and facilities, an exponential rate of decay of 11% per year was assumed, consistent with an average remaining life for existing buildings of 100 years. A building decay rate concept is not relevant to large gas transport (noncore) customers. In both the commercial and industrial noncore models, the existing building decay rate was set to zero.

Similarly, all new construction decay rates were assumed to be zero over the forecast horizon. The assumption was required because the growth of new buildings and facilities was tied directly to the econometric models.

End use lifetimes were derived from a variety of sources

Commercial:

Space Heat- 25 Years

Water Heat- 15 Years

AC/Compressor- 20 Years

All other commercial end uses- 15 Years

Industrial:

Fire-tube boiler – 25 years
Water-tube boiler – 25 years
Engine (motors) – 25 years
All other industrial end-uses – 20 years

F. Equipment Saturations, Fuel Shares, and Efficiency Shares:

EUForecaster defines saturation as the percentage of customers in any segment that has a particular end use, independent of fuel shares. The commercial models developed saturation and fuel share estimates from our others end-use models. EUForecaster adjusted core commercial fuel shares according to a set of fuel-choice equations over the forecast horizon.

End-use saturations in the industrial model were initially set equal to 100%. Industrial end-use gas fuel shares were initially approximated. We then used an iterative procedure to further adjust industrial saturation and fuel shares such that the EUForecaster sales totals matched SDG&E industrial sales figures, and our estimates of electric usage by SDG&E customers. Finally, all commercial and industrial fuel shares were held constant over the forecast horizon.

Energy efficiency varied within the major gas end-uses/processes, including all boilers, space heat, and water heat. Four levels of efficiency were assigned to gas equipment: low, medium (standard) high, and premium for core commercial and three levels of efficiency were assigned to gas equipment: low, medium (standard), and high for core industrial market. California and federal standards have effectively eliminated the lowest efficiency alternatives for several gas end-uses from being purchased as new or replacement equipment. The lowest efficiency alternative for these end uses is, therefore, allowed to exist in the base year stock, but the customer must then purchase either medium (e.g., equipment that just meets Government standards), high or premium efficiency equipment as these units decay. The low efficiency share in the existing equipment stock was set equal to 50%. Medium ranged from 40% to 45%, and high from 5% to10%.

EUForecaster's choice module prorates the low share proportionately to the medium, high and premium alternatives proportionate to their shares noted above. Therefore, replacement and new construction efficiency shares for medium range from 80% to 90%, and high ranges from 10% to 20%.

Gas Price Data:

Average and marginal gas prices ($/therm) were calculated from forecasts of the GN-3 rate components. We used underlying detailed consumption data to separate monthly consumption for customers by each commercial business type into the respective GN-3 consumption tiers. (The most recent 12-month calendar period, January 2019 through December 2019, of this detailed consumption data was used.)

For a given business type, the average gas commodity rate for the 12-month period was calculated for each year. The average commodity rate in each forecast year was developed using the same monthly consumption pattern, but with the forecasts of rates for each GN-3 rate tier. The average gas price each year was then calculated by including the non-volumetric customer charges with the year's average gas commodity rate.

Each respective business type's marginal gas commodity rate (for each month) was calculated by "pricing" the entire month's consumption at the GN-3 rate's tier that was the last tier with non-zero consumption, the marginal consumption tier, for the customers of the given business type. The marginal gas price was then calculated as the simple average of the 12 monthly marginal commodity rates. The forecasts for each year used the same monthly consumption pattern, but used the projected GN-3 price of the marginal consumption tier.

Electric Price Data:

Both average prices (cents/kWh) and marginal prices (cents/kWh) were developed as electricity price inputs. Forecasts for the SDG&E commercial customer class were developed based on the California Energy Commission's December 2019 updated forecast rates for California energy demand (forecast for the SDG&E planning area, under "Mid-Case" demand for electricity) for the SDG&E service area through our forecast time horizon

The electricity prices for SDG&E's GN-3 Commercial customers were estimated at 112% of the CEC's projected commercial electricity prices. These were the average electricity prices for the GN-3 core commercial market, overall.

The marginal prices were calculated by multiplying each year's respective average price by a ratio. This ratio, 1.000, was used and is the same as the ratio used for the SoCalGas core commercial G-10 end-use model.

To impute, in each year, average and marginal electricity prices to each core commercial business type, we simply calculated the ratio of the average (or marginal) gas price to the overall core commercial gas price for each business type, then multiplied by the overall average (or marginal) electricity price.

G. Energy Efficiency Forecast:

The end-use gas demand forecast developed with EUForecaster does not capture the effects of SDG&E's EE/DSM programs. Energy savings goals from the CPUC's mandated energy efficiency/energy conservation programs for the core commercial and industrial were provided by SDG&E's DSM department. These savings are subtracted from the forecast generated by the core commercial and industrial forecasts generated by EUForecaster.

GN3 COMMERCIAL DATA TABLES

San Diego Gas & Electric
Core Commercial Historical Data: Base Year Inputs

Segment	2019 Therm Sales	2019 Meter Count	2019 Meter Count, Existing/Old customers	2019 Meter Count New Customers	Avg Use Per Meter Existing Customers	Avg Use Per Meter New Customers	Price Elasticity
Office	36,256,534	6,370	6,261	109	**5,673**	6,787	-0.072000
Restaurant	37,616,174	5,705	5,576	129	**6,562**	7,955	-0.001000
Retail	11,474,502	2,706	2,649	57	**4,216**	5,397	-0.032000
Laundry	6,659,096	412	411	1	**16,062**	57,484	-0.026000
Warehouse	4,076,581	575	565	10	**7,171**	2,509	-0.142000
School	3,190,866	838	831	7	**3,822**	2,081	-0.103000
College	6,762,719	356	352	4	**18,036**	103,525	-0.090000
Health	12,452,571	720	710	10	**17,450**	6,303	-0.052000
Lodging	16,878,007	825	812	13	**20,577**	13,017	-0.013000
Misc	18,215,458	5,296	5,160	136	**3,169**	13,688	-0.030000
Government	14,807,063	717	707	10	**19,611**	94,174	-0.060000
TCU	7,434,525	1,386	1,381	5	**5,383**	33	-0.162000
Construction	1,404,464	676	640	36	**2,131**	1,136	-0.179000
Agriculture	2,382,999	90	89	1	**26,775**	1	-0.059000

San Diego Gas & Electric
Core Commercial Market
Employment (in millions)

YEAR	Office	Restaurant	Retail	Laundry	Warehouse	School	College	Health
2020	0.3149476	0.12387308	0.131839765	0.021601239	0.043976942	0.10555667	0.04846	0.18871
2021	0.3161144	0.13377544	0.133596605	0.021704667	0.044015666	0.10751324	0.04936	0.192231
2022	0.343471	0.13337537	0.145205775	0.021911152	0.045088841	0.11113294	0.05102	0.19871
2023	0.3551144	0.13693555	0.14429863	0.021985941	0.046105514	0.11333194	0.05203	0.202637
2024	0.3611359	0.13833214	0.143573903	0.021809998	0.0463225	0.11380625	0.05225	0.20348
2025	0.3654996	0.13864518	0.141630688	0.021725183	0.046405483	0.11418811	0.05242	0.204163
2026	0.3684909	0.13887007	0.139804479	0.021723536	0.046415959	0.11469822	0.05266	0.205075
2027	0.3726443	0.13960209	0.139036003	0.021799504	0.046498374	0.11561194	0.05308	0.20671
2028	0.378457	0.1408797	0.13893477	0.021925033	0.046293586	0.11680241	0.05362	0.208839
2029	0.382965	0.14258241	0.139052994	0.022011576	0.046103027	0.11782637	0.05409	0.210669
2030	0.3858251	0.14410924	0.138804532	0.022084259	0.045855236	0.11863555	0.05446	0.212116
2031	0.3889181	0.14573096	0.138952156	0.022121918	0.045723019	0.11948369	0.05485	0.213632
2032	0.3921698	0.14719917	0.139792727	0.022161645	0.045547062	0.1204675	0.0553	0.215391
2033	0.395034	0.14874835	0.140878098	0.022192109	0.045359862	0.1214692	0.05576	0.217182
2034	0.3964475	0.14999323	0.141643276	0.022203693	0.045114427	0.12249576	0.05624	0.219017
2035	0.397812	0.15141401	0.142381345	0.022198916	0.044896152	0.12340669	0.05665	0.220646

YEAR	Lodging	Misc	Government	TCU	Construction	Agriculture
2020	0.0280796	0.06690533	0.139398146	0.055419061	0.089564592	0.00872283
2021	0.0303437	0.06723294	0.13934298	0.053981344	0.088105807	0.00867922
2022	0.0302443	0.06786994	0.140326975	0.054265823	0.090713562	0.00863582
2023	0.0310562	0.06810417	0.141251988	0.054790113	0.092887276	0.00859264
2024	0.0313711	0.06755884	0.142244484	0.054630663	0.093974729	0.00854968
2025	0.0314417	0.06729566	0.143211825	0.054398408	0.095106448	0.00850693
2026	0.031493	0.06729023	0.144149777	0.054345804	0.095913033	0.0084644
2027	0.0316591	0.067525	0.145029188	0.054046443	0.097061493	0.00842208
2028	0.0319493	0.06791415	0.145765246	0.053528071	0.09887939	0.00837997
2029	0.0323353	0.06818209	0.146462371	0.052907743	0.101487524	0.00833807
2030	0.0326816	0.06840715	0.148320066	0.052159678	0.104179639	0.00829638
2031	0.0330494	0.06852416	0.14818281	0.051696734	0.106394419	0.00825489
2032	0.0333824	0.06864732	0.149041915	0.051712577	0.108383079	0.00821362
2033	0.0337336	0.06874176	0.149849832	0.051804017	0.110006896	0.00817255
2034	0.0340159	0.06877779	0.150717236	0.051713427	0.111365959	0.00813169
2035	0.034338	0.0687629	0.151610002	0.05150713	0.112849489	0.00809103

San Diego Gas and Electric
Core Commercial Market
Saturations by Business Type and End Use

zname	bname	nname	SAT	SOURCE
Commercial	Agriculture	Drying	1.0000	Assumed
Commercial	Agriculture	Engine	0.5000	Assumed
Commercial	Agriculture	Other	1.0000	DEFAULT
Commercial	Agriculture	Space_Heat	0.7200	CI_1996_STUDY
Commercial	Agriculture	Water_Heat	0.6900	CI_1996_STUDY
Commercial	College	AC_Compressor	0.8850	CBECS
Commercial	College	Cook_top	0.1470	CBECS
Commercial	College	Fryer	0.1470	CBECS
Commercial	College	Griddle	0.1470	CBECS
Commercial	College	Other	1.0000	DEFAULT
Commercial	College	Other_Cooking	0.1470	CBECS
Commercial	College	Space_Heat	0.7630	SDGE_EUI_STUDY
Commercial	College	Water_Heat	0.9550	SDGE_EUI_STUDY
Commercial	Construction	Other	1.0000	DEFAULT
Commercial	Construction	Space_Heat	0.7200	CI_1996_STUDY
Commercial	Construction	Water_Heat	0.6900	CI_1996_STUDY
Commercial	Government	AC_Compressor	0.8880	CBECS
Commercial	Government	Cook_top	0.1960	CBECS
Commercial	Government	Fryer	0.1960	CBECS
Commercial	Government	Griddle	0.1960	CBECS
Commercial	Government	Other	1.0000	DEFAULT
Commercial	Government	Other_Cooking	0.1960	CBECS
Commercial	Government	Space_Heat	0.8720	SDGE_EUI_STUDY
Commercial	Government	Water_Heat	0.7000	CI_1996_STUDY
Commercial	Grocery	AC_Compressor	0.8560	CBECS
Commercial	Grocery	Cook_top	0.2450	CBECS
Commercial	Grocery	Fryer	0.2450	CBECS
Commercial	Grocery	Griddle	0.2450	CBECS
Commercial	Grocery	Other	1.0000	DEFAULT
Commercial	Grocery	Other_Cooking	0.2450	CBECS
Commercial	Grocery	Space_Heat	0.6470	SDGE_EUI_STUDY
Commercial	Grocery	Water_Heat	0.9300	CI_1996_STUDY
Commercial	Health	AC_Compressor	0.7920	CBECS
Commercial	Health	Cook_top	0.1020	CBECS
Commercial	Health	Drying	0.8200	CI_1996_STUDY
Commercial	Health	Fryer	0.1020	CBECS
Commercial	Health	Griddle	0.1020	CBECS
Commercial	Health	Other	1.0000	DEFAULT
Commercial	Health	Other_Cooking	0.1020	CBECS
Commercial	Health	Space_Heat	0.9360	SDGE_EUI_STUDY
Commercial	Health	Water_Heat	1.0000	CI_1996_STUDY
Commercial	Laundry	Drying	1.0000	CI_1996_STUDY
Commercial	Laundry	Other	1.0000	CI_1996_STUDY

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Saturations by Business Type and End Use

Commercial	Laundry	Space_Heat	0.7200	CI_1996_STUDY
Commercial	Laundry	Water_Heat	1.0000	CI_1996_STUDY
Commercial	Lodging	AC_Compressor	0.7950	CBECS
Commercial	Lodging	Cook_top	0.0840	CBECS
Commercial	Lodging	Drying	0.8200	CI_1996_STUDY
Commercial	Lodging	Fryer	0.0840	CBECS
Commercial	Lodging	Griddle	0.0840	CBECS
Commercial	Lodging	Other	1.0000	CI_1996_STUDY
Commercial	Lodging	Other_Cooking	0.0840	CBECS
Commercial	Lodging	Space_Heat	0.8950	SDGE_EUI_STUDY
Commercial	Lodging	Water_Heat	1.0000	CI_1996_STUDY
Commercial	Misc	AC_Compressor	0.7310	CBECS
Commercial	Misc	Cook_top	0.0210	CBECS
Commercial	Misc	Fryer	0.0210	CBECS
Commercial	Misc	Griddle	0.0210	CBECS
Commercial	Misc	Other	1.0000	CI_1996_STUDY
Commercial	Misc	Other_Cooking	0.0210	CBECS
Commercial	Misc	Space_Heat	0.6950	SDGE_EUI_STUDY
Commercial	Misc	Water_Heat	0.6900	CI_1996_STUDY
Commercial	Office	AC_Compressor	0.9310	CBECS
Commercial	Office	Cooking	0.0820	CBECS
Commercial	Office	Other	1.0000	CI_1996_STUDY
Commercial	Office	Space_Heat	0.8720	SDGE_EUI_STUDY
Commercial	Office	Water_Heat	0.7000	CI_1996_STUDY
Commercial	Restaurant	AC_Compressor	0.8710	CBECS
Commercial	Restaurant	Cook_top	0.7500	SCG_COOKING_STUDY
Commercial	Restaurant	Fryer	0.7290	SCG_COOKING_STUDY
Commercial	Restaurant	Griddle	0.5740	SCG_COOKING_STUDY
Commercial	Restaurant	Other	1.0000	CI_1996_STUDY
Commercial	Restaurant	Other_Cooking	0.9000	CI_1996_STUDY
Commercial	Restaurant	Space_Heat	0.8180	SDGE_EUI_STUDY
Commercial	Restaurant	Water_Heat	0.9600	CI_1996_STUDY
Commercial	Retail	Cooking	0.2450	CBECS
Commercial	Retail	Other	1.0000	CI_1996_STUDY
Commercial	Retail	Space_Heat	0.7710	SDGE_EUI_STUDY
Commercial	Retail	Water_Heat	0.6200	CI_1996_STUDY
Commercial	School	AC_Compressor	0.8850	CBECS
Commercial	School	Cook_top	0.1470	CBECS
Commercial	School	Fryer	0.1470	CBECS
Commercial	School	Griddle	0.1470	CBECS
Commercial	School	Other	1.0000	CI_1996_STUDY
Commercial	School	Other_Cooking	0.1470	CBECS
Commercial	School	Space_Heat	0.9670	SDGE_EUI_STUDY
Commercial	School	Water_Heat	0.9000	CI_1996_STUDY
Commercial	TCU	Engine	0.5000	Assumed
Commercial	TCU	Other	1.0000	CI_1996_STUDY
Commercial	TCU	Space_Heat	0.7200	CI_1996_STUDY
Commercial	TCU	Water_Heat	0.6900	CI_1996_STUDY

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Commercial	Warehouse	Engine	0.2500	Assumed
Commercial	Warehouse	Other	1.0000	DEFAULT
Commercial	Warehouse	Space_Heat	0.2310	SDGE_EUI_STUDY
Commercial	Warehouse	Water_Heat	0.8800	SDGE_EUI_STUDY

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SAT_LOOKUP	SOURCE	FASHARE_ORIG	BNSUM_SAT	FASHARE_SDGE
OfficeSpace_Heat	SDGE_EUI_STUDY	0.7460000000000000	0.8720000000000000	0.8555045871559630
OfficeSpace_Heat	SDGE_EUI_STUDY	0.1260000000000000	0.8720000000000000	0.1444954128440370
OfficeWater_Heat	SDGE_EUI_STUDY	0.1620000000000000	0.9770000000000000	0.1658137154554760
OfficeWater_Heat	SDGE_EUI_STUDY	0.8150000000000000	0.9770000000000000	0.8341862845445240
OfficeCooking	SDGE_EUI_STUDY	0.0180000000000000	0.8700000000000000	0.0206896551724138
OfficeCooking	SDGE_EUI_STUDY	0.8520000000000000	0.8700000000000000	0.9793103448275860
OfficeAC_Compressor	CI_1996_STUDY	0.0600000000000000	1.0000000000000000	0.0600000000000000
OfficeAC_Compressor	CI_1996_STUDY	0.9400000000000000	1.0000000000000000	0.9400000000000000
OfficeOther	DEFAULT	0.1750000000000000	0.1750000000000000	1.0000000000000000
RestaurantSpace_Heat	SDGE_EUI_STUDY	0.4830000000000000	0.8180000000000000	0.5904645476772620
RestaurantSpace_Heat	SDGE_EUI_STUDY	0.3350000000000000	0.8180000000000000	0.4095354523227380
RestaurantWater_Heat	SDGE_EUI_STUDY	0.8840000000000000	0.9800000000000000	0.9020408163265310
RestaurantWater_Heat	SDGE_EUI_STUDY	0.0960000000000000	0.9800000000000000	0.0979591836734694
RestaurantCook_top	SCG_COOKING_STUDY	0.7330000000000000	0.7500000000000000	0.9773333333333330
RestaurantCook_top	SCG_COOKING_STUDY	0.0170000000000000	0.7500000000000000	0.0226666666666667
RestaurantFryer	SCG_COOKING_STUDY	0.6600000000000000	0.7290000000000000	0.9053497942386830
RestaurantFryer	SCG_COOKING_STUDY	0.0690000000000000	0.7290000000000000	0.0946502057613169
RestaurantGriddle	SCG_COOKING_STUDY	0.5570000000000000	0.5740000000000000	0.9703832752613240
RestaurantGriddle	SCG_COOKING_STUDY	0.0170000000000000	0.5740000000000000	0.0296167247386760
RestaurantOther_Cooking	SDGE_EUI_STUDY	0.6600000000000000	1.0000000000000000	0.6600000000000000
RestaurantOther_Cooking	SDGE_EUI_STUDY	0.3400000000000000	1.0000000000000000	0.3400000000000000
RestaurantAC_Compressor	CI_1996_STUDY	0.0600000000000000	1.0000000000000000	0.0600000000000000
RestaurantAC_Compressor	CI_1996_STUDY	0.9400000000000000	1.0000000000000000	0.9400000000000000
RestaurantOther	DEFAULT	0.0050000000000000	0.0050000000000000	1.0000000000000000
RetailSpace_Heat	SDGE_EUI_STUDY	0.3990000000000000	0.7710000000000000	0.5175097276264590
RetailSpace_Heat	SDGE_EUI_STUDY	0.3720000000000000	0.7710000000000000	0.4824902723735410
RetailWater_Heat	SDGE_EUI_STUDY	0.2800000000000000	0.9030000000000000	0.3100775193798450
RetailWater_Heat	SDGE_EUI_STUDY	0.6230000000000000	0.9030000000000000	0.6899224806201550
RetailCooking	SDGE_EUI_STUDY	0.0740000000000000	0.7900000000000000	0.0936708860759494
RetailCooking	SDGE_EUI_STUDY	0.7160000000000000	0.7900000000000000	0.9063291139240510
RetailOther	DEFAULT	1.0000000000000000	1.0000000000000000	1.0000000000000000

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SAT_LOOKUP	SOURCE	FASHARE_ORIG	BNSUM_SAT	FASHARE_SDGE
LaundrySpace_Heat	CI_1996_STUDY	0.6000000000000000	1.0400000000000000	0.5769230769230770
LaundrySpace_Heat	CI_1996_STUDY	0.4400000000000000	1.0400000000000000	0.4230769230769230
LaundryWater_Heat	CI_1996_STUDY	0.6900000000000000	1.0200000000000000	0.6764705882352940
LaundryWater_Heat	CI_1996_STUDY	0.3300000000000000	1.0200000000000000	0.3235294117647060
LaundryDrying	CI_1996_STUDY	0.6600000000000000	1.1000000000000000	0.6000000000000000
LaundryDrying	CI_1996_STUDY	0.4400000000000000	1.1000000000000000	0.4000000000000000
LaundryOther	DEFAULT	1.0000000000000000	1.0000000000000000	1.0000000000000000
WarehouseSpace_Heat	SDGE_EUI_STUDY	0.1010000000000000	0.2310000000000000	0.4372294372294370
WarehouseSpace_Heat	SDGE_EUI_STUDY	0.1300000000000000	0.2310000000000000	0.5627705627705630
WarehouseWater_Heat	SDGE_EUI_STUDY	0.0630000000000000	0.8800000000000000	0.0715909090909091
WarehouseWater_Heat	SDGE_EUI_STUDY	0.8170000000000000	0.8800000000000000	0.9284090909090910
WarehouseEngine	Assumed same as AC	0.0600000000000000	1.0000000000000000	0.0600000000000000
WarehouseEngine	Assumed same as AC	0.9400000000000000	1.0000000000000000	0.9400000000000000
WarehouseOther	DEFAULT	1.0000000000000000	1.0000000000000000	1.0000000000000000
SchoolSpace_Heat	SDGE_EUI_STUDY	0.7280000000000000	0.9670000000000000	0.7528438469493280
SchoolSpace_Heat	SDGE_EUI_STUDY	0.2390000000000000	0.9670000000000000	0.2471561530506720
SchoolWater_Heat	SDGE_EUI_STUDY	0.6970000000000000	0.9190000000000000	0.7584330794341680
SchoolWater_Heat	SDGE_EUI_STUDY	0.2220000000000000	0.9190000000000000	0.2415669205658320
SchoolCook_top	SDGE_EUI_STUDY	0.3900000000000000	0.9100000000000000	0.4285714285714290
SchoolCook_top	SDGE_EUI_STUDY	0.5200000000000000	0.9100000000000000	0.5714285714285710
SchoolFryer	SDGE_EUI_STUDY	0.3900000000000000	0.9100000000000000	0.4285714285714290
SchoolFryer	SDGE_EUI_STUDY	0.5200000000000000	0.9100000000000000	0.5714285714285710
SchoolGriddle	SDGE_EUI_STUDY	0.3900000000000000	0.9100000000000000	0.4285714285714290
SchoolGriddle	SDGE_EUI_STUDY	0.5200000000000000	0.9100000000000000	0.5714285714285710
SchoolOther_Cooking	SDGE_EUI_STUDY	0.3900000000000000	0.9100000000000000	0.4285714285714290
SchoolOther_Cooking	SDGE_EUI_STUDY	0.5200000000000000	0.9100000000000000	0.5714285714285710
SchoolAC_Compressor	CI_1996_STUDY	0.0600000000000000	1.0000000000000000	0.0600000000000000
SchoolAC_Compressor	CI_1996_STUDY	0.9400000000000000	1.0000000000000000	0.9400000000000000
SchoolOther	DEFAULT	1.0000000000000000	1.0000000000000000	1.0000000000000000
CollegeSpace_Heat	SDGE_EUI_STUDY	0.2520000000000000	0.7630000000000000	0.3302752293577980
CollegeSpace_Heat	SDGE_EUI_STUDY	0.5110000000000000	0.7630000000000000	0.6697247706422020

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SAT_LOOKUP	SOURCE	FASHARE_ORIG	BNSUM_SAT	FASHARE_SDGE
CollegeWater_Heat	SDGE_EUI_STUDY	0.7800000000000000	0.9550000000000000	0.8167539267015710
CollegeWater_Heat	SDGE_EUI_STUDY	0.1750000000000000	0.9550000000000000	0.1832460732984290
CollegeCook_top	SDGE_EUI_STUDY	0.0350000000000000	0.7290000000000000	0.0480109739368999
CollegeCook_top	SDGE_EUI_STUDY	0.6940000000000000	0.7290000000000000	0.9519890260631000
CollegeFryer	SDGE_EUI_STUDY	0.0350000000000000	0.7290000000000000	0.0480109739368999
CollegeFryer	SDGE_EUI_STUDY	0.6940000000000000	0.7290000000000000	0.9519890260631000
CollegeGriddle	SDGE_EUI_STUDY	0.0350000000000000	0.7290000000000000	0.0480109739368999
CollegeGriddle	SDGE_EUI_STUDY	0.6940000000000000	0.7290000000000000	0.9519890260631000
CollegeOther_Cooking	SDGE_EUI_STUDY	0.0350000000000000	0.7290000000000000	0.0480109739368999
CollegeOther_Cooking	SDGE_EUI_STUDY	0.6940000000000000	0.7290000000000000	0.9519890260631000
CollegeAC_Compressor	CI_1996_STUDY	0.0600000000000000	1.0000000000000000	0.0600000000000000
CollegeAC_Compressor	CI_1996_STUDY	0.9400000000000000	1.0000000000000000	0.9400000000000000
CollegeOther	DEFAULT	0.0930000000000000	0.0930000000000000	1.0000000000000000
HealthSpace_Heat	SDGE_EUI_STUDY	0.6180000000000000	0.9360000000000000	0.6602564102564100
HealthSpace_Heat	SDGE_EUI_STUDY	0.3180000000000000	0.9360000000000000	0.3397435897435900
HealthWater_Heat	SDGE_EUI_STUDY	0.7220000000000000	0.8760000000000000	0.8242009132420090
HealthWater_Heat	SDGE_EUI_STUDY	0.1540000000000000	0.8760000000000000	0.1757990867579910
HealthCook_top	SDGE_EUI_STUDY	0.0870000000000000	0.9170000000000000	0.0948745910577972
HealthCook_top	SDGE_EUI_STUDY	0.8300000000000000	0.9170000000000000	0.9051254089422030
HealthFryer	SDGE_EUI_STUDY	0.0870000000000000	0.9170000000000000	0.0948745910577972
HealthFryer	SDGE_EUI_STUDY	0.8300000000000000	0.9170000000000000	0.9051254089422030
HealthGriddle	SDGE_EUI_STUDY	0.0870000000000000	0.9170000000000000	0.0948745910577972
HealthGriddle	SDGE_EUI_STUDY	0.8300000000000000	0.9170000000000000	0.9051254089422030
HealthOther_Cooking	SDGE_EUI_STUDY	0.6600000000000000	1.0000000000000000	0.6600000000000000
HealthOther_Cooking	SDGE_EUI_STUDY	0.3400000000000000	1.0000000000000000	0.3400000000000000
HealthDrying	CI_1996_STUDY	0.6000000000000000	1.1000000000000000	0.6000000000000000
HealthDrying	CI_1996_STUDY	0.4400000000000000	1.1000000000000000	0.4000000000000000
HealthAC_Compressor	CI_1996_STUDY	0.0600000000000000	1.0000000000000000	0.0600000000000000
HealthAC_Compressor	CI_1996_STUDY	0.9400000000000000	1.0000000000000000	0.9400000000000000
HealthOther	DEFAULT	0.2110000000000000	0.2110000000000000	1.0000000000000000
LodgingSpace_Heat	SDGE_EUI_STUDY	0.2430000000000000	0.8950000000000000	0.2715083798882680

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SAT_LOOKUP	SOURCE	FASHARE_ORIG	BNSUM_SAT	FASHARE_SDGE
LodgingSpace_Heat	SDGE_EUI_STUDY	0.6520000000000000	0.8950000000000000	0.7284916201117320
LodgingWater_Heat	SDGE_EUI_STUDY	0.9410000000000000	0.9510000000000000	0.9894847528916930
LodgingWater_Heat	SDGE_EUI_STUDY	0.0100000000000000	0.9510000000000000	0.0105152471083070
LodgingCook_top	SDGE_EUI_STUDY	0.3210000000000000	0.7140000000000000	0.4495798319327730
LodgingCook_top	SDGE_EUI_STUDY	0.3930000000000000	0.7140000000000000	0.5504201680672270
LodgingFryer	SDGE_EUI_STUDY	0.3210000000000000	0.7140000000000000	0.4495798319327730
LodgingFryer	SDGE_EUI_STUDY	0.3930000000000000	0.7140000000000000	0.5504201680672270
LodgingGriddle	SDGE_EUI_STUDY	0.3210000000000000	0.7140000000000000	0.4495798319327730
LodgingGriddle	SDGE_EUI_STUDY	0.3930000000000000	0.7140000000000000	0.5504201680672270
LodgingOther_Cooking	SDGE_EUI_STUDY	0.3210000000000000	0.7140000000000000	0.4495798319327730
LodgingOther_Cooking	SDGE_EUI_STUDY	0.3930000000000000	0.7140000000000000	0.5504201680672270
LodgingDrying	CI_1996_STUDY	0.6600000000000000	1.1000000000000000	0.6000000000000000
LodgingDrying	CI_1996_STUDY	0.4400000000000000	1.1000000000000000	0.4000000000000000
LodgingAC_Compressor	CI_1996_STUDY	0.0600000000000000	1.0000000000000000	0.0600000000000000
LodgingAC_Compressor	CI_1996_STUDY	0.9400000000000000	1.0000000000000000	0.9400000000000000
LodgingOther	DEFAULT	0.4330000000000000	0.4330000000000000	1.0000000000000000
MiscSpace_Heat	SDGE_EUI_STUDY	0.3820000000000000	0.6950000000000000	0.5496402877697840
MiscSpace_Heat	SDGE_EUI_STUDY	0.3130000000000000	0.6950000000000000	0.4503597122302160
MiscWater_Heat	SDGE_EUI_STUDY	0.5040000000000000	0.9050000000000000	0.5569060773480660
MiscWater_Heat	SDGE_EUI_STUDY	0.4010000000000000	0.9050000000000000	0.4430939226519340
MiscCook_top	SCG_COOKING_STUDY	0.7330000000000000	0.7500000000000000	0.9773333333333330
MiscCook_top	SCG_COOKING_STUDY	0.0170000000000000	0.7500000000000000	0.0226666666666667
MiscFryer	SCG_COOKING_STUDY	0.6600000000000000	0.7290000000000000	0.9053497942386830
MiscFryer	SCG_COOKING_STUDY	0.0690000000000000	0.7290000000000000	0.0946502057613169
MiscGriddle	SCG_COOKING_STUDY	0.5570000000000000	0.5740000000000000	0.9703832752613240
MiscGriddle	SCG_COOKING_STUDY	0.0170000000000000	0.5740000000000000	0.0296167247386760
MiscOther_Cooking	SDGE_EUI_STUDY	0.6600000000000000	1.0000000000000000	0.6600000000000000
MiscOther_Cooking	SDGE_EUI_STUDY	0.3400000000000000	1.0000000000000000	0.3400000000000000
MiscAC_Compressor	CI_1996_STUDY	0.0600000000000000	1.0000000000000000	0.0600000000000000
MiscAC_Compressor	CI_1996_STUDY	0.9400000000000000	1.0000000000000000	0.9400000000000000
MiscOther	DEFAULT	0.0600000000000000	0.0600000000000000	1.0000000000000000

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SAT_LOOKUP	SOURCE	FASHARE_ORIG	BNSUM_SAT	FASHARE_SDGE
GovernmentSpace_Heat	SDGE_EUI_STUDY	0.7460000000000000	0.8720000000000000	0.8555045871559630
GovernmentSpace_Heat	SDGE_EUI_STUDY	0.1260000000000000	0.8720000000000000	0.1444954128440370
GovernmentWater_Heat	SDGE_EUI_STUDY	0.1620000000000000	0.9770000000000000	0.1658137154554760
GovernmentWater_Heat	SDGE_EUI_STUDY	0.8150000000000000	0.9770000000000000	0.8341862845445240
GovernmentCook_top	SCG_COOKING_STUDY	0.7330000000000000	0.7500000000000000	0.9773333333333330
GovernmentCook_top	SCG_COOKING_STUDY	0.0170000000000000	0.7500000000000000	0.0226666666666667
GovernmentFryer	SCG_COOKING_STUDY	0.6600000000000000	0.7290000000000000	0.9053497942386830
GovernmentFryer	SCG_COOKING_STUDY	0.0690000000000000	0.7290000000000000	0.0946502057613169
GovernmentGriddle	SCG_COOKING_STUDY	0.5570000000000000	0.5740000000000000	0.9703832752613240
GovernmentGriddle	SCG_COOKING_STUDY	0.0170000000000000	0.5740000000000000	0.0296167247386760
GovernmentOther_Cooking	SDGE_EUI_STUDY	0.6600000000000000	1.0000000000000000	0.6600000000000000
GovernmentOther_Cooking	SDGE_EUI_STUDY	0.3400000000000000	1.0000000000000000	0.3400000000000000
GovernmentAC_Compressor	CI_1996_STUDY	0.0600000000000000	1.0000000000000000	0.0600000000000000
GovernmentAC_Compressor	CI_1996_STUDY	0.9400000000000000	1.0000000000000000	0.9400000000000000
GovernmentOther	DEFAULT	0.1750000000000000	0.1750000000000000	1.0000000000000000
TCUSpace_Heat	CI_1996_STUDY	0.6000000000000000	1.0400000000000000	0.5769230769230770
TCUSpace_Heat	CI_1996_STUDY	0.4400000000000000	1.0400000000000000	0.4230769230769230
TCUWater_Heat	CI_1996_STUDY	0.6900000000000000	1.0200000000000000	0.6764705882352940
TCUWater_Heat	CI_1996_STUDY	0.3300000000000000	1.0200000000000000	0.3235294117647060
TCUEngine	Assumed same as AC	0.0600000000000000	1.0000000000000000	0.0600000000000000
TCUEngine	Assumed same as AC	0.9400000000000000	1.0000000000000000	0.9400000000000000
TCUOther	DEFAULT	1.0000000000000000	1.0000000000000000	1.0000000000000000
ConstructionSpace_Heat	CI_1996_STUDY	0.6000000000000000	1.0400000000000000	0.5769230769230770
ConstructionSpace_Heat	CI_1996_STUDY	0.4400000000000000	1.0400000000000000	0.4230769230769230
ConstructionWater_Heat	CI_1996_STUDY	0.6900000000000000	1.0200000000000000	0.6764705882352940
ConstructionWater_Heat	CI_1996_STUDY	0.3300000000000000	1.0200000000000000	0.3235294117647060
ConstructionOther	DEFAULT	1.0000000000000000	1.0000000000000000	1.0000000000000000
AgricultureSpace_Heat	CI_1996_STUDY	0.6000000000000000	1.0400000000000000	0.5769230769230770
AgricultureSpace_Heat	CI_1996_STUDY	0.4400000000000000	1.0400000000000000	0.4230769230769230
AgricultureWater_Heat	CI_1996_STUDY	0.6900000000000000	1.0200000000000000	0.6764705882352940
AgricultureWater_Heat	CI_1996_STUDY	0.3300000000000000	1.0200000000000000	0.3235294117647060

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SAT_LOOKUP	SOURCE	FASHARE_ORIG	BNSUM_SAT	FASHARE_SDGE
AgricultureDrying	NEED DATA	1.0000000000000000	1.0000000000000000	1.0000000000000000
AgricultureDrying	NEED DATA	0.0000000000000000	1.0000000000000000	0.0000000000000000
AgricultureEngine	Assumed same as AC	0.0600000000000000	1.0000000000000000	0.0600000000000000
AgricultureEngine	Assumed same as AC	0.9400000000000000	1.0000000000000000	0.9400000000000000
AgricultureOther	DEFAULT	1.0000000000000000	1.0000000000000000	1.0000000000000000
GrocerySpace_Heat	SDGE_EUI_STUDY	0.4830000000000000	0.6470000000000000	0.7465224111282840
GrocerySpace_Heat	SDGE_EUI_STUDY	0.1640000000000000	0.6470000000000000	0.2534775888717160
GroceryWater_Heat	SDGE_EUI_STUDY	0.6950000000000000	0.9810000000000000	0.7084607543323140
GroceryWater_Heat	SDGE_EUI_STUDY	0.2860000000000000	0.9810000000000000	0.2915392456676860
GroceryCook_top	SDGE_EUI_STUDY	0.3210000000000000	0.9010000000000000	0.3562708102108770
GroceryCook_top	SDGE_EUI_STUDY	0.5800000000000000	0.9010000000000000	0.6437291897891230
GroceryFryer	SDGE_EUI_STUDY	0.3210000000000000	0.9010000000000000	0.3562708102108770
GroceryFryer	SDGE_EUI_STUDY	0.5800000000000000	0.9010000000000000	0.6437291897891230
GroceryGriddle	SDGE_EUI_STUDY	0.3210000000000000	0.9010000000000000	0.3562708102108770
GroceryGriddle	SDGE_EUI_STUDY	0.5800000000000000	0.9010000000000000	0.6437291897891230
GroceryOther_Cooking	SDGE_EUI_STUDY	0.3210000000000000	0.9010000000000000	0.3562708102108770
GroceryOther_Cooking	SDGE_EUI_STUDY	0.5800000000000000	0.9010000000000000	0.6437291897891230
GroceryAC_Compressor	CI_1996_STUDY	0.0600000000000000	1.0000000000000000	0.0600000000000000
GroceryAC_Compressor	CI_1996_STUDY	0.9400000000000000	1.0000000000000000	0.9400000000000000
GroceryOther	DEFAULT	1.0000000000000000	1.0000000000000000	1.0000000000000000

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EUI Values by Business Type and End Use

bname	nname	fname	_NAME_	SOURCE	Stock_Existing	Standard_Existing	High_Existing	Premium_Existing
Agriculture	Drying	Electric	B0	SDGE_EUI_STUDY	0.3120000	0.2808000	N/A	N/A
Agriculture	Drying	Natural_Gas	B0	SDGE_EUI_STUDY	0.2013300	0.1811970	N/A	N/A
Agriculture	Engine	Electric	B0	SDGE_EUI_STUDY	1.3416000	1.2074400	N/A	N/A
Agriculture	Engine	Natural_Gas	B0	SDGE_EUI_STUDY	0.8657190	0.7791471	N/A	N/A
Agriculture	Other	Natural_Gas	B0	SDGE_EUI_STUDY	0.00	N/A	N/A	N/A
Agriculture	Space_Heat	Electric	B0	SDGE_EUI_STUDY	0.6010000	0.5409000	N/A	N/A
Agriculture	Space_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	0.1468600	0.1321740	0.1202783	0.1083827
Agriculture	Water_Heat	Electric	B0	SDGE_EUI_STUDY	0.3120000	0.2808000	0.2732184	0.2656368
Agriculture	Water_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	0.2013300	0.1811970	0.1585474	0.1358978
College	AC_Compressor	Electric	B0	SDGE_EUI_STUDY	3.4630000	3.1167000	N/A	N/A
College	AC_Compressor	Natural_Gas	B0	SDGE_EUI_STUDY	0.1181922	0.1063730	N/A	N/A
College	Cook_top	Electric	B0	SDGE_EUI_STUDY	0.7620000	0.6858000	N/A	N/A
College	Cook_top	Natural_Gas	B0	SDGE_EUI_STUDY	0.0486000	0.0437400	N/A	N/A
College	Fryer	Electric	B0	SDGE_EUI_STUDY	0.7620000	0.6858000	N/A	N/A
College	Fryer	Natural_Gas	B0	SDGE_EUI_STUDY	0.0485700	0.0437130	N/A	N/A
College	Griddle	Electric	B0	SDGE_EUI_STUDY	0.7620000	0.6858000	N/A	N/A
College	Griddle	Natural_Gas	B0	SDGE_EUI_STUDY	0.0485700	0.0437130	N/A	N/A
College	Other	Natural_Gas	B0	SDGE_EUI_STUDY	0.00	N/A	N/A	N/A
College	Other_Cooking	Electric	B0	SDGE_EUI_STUDY	0.7620000	0.6858000	N/A	N/A
College	Other_Cooking	Natural_Gas	B0	SDGE_EUI_STUDY	0.0486000	0.0437400	N/A	N/A
College	Space_Heat	Electric	B0	SDGE_EUI_STUDY	0.1990000	0.1791000	N/A	N/A
College	Space_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	0.2664300	0.2397870	0.2182062	0.1966253
College	Water_Heat	Electric	B0	SDGE_EUI_STUDY	0.6400000	0.5760000	0.5604480	0.5448960
College	Water_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	0.2871500	0.2584350	0.2261306	0.1938263
Construction	Other	Natural_Gas	B0	SDGE_EUI_STUDY	0.00	N/A	N/A	N/A
Construction	Space_Heat	Electric	B0	SDGE_EUI_STUDY	0.6010000	0.5409000	N/A	N/A
Construction	Space_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	0.1468600	0.1321740	0.1202783	0.1083827
Construction	Water_Heat	Electric	B0	SDGE_EUI_STUDY	0.3120000	0.2808000	0.2732184	0.2656368
Construction	Water_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	0.2013300	0.1811970	0.1585474	0.1358978
Government	AC_Compressor	Electric	B0	SDGE_EUI_STUDY	3.0560000	2.7504000	N/A	N/A
Government	AC_Compressor	Natural_Gas	B0	SDGE_EUI_STUDY	0.1043013	0.0938712	N/A	N/A
Government	Cook_top	Electric	B0	SDGE_EUI_STUDY	0.4510000	0.4059000	N/A	N/A
Government	Cook_top	Natural_Gas	B0	SDGE_EUI_STUDY	0.0346000	0.0311400	N/A	N/A
Government	Fryer	Electric	B0	SDGE_EUI_STUDY	0.4510000	0.4059000	N/A	N/A
Government	Fryer	Natural_Gas	B0	SDGE_EUI_STUDY	0.0345900	0.0311310	N/A	N/A
Government	Griddle	Electric	B0	SDGE_EUI_STUDY	0.4510000	0.4059000	N/A	N/A
Government	Griddle	Natural_Gas	B0	SDGE_EUI_STUDY	0.0345900	0.0311310	N/A	N/A
Government	Other	Natural_Gas	B0	SDGE_EUI_STUDY	0.00	N/A	N/A	N/A
Government	Other_Cooking	Electric	B0	SDGE_EUI_STUDY	0.4510000	0.4059000	N/A	N/A
Government	Other_Cooking	Natural_Gas	B0	SDGE_EUI_STUDY	0.0346000	0.0311400	N/A	N/A
Government	Space_Heat	Electric	B0	SDGE_EUI_STUDY	0.8450000	N/A	N/A	N/A
Government	Space_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	0.3046400	0.2741760	0.2495002	0.2248243
Government	Water_Heat	Electric	B0	SDGE_EUI_STUDY	0.1790000	0.1611000	0.1567503	0.1524006
Government	Water_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	0.0473900	0.0426510	0.0373196	0.0319883
Grocery	AC_Compressor	Electric	B0	SDGE_EUI_STUDY	5.5860000	5.0274000	N/A	N/A
Grocery	AC_Compressor	Natural_Gas	B0	SDGE_EUI_STUDY	0.1906502	0.1715852	N/A	N/A
Grocery	Cook_top	Electric	B0	SDGE_EUI_STUDY	5.2450000	4.7205000	N/A	N/A
Grocery	Cook_top	Natural_Gas	B0	SDGE_EUI_STUDY	0.0418300	0.0376470	N/A	N/A
Grocery	Fryer	Electric	B0	SDGE_EUI_STUDY	5.2450000	4.7205000	N/A	N/A
Grocery	Fryer	Natural_Gas	B0	SDGE_EUI_STUDY	0.4183200	0.3764880	N/A	N/A

San Diego Gas & Electric
EUI Values by Business Type and End Use

bname	nname	fname	_NAME_	SOURCE	Stock_Existing	Standard_Existing	High_Existing	Premium_Existing
Grocery	Griddle	Electric	B0	SDGE_EUI_STUDY	5.2450000	4.7205000	N/A	N/A
Grocery	Griddle	Natural_Gas	B0	SDGE_EUI_STUDY	0.4183200	0.3764880	N/A	N/A
Grocery	Other	Natural_Gas	B0	SDGE_EUI_STUDY	0.00	N/A	N/A	N/A
Grocery	Other_Cooking	Electric	B0	SDGE_EUI_STUDY	5.2450000	4.7205000	N/A	N/A
Grocery	Other_Cooking	Natural_Gas	B0	SDGE_EUI_STUDY	0.0418300	0.0376470	N/A	N/A
Grocery	Space_Heat	Electric	B0	SDGE_EUI_STUDY	0.7350000	N/A	N/A	N/A
Grocery	Space_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	0.0976200	0.0878580	0.0799508	0.0720436
Grocery	Water_Heat	Electric	B0	SDGE_EUI_STUDY	1.7630000	1.5867000	1.5438591	1.5010182
Grocery	Water_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	0.3182700	0.2864430	0.2506376	0.2148323
Health	AC_Compressor	Electric	B0	SDGE_EUI_STUDY	3.3360000	3.0024000	N/A	N/A
Health	AC_Compressor	Natural_Gas	B0	SDGE_EUI_STUDY	0.1138577	0.1024719	N/A	N/A
Health	Cook_top	Electric	B0	SDGE_EUI_STUDY	1.1540000	1.0386000	N/A	N/A
Health	Cook_top	Natural_Gas	B0	SDGE_EUI_STUDY	0.2635800	0.2372220	N/A	N/A
Health	Drying	Electric	B0	SDGE_EUI_STUDY	0.7619500	0.6857550	N/A	N/A
Health	Drying	Natural_Gas	B0	SDGE_EUI_STUDY	0.1459815	0.1313834	N/A	N/A
Health	Fryer	Electric	B0	SDGE_EUI_STUDY	1.1540000	1.0386000	N/A	N/A
Health	Fryer	Natural_Gas	B0	SDGE_EUI_STUDY	0.2635800	0.2372220	N/A	N/A
Health	Griddle	Electric	B0	SDGE_EUI_STUDY	1.1540000	1.0386000	N/A	N/A
Health	Griddle	Natural_Gas	B0	SDGE_EUI_STUDY	0.2635800	0.2372220	N/A	N/A
Health	Other	Natural_Gas	B0	SDGE_EUI_STUDY	0.00	N/A	N/A	N/A
Health	Other_Cooking	Electric	B0	SDGE_EUI_STUDY	1.1540000	1.0386000	N/A	N/A
Health	Other_Cooking	Natural_Gas	B0	SDGE_EUI_STUDY	0.0263600	0.0237240	N/A	N/A
Health	Space_Heat	Electric	B0	SDGE_EUI_STUDY	0.4050000	0.3645000	N/A	N/A
Health	Space_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	0.0689400	0.0620460	0.0564619	0.0508777
Health	Water_Heat	Electric	B0	SDGE_EUI_STUDY	2.1770000	1.9593000	1.9063989	1.8534978
Health	Water_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	0.4170900	0.3753810	0.3284584	0.2815358
Laundry	Drying	Electric	B0	SDGE_EUI_STUDY	85.5136937	76.9623243	N/A	N/A
Laundry	Drying	Natural_Gas	B0	SDGE_EUI_STUDY	14.9366516	13.4429864	N/A	N/A
Laundry	Other	Natural_Gas	B0	SDGE_EUI_STUDY	0.00	N/A	N/A	N/A
Laundry	Space_Heat	Electric	B0	SDGE_EUI_STUDY	0.6010000	0.5409000	N/A	N/A
Laundry	Space_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	0.1468600	0.1321740	0.1202783	0.1083827
Laundry	Water_Heat	Electric	B0	SDGE_EUI_STUDY	15.8040000	14.2236000	13.8395628	13.4555256
Laundry	Water_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	2.7604800	2.4844320	2.1738780	1.8633240
Lodging	AC_Compressor	Electric	B0	SDGE_EUI_STUDY	1.6700000	1.5030000	N/A	N/A
Lodging	AC_Compressor	Natural_Gas	B0	SDGE_EUI_STUDY	0.0569971	0.0512974	N/A	N/A
Lodging	Cook_top	Electric	B0	SDGE_EUI_STUDY	39.3000000	35.3700000	N/A	N/A
Lodging	Cook_top	Natural_Gas	B0	SDGE_EUI_STUDY	0.3210000	0.2889000	N/A	N/A
Lodging	Drying	Electric	B0	SDGE_EUI_STUDY	0.9877500	0.8889750	N/A	N/A
Lodging	Drying	Natural_Gas	B0	SDGE_EUI_STUDY	0.1725300	0.1552770	N/A	N/A
Lodging	Fryer	Electric	B0	SDGE_EUI_STUDY	5.2450000	4.7205000	N/A	N/A
Lodging	Fryer	Natural_Gas	B0	SDGE_EUI_STUDY	0.4183200	0.3764880	N/A	N/A
Lodging	Griddle	Electric	B0	SDGE_EUI_STUDY	5.2450000	4.7205000	N/A	N/A
Lodging	Griddle	Natural_Gas	B0	SDGE_EUI_STUDY	0.4183200	0.3764880	N/A	N/A
Lodging	Other	Natural_Gas	B0	SDGE_EUI_STUDY	0.00	N/A	N/A	N/A
Lodging	Other_Cooking	Electric	B0	SDGE_EUI_STUDY	5.2450000	4.7205000	N/A	N/A
Lodging	Other_Cooking	Natural_Gas	B0	SDGE_EUI_STUDY	0.0410000	0.0369000	N/A	N/A
Lodging	Space_Heat	Electric	B0	SDGE_EUI_STUDY	0.5490000	0.4941000	N/A	N/A
Lodging	Space_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	0.3869800	0.3482820	0.3169366	0.2855912
Lodging	Water_Heat	Electric	B0	SDGE_EUI_STUDY	3.9510000	3.5559000	3.4598907	3.3638814
Lodging	Water_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	0.6901200	0.6211080	0.5434695	0.4658310

San Diego Gas & Electric
EUI Values by Business Type and End Use

bname	nname	fname	_NAME_	SOURCE	Stock_Existing	Standard_Existing	High_Existing	Premium_Existing
Misc	AC_Compressor	Electric	B0	SDGE_EUI_STUDY	3.8720000	3.4848000	N/A	N/A
Misc	AC_Compressor	Natural_Gas	B0	SDGE_EUI_STUDY	0.1321514	0.1189362	N/A	N/A
Misc	Cook_top	Electric	B0	SDGE_EUI_STUDY	0.5390000	0.4851000	N/A	N/A
Misc	Cook_top	Natural_Gas	B0	SDGE_EUI_STUDY	0.0430000	0.0387000	N/A	N/A
Misc	Fryer	Electric	B0	SDGE_EUI_STUDY	0.5390000	0.4851000	N/A	N/A
Misc	Fryer	Natural_Gas	B0	SDGE_EUI_STUDY	0.0430200	0.0387180	N/A	N/A
Misc	Griddle	Electric	B0	SDGE_EUI_STUDY	0.5390000	0.4851000	N/A	N/A
Misc	Griddle	Natural_Gas	B0	SDGE_EUI_STUDY	0.0430200	0.0387180	N/A	N/A
Misc	Other	Natural_Gas	B0	SDGE_EUI_STUDY	0.00	N/A	N/A	N/A
Misc	Other_Cooking	Electric	B0	SDGE_EUI_STUDY	0.5390000	0.4851000	N/A	N/A
Misc	Other_Cooking	Natural_Gas	B0	SDGE_EUI_STUDY	0.0430000	0.0387000	N/A	N/A
Misc	Space_Heat	Electric	B0	SDGE_EUI_STUDY	0.6010000	0.5409000	N/A	N/A
Misc	Space_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	0.1468600	0.1321740	0.1202783	0.1083827
Misc	Water_Heat	Electric	B0	SDGE_EUI_STUDY	0.3120000	0.2808000	0.2732184	0.2656368
Misc	Water_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	0.2013300	0.1811970	0.1585474	0.1358978
Office	AC_Compressor	Electric	B0	SDGE_EUI_STUDY	3.0560000	2.7504000	N/A	N/A
Office	AC_Compressor	Natural_Gas	B0	SDGE_EUI_STUDY	0.1043013	0.0938712	N/A	N/A
Office	Cooking	Electric	B0	SDGE_EUI_STUDY	0.4510000	0.4059000	N/A	N/A
Office	Cooking	Natural_Gas	B0	SDGE_EUI_STUDY	0.0345900	0.0311310	N/A	N/A
Office	Other	Natural_Gas	B0	SDGE_EUI_STUDY	0.00	N/A	N/A	N/A
Office	Space_Heat	Electric	B0	SDGE_EUI_STUDY	0.8450000	0.7605000	N/A	N/A
Office	Space_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	0.3046400	0.2741760	0.2495002	0.2248243
Office	Water_Heat	Electric	B0	SDGE_EUI_STUDY	0.1790000	0.1611000	0.1567503	0.1524006
Office	Water_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	0.0473900	0.0426510	0.0373196	0.0319883
Restaurant	AC_Compressor	Electric	B0	SDGE_EUI_STUDY	5.9430000	5.3487000	N/A	N/A
Restaurant	AC_Compressor	Natural_Gas	B0	SDGE_EUI_STUDY	0.2028346	0.1825511	N/A	N/A
Restaurant	Cook_top	Electric	B0	SDGE_EUI_STUDY	1.5190269	1.3671242	N/A	N/A
Restaurant	Cook_top	Natural_Gas	B0	SDGE_EUI_STUDY	1.1985040	1.0786536	N/A	N/A
Restaurant	Fryer	Electric	B0	SDGE_EUI_STUDY	6.1654621	5.5489159	N/A	N/A
Restaurant	Fryer	Natural_Gas	B0	SDGE_EUI_STUDY	1.0791441	0.9712297	N/A	N/A
Restaurant	Griddle	Electric	B0	SDGE_EUI_STUDY	1.5190269	1.3671242	N/A	N/A
Restaurant	Griddle	Natural_Gas	B0	SDGE_EUI_STUDY	0.9107322	0.8196590	N/A	N/A
Restaurant	Other	Natural_Gas	B0	SDGE_EUI_STUDY	0.00	N/A	N/A	N/A
Restaurant	Other_Cooking	Electric	B0	SDGE_EUI_STUDY	27.3424841	24.6082357	N/A	N/A
Restaurant	Other_Cooking	Natural_Gas	B0	SDGE_EUI_STUDY	0.9712297	0.8741067	N/A	N/A
Restaurant	Space_Heat	Electric	B0	SDGE_EUI_STUDY	0.3430000	0.3087000	N/A	N/A
Restaurant	Space_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	0.1176700	0.1059030	0.0963717	0.0868405
Restaurant	Water_Heat	Electric	B0	SDGE_EUI_STUDY	4.2600000	3.8340000	3.7304820	3.6269640
Restaurant	Water_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	0.8665900	0.7799310	0.6824396	0.5849483
Retail	Cooking	Electric	B0	SDGE_EUI_STUDY	0.6930000	0.6237000	N/A	N/A
Retail	Cooking	Natural_Gas	B0	SDGE_EUI_STUDY	0.3078600	0.2770740	N/A	N/A
Retail	Other	Natural_Gas	B0	SDGE_EUI_STUDY	0.00	N/A	N/A	N/A
Retail	Space_Heat	Electric	B0	SDGE_EUI_STUDY	1.3560000	1.2204000	N/A	N/A
Retail	Space_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	0.2455200	0.2209680	0.2010809	0.1811938
Retail	Water_Heat	Electric	B0	SDGE_EUI_STUDY	0.5280000	0.4752000	0.4623696	0.4495392
Retail	Water_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	0.1092600	0.0983340	0.0860423	0.0737505
School	AC_Compressor	Electric	B0	SDGE_EUI_STUDY	1.9130000	1.7217000	N/A	N/A
School	AC_Compressor	Natural_Gas	B0	SDGE_EUI_STUDY	0.0652907	0.0587616	N/A	N/A
School	Cook_top	Electric	B0	SDGE_EUI_STUDY	0.5020000	0.4518000	N/A	N/A
School	Cook_top	Natural_Gas	B0	SDGE_EUI_STUDY	0.0460000	0.0414000	N/A	N/A

San Diego Gas & Electric
EUI Values by Business Type and End Use

bname	nname	fname	_NAME_	SOURCE	Stock_Existing	Standard_Existing	High_Existing	Premium_Existing
School	Fryer	Electric	B0	SDGE_EUI_STUDY	0.5020000	0.4518000	N/A	N/A
School	Fryer	Natural_Gas	B0	SDGE_EUI_STUDY	0.0461000	0.0414900	N/A	N/A
School	Griddle	Electric	B0	SDGE_EUI_STUDY	0.5020000	0.4518000	N/A	N/A
School	Griddle	Natural_Gas	B0	SDGE_EUI_STUDY	0.0461000	0.0414900	N/A	N/A
School	Other	Natural_Gas	B0	SDGE_EUI_STUDY	0.00	N/A	N/A	N/A
School	Other_Cooking	Electric	B0	SDGE_EUI_STUDY	0.5020000	0.4518000	N/A	N/A
School	Other_Cooking	Natural_Gas	B0	SDGE_EUI_STUDY	0.0460000	0.0414000	N/A	N/A
School	Space_Heat	Electric	B0	SDGE_EUI_STUDY	0.4840000	0.4356000	N/A	N/A
School	Space_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	0.0923800	0.0831420	0.0756592	0.0681764
School	Water_Heat	Electric	B0	SDGE_EUI_STUDY	0.6880000	0.6192000	0.6024816	0.5857632
School	Water_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	0.1232800	0.1109520	0.0970830	0.0832140
TCU	Engine	Electric	B0	SDGE_EUI_STUDY	3.7825983	3.4043385	N/A	N/A
TCU	Engine	Natural_Gas	B0	SDGE_EUI_STUDY	2.4408670	2.1967803	N/A	N/A
TCU	Other	Natural_Gas	B0	SDGE_EUI_STUDY	0.00	N/A	N/A	N/A
TCU	Space_Heat	Electric	B0	SDGE_EUI_STUDY	0.6010000	0.5409000	N/A	N/A
TCU	Space_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	0.1468600	0.1321740	0.1202783	0.1083827
TCU	Water_Heat	Electric	B0	SDGE_EUI_STUDY	0.3120000	0.2808000	0.2732184	0.2656368
TCU	Water_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	0.2013300	0.1811970	0.1585474	0.1358978
Warehouse	Engine	Electric	B0	SDGE_EUI_STUDY	33.4700769	30.1230692	N/A	N/A
Warehouse	Engine	Natural_Gas	B0	SDGE_EUI_STUDY	8.8838738	7.9954865	N/A	N/A
Warehouse	Other	Natural_Gas	B0	SDGE_EUI_STUDY	0.00	N/A	N/A	N/A
Warehouse	Space_Heat	Electric	B0	SDGE_EUI_STUDY	2.3400000	2.1060000	N/A	N/A
Warehouse	Space_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	0.6211000	0.5589900	0.5086809	0.4583718
Warehouse	Water_Heat	Electric	B0	SDGE_EUI_STUDY	0.1300000	0.1170000	0.1138410	0.1106820
Warehouse	Water_Heat	Natural_Gas	B0	SDGE_EUI_STUDY	0.2048000	0.1843200	0.1612800	0.1382400

San Diego Gas & Electric
Core Commercial E Share Values by Business Type and End Use

bname	nname	fname	_NAME_	SAT_LOOKUP	Stock_Qtec	Standard_Qtec	High_Qtec	Premium_Qtec
Agriculture	Drying	Electric	EASHARE	AgricultureDryingElectric	0.65	0.35	N/A	N/A
Agriculture	Drying	Natural_Gas	EASHARE	AgricultureDryingNatural_Gas	0.65	0.35	N/A	N/A
Agriculture	Engine	Electric	EASHARE	AgricultureEngineElectric	0.65	0.35	N/A	N/A
Agriculture	Engine	Natural_Gas	EASHARE	AgricultureEngineNatural_Gas	0.65	0.35	N/A	N/A
Agriculture	Other	Natural_Gas	EASHARE	AgricultureOtherNatural_Gas	1	N/A	N/A	N/A
Agriculture	Space_Heat	Electric	EASHARE	AgricultureSpace_HeatElectric	1	999	999	999
Agriculture	Space_Heat	Natural_Gas	EASHARE	AgricultureSpace_HeatNatural_Gas	0.65	0.3	0.04	0.01
Agriculture	Water_Heat	Electric	EASHARE	AgricultureWater_HeatElectric	0.4	0.5	0.08	0.02
Agriculture	Water_Heat	Natural_Gas	EASHARE	AgricultureWater_HeatNatural_Gas	0.4	0.5	0.08	0.02
College	AC_Compressor	Electric	EASHARE	CollegeAC_CompressorElectric	0.65	0.35	N/A	N/A
College	AC_Compressor	Natural_Gas	EASHARE	CollegeAC_CompressorNatural_Gas	0.65	0.35	N/A	N/A
College	Cook_top	Electric	EASHARE	CollegeCook_topElectric	0.65	0.35	N/A	N/A
College	Cook_top	Natural_Gas	EASHARE	CollegeCook_topNatural_Gas	0.65	0.35	N/A	N/A
College	Fryer	Electric	EASHARE	CollegeFryerElectric	0.65	0.35	N/A	N/A
College	Fryer	Natural_Gas	EASHARE	CollegeFryerNatural_Gas	0.65	0.35	N/A	N/A
College	Griddle	Electric	EASHARE	CollegeGriddleElectric	0.65	0.35	N/A	N/A
College	Griddle	Natural_Gas	EASHARE	CollegeGriddleNatural_Gas	0.65	0.35	N/A	N/A
College	Other	Natural_Gas	EASHARE	CollegeOtherNatural_Gas	1	N/A	N/A	N/A
College	Other_Cooking	Electric	EASHARE	CollegeOther_CookingElectric	0.65	0.35	N/A	N/A
College	Other_Cooking	Natural_Gas	EASHARE	CollegeOther_CookingNatural_Gas	0.65	0.35	N/A	N/A
College	Space_Heat	Electric	EASHARE	CollegeSpace_HeatElectric	1	999	999	999
College	Space_Heat	Natural_Gas	EASHARE	CollegeSpace_HeatNatural_Gas	0.65	0.3	0.04	0.01
College	Water_Heat	Electric	EASHARE	CollegeWater_HeatElectric	0.4	0.5	0.08	0.02
College	Water_Heat	Natural_Gas	EASHARE	CollegeWater_HeatNatural_Gas	0.4	0.5	0.08	0.02
Construction	Other	Natural_Gas	EASHARE	ConstructionOtherNatural_Gas	1	N/A	N/A	N/A
Construction	Space_Heat	Electric	EASHARE	ConstructionSpace_HeatElectric	1	999	999	999
Construction	Space_Heat	Natural_Gas	EASHARE	ConstructionSpace_HeatNatural_Gas	0.65	0.3	0.04	0.01
Construction	Water_Heat	Electric	EASHARE	ConstructionWater_HeatElectric	0.4	0.5	0.08	0.02
Construction	Water_Heat	Natural_Gas	EASHARE	ConstructionWater_HeatNatural_Gas	0.4	0.5	0.08	0.02
Government	AC_Compressor	Electric	EASHARE	GovernmentAC_CompressorElectric	0.65	0.35	N/A	N/A
Government	AC_Compressor	Natural_Gas	EASHARE	GovernmentAC_CompressorNatural_Gas	0.65	0.35	N/A	N/A
Government	Cook_top	Electric	EASHARE	GovernmentCook_topElectric	0.65	0.35	N/A	N/A
Government	Cook_top	Natural_Gas	EASHARE	GovernmentCook_topNatural_Gas	0.65	0.35	N/A	N/A
Government	Fryer	Electric	EASHARE	GovernmentFryerElectric	0.65	0.35	N/A	N/A
Government	Fryer	Natural_Gas	EASHARE	GovernmentFryerNatural_Gas	0.65	0.35	N/A	N/A
Government	Griddle	Electric	EASHARE	GovernmentGriddleElectric	0.65	0.35	N/A	N/A
Government	Griddle	Natural_Gas	EASHARE	GovernmentGriddleNatural_Gas	0.65	0.35	N/A	N/A
Government	Other	Natural_Gas	EASHARE	GovernmentOtherNatural_Gas	1	N/A	N/A	N/A
Government	Other_Cooking	Electric	EASHARE	GovernmentOther_CookingElectric	0.65	0.35	N/A	N/A
Government	Other_Cooking	Natural_Gas	EASHARE	GovernmentOther_CookingNatural_Gas	0.65	0.35	N/A	N/A
Government	Space_Heat	Electric	EASHARE	GovernmentSpace_HeatElectric	1	999	999	999
Government	Space_Heat	Natural_Gas	EASHARE	GovernmentSpace_HeatNatural_Gas	0.65	0.3	0.04	0.01
Government	Water_Heat	Electric	EASHARE	GovernmentWater_HeatElectric	0.4	0.5	0.08	0.02
Government	Water_Heat	Natural_Gas	EASHARE	GovernmentWater_HeatNatural_Gas	0.4	0.5	0.08	0.02
Grocery	AC_Compressor	Electric	EASHARE	GroceryAC_CompressorElectric	0.65	0.35	N/A	N/A
Grocery	AC_Compressor	Natural_Gas	EASHARE	GroceryAC_CompressorNatural_Gas	0.65	0.35	N/A	N/A
Grocery	Cook_top	Electric	EASHARE	GroceryCook_topElectric	0.65	0.35	N/A	N/A
Grocery	Cook_top	Natural_Gas	EASHARE	GroceryCook_topNatural_Gas	0.65	0.35	N/A	N/A
Grocery	Fryer	Electric	EASHARE	GroceryFryerElectric	0.65	0.35	N/A	N/A
Grocery	Fryer	Natural_Gas	EASHARE	GroceryFryerNatural_Gas	0.65	0.35	N/A	N/A
Grocery	Griddle	Electric	EASHARE	GroceryGriddleElectric	0.65	0.35	N/A	N/A
Grocery	Griddle	Natural_Gas	EASHARE	GroceryGriddleNatural_Gas	0.65	0.35	N/A	N/A
Grocery	Other	Natural_Gas	EASHARE	GroceryOtherNatural_Gas	1	N/A	N/A	N/A
Grocery	Other_Cooking	Electric	EASHARE	GroceryOther_CookingElectric	0.65	0.35	N/A	N/A
Grocery	Other_Cooking	Natural_Gas	EASHARE	GroceryOther_CookingNatural_Gas	0.65	0.35	N/A	N/A
Grocery	Space_Heat	Electric	EASHARE	GrocerySpace_HeatElectric	1	999	999	999
Grocery	Space_Heat	Natural_Gas	EASHARE	GrocerySpace_HeatNatural_Gas	0.65	0.3	0.04	0.01
Grocery	Water_Heat	Electric	EASHARE	GroceryWater_HeatElectric	0.4	0.5	0.08	0.02
Grocery	Water_Heat	Natural_Gas	EASHARE	GroceryWater_HeatNatural_Gas	0.4	0.5	0.08	0.02
Health	AC_Compressor	Electric	EASHARE	HealthAC_CompressorElectric	0.65	0.35	N/A	N/A
Health	AC_Compressor	Natural_Gas	EASHARE	HealthAC_CompressorNatural_Gas	0.65	0.35	N/A	N/A
Health	Cook_top	Electric	EASHARE	HealthCook_topElectric	0.65	0.35	N/A	N/A
Health	Cook_top	Natural_Gas	EASHARE	HealthCook_topNatural_Gas	0.65	0.35	N/A	N/A
Health	Drying	Electric	EASHARE	HealthDryingElectric	0.65	0.35	N/A	N/A
Health	Drying	Natural_Gas	EASHARE	HealthDryingNatural_Gas	0.65	0.35	N/A	N/A
Health	Fryer	Electric	EASHARE	HealthFryerElectric	0.65	0.35	N/A	N/A
Health	Fryer	Natural_Gas	EASHARE	HealthFryerNatural_Gas	0.65	0.35	N/A	N/A
Health	Griddle	Electric	EASHARE	HealthGriddleElectric	0.65	0.35	N/A	N/A
Health	Griddle	Natural_Gas	EASHARE	HealthGriddleNatural_Gas	0.65	0.35	N/A	N/A
Health	Other	Natural_Gas	EASHARE	HealthOtherNatural_Gas	1	N/A	N/A	N/A
Health	Other_Cooking	Electric	EASHARE	HealthOther_CookingElectric	0.65	0.35	N/A	N/A
Health	Other_Cooking	Natural_Gas	EASHARE	HealthOther_CookingNatural_Gas	0.65	0.35	N/A	N/A
Health	Space_Heat	Electric	EASHARE	HealthSpace_HeatElectric	1	999	999	999
Health	Space_Heat	Natural_Gas	EASHARE	HealthSpace_HeatNatural_Gas	0.65	0.3	0.04	0.01
Health	Water_Heat	Electric	EASHARE	HealthWater_HeatElectric	0.4	0.5	0.08	0.02
Health	Water_Heat	Natural_Gas	EASHARE	HealthWater_HeatNatural_Gas	0.4	0.5	0.08	0.02
Laundry	Drying	Electric	EASHARE	LaundryDryingElectric	0.65	0.35	N/A	N/A
Laundry	Drying	Natural_Gas	EASHARE	LaundryDryingNatural_Gas	0.65	0.35	N/A	N/A

San Diego Gas & Electric
Core Commercial E Share Values by Business Type and End Use

bname	nname	fname	_NAME_	SAT_LOOKUP	Stock_Qtec	Standard_Qtec	High_Qtec	Premium_Qtec
Laundry	Other	Natural_Gas	EASHARE	LaundryOtherNatural_Gas	1	N/A	N/A	N/A
Laundry	Space_Heat	Electric	EASHARE	LaundrySpace_HeatElectric	1	999	999	999
Laundry	Space_Heat	Natural_Gas	EASHARE	LaundrySpace_HeatNatural_Gas	0.65	0.3	0.04	0.01
Laundry	Water_Heat	Electric	EASHARE	LaundryWater_HeatElectric	0.4	0.5	0.08	0.02
Laundry	Water_Heat	Natural_Gas	EASHARE	LaundryWater_HeatNatural_Gas	0.4	0.5	0.08	0.02
Lodging	AC_Compressor	Electric	EASHARE	LodgingAC_CompressorElectric	0.65	0.35	N/A	N/A
Lodging	AC_Compressor	Natural_Gas	EASHARE	LodgingAC_CompressorNatural_Gas	0.65	0.35	N/A	N/A
Lodging	Cook_top	Electric	EASHARE	LodgingCook_topElectric	0.65	0.35	N/A	N/A
Lodging	Cook_top	Natural_Gas	EASHARE	LodgingCook_topNatural_Gas	0.65	0.35	N/A	N/A
Lodging	Drying	Electric	EASHARE	LodgingDryingElectric	0.65	0.35	N/A	N/A
Lodging	Drying	Natural_Gas	EASHARE	LodgingDryingNatural_Gas	0.65	0.35	N/A	N/A
Lodging	Fryer	Electric	EASHARE	LodgingFryerElectric	0.65	0.35	N/A	N/A
Lodging	Fryer	Natural_Gas	EASHARE	LodgingFryerNatural_Gas	0.65	0.35	N/A	N/A
Lodging	Griddle	Electric	EASHARE	LodgingGriddleElectric	0.65	0.35	N/A	N/A
Lodging	Griddle	Natural_Gas	EASHARE	LodgingGriddleNatural_Gas	0.65	0.35	N/A	N/A
Lodging	Other	Natural_Gas	EASHARE	LodgingOtherNatural_Gas	1	N/A	N/A	N/A
Lodging	Other_Cooking	Electric	EASHARE	LodgingOther_CookingElectric	0.65	0.35	N/A	N/A
Lodging	Other_Cooking	Natural_Gas	EASHARE	LodgingOther_CookingNatural_Gas	0.65	0.35	N/A	N/A
Lodging	Space_Heat	Electric	EASHARE	LodgingSpace_HeatElectric	1	999	999	999
Lodging	Space_Heat	Natural_Gas	EASHARE	LodgingSpace_HeatNatural_Gas	0.65	0.3	0.04	0.01
Lodging	Water_Heat	Electric	EASHARE	LodgingWater_HeatElectric	0.4	0.5	0.08	0.02
Lodging	Water_Heat	Natural_Gas	EASHARE	LodgingWater_HeatNatural_Gas	0.4	0.5	0.08	0.02
Misc	AC_Compressor	Electric	EASHARE	MiscAC_CompressorElectric	0.65	0.35	N/A	N/A
Misc	AC_Compressor	Natural_Gas	EASHARE	MiscAC_CompressorNatural_Gas	0.65	0.35	N/A	N/A
Misc	Cook_top	Electric	EASHARE	MiscCook_topElectric	0.65	0.35	N/A	N/A
Misc	Cook_top	Natural_Gas	EASHARE	MiscCook_topNatural_Gas	0.65	0.35	N/A	N/A
Misc	Fryer	Electric	EASHARE	MiscFryerElectric	0.65	0.35	N/A	N/A
Misc	Fryer	Natural_Gas	EASHARE	MiscFryerNatural_Gas	0.65	0.35	N/A	N/A
Misc	Griddle	Electric	EASHARE	MiscGriddleElectric	0.65	0.35	N/A	N/A
Misc	Griddle	Natural_Gas	EASHARE	MiscGriddleNatural_Gas	0.65	0.35	N/A	N/A
Misc	Other	Natural_Gas	EASHARE	MiscOtherNatural_Gas	1	N/A	N/A	N/A
Misc	Other_Cooking	Electric	EASHARE	MiscOther_CookingElectric	0.65	0.35	N/A	N/A
Misc	Other_Cooking	Natural_Gas	EASHARE	MiscOther_CookingNatural_Gas	0.65	0.35	N/A	N/A
Misc	Space_Heat	Electric	EASHARE	MiscSpace_HeatElectric	1	999	999	999
Misc	Space_Heat	Natural_Gas	EASHARE	MiscSpace_HeatNatural_Gas	0.65	0.3	0.04	0.01
Misc	Water_Heat	Electric	EASHARE	MiscWater_HeatElectric	0.4	0.5	0.08	0.02
Misc	Water_Heat	Natural_Gas	EASHARE	MiscWater_HeatNatural_Gas	0.4	0.5	0.08	0.02
Office	AC_Compressor	Electric	EASHARE	OfficeAC_CompressorElectric	0.65	0.35	N/A	N/A
Office	AC_Compressor	Natural_Gas	EASHARE	OfficeAC_CompressorNatural_Gas	0.65	0.35	N/A	N/A
Office	Cooking	Electric	EASHARE	OfficeCookingElectric	0.65	0.35	N/A	N/A
Office	Cooking	Natural_Gas	EASHARE	OfficeCookingNatural_Gas	0.65	0.35	N/A	N/A
Office	Other	Natural_Gas	EASHARE	OfficeOtherNatural_Gas	1	N/A	N/A	N/A
Office	Space_Heat	Electric	EASHARE	OfficeSpace_HeatElectric	1	999	999	999
Office	Space_Heat	Natural_Gas	EASHARE	OfficeSpace_HeatNatural_Gas	0.65	0.3	0.04	0.01
Office	Water_Heat	Electric	EASHARE	OfficeWater_HeatElectric	0.4	0.5	0.08	0.02
Office	Water_Heat	Natural_Gas	EASHARE	OfficeWater_HeatNatural_Gas	0.4	0.5	0.08	0.02
Restaurant	AC_Compressor	Electric	EASHARE	RestaurantAC_CompressorElectric	0.65	0.35	N/A	N/A
Restaurant	AC_Compressor	Natural_Gas	EASHARE	RestaurantAC_CompressorNatural_Gas	0.65	0.35	N/A	N/A
Restaurant	Cook_top	Electric	EASHARE	RestaurantCook_topElectric	0.65	0.35	N/A	N/A
Restaurant	Cook_top	Natural_Gas	EASHARE	RestaurantCook_topNatural_Gas	0.65	0.35	N/A	N/A
Restaurant	Fryer	Electric	EASHARE	RestaurantFryerElectric	0.65	0.35	N/A	N/A
Restaurant	Fryer	Natural_Gas	EASHARE	RestaurantFryerNatural_Gas	0.65	0.35	N/A	N/A
Restaurant	Griddle	Electric	EASHARE	RestaurantGriddleElectric	0.65	0.35	N/A	N/A
Restaurant	Griddle	Natural_Gas	EASHARE	RestaurantGriddleNatural_Gas	0.65	0.35	N/A	N/A
Restaurant	Other	Natural_Gas	EASHARE	RestaurantOtherNatural_Gas	1	N/A	N/A	N/A
Restaurant	Other_Cooking	Electric	EASHARE	RestaurantOther_CookingElectric	0.65	0.35	N/A	N/A
Restaurant	Other_Cooking	Natural_Gas	EASHARE	RestaurantOther_CookingNatural_Gas	0.65	0.35	N/A	N/A
Restaurant	Space_Heat	Electric	EASHARE	RestaurantSpace_HeatElectric	1	999	999	999
Restaurant	Space_Heat	Natural_Gas	EASHARE	RestaurantSpace_HeatNatural_Gas	0.65	0.3	0.04	0.01
Restaurant	Water_Heat	Electric	EASHARE	RestaurantWater_HeatElectric	0.4	0.5	0.08	0.02
Restaurant	Water_Heat	Natural_Gas	EASHARE	RestaurantWater_HeatNatural_Gas	0.4	0.5	0.08	0.02
Retail	Cooking	Electric	EASHARE	RetailCookingElectric	0.65	0.35	N/A	N/A
Retail	Cooking	Natural_Gas	EASHARE	RetailCookingNatural_Gas	0.65	0.35	N/A	N/A
Retail	Other	Natural_Gas	EASHARE	RetailOtherNatural_Gas	1	N/A	N/A	N/A
Retail	Space_Heat	Electric	EASHARE	RetailSpace_HeatElectric	1	999	999	999
Retail	Space_Heat	Natural_Gas	EASHARE	RetailSpace_HeatNatural_Gas	0.65	0.3	0.04	0.01
Retail	Water_Heat	Electric	EASHARE	RetailWater_HeatElectric	0.4	0.5	0.08	0.02
Retail	Water_Heat	Natural_Gas	EASHARE	RetailWater_HeatNatural_Gas	0.4	0.5	0.08	0.02
School	AC_Compressor	Electric	EASHARE	SchoolAC_CompressorElectric	0.65	0.35	N/A	N/A
School	AC_Compressor	Natural_Gas	EASHARE	SchoolAC_CompressorNatural_Gas	0.65	0.35	N/A	N/A
School	Cook_top	Electric	EASHARE	SchoolCook_topElectric	0.65	0.35	N/A	N/A
School	Cook_top	Natural_Gas	EASHARE	SchoolCook_topNatural_Gas	0.65	0.35	N/A	N/A
School	Fryer	Electric	EASHARE	SchoolFryerElectric	0.65	0.35	N/A	N/A
School	Fryer	Natural_Gas	EASHARE	SchoolFryerNatural_Gas	0.65	0.35	N/A	N/A
School	Griddle	Electric	EASHARE	SchoolGriddleElectric	0.65	0.35	N/A	N/A
School	Griddle	Natural_Gas	EASHARE	SchoolGriddleNatural_Gas	0.65	0.35	N/A	N/A
School	Other	Natural_Gas	EASHARE	SchoolOtherNatural_Gas	1	N/A	N/A	N/A
School	Other_Cooking	Electric	EASHARE	SchoolOther_CookingElectric	0.65	0.35	N/A	N/A

San Diego Gas & Electric
Core Commercial E Share Values by Business Type and End Use

bname	nname	fname	_NAME_	SAT_LOOKUP	Stock_Qtec	Standard_Qtec	High_Qtec	Premium_Qtec
School	Other_Cooking	Natural_Gas	EASHARE	SchoolOther_CookingNatural_Gas	0.65	0.35	N/A	N/A
School	Space_Heat	Electric	EASHARE	SchoolSpace_HeatElectric	1	999	999	999
School	Space_Heat	Natural_Gas	EASHARE	SchoolSpace_HeatNatural_Gas	0.65	0.3	0.04	0.01
School	Water_Heat	Electric	EASHARE	SchoolWater_HeatElectric	0.4	0.5	0.08	0.02
School	Water_Heat	Natural_Gas	EASHARE	SchoolWater_HeatNatural_Gas	0.4	0.5	0.08	0.02
TCU	Engine	Electric	EASHARE	TCUEngineElectric	0.65	0.35	N/A	N/A
TCU	Engine	Natural_Gas	EASHARE	TCUEngineNatural_Gas	0.65	0.35	N/A	N/A
TCU	Other	Natural_Gas	EASHARE	TCUOtherNatural_Gas	1	N/A	N/A	N/A
TCU	Space_Heat	Electric	EASHARE	TCUSpace_HeatElectric	1	999	999	999
TCU	Space_Heat	Natural_Gas	EASHARE	TCUSpace_HeatNatural_Gas	0.65	0.3	0.04	0.01
TCU	Water_Heat	Electric	EASHARE	TCUWater_HeatElectric	0.4	0.5	0.08	0.02
TCU	Water_Heat	Natural_Gas	EASHARE	TCUWater_HeatNatural_Gas	0.4	0.5	0.08	0.02
Warehouse	Engine	Electric	EASHARE	WarehouseEngineElectric	0.65	0.35	N/A	N/A
Warehouse	Engine	Natural_Gas	EASHARE	WarehouseEngineNatural_Gas	0.65	0.35	N/A	N/A
Warehouse	Other	Natural_Gas	EASHARE	WarehouseOtherNatural_Gas	1	999	N/A	N/A
Warehouse	Space_Heat	Electric	EASHARE	WarehouseSpace_HeatElectric	1	999	999	999
Warehouse	Space_Heat	Natural_Gas	EASHARE	WarehouseSpace_HeatNatural_Gas	0.65	0.3	0.04	0.01
Warehouse	Water_Heat	Electric	EASHARE	WarehouseWater_HeatElectric	0.4	0.5	0.08	0.02
Warehouse	Water_Heat	Natural_Gas	EASHARE	WarehouseWater_HeatNatural_Gas	0.4	0.5	0.08	0.02

San Diego Gas & Electric
Average Equipment Age

Sector	Space Heater	Water Heater	Cooktop	Griddle	Fryer	Other Cooking Equipment	Kitchen Equipment	AC	Dryer	Engine	Other
Office	1977	1978	1974	1978	1979	1976	1980	1975	1978	1975	1973
Restaurant	1980	1983	1980	1980	1982	1981	1983	1977	1983	1978	1980
Retail	1976	1979	1977	1977	1984	1981	1977	1976	1978	1984	1977
Laundry	1979	1975	1981	1986	1986	1986	1986	1975	1976	1981	1975
Warehouse	1977	1977	1975	1981	1979	1979	1939	1975	1983	1981	1978
School	1975	1977	1971	1972	1975	1972	1972	1973	1975	1974	1972
College	1974	1976	1973	1974	1975	1975	1973	1979	1974	1973	1970
Health	1976	1979	1974	1975	1977	1975	1973	1975	1977	1974	1975
Lodging	1974	1981	1975	1979	1983	1979	1984	1975	1980	1975	1981
Misc	1974	1977	1972	1972	1976	1973	1979	1974	1978	1974	1978
Government	1975	1977	1973	1979	1975	1976	1978	1975	1980	1978	1972
TCU	1975	1979	1975	1978	1982	1979	1990	1975	1983	1978	1981
Construction	1977	1977	1972	1974	1975	1974	1953	1973	1980	1975	1976
Agriculture	1982	1980	1973	1979	1980	1979	1970	1976	1971	1987	1985

San Diego Gas & Electric
Use Per Meter (new)

Sector	Space Heater	Water Heater	Cooktop	Griddle	Fryer	Other Cooking Equipment	Kitchen Equipment	AC	Dryer	Engine	Other	Total Building
Office	5400	17920	708	3655	3	1461	270	3	3	3	32	29446
Restaurant	2225	7385	292	1506	1	602	111	1	1	1	13	12135
Retail	1871	6209	245	1266	1	506	93	1	1	1	11	10202
Laundry	4735	15713	620	3205	3	1281	237	3	3	3	28	25819
Warehouse	13683	45407	1793	9261	7	3702	683	7	7	7	81	74610
School	846	2808	111	573	0	229	42	0	0	0	5	4613
College	3830	12711	502	2592	2	1036	191	2	2	2	23	20886
Health	0	1	0	0	0	0	0	0	0	0	0	1
Lodging	11847	39315	1552	8018	6	3205	592	6	6	6	70	64599
Misc	631	2094	83	427	0	171	32	0	0	0	4	3440
Government	11138	36961	1459	7538	6	3013	556	6	6	6	66	60732
TCU	64	213	8	43	0	17	3	0	0	0	0	349
Construction	0	1	0	0	0	0	0	0	0	0	0	1
Agriculture	0	1	0	0	0	0	0	0	0	0	0	1

San Diego Gas & Electric
Use Per Meter (Average of All)

Sector	Space Heater	Water Heater	Cooktop	Griddle	Fryer	Other Cooking Equipment	Kitchen Equipment	AC	Dryer	Engine	Other	Total Building
Office	552	229	28	9	7	29	6	9	27	8	550	1455
Restaurant	460	890	1485	611	1173	1298	316	18	8	0	292	6551
Retail	485	295	107	18	119	206	127	28	54	4	672	2116
Laundry	42	666	5	1	1	8	0	1	6694	0	6233	13652
Warehouse	425	123	18	5	42	49	62	48	141	42	1366	2321
School	2450	826	140	10	31	257	26	31	5	33	717	4526
College	3469	1714	167	49	86	206	48	217	53	74	2359	8441
Health	2467	1546	248	48	67	191	108	45	339	25	2608	7692
Lodging	1680	3432	474	116	148	577	284	28	894	1	3879	11512
Misc	706	431	87	17	29	72	23	73	28	5	476	1947
Government	2573	1496	131	65	38	108	59	69	35	380	1008	5961
TCU	780	280	25	6	12	22	15	38	2	1224	1294	3697
Construction	531	166	13	0	2	7	5	16	99	0	783	1623
Agriculture	3433	832	141	24	294	653	594	8	866	5677	11463	23985

San Diego Gas & Electric Company
AVERAGE Gas Prices
($/Therm)

Year	Com Price Deflator	C Agriculture Average Price	C College Average Price	C Construction Average Price	C Government Average Price	C Health Average Price	C Laundry Average Price	C Lodging Average Price	C Misc Average Price	C Office Average Price	C Restaurant Average Price	C Retail Average Price	C School Average Price	C TCU Average Price	C Warehouse Average Price
2020	100.00	0.8033	0.9272	0.8638	0.8256	0.7819	0.9046	0.7586	0.7572	0.7878	0.8718	0.7354	0.7341	0.8649	0.7307
2021	102.23	0.7819	0.9120	0.8452	0.8058	0.7595	0.8878	0.7354	0.7339	0.7661	0.8530	0.7110	0.7092	0.8455	0.7061
2022	104.67	0.7836	0.9107	0.8455	0.8067	0.7617	0.8872	0.7380	0.7365	0.7680	0.8534	0.7142	0.7127	0.8463	0.7094
2023	107.55	0.8066	0.9400	0.8713	0.8313	0.7838	0.9148	0.7593	0.7577	0.7907	0.8792	0.7343	0.7322	0.8713	0.7293
2024	110.27	0.8219	0.9593	0.8884	0.8477	0.7985	0.9330	0.7734	0.7718	0.8059	0.8962	0.7477	0.7454	0.8878	0.7426
2025	112.83	0.8369	0.9781	0.9051	0.8636	0.8129	0.9508	0.7873	0.7857	0.8207	0.9128	0.7609	0.7582	0.9040	0.7557
2026	115.36	0.8660	1.0110	0.9359	0.8937	0.8414	0.9826	0.8154	0.8137	0.8497	0.9435	0.7882	0.7853	0.9343	0.7830
2027	117.86	0.9224	1.0712	0.9940	0.9511	0.8973	1.0417	0.8708	0.8690	0.9059	1.0016	0.8429	0.8397	0.9919	0.8375
2028	120.40	0.9694	1.1222	1.0428	0.9991	0.9436	1.0917	0.9166	0.9148	0.9527	1.0503	0.8879	0.8844	1.0402	0.8824
2029	123.03	1.0076	1.1646	1.0829	1.0384	0.9812	1.1329	0.9536	0.9517	0.9908	1.0903	0.9241	0.9203	1.0797	0.9186
2030	125.71	1.0522	1.2133	1.1293	1.0840	1.0252	1.1804	0.9971	0.9951	1.0352	1.1366	0.9668	0.9627	1.1256	0.9611
2031	128.48	1.0923	1.2576	1.1713	1.1252	1.0646	1.2235	1.0360	1.0340	1.0751	1.1785	1.0050	1.0005	1.1670	0.9992
2032	131.23	1.1689	1.3382	1.2497	1.2028	1.1407	1.3031	1.1115	1.1094	1.1516	1.2569	1.0797	1.0749	1.2449	1.0738
2033	134.06	1.1639	1.3374	1.2466	1.1989	1.1351	1.3011	1.1054	1.1032	1.1464	1.2537	1.0728	1.0677	1.2413	1.0668
2034	136.90	1.2113	1.3894	1.2960	1.2475	1.1818	1.3518	1.1515	1.1493	1.1936	1.3030	1.1180	1.1126	1.2901	1.1119
2035	139.82	1.2603	1.4428	1.3470	1.2976	1.2301	1.4040	1.1992	1.1970	1.2424	1.3539	1.1649	1.1592	1.3405	1.1587

San Diego Gas & Electric Company
MARGINAL Gas Prices
($/Therm)

Year	Com Price Deflator	C Agriculture Marginal Price	C College Marginal Price	C Construction Marginal Price	C Government Marginal Price	C Health Marginal Price	C Laundry Marginal Price	C Lodging Marginal Price	C Misc Marginal Price	C Office Marginal Price	C Restaurant Marginal Price	C Retail Marginal Price	C School Marginal Price	C TCU Marginal Price	C Warehouse Marginal Price
2020	100.00	0.7338	0.8532	0.7728	0.7530	0.7166	0.8232	0.7029	0.6985	0.7227	0.7829	0.6898	0.6831	0.7706	0.6784
2021	102.23	0.7097	0.8352	0.7507	0.7298	0.6915	0.8036	0.6772	0.6725	0.6980	0.7613	0.6633	0.6563	0.7484	0.6514
2022	104.67	0.7128	0.8352	0.7528	0.7324	0.6951	0.8044	0.6811	0.6766	0.7014	0.7631	0.6675	0.6607	0.7505	0.6559
2023	107.55	0.7330	0.8616	0.7751	0.7536	0.7144	0.8293	0.6997	0.6950	0.7211	0.7859	0.6855	0.6784	0.7727	0.6733
2024	110.27	0.7466	0.8791	0.7899	0.7678	0.7274	0.8458	0.7123	0.7074	0.7342	0.8011	0.6977	0.6903	0.7874	0.6851
2025	112.83	0.7599	0.8962	0.8044	0.7817	0.7402	0.8619	0.7246	0.7196	0.7472	0.8159	0.7096	0.7020	0.8019	0.6966
2026	115.36	0.7874	0.9273	0.8331	0.8098	0.7672	0.8921	0.7512	0.7460	0.7744	0.8449	0.7357	0.7280	0.8305	0.7224
2027	117.86	0.8421	0.9857	0.8891	0.8652	0.8214	0.9497	0.8050	0.7997	0.8288	0.9012	0.7891	0.7811	0.8864	0.7755
2028	120.40	0.8874	1.0349	0.9356	0.9110	0.8660	0.9978	0.8491	0.8437	0.8736	0.9480	0.8328	0.8247	0.9329	0.8188
2029	123.03	0.9237	1.0754	0.9733	0.9480	0.9018	1.0373	0.8844	0.8789	0.9096	0.9861	0.8677	0.8593	0.9705	0.8533
2030	125.71	0.9665	1.1222	1.0174	0.9915	0.9440	1.0831	0.9262	0.9205	0.9520	1.0305	0.9090	0.9004	1.0145	0.8942
2031	128.48	1.0048	1.1645	1.0570	1.0304	0.9817	1.1244	0.9634	0.9576	0.9899	1.0705	0.9458	0.9369	1.0540	0.9306
2032	131.23	1.0797	1.2433	1.1332	1.1059	1.0560	1.2022	1.0373	1.0313	1.0645	1.1470	1.0193	1.0102	1.1301	1.0037
2033	134.06	1.0729	1.2406	1.1277	1.0998	1.0487	1.1985	1.0295	1.0233	1.0573	1.1419	1.0110	1.0017	1.1246	0.9951
2034	136.90	1.1183	1.2905	1.1746	1.1459	1.0934	1.2472	1.0737	1.0674	1.1023	1.1891	1.0547	1.0452	1.1714	1.0384
2035	139.82	1.1654	1.3418	1.2230	1.1936	1.1398	1.2975	1.1197	1.1132	1.1489	1.2379	1.1002	1.0904	1.2198	1.0834

San Diego Gas & Electric Company
AVERAGE Electric Prices
(Cents/Kwh)

Year	C Agriculture Average Price	C College Average Price	C Construction Average Price	C Government Average Price	C Health Average Price	C Laundry Average Price	C Lodging Average Price	C Misc Average Price	C Office Average Price	C Restaurant Average Price	C Retail Average Price	C School Average Price	C TCU Average Price	C Warehouse Average Price
2020	25.75	29.72	27.69	26.46	25.06	29.00	24.32	24.27	25.25	27.94	23.57	23.53	27.72	23.42
2021	26.50	30.92	28.65	27.31	25.74	30.09	24.93	24.88	25.97	28.92	24.10	24.04	28.66	23.94
2022	27.22	31.63	29.37	28.02	26.46	30.82	25.64	25.59	26.68	29.65	24.81	24.76	29.40	24.64
2023	27.87	32.48	30.11	28.73	27.08	31.61	26.24	26.18	27.33	30.38	25.37	25.30	30.11	25.20
2024	28.72	33.52	31.04	29.62	27.90	32.60	27.02	26.97	28.16	31.31	26.12	26.04	31.02	25.95
2025	29.57	34.56	31.98	30.52	28.72	33.59	27.82	27.76	29.00	32.25	26.88	26.79	31.94	26.70
2026	30.60	35.72	33.07	31.58	29.73	34.72	28.81	28.75	30.02	33.34	27.85	27.75	33.02	27.67
2027	31.52	36.60	33.97	32.50	30.66	35.60	29.75	29.69	30.96	34.22	28.80	28.69	33.89	28.62
2028	32.69	37.85	35.17	33.69	31.82	36.81	30.91	30.85	32.13	35.42	29.94	29.83	35.08	29.76
2029	33.93	39.22	36.47	34.97	33.04	38.15	32.11	32.05	33.37	36.72	31.12	30.99	36.36	30.93
2030	35.40	40.82	37.99	36.47	34.49	39.71	33.55	33.48	34.83	38.24	32.53	32.39	37.87	32.34
2031	35.44	40.81	38.01	36.51	34.55	39.70	33.62	33.55	34.89	38.24	32.61	32.46	37.87	32.42
2032	35.48	40.61	37.93	36.51	34.62	39.55	33.73	33.67	34.95	38.14	32.77	32.62	37.78	32.59
2033	35.49	40.78	38.01	36.56	34.61	39.67	33.70	33.64	34.95	38.22	32.71	32.55	37.85	32.53
2034	35.50	40.72	37.99	36.56	34.64	39.62	33.75	33.69	34.99	38.19	32.77	32.61	37.81	32.59
2035	35.52	40.67	37.96	36.57	34.67	39.57	33.80	33.74	35.02	38.16	32.83	32.67	37.78	32.66

San Diego Gas & Electric Company
MARGINAL Electric Prices
(Cents/Kwh)

Year	C Agriculture Marginal Price	C College Marginal Price	C Construction Marginal Price	C Government Marginal Price	C Health Marginal Price	C Laundry Marginal Price	C Lodging Marginal Price	C Misc Marginal Price	C Office Marginal Price	C Restaurant Marginal Price	C Retail Marginal Price	C School Marginal Price	C TCU Marginal Price	C Warehouse Marginal Price
2020	25.71	29.89	27.08	26.38	25.10	28.84	24.63	24.47	25.32	27.43	24.16	23.93	27.00	23.77
2021	26.46	31.14	27.99	27.21	25.78	29.96	25.25	25.07	26.02	28.38	24.73	24.47	27.90	24.29
2022	27.18	31.84	28.70	27.92	26.50	30.67	25.97	25.79	26.74	29.10	25.45	25.19	28.62	25.01
2023	27.83	32.71	29.42	28.61	27.12	31.48	26.56	26.38	27.37	29.84	26.02	25.75	29.33	25.56
2024	28.67	33.76	30.33	29.49	27.94	32.48	27.35	27.17	28.20	30.76	26.79	26.51	30.24	26.31
2025	29.52	34.82	31.25	30.37	28.76	33.49	28.15	27.96	29.03	31.70	27.57	27.27	31.15	27.06
2026	30.55	35.98	32.33	31.42	29.77	34.62	29.15	28.95	30.05	32.78	28.55	28.25	32.23	28.03
2027	31.47	36.84	33.23	32.33	30.70	35.49	30.08	29.89	30.97	33.68	29.49	29.19	33.13	28.98
2028	32.65	38.08	34.42	33.52	31.86	36.71	31.24	31.04	32.14	34.88	30.64	30.34	34.32	30.12
2029	33.89	39.45	35.70	34.78	33.08	38.05	32.45	32.24	33.37	36.17	31.83	31.52	35.60	31.30
2030	35.35	41.05	37.21	36.27	34.53	39.62	33.88	33.67	34.82	37.70	33.25	32.93	37.11	32.71
2031	35.40	41.03	37.24	36.30	34.59	39.61	33.94	33.74	34.87	37.71	33.32	33.01	37.13	32.79
2032	35.44	40.81	37.19	36.30	34.66	39.46	34.04	33.85	34.93	37.64	33.45	33.15	37.09	32.94
2033	35.45	40.99	37.26	36.33	34.65	39.59	34.01	33.81	34.93	37.73	33.40	33.09	37.15	32.87
2034	35.46	40.92	37.25	36.34	34.67	39.55	34.05	33.85	34.96	37.71	33.45	33.14	37.15	32.93
2035	35.48	40.86	37.24	36.34	34.71	39.51	34.09	33.89	34.98	37.69	33.50	33.20	37.14	32.99

Com3Avg

San Diego Gas & Electric
Core Commercial Forecast
Demand Forecast: Average Temperature

YEAR	MDTH1	MDTH2	MDTH3	MDTH4	MDTH5	MDTH6	MDTH7	MDTH8	MDTH9	MDTH1(	MDTH1:	MDTH1;	TOTAL
2019	1,983	1,866	1,733	1,564	1,333	1,199	1,161	1,159	1,162	1,235	1,551	2,016	**17,961**
2020	1,979	1,863	1,730	1,562	1,331	1,198	1,160	1,157	1,161	1,234	1,549	2,012	**17,936**
2021	1,984	1,867	1,734	1,566	1,335	1,201	1,163	1,160	1,164	1,237	1,553	2,017	**17,979**
2022	1,985	1,868	1,735	1,567	1,336	1,202	1,164	1,162	1,165	1,238	1,554	2,017	**17,992**
2023	1,977	1,862	1,729	1,561	1,331	1,198	1,160	1,158	1,161	1,234	1,548	2,010	**17,931**
2024	1,966	1,851	1,719	1,553	1,324	1,192	1,154	1,152	1,155	1,228	1,540	1,999	**17,835**
2025	1,954	1,839	1,708	1,543	1,316	1,185	1,147	1,145	1,148	1,221	1,530	1,986	**17,724**
2026	1,941	1,827	1,698	1,534	1,308	1,178	1,141	1,138	1,142	1,213	1,521	1,973	**17,614**
2027	1,932	1,819	1,690	1,527	1,303	1,173	1,136	1,134	1,137	1,208	1,514	1,964	**17,538**
2028	1,925	1,813	1,684	1,522	1,299	1,170	1,133	1,130	1,134	1,205	1,509	1,957	**17,479**
2029	1,918	1,806	1,678	1,516	1,294	1,166	1,129	1,127	1,130	1,201	1,504	1,949	**17,417**
2030	1,923	1,811	1,683	1,521	1,298	1,169	1,133	1,130	1,134	1,204	1,508	1,955	**17,469**
2031	1,924	1,812	1,683	1,522	1,299	1,171	1,134	1,132	1,135	1,205	1,509	1,955	**17,480**
2032	1,934	1,821	1,693	1,530	1,307	1,177	1,140	1,138	1,141	1,212	1,517	1,965	**17,576**
2033	1,936	1,824	1,695	1,533	1,309	1,179	1,142	1,140	1,143	1,214	1,520	1,968	**17,603**
2034	1,939	1,826	1,697	1,535	1,311	1,181	1,144	1,142	1,145	1,217	1,522	1,970	**17,630**
2035	1,917	1,805	1,678	1,518	1,297	1,169	1,132	1,130	1,133	1,203	1,505	1,948	**17,433**

Com3Col

San Diego Gas & Electric
Core Commercial Forecast
Demand Forecast: Cold Temperature

YEAR	MDTH1	MDTH2	MDTH3	MDTH4	MDTH5	MDTH6	MDTH7	MDTH8	MDTH9	MDTH10	MDTH11	MDTH12	TOTAL
2019	2,096	1,966	1,810	1,615	1,356	1,203	1,161	1,159	1,162	1,246	1,603	2,134	**18,511**
2020	2,092	1,963	1,808	1,613	1,354	1,202	1,160	1,157	1,161	1,245	1,601	2,131	**18,486**
2021	2,097	1,967	1,812	1,616	1,357	1,205	1,163	1,160	1,164	1,248	1,604	2,135	**18,528**
2022	2,098	1,968	1,813	1,617	1,359	1,206	1,164	1,162	1,165	1,249	1,605	2,136	**18,541**
2023	2,090	1,961	1,806	1,612	1,354	1,202	1,160	1,158	1,162	1,245	1,600	2,129	**18,481**
2024	2,079	1,951	1,797	1,604	1,347	1,196	1,155	1,152	1,156	1,239	1,592	2,118	**18,385**
2025	2,067	1,939	1,786	1,594	1,339	1,189	1,148	1,145	1,149	1,231	1,582	2,105	**18,273**
2026	2,054	1,927	1,775	1,584	1,331	1,182	1,141	1,139	1,142	1,224	1,573	2,092	**18,163**
2027	2,045	1,919	1,768	1,578	1,326	1,177	1,136	1,134	1,137	1,219	1,566	2,083	**18,088**
2028	2,038	1,912	1,762	1,573	1,322	1,174	1,133	1,130	1,134	1,215	1,561	2,075	**18,028**
2029	2,031	1,905	1,755	1,567	1,317	1,170	1,129	1,127	1,130	1,211	1,555	2,068	**17,966**
2030	2,036	1,910	1,760	1,572	1,321	1,174	1,133	1,131	1,134	1,215	1,560	2,073	**18,019**
2031	2,037	1,911	1,761	1,573	1,322	1,175	1,134	1,132	1,135	1,216	1,561	2,074	**18,030**
2032	2,047	1,921	1,770	1,581	1,329	1,181	1,141	1,138	1,142	1,223	1,569	2,084	**18,126**
2033	2,049	1,923	1,773	1,583	1,332	1,184	1,143	1,140	1,144	1,225	1,571	2,087	**18,153**
2034	2,052	1,926	1,775	1,586	1,334	1,186	1,145	1,142	1,146	1,227	1,574	2,089	**18,180**
2035	2,030	1,905	1,756	1,568	1,319	1,173	1,132	1,130	1,133	1,214	1,557	2,067	**17,983**

Com3Hot

San Diego Gas & Electric
Core Commercial Forecast
Demand Forecast: Hot Temperature

YEAR	MDTH1	MDTH2	MDTH3	MDTH4	MDTH5	MDTH6	MDTH7	MDTH8	MDTH9	MDTH10	MDTH11	MDTH12	TOTAL
2019	1,870	1,767	1,655	1,513	1,310	1,195	1,161	1,159	1,161	1,225	1,499	1,897	**17,412**
2020	1,867	1,764	1,652	1,511	1,308	1,193	1,159	1,157	1,160	1,224	1,497	1,894	**17,387**
2021	1,871	1,768	1,656	1,515	1,312	1,197	1,162	1,160	1,163	1,227	1,501	1,898	**17,429**
2022	1,872	1,769	1,657	1,516	1,313	1,198	1,164	1,161	1,164	1,228	1,502	1,899	**17,442**
2023	1,864	1,762	1,651	1,511	1,309	1,194	1,160	1,158	1,161	1,224	1,497	1,891	**17,382**
2024	1,853	1,752	1,642	1,502	1,302	1,188	1,154	1,152	1,155	1,218	1,488	1,880	**17,286**
2025	1,841	1,740	1,631	1,493	1,294	1,181	1,147	1,145	1,148	1,210	1,479	1,867	**17,174**
2026	1,828	1,728	1,620	1,483	1,286	1,174	1,140	1,138	1,141	1,203	1,469	1,854	**17,064**
2027	1,819	1,720	1,612	1,476	1,280	1,169	1,136	1,134	1,137	1,198	1,462	1,845	**16,989**
2028	1,812	1,713	1,606	1,471	1,276	1,165	1,132	1,130	1,133	1,194	1,457	1,838	**16,929**
2029	1,805	1,706	1,600	1,466	1,271	1,161	1,129	1,127	1,130	1,190	1,452	1,830	**16,867**
2030	1,810	1,711	1,605	1,470	1,276	1,165	1,132	1,130	1,133	1,194	1,456	1,836	**16,920**
2031	1,811	1,712	1,606	1,471	1,276	1,166	1,133	1,131	1,134	1,195	1,457	1,836	**16,931**
2032	1,821	1,722	1,615	1,480	1,284	1,173	1,140	1,138	1,141	1,202	1,466	1,847	**17,027**
2033	1,823	1,724	1,617	1,482	1,286	1,175	1,142	1,140	1,143	1,204	1,468	1,849	**17,054**
2034	1,826	1,726	1,620	1,484	1,288	1,177	1,144	1,142	1,145	1,206	1,470	1,852	**17,081**
2035	1,804	1,706	1,600	1,467	1,274	1,164	1,132	1,130	1,133	1,193	1,453	1,829	**16,884**

Com3Bas

San Diego Gas & Electric
Core Commercial Forecast
Demand Forecast: Base Temperature

YEAR	MDTH1	MDTH2	MDTH3	MDTH4	MDTH5	MDTH6	MDTH7	MDTH8	MDTH9	MDTH10	MDTH11	MDTH12	TOTAL
2019	1,262	1,181	1,262	1,221	1,262	1,221	1,262	1,262	1,221	1,262	1,221	1,262	**14,901**
2020	1,261	1,180	1,261	1,220	1,261	1,220	1,261	1,261	1,220	1,261	1,220	1,261	**14,887**
2021	1,265	1,184	1,265	1,225	1,265	1,225	1,265	1,265	1,225	1,265	1,225	1,265	**14,940**
2022	1,267	1,186	1,267	1,226	1,267	1,226	1,267	1,267	1,226	1,267	1,226	1,267	**14,963**
2023	1,263	1,182	1,263	1,222	1,263	1,222	1,263	1,263	1,222	1,263	1,222	1,263	**14,913**
2024	1,256	1,175	1,256	1,215	1,256	1,215	1,256	1,256	1,215	1,256	1,215	1,256	**14,827**
2025	1,247	1,167	1,247	1,207	1,247	1,207	1,247	1,247	1,207	1,247	1,207	1,247	**14,726**
2026	1,239	1,159	1,239	1,199	1,239	1,199	1,239	1,239	1,199	1,239	1,199	1,239	**14,626**
2027	1,233	1,154	1,233	1,194	1,233	1,194	1,233	1,233	1,194	1,233	1,194	1,233	**14,561**
2028	1,229	1,150	1,229	1,190	1,229	1,190	1,229	1,229	1,190	1,229	1,190	1,229	**14,512**
2029	1,225	1,146	1,225	1,185	1,225	1,185	1,225	1,225	1,185	1,225	1,185	1,225	**14,460**
2030	1,230	1,151	1,230	1,190	1,230	1,190	1,230	1,230	1,190	1,230	1,190	1,230	**14,523**
2031	1,232	1,152	1,232	1,192	1,232	1,192	1,232	1,232	1,192	1,232	1,192	1,232	**14,544**
2032	1,241	1,161	1,241	1,201	1,241	1,201	1,241	1,241	1,201	1,241	1,201	1,241	**14,650**
2033	1,244	1,164	1,244	1,204	1,244	1,204	1,244	1,244	1,204	1,244	1,204	1,244	**14,688**
2034	1,247	1,167	1,247	1,207	1,247	1,207	1,247	1,247	1,207	1,247	1,207	1,247	**14,725**
2035	1,231	1,152	1,231	1,192	1,231	1,192	1,231	1,231	1,192	1,231	1,192	1,231	**14,539**

GN3 Industrial DATA TABLES

San Diego Gas and Electric Company
Industrial GN3
The Year the Equipment Was Installed by Business Types

Business Type	Fire_ Tube_ Boiler	Water_ Tube_ Boiler	Space_ Heat	Water_ Heat	Dryer	Furnace_ Oven_ Kiln	AC	Engine	Other
Mining	2002	1980	1979	1980	1968	1978	.	1970	1976
Food	2004	1999	2002	1992	1992	2002	1965	1994	1983
Textile	1999	1998	1994	1982	1992	1982	.	.	1980
Wood_Paper	1997	1994	1995	1981	1981	2006	.	.	1975
Chemical	2005	1995	2002	1986	1985	1981	.	1999	1976
Petroleum	2006	1990	2002	1975	1981	1971	.	.	1977
Stone	2007	1983	1996	1982	1982	1982	1985	2014	1975
Prim_Metal	1993	1991	1987	1982	1978	1982	.	1996	1976
Fab_Metal	2002	1989	1986	1980	1984	1980	.	1984	1975
Transport	1993	1994	1996	1981	1987	1983	1973	2003	1976
Misc	1996	1995	1994	1981	1987	1978	1984	1999	1978

San Diego Gas and Electric Company
Industrial GN3
Electric Price Forecasat (Cent/KWH)

(a) Average Price Forecast

Year	Chemical	Fab_Metal	Food	Mining	Petroleum	Prim_Metal	Stone	Textile	Transport	Wood_Paper	Misc
2019	17.93	17.89	20.70	21.03	16.93	20.39	17.49	17.06	18.03	16.70	17.49
2020	19.68	19.57	24.34	24.71	17.82	24.02	18.77	18.08	19.81	17.38	18.80
2021	20.24	20.11	25.36	25.75	18.18	25.02	19.23	18.47	20.37	17.69	19.26
2022	20.79	20.66	25.94	26.34	18.73	25.59	19.78	19.02	20.93	18.23	19.81
2023	21.29	21.16	26.62	27.02	19.15	26.27	20.24	19.46	21.43	18.63	20.27
2024	21.94	21.80	27.46	27.86	19.71	27.11	20.84	20.03	22.09	19.18	20.88
2025	22.60	22.45	28.30	28.71	20.28	27.95	21.45	20.62	22.74	19.72	21.49
2026	23.40	23.24	29.23	29.64	21.02	28.87	22.21	21.36	23.54	20.45	22.26
2027	24.12	23.97	29.89	30.28	21.77	29.55	22.94	22.11	24.27	21.20	22.99
2028	25.04	24.88	30.86	31.25	22.65	30.53	23.84	23.00	25.18	22.07	23.89
2029	26.00	25.83	31.95	32.35	23.56	31.62	24.77	23.91	26.15	22.96	24.82
2030	27.14	26.97	33.22	33.61	24.64	32.89	25.88	25.00	27.29	24.03	25.93
2031	27.19	27.01	33.18	33.56	24.71	32.86	25.93	25.07	27.33	24.11	25.99
2032	27.24	27.07	32.97	33.32	24.86	32.66	26.03	25.21	27.37	24.28	26.08
2033	27.24	27.07	33.11	33.47	24.80	32.81	26.00	25.16	27.38	24.21	26.05
2034	27.26	27.09	33.04	33.38	24.86	32.75	26.04	25.21	27.40	24.27	26.09
2035	27.29	27.12	32.96	33.29	24.92	32.68	26.08	25.27	27.42	24.34	26.13

(b) Marginal Price Forecast

Year	Chemical	Fab_Metal	Food	Mining	Petroleum	Prim_Metal	Stone	Textile	Transport	Wood_Paper	Misc
2019	13.98	14.03	16.18	16.20	13.58	16.31	13.96	13.45	14.13	13.40	13.81
2020	15.03	15.12	19.46	19.49	14.22	19.72	14.99	13.97	15.33	13.85	14.67
2021	15.40	15.50	20.34	20.37	14.50	20.63	15.36	14.21	15.73	14.09	15.00
2022	15.84	15.95	20.78	20.81	14.94	21.07	15.80	14.66	16.17	14.53	15.45
2023	16.20	16.31	21.36	21.40	15.26	21.66	16.16	14.97	16.55	14.84	15.79
2024	16.69	16.80	22.06	22.09	15.71	22.37	16.64	15.39	17.05	15.26	16.25
2025	17.17	17.29	22.76	22.79	16.15	23.08	17.12	15.83	17.55	15.69	16.72
2026	17.78	17.90	23.51	23.55	16.73	23.84	17.73	16.40	18.16	16.26	17.32
2027	18.35	18.47	24.03	24.07	17.32	24.36	18.30	16.99	18.74	16.85	17.90
2028	19.06	19.18	24.81	24.85	18.01	25.15	19.01	17.68	19.45	17.54	18.60
2029	19.80	19.92	25.69	25.73	18.73	26.04	19.75	18.39	20.20	18.24	19.33
2030	20.68	20.80	26.71	26.75	19.58	27.07	20.62	19.23	21.08	19.08	20.19
2031	20.72	20.84	26.68	26.73	19.63	27.03	20.66	19.28	21.12	19.13	20.24
2032	20.79	20.91	26.49	26.53	19.75	26.83	20.73	19.42	21.17	19.27	20.33
2033	20.76	20.89	26.64	26.68	19.69	26.99	20.71	19.35	21.16	19.20	20.29
2034	20.79	20.91	26.58	26.62	19.73	26.92	20.73	19.40	21.18	19.25	20.32
2035	20.82	20.93	26.52	26.56	19.77	26.86	20.76	19.44	21.20	19.30	20.36

San Diego Gas and Electric Company
Industrial GN3
Gas Price Forecasat ($/Therm)

(a) Average Price Forecast

Year	Price Deflator	Chemical	Fabricated Metal	Food	Mining	Petroleum	Primary Metal	Stone	Textile	Transport	Wood Paper	Misc
2019	100.00	0.7942	0.7924	0.9165	0.9314	0.7499	0.9030	0.7748	0.7555	0.7986	0.7398	0.7747
2020	101.17	0.8076	0.8029	0.9988	1.0139	0.7313	0.9855	0.7703	0.7421	0.8128	0.7130	0.7714
2021	**103.42**	0.7867	0.7817	0.9858	1.0009	0.7068	0.9725	0.7474	0.7182	0.7920	0.6876	0.7487
2022	105.89	0.7882	0.7833	0.9833	0.9985	0.7101	0.9701	0.7499	0.7211	0.7934	0.6913	0.7511
2023	108.80	0.8118	0.8066	1.0148	1.0300	0.7301	1.0016	0.7715	0.7417	0.8172	0.7104	0.7728
2024	111.56	0.8275	0.8221	1.0355	1.0506	0.7434	1.0222	0.7858	0.7555	0.8329	0.7231	0.7873
2025	114.15	0.8429	0.8372	1.0557	1.0709	0.7566	1.0425	0.8000	0.7689	0.8483	0.7357	0.8015
2026	116.70	0.8724	0.8665	1.0898	1.1050	0.7839	1.0766	0.8282	0.7966	0.8779	0.7625	0.8299
2027	119.24	0.9291	0.9231	1.1513	1.1665	0.8385	1.1381	0.8838	0.8516	0.9347	0.8165	0.8855
2028	121.81	0.9765	0.9703	1.2038	1.2190	0.8835	1.1906	0.9298	0.8970	0.9821	0.8609	0.9317
2029	124.47	1.0151	1.0086	1.2476	1.2628	0.9197	1.2345	0.9671	0.9335	1.0208	0.8965	0.9690
2030	127.18	1.0601	1.0534	1.2977	1.3129	0.9623	1.2846	1.0107	0.9765	1.0658	0.9385	1.0128
2031	129.98	1.1006	1.0937	1.3434	1.3587	1.0004	1.3303	1.0499	1.0150	1.1064	0.9759	1.0520
2032	132.77	1.1776	1.1705	1.4254	1.4407	1.0751	1.4123	1.1256	1.0901	1.1835	1.0501	1.1279
2033	135.62	1.1731	1.1658	1.4260	1.4413	1.0681	1.4130	1.1197	1.0835	1.1790	1.0425	1.1221
2034	138.50	1.2209	1.2133	1.4796	1.4949	1.1133	1.4666	1.1661	1.1291	1.2269	1.0870	1.1685
2035	141.45	1.2703	1.2625	1.5345	1.5499	1.1602	1.5215	1.2141	1.1764	1.2764	1.1332	1.2166

(b) Marginal Price Forecasat

Year	Price Deflator	Chemical	Fabricated Metal	Food	Mining	Petroleum	Primary Metal	Stone	Textile	Transport	Wood Paper	Misc
2019	100.00	0.7455	0.7480	0.8628	0.8636	0.7241	0.8697	0.7445	0.7174	0.7534	0.7144	0.7361
2020	101.17	0.7258	0.7302	0.9397	0.9411	0.6868	0.9522	0.7238	0.6744	0.7402	0.6690	0.7086
2021	103.42	0.7012	0.7059	0.9261	0.9276	0.6601	0.9393	0.6991	0.6471	0.7163	0.6415	0.6831
2022	105.89	0.7045	0.7091	0.9239	0.9254	0.6645	0.9368	0.7025	0.6518	0.7192	0.6463	0.6868
2023	108.80	0.7243	0.7291	0.9548	0.9564	0.6823	0.9683	0.7222	0.6690	0.7398	0.6632	0.7058
2024	111.56	0.7376	0.7426	0.9751	0.9767	0.6943	0.9890	0.7354	0.6806	0.7536	0.6746	0.7185
2025	114.15	0.7507	0.7558	0.9949	0.9966	0.7061	1.0092	0.7484	0.6920	0.7671	0.6859	0.7310
2026	116.70	0.7779	0.7832	1.0287	1.0304	0.7322	1.0434	0.7756	0.7177	0.7948	0.7114	0.7578
2027	119.24	0.8324	0.8378	1.0898	1.0915	0.7855	1.1049	0.8301	0.7706	0.8497	0.7642	0.8117
2028	121.81	0.8774	0.8829	1.1418	1.1437	0.8291	1.1574	0.8749	0.8138	0.8952	0.8072	0.8561
2029	124.47	0.9135	0.9191	1.1853	1.1871	0.8639	1.2012	0.9109	0.8482	0.9317	0.8413	0.8916
2030	127.18	0.9560	0.9618	1.2349	1.2369	0.9051	1.2513	0.9534	0.8890	0.9747	0.8820	0.9335
2031	129.98	0.9940	1.0000	1.2802	1.2822	0.9418	1.2970	0.9914	0.9252	1.0132	0.9180	0.9710
2032	132.77	1.0686	1.0747	1.3619	1.3639	1.0151	1.3791	1.0659	0.9982	1.0883	0.9908	1.0450
2033	135.62	1.0616	1.0678	1.3621	1.3642	1.0068	1.3797	1.0588	0.9894	1.0818	0.9818	1.0374
2034	138.50	1.1067	1.1131	1.4152	1.4173	1.0504	1.4333	1.1038	1.0325	1.1274	1.0248	1.0818
2035	141.45	1.1534	1.1600	1.4697	1.4719	1.0957	1.4882	1.1505	1.0774	1.1747	1.0695	1.1280

San Diego Gas and Electric Company
Industrial GN3
Historical Throughput and Customer Counts

Business Type	therms_ 2019 Temp. Adj.	meters_ 2019	meters_ 2019 ExCust	meters_ 2019 NewCust	avgUse_ 2019 ExCust	avgUse_ 2019 NewCust	Price Elasticity	Employment Elasticity
Mining	**80174**	6	6	0	13362	0	0.00000	0.32145
Food	**3253252**	299	281	18	11078	7804	0.00000	1.24251
Textile	**41187**	20	20	0	2059	0	0.00000	0.03333
Wood_Paper	**22377**	16	16	0	1399	0	-0.11400	0.50827
Chemical	**2957922**	90	87	3	33667	9620	0.00000	0.65007
Petroleum	**10546**	3	3	0	3515	0	0.00000	0.08454
Stone	**247314**	28	28	0	8833	0	0.00000	0.41691
Prim_Metal	**307441**	10	9	1	21840	110878	0.00000	0.95669
Fab_Metal	**1178076**	143	142	1	8212	11934	0.00000	1.02388
Transport	**1664892**	46	46	0	36193	0	0.00000	0.40251
Misc	**4805434**	451	440	11	10329	23681	0.00000	0.87931

Total

San Diego Gas and Electric Company
Industrial GN3
Average Use Per Meter (therm)

Business Type	Fire_ Tube_ Boiler	Water_ Tube_ Boiler	Space_ Heat	Water_ Heat	Dryer	Furnace_ Oven_ Kiln	AC	Engine	Other	Total
Mining	0.00	6225.80	43.44	1922.69	76.05	0.56	0.00	2.75	4786.37	13057.66
Food	3180.78	10141.03	82.75	2847.86	5310.90	7.92	71.91	83.96	2503.74	24230.85
Textile	5027.39	6783.50	56.56	1340.65	7765.90	71.23	0.00	0.00	1098.82	22144.05
Wood_Paper	4463.96	11983.97	458.96	1285.89	1606.17	119.80	0.00	3.78	2324.39	22246.91
Chemical	1972.76	7552.98	2767.33	1673.42	2070.49	665.27	2.19	85.13	4219.74	21009.32
Petroleum	2197.09	20863.92	133.26	129.32	41681.87	8.61	0.00	9165.75	15693.36	89873.19
Stone	428.23	1589.00	45.91	474.03	3876.33	3293.73	0.59	0.02	1787.29	11495.13
Prim_Metal	1513.70	2386.00	313.35	1878.50	6092.33	16202.71	10.64	0.00	3538.66	31935.90
Fab_Metal	336.91	656.28	208.11	1452.36	3112.68	2689.72	0.05	7.80	2730.58	11194.48
Transport	488.08	1995.77	1128.58	1115.44	1053.17	659.96	0.00	196.93	1456.32	8094.24
Misc	230.00	1031.13	332.14	501.28	1535.53	375.48	0.01	17.60	1179.66	5202.83

San Diego Gas and Electric Company
Industrial GN3
Use Per Meter for New Customers (therm)

Business Type	Fire_ Tube_ Boiler	Water_ Tube_ Boiler	Space_ Heat	Water_ Heat	Dryer	Furnace_ Oven_ Kiln	AC	Engine	Other	Total
Mining	0.00	2.24	0.23	23947.31	0.00	0.00	0.00	0.00	9314.20	33263.98
Food	3155.88	12674.65	38.57	1919.40	1967.47	0.00	0.00	0.00	1249.16	21005.14
Textile	1329.08	131.16	1.11	7181.12	1647.02	0.00	0.00	0.00	17.62	10307.11
Wood_Paper	0.00	30721.53	214.64	20.21	9238.90	0.00	0.00	0.00	0.00	40195.28
Chemical	5624.56	11816.67	3290.36	2592.56	3709.92	0.00	0.00	35.54	587.66	27657.26
Petroleum	3649.78	91492.09	145.82	0.00	26440.15	0.00	0.00	0.00	868.47	122596.30
Stone	0.00	0.00	198.09	0.00	1636.20	0.00	0.00	0.00	0.00	1834.29
Prim_Metal	0.00	18017.06	0.00	0.00	1290.93	39287.08	0.00	0.00	0.00	58595.07
Fab_Metal	0.00	317.56	14.86	42.94	6237.87	33.44	0.00	0.00	2118.72	8765.39
Transport	0.00	3204.72	1876.33	589.64	2009.99	3173.04	0.00	5922.60	0.00	16776.31
Misc	1325.47	1281.96	223.24	588.39	2609.70	138.67	0.00	10.79	2858.83	9037.05

San Diego Gas and Electric Company
Industrial GN3
Electric UEC (Kwh/SqFt)

Business Type	Fire_ Tube_ Boiler	Water_ Tube_ Boiler	Space_ Heat	Water_ Heat	Dryer	Furnace_ Oven_ Kiln	AC	Engine	Other
Mining	0.00	153.78	1.07	47.49	1.88	0.01	0.00	0.07	118.22
Food	894.74	2834.31	23.37	805.10	1507.57	2.24	20.33	23.73	719.30
Textile	255.39	344.60	2.87	68.10	394.52	3.62	0.00	0.00	55.82
Wood_Paper	205.34	551.26	21.11	59.15	73.88	5.51	0.00	0.17	106.92
Chemical	195.90	750.01	274.80	166.17	205.60	66.06	0.22	8.45	419.02
Petroleum	29.22	277.49	1.77	1.72	554.37	0.12	0.00	121.90	208.72
Stone	18.50	68.64	1.98	20.48	167.46	142.29	0.03	0.00	77.21
Primary_Metal	51.77	81.60	10.23	64.25	208.37	554.59	0.36	0.00	121.04
Fabricated_Metal	72.67	141.61	44.89	313.22	671.40	580.17	0.01	1.68	588.99
Transportation	83.56	341.15	193.01	191.35	180.35	112.99	0.00	33.71	249.62
Miscellaneous	160.38	722.32	227.50	349.39	1066.90	261.82	0.00	12.28	825.79

San Diego Gas and Electric Company
Industrial GN3
Gas UEC (Therm per SqFt)

Business Type	Fire_ Tube_ Boiler	Water_ Tube_ Boiler	Space_ Heat	Water_ Heat	Dryer	Furnace_ Oven_ Kiln	AC	Engine	Other
Mining	587697	5728	1099	281	163309	67709	159	140010	4169
Food	48371	11453	3801	1088	51807	38092	1210	56748	3383
Textile	69640	18095	1014	2073	185827	52133	3638	0	905
Wood_Paper	538832	176840	2355	199	25503	48049	160	0	1333
Chemical	57040	32092	1693	1327	1288	28940	79	36	3051
Petroleum	74485	18782	766	1037	670974	2971	0	4932	10241
Stone	241878	48074	1559	1558	334016	304106	1844	0	1204
Primary_Metal	8499	26852	2693	636	1243	678517	3232	0	2343
Fabricated_Metal	29520	28816	2697	591	2811	101640	281	0	2435
Transportation	3723	2169	1490	443	11159	19127	71	353	373
Miscellaneous	7219	5077	1109	319	8838	49023	413	859	952

San Diego Gas and Electric Company
Industrial GN3
Gas Market Shares

Business Type	Fire_ Tube_ Boiler	Water_ Tube_ Boiler	Space_ Heat	Water_ Heat	Dryer	Furnace_ Oven_ Kiln	AC	Engine	Other
Chemical	0.0000	0.2778	0.2361	0.5000	0.0278	0.0139	0.0000	0.0278	0.7222
Fabricated_Metal	0.0636	0.2139	0.1445	0.7737	0.2362	0.0107	0.0025	0.0091	0.7399
Food	0.1978	0.3077	0.1648	0.4286	0.5714	0.0275	0.0000	0.0000	0.4451
Mining	0.0533	0.2067	0.2000	0.5333	0.2267	0.0533	0.0000	0.0133	0.6533
Miscllaneous	0.0685	0.3227	0.2714	0.5795	0.2054	0.0293	0.0024	0.0342	0.6113
Petroleum	0.0741	0.2407	0.1667	0.2222	0.2593	0.0370	0.0000	0.0556	0.5741
Primary_Metal	0.0315	0.1132	0.2201	0.4717	0.2579	0.3208	0.0189	0.0126	0.5912
Stone	0.0328	0.0929	0.2077	0.5519	0.3279	0.4918	0.0055	0.0109	0.5902
Textile	0.0136	0.0819	0.1733	0.5703	0.3192	0.1242	0.0014	0.0096	0.7121
Transportation	0.0159	0.0680	0.1996	0.4966	0.1973	0.0794	0.0000	0.0091	0.7732
Wood_Paper	0.0153	0.1153	0.2116	0.5312	0.2386	0.0677	0.0016	0.0095	0.7254

San Diego Gas and Electric Company
Industrial GN3
Saturation Rate

Business Type	Fire_ Tube_ Boiler	Water_ Tube_ Boiler	Space_ Heat	Water_ Heat	Dryer	Furnace_ Oven_ Kiln	AC	Engine	Other
Mining	0.01	0.01	0.73	0.73	0.03	0.06	0.64	0.87	1.00
Food	0.45	0.45	0.60	0.85	0.12	0.33	0.73	0.70	1.00
Textile	0.26	0.26	0.70	0.71	0.14	0.09	0.72	0.46	1.00
Wood_Paper	0.01	0.01	0.62	0.77	0.09	0.07	0.71	0.50	1.00
Chemical	0.14	0.14	0.73	0.73	0.12	0.10	0.74	0.70	1.00
Petroleum	0.14	0.14	0.73	0.73	0.12	0.10	0.74	0.70	1.00
Stone	0.01	0.01	0.73	0.73	0.03	0.06	0.64	0.87	1.00
Prim_Metal	0.07	0.07	0.73	0.76	0.15	0.10	0.68	0.86	1.00
Fab_Metal	0.07	0.07	0.73	0.76	0.15	0.10	0.68	0.86	1.00
Transport	0.14	0.14	0.73	0.73	0.12	0.10	0.74	0.70	1.00
Misc	0.14	0.14	0.73	0.73	0.12	0.10	0.74	0.70	1.00

San Diego Gas and Electric Company
Industrial GN3
UEC, Equipment Cost and Efficiency Shares

Where Fuel = 1 (gas) and = 2 (electric), and
Efficiency =1 (stock), =2 (standard), =3 (high) and =4 (premium)

Business Type	End Use	Fuel	Efficiency	EQcost
Mining	Fire_Tube_Boiler	1	1	3,907,010
Mining	Fire_Tube_Boiler	1	2	4,297,711
Mining	Fire_Tube_Boiler	1	3	4,688,412
Mining	Fire_Tube_Boiler	2	1	3,125,608
Mining	Fire_Tube_Boiler	2	2	3,438,169
Mining	Fire_Tube_Boiler	2	3	3,750,729
Mining	Water_Tube_Boiler	1	1	38,080
Mining	Water_Tube_Boiler	1	2	41,888
Mining	Water_Tube_Boiler	1	3	45,696
Mining	Water_Tube_Boiler	2	1	30,464
Mining	Water_Tube_Boiler	2	2	33,510
Mining	Water_Tube_Boiler	2	3	36,557
Mining	Space_Heat	1	1	7,306
Mining	Space_Heat	1	2	8,037
Mining	Space_Heat	1	3	8,767
Mining	Space_Heat	2	1	5,845
Mining	Space_Heat	2	2	6,429
Mining	Space_Heat	2	3	7,014
Mining	Water_Heat	1	1	1,868
Mining	Water_Heat	1	2	2,055
Mining	Water_Heat	1	3	2,242
Mining	Water_Heat	2	1	1,494
Mining	Water_Heat	2	2	1,644
Mining	Water_Heat	2	3	1,793
Mining	Dryer	1	1	1,085,678
Mining	Dryer	1	2	1,194,246
Mining	Dryer	1	3	1,302,814
Mining	Dryer	2	1	868,543
Mining	Dryer	2	2	955,397
Mining	Dryer	2	3	1,042,251
Mining	Furnace_Oven_Kiln	1	1	450,129
Mining	Furnace_Oven_Kiln	1	2	495,142
Mining	Furnace_Oven_Kiln	1	3	540,155
Mining	Furnace_Oven_Kiln	2	1	360,104
Mining	Furnace_Oven_Kiln	2	2	396,114
Mining	Furnace_Oven_Kiln	2	3	432,124
Mining	AC	1	1	1,057
Mining	AC	1	2	1,163
Mining	AC	1	3	1,268
Mining	AC	2	1	846
Mining	AC	2	2	930
Mining	AC	2	3	1,015
Mining	Engine	1	1	930,786
Mining	Engine	1	2	1,023,865
Mining	Engine	1	3	1,116,944
Mining	Engine	2	1	744,629
Mining	Engine	2	2	819,092
Mining	Engine	2	3	893,555
Mining	Other	1	1	-
Mining	Other	1	2	-
Mining	Other	1	3	-
Mining	Other	2	1	-
Mining	Other	2	2	-
Mining	Other	2	3	-
Food	Fire_Tube_Boiler	1	1	303,093
Food	Fire_Tube_Boiler	1	2	333,402
Food	Fire_Tube_Boiler	1	3	363,711
Food	Fire_Tube_Boiler	2	1	242,474
Food	Fire_Tube_Boiler	2	2	266,722
Food	Fire_Tube_Boiler	2	3	290,969
Food	Water_Tube_Boiler	1	1	71,765

Food	Water_Tube_Boiler	1	2	78,941
Food	Water_Tube_Boiler	1	3	86,117
Food	Water_Tube_Boiler	2	1	57,412
Food	Water_Tube_Boiler	2	2	63,153
Food	Water_Tube_Boiler	2	3	68,894
Food	Space_Heat	1	1	23,817
Food	Space_Heat	1	2	26,199
Food	Space_Heat	1	3	28,580
Food	Space_Heat	2	1	19,054
Food	Space_Heat	2	2	20,959
Food	Space_Heat	2	3	22,864
Food	Water_Heat	1	1	6,817
Food	Water_Heat	1	2	7,499
Food	Water_Heat	1	3	8,181
Food	Water_Heat	2	1	5,454
Food	Water_Heat	2	2	5,999
Food	Water_Heat	2	3	6,545
Food	Dryer	1	1	324,623
Food	Dryer	1	2	357,085
Food	Dryer	1	3	389,547
Food	Dryer	2	1	259,698
Food	Dryer	2	2	285,668
Food	Dryer	2	3	311,638
Food	Furnace_Oven_Kiln	1	1	238,684
Food	Furnace_Oven_Kiln	1	2	262,553
Food	Furnace_Oven_Kiln	1	3	286,421
Food	Furnace_Oven_Kiln	2	1	190,948
Food	Furnace_Oven_Kiln	2	2	210,042
Food	Furnace_Oven_Kiln	2	3	229,137
Food	AC	1	1	7,582
Food	AC	1	2	8,340
Food	AC	1	3	9,098
Food	AC	2	1	6,065
Food	AC	2	2	6,672
Food	AC	2	3	7,279
Food	Engine	1	1	355,583
Food	Engine	1	2	391,141
Food	Engine	1	3	426,700
Food	Engine	2	1	284,466
Food	Engine	2	2	312,913
Food	Engine	2	3	341,360
Food	Other	1	1	-
Food	Other	1	2	-
Food	Other	1	3	-
Food	Other	2	1	-
Food	Other	2	2	-
Food	Other	2	3	-
Textile	Fire_Tube_Boiler	1	1	440,682
Textile	Fire_Tube_Boiler	1	2	484,750
Textile	Fire_Tube_Boiler	1	3	528,818
Textile	Fire_Tube_Boiler	2	1	352,546
Textile	Fire_Tube_Boiler	2	2	387,800
Textile	Fire_Tube_Boiler	2	3	423,055
Textile	Water_Tube_Boiler	1	1	114,505
Textile	Water_Tube_Boiler	1	2	125,956
Textile	Water_Tube_Boiler	1	3	137,406
Textile	Water_Tube_Boiler	2	1	91,604
Textile	Water_Tube_Boiler	2	2	100,765
Textile	Water_Tube_Boiler	2	3	109,925
Textile	Space_Heat	1	1	6,417
Textile	Space_Heat	1	2	7,058
Textile	Space_Heat	1	3	7,700
Textile	Space_Heat	2	1	5,133
Textile	Space_Heat	2	2	5,647
Textile	Space_Heat	2	3	6,160
Textile	Water_Heat	1	1	13,118
Textile	Water_Heat	1	2	14,430
Textile	Water_Heat	1	3	15,742
Textile	Water_Heat	2	1	10,494
Textile	Water_Heat	2	2	11,544
Textile	Water_Heat	2	3	12,593
Textile	Dryer	1	1	1,175,913

Textile	Dryer	1	2	1,293,505
Textile	Dryer	1	3	1,411,096
Textile	Dryer	2	1	940,731
Textile	Dryer	2	2	1,034,804
Textile	Dryer	2	3	1,128,877
Textile	Furnace_Oven_Kiln	1	1	329,898
Textile	Furnace_Oven_Kiln	1	2	362,887
Textile	Furnace_Oven_Kiln	1	3	395,877
Textile	Furnace_Oven_Kiln	2	1	263,918
Textile	Furnace_Oven_Kiln	2	2	290,310
Textile	Furnace_Oven_Kiln	2	3	316,702
Textile	AC	1	1	23,021
Textile	AC	1	2	25,323
Textile	AC	1	3	27,626
Textile	AC	2	1	18,417
Textile	AC	2	2	20,259
Textile	AC	2	3	22,100
Textile	Engine	1	1	-
Textile	Engine	1	2	-
Textile	Engine	1	3	-
Textile	Engine	2	1	-
Textile	Engine	2	2	-
Textile	Engine	2	3	-
Textile	Other	1	1	-
Textile	Other	1	2	-
Textile	Other	1	3	-
Textile	Other	2	1	-
Textile	Other	2	2	-
Textile	Other	2	3	-
Wood_Paper	Fire_Tube_Boiler	1	1	3,531,505
Wood_Paper	Fire_Tube_Boiler	1	2	3,884,655
Wood_Paper	Fire_Tube_Boiler	1	3	4,237,806
Wood_Paper	Fire_Tube_Boiler	2	1	2,825,204
Wood_Paper	Fire_Tube_Boiler	2	2	3,107,724
Wood_Paper	Fire_Tube_Boiler	2	3	3,390,245
Wood_Paper	Water_Tube_Boiler	1	1	1,159,009
Wood_Paper	Water_Tube_Boiler	1	2	1,274,910
Wood_Paper	Water_Tube_Boiler	1	3	1,390,811
Wood_Paper	Water_Tube_Boiler	2	1	927,207
Wood_Paper	Water_Tube_Boiler	2	2	1,019,928
Wood_Paper	Water_Tube_Boiler	2	3	1,112,649
Wood_Paper	Space_Heat	1	1	15,435
Wood_Paper	Space_Heat	1	2	16,978
Wood_Paper	Space_Heat	1	3	18,522
Wood_Paper	Space_Heat	2	1	12,348
Wood_Paper	Space_Heat	2	2	13,583
Wood_Paper	Space_Heat	2	3	14,817
Wood_Paper	Water_Heat	1	1	1,304
Wood_Paper	Water_Heat	1	2	1,435
Wood_Paper	Water_Heat	1	3	1,565
Wood_Paper	Water_Heat	2	1	1,043
Wood_Paper	Water_Heat	2	2	1,148
Wood_Paper	Water_Heat	2	3	1,252
Wood_Paper	Dryer	1	1	167,147
Wood_Paper	Dryer	1	2	183,861
Wood_Paper	Dryer	1	3	200,576
Wood_Paper	Dryer	2	1	133,717
Wood_Paper	Dryer	2	2	147,089
Wood_Paper	Dryer	2	3	160,461
Wood_Paper	Furnace_Oven_Kiln	1	1	314,913
Wood_Paper	Furnace_Oven_Kiln	1	2	346,404
Wood_Paper	Furnace_Oven_Kiln	1	3	377,896
Wood_Paper	Furnace_Oven_Kiln	2	1	251,931
Wood_Paper	Furnace_Oven_Kiln	2	2	277,124
Wood_Paper	Furnace_Oven_Kiln	2	3	302,317
Wood_Paper	AC	1	1	1,049
Wood_Paper	AC	1	2	1,154
Wood_Paper	AC	1	3	1,258
Wood_Paper	AC	2	1	839
Wood_Paper	AC	2	2	923
Wood_Paper	AC	2	3	1,007
Wood_Paper	Engine	1	1	-

Wood_Paper	Engine	1	2	-
Wood_Paper	Engine	1	3	-
Wood_Paper	Engine	2	1	-
Wood_Paper	Engine	2	2	-
Wood_Paper	Engine	2	3	-
Wood_Paper	Other	1	1	-
Wood_Paper	Other	1	2	-
Wood_Paper	Other	1	3	-
Wood_Paper	Other	2	1	-
Wood_Paper	Other	2	2	-
Wood_Paper	Other	2	3	-
Chemical	Fire_Tube_Boiler	1	1	374,525
Chemical	Fire_Tube_Boiler	1	2	411,977
Chemical	Fire_Tube_Boiler	1	3	449,430
Chemical	Fire_Tube_Boiler	2	1	299,620
Chemical	Fire_Tube_Boiler	2	2	329,582
Chemical	Fire_Tube_Boiler	2	3	359,544
Chemical	Water_Tube_Boiler	1	1	210,716
Chemical	Water_Tube_Boiler	1	2	231,788
Chemical	Water_Tube_Boiler	1	3	252,859
Chemical	Water_Tube_Boiler	2	1	168,573
Chemical	Water_Tube_Boiler	2	2	185,430
Chemical	Water_Tube_Boiler	2	3	202,287
Chemical	Space_Heat	1	1	11,116
Chemical	Space_Heat	1	2	12,228
Chemical	Space_Heat	1	3	13,339
Chemical	Space_Heat	2	1	8,893
Chemical	Space_Heat	2	2	9,782
Chemical	Space_Heat	2	3	10,672
Chemical	Water_Heat	1	1	8,713
Chemical	Water_Heat	1	2	9,584
Chemical	Water_Heat	1	3	10,456
Chemical	Water_Heat	2	1	6,970
Chemical	Water_Heat	2	2	7,668
Chemical	Water_Heat	2	3	8,365
Chemical	Dryer	1	1	8,457
Chemical	Dryer	1	2	9,303
Chemical	Dryer	1	3	10,148
Chemical	Dryer	2	1	6,766
Chemical	Dryer	2	2	7,442
Chemical	Dryer	2	3	8,119
Chemical	Furnace_Oven_Kiln	1	1	190,020
Chemical	Furnace_Oven_Kiln	1	2	209,022
Chemical	Furnace_Oven_Kiln	1	3	228,024
Chemical	Furnace_Oven_Kiln	2	1	152,016
Chemical	Furnace_Oven_Kiln	2	2	167,218
Chemical	Furnace_Oven_Kiln	2	3	182,419
Chemical	AC	1	1	519
Chemical	AC	1	2	571
Chemical	AC	1	3	622
Chemical	AC	2	1	415
Chemical	AC	2	2	456
Chemical	AC	2	3	498
Chemical	Engine	1	1	236
Chemical	Engine	1	2	260
Chemical	Engine	1	3	284
Chemical	Engine	2	1	189
Chemical	Engine	2	2	208
Chemical	Engine	2	3	227
Chemical	Other	1	1	-
Chemical	Other	1	2	-
Chemical	Other	1	3	-
Chemical	Other	2	1	-
Chemical	Other	2	2	-
Chemical	Other	2	3	-
Petroleum	Fire_Tube_Boiler	1	1	461,658
Petroleum	Fire_Tube_Boiler	1	2	507,824
Petroleum	Fire_Tube_Boiler	1	3	553,990
Petroleum	Fire_Tube_Boiler	2	1	369,326
Petroleum	Fire_Tube_Boiler	2	2	406,259
Petroleum	Fire_Tube_Boiler	2	3	443,192
Petroleum	Water_Tube_Boiler	1	1	116,411

Petroleum	Water_Tube_Boiler	1	2	128,052
Petroleum	Water_Tube_Boiler	1	3	139,693
Petroleum	Water_Tube_Boiler	2	1	93,129
Petroleum	Water_Tube_Boiler	2	2	102,442
Petroleum	Water_Tube_Boiler	2	3	111,754
Petroleum	Space_Heat	1	1	4,748
Petroleum	Space_Heat	1	2	5,222
Petroleum	Space_Heat	1	3	5,697
Petroleum	Space_Heat	2	1	3,798
Petroleum	Space_Heat	2	2	4,178
Petroleum	Space_Heat	2	3	4,558
Petroleum	Water_Heat	1	1	6,427
Petroleum	Water_Heat	1	2	7,070
Petroleum	Water_Heat	1	3	7,713
Petroleum	Water_Heat	2	1	5,142
Petroleum	Water_Heat	2	2	5,656
Petroleum	Water_Heat	2	3	6,170
Petroleum	Dryer	1	1	4,158,697
Petroleum	Dryer	1	2	4,574,567
Petroleum	Dryer	1	3	4,990,436
Petroleum	Dryer	2	1	3,326,957
Petroleum	Dryer	2	2	3,659,653
Petroleum	Dryer	2	3	3,992,349
Petroleum	Furnace_Oven_Kiln	1	1	18,414
Petroleum	Furnace_Oven_Kiln	1	2	20,256
Petroleum	Furnace_Oven_Kiln	1	3	22,097
Petroleum	Furnace_Oven_Kiln	2	1	14,731
Petroleum	Furnace_Oven_Kiln	2	2	16,205
Petroleum	Furnace_Oven_Kiln	2	3	17,678
Petroleum	AC	1	1	-
Petroleum	AC	1	2	-
Petroleum	AC	1	3	-
Petroleum	AC	2	1	-
Petroleum	AC	2	2	-
Petroleum	AC	2	3	-
Petroleum	Engine	1	1	30,569
Petroleum	Engine	1	2	33,625
Petroleum	Engine	1	3	36,682
Petroleum	Engine	2	1	24,455
Petroleum	Engine	2	2	26,900
Petroleum	Engine	2	3	29,346
Petroleum	Other	1	1	-
Petroleum	Other	1	2	-
Petroleum	Other	1	3	-
Petroleum	Other	2	1	-
Petroleum	Other	2	2	-
Petroleum	Other	2	3	-
Stone	Fire_Tube_Boiler	1	1	1,591,073
Stone	Fire_Tube_Boiler	1	2	1,750,181
Stone	Fire_Tube_Boiler	1	3	1,909,288
Stone	Fire_Tube_Boiler	2	1	1,272,859
Stone	Fire_Tube_Boiler	2	2	1,400,145
Stone	Fire_Tube_Boiler	2	3	1,527,431
Stone	Water_Tube_Boiler	1	1	316,231
Stone	Water_Tube_Boiler	1	2	347,854
Stone	Water_Tube_Boiler	1	3	379,477
Stone	Water_Tube_Boiler	2	1	252,985
Stone	Water_Tube_Boiler	2	2	278,283
Stone	Water_Tube_Boiler	2	3	303,582
Stone	Space_Heat	1	1	10,255
Stone	Space_Heat	1	2	11,281
Stone	Space_Heat	1	3	12,306
Stone	Space_Heat	2	1	8,204
Stone	Space_Heat	2	2	9,024
Stone	Space_Heat	2	3	9,845
Stone	Water_Heat	1	1	10,249
Stone	Water_Heat	1	2	11,273
Stone	Water_Heat	1	3	12,298
Stone	Water_Heat	2	1	8,199
Stone	Water_Heat	2	2	9,019
Stone	Water_Heat	2	3	9,839
Stone	Dryer	1	1	2,197,157

Stone	Dryer	1	2	2,416,873
Stone	Dryer	1	3	2,636,589
Stone	Dryer	2	1	1,757,726
Stone	Dryer	2	2	1,933,498
Stone	Dryer	2	3	2,109,271
Stone	Furnace_Oven_Kiln	1	1	2,000,409
Stone	Furnace_Oven_Kiln	1	2	2,200,450
Stone	Furnace_Oven_Kiln	1	3	2,400,491
Stone	Furnace_Oven_Kiln	2	1	1,600,327
Stone	Furnace_Oven_Kiln	2	2	1,760,360
Stone	Furnace_Oven_Kiln	2	3	1,920,393
Stone	AC	1	1	12,130
Stone	AC	1	2	13,343
Stone	AC	1	3	14,556
Stone	AC	2	1	9,704
Stone	AC	2	2	10,674
Stone	AC	2	3	11,645
Stone	Engine	1	1	-
Stone	Engine	1	2	-
Stone	Engine	1	3	-
Stone	Engine	2	1	-
Stone	Engine	2	2	-
Stone	Engine	2	3	-
Stone	Other	1	1	-
Stone	Other	1	2	-
Stone	Other	1	3	-
Stone	Other	2	1	-
Stone	Other	2	2	-
Stone	Other	2	3	-
Prim_Metal	Fire_Tube_Boiler	1	1	54,853
Prim_Metal	Fire_Tube_Boiler	1	2	60,338
Prim_Metal	Fire_Tube_Boiler	1	3	65,823
Prim_Metal	Fire_Tube_Boiler	2	1	43,882
Prim_Metal	Fire_Tube_Boiler	2	2	48,270
Prim_Metal	Fire_Tube_Boiler	2	3	52,658
Prim_Metal	Water_Tube_Boiler	1	1	173,303
Prim_Metal	Water_Tube_Boiler	1	2	190,633
Prim_Metal	Water_Tube_Boiler	1	3	207,963
Prim_Metal	Water_Tube_Boiler	2	1	138,642
Prim_Metal	Water_Tube_Boiler	2	2	152,506
Prim_Metal	Water_Tube_Boiler	2	3	166,371
Prim_Metal	Space_Heat	1	1	17,381
Prim_Metal	Space_Heat	1	2	19,119
Prim_Metal	Space_Heat	1	3	20,857
Prim_Metal	Space_Heat	2	1	13,905
Prim_Metal	Space_Heat	2	2	15,295
Prim_Metal	Space_Heat	2	3	16,685
Prim_Metal	Water_Heat	1	1	4,105
Prim_Metal	Water_Heat	1	2	4,515
Prim_Metal	Water_Heat	1	3	4,926
Prim_Metal	Water_Heat	2	1	3,284
Prim_Metal	Water_Heat	2	2	3,612
Prim_Metal	Water_Heat	2	3	3,941
Prim_Metal	Dryer	1	1	8,022
Prim_Metal	Dryer	1	2	8,825
Prim_Metal	Dryer	1	3	9,627
Prim_Metal	Dryer	2	1	6,418
Prim_Metal	Dryer	2	2	7,060
Prim_Metal	Dryer	2	3	7,701
Prim_Metal	Furnace_Oven_Kiln	1	1	4,379,149
Prim_Metal	Furnace_Oven_Kiln	1	2	4,817,064
Prim_Metal	Furnace_Oven_Kiln	1	3	5,254,978
Prim_Metal	Furnace_Oven_Kiln	2	1	3,503,319
Prim_Metal	Furnace_Oven_Kiln	2	2	3,853,651
Prim_Metal	Furnace_Oven_Kiln	2	3	4,203,983
Prim_Metal	AC	1	1	20,859
Prim_Metal	AC	1	2	22,945
Prim_Metal	AC	1	3	25,031
Prim_Metal	AC	2	1	16,687
Prim_Metal	AC	2	2	18,356
Prim_Metal	AC	2	3	20,025
Prim_Metal	Engine	1	1	-

Prim_Metal	Engine	1	2	-
Prim_Metal	Engine	1	3	-
Prim_Metal	Engine	2	1	-
Prim_Metal	Engine	2	2	-
Prim_Metal	Engine	2	3	-
Prim_Metal	Other	1	1	-
Prim_Metal	Other	1	2	-
Prim_Metal	Other	1	3	-
Prim_Metal	Other	2	1	-
Prim_Metal	Other	2	2	-
Prim_Metal	Other	2	3	-
Fab_Metal	Fire_Tube_Boiler	1	1	199,496
Fab_Metal	Fire_Tube_Boiler	1	2	219,446
Fab_Metal	Fire_Tube_Boiler	1	3	239,395
Fab_Metal	Fire_Tube_Boiler	2	1	159,597
Fab_Metal	Fire_Tube_Boiler	2	2	175,557
Fab_Metal	Fire_Tube_Boiler	2	3	191,516
Fab_Metal	Water_Tube_Boiler	1	1	194,739
Fab_Metal	Water_Tube_Boiler	1	2	214,212
Fab_Metal	Water_Tube_Boiler	1	3	233,686
Fab_Metal	Water_Tube_Boiler	2	1	155,791
Fab_Metal	Water_Tube_Boiler	2	2	171,370
Fab_Metal	Water_Tube_Boiler	2	3	186,949
Fab_Metal	Space_Heat	1	1	18,226
Fab_Metal	Space_Heat	1	2	20,049
Fab_Metal	Space_Heat	1	3	21,872
Fab_Metal	Space_Heat	2	1	14,581
Fab_Metal	Space_Heat	2	2	16,039
Fab_Metal	Space_Heat	2	3	17,497
Fab_Metal	Water_Heat	1	1	3,994
Fab_Metal	Water_Heat	1	2	4,393
Fab_Metal	Water_Heat	1	3	4,793
Fab_Metal	Water_Heat	2	1	3,195
Fab_Metal	Water_Heat	2	2	3,515
Fab_Metal	Water_Heat	2	3	3,834
Fab_Metal	Dryer	1	1	18,997
Fab_Metal	Dryer	1	2	20,896
Fab_Metal	Dryer	1	3	22,796
Fab_Metal	Dryer	2	1	15,197
Fab_Metal	Dryer	2	2	16,717
Fab_Metal	Dryer	2	3	18,237
Fab_Metal	Furnace_Oven_Kiln	1	1	686,883
Fab_Metal	Furnace_Oven_Kiln	1	2	755,571
Fab_Metal	Furnace_Oven_Kiln	1	3	824,260
Fab_Metal	Furnace_Oven_Kiln	2	1	549,507
Fab_Metal	Furnace_Oven_Kiln	2	2	604,457
Fab_Metal	Furnace_Oven_Kiln	2	3	659,408
Fab_Metal	AC	1	1	1,899
Fab_Metal	AC	1	2	2,089
Fab_Metal	AC	1	3	2,279
Fab_Metal	AC	2	1	1,519
Fab_Metal	AC	2	2	1,671
Fab_Metal	AC	2	3	1,823
Fab_Metal	Engine	1	1	-
Fab_Metal	Engine	1	2	-
Fab_Metal	Engine	1	3	-
Fab_Metal	Engine	2	1	-
Fab_Metal	Engine	2	2	-
Fab_Metal	Engine	2	3	-
Fab_Metal	Other	1	1	-
Fab_Metal	Other	1	2	-
Fab_Metal	Other	1	3	-
Fab_Metal	Other	2	1	-
Fab_Metal	Other	2	2	-
Fab_Metal	Other	2	3	-
Transport	Fire_Tube_Boiler	1	1	27,156
Transport	Fire_Tube_Boiler	1	2	29,871
Transport	Fire_Tube_Boiler	1	3	32,587
Transport	Fire_Tube_Boiler	2	1	21,724
Transport	Fire_Tube_Boiler	2	2	23,897
Transport	Fire_Tube_Boiler	2	3	26,069
Transport	Water_Tube_Boiler	1	1	15,821

Transport	Water_Tube_Boiler	1	2	17,403
Transport	Water_Tube_Boiler	1	3	18,985
Transport	Water_Tube_Boiler	2	1	12,657
Transport	Water_Tube_Boiler	2	2	13,922
Transport	Water_Tube_Boiler	2	3	15,188
Transport	Space_Heat	1	1	10,868
Transport	Space_Heat	1	2	11,955
Transport	Space_Heat	1	3	13,042
Transport	Space_Heat	2	1	8,694
Transport	Space_Heat	2	2	9,564
Transport	Space_Heat	2	3	10,433
Transport	Water_Heat	1	1	3,231
Transport	Water_Heat	1	2	3,554
Transport	Water_Heat	1	3	3,877
Transport	Water_Heat	2	1	2,585
Transport	Water_Heat	2	2	2,843
Transport	Water_Heat	2	3	3,102
Transport	Dryer	1	1	81,394
Transport	Dryer	1	2	89,533
Transport	Dryer	1	3	97,673
Transport	Dryer	2	1	65,115
Transport	Dryer	2	2	71,627
Transport	Dryer	2	3	78,138
Transport	Furnace_Oven_Kiln	1	1	139,512
Transport	Furnace_Oven_Kiln	1	2	153,464
Transport	Furnace_Oven_Kiln	1	3	167,415
Transport	Furnace_Oven_Kiln	2	1	111,610
Transport	Furnace_Oven_Kiln	2	2	122,771
Transport	Furnace_Oven_Kiln	2	3	133,932
Transport	AC	1	1	518
Transport	AC	1	2	570
Transport	AC	1	3	621
Transport	AC	2	1	414
Transport	AC	2	2	456
Transport	AC	2	3	497
Transport	Engine	1	1	2,575
Transport	Engine	1	2	2,832
Transport	Engine	1	3	3,090
Transport	Engine	2	1	2,060
Transport	Engine	2	2	2,266
Transport	Engine	2	3	2,472
Transport	Other	1	1	-
Transport	Other	1	2	-
Transport	Other	1	3	-
Transport	Other	2	1	-
Transport	Other	2	2	-
Transport	Other	2	3	-
Misc	Fire_Tube_Boiler	1	1	50,324
Misc	Fire_Tube_Boiler	1	2	55,356
Misc	Fire_Tube_Boiler	1	3	60,388
Misc	Fire_Tube_Boiler	2	1	40,259
Misc	Fire_Tube_Boiler	2	2	44,285
Misc	Fire_Tube_Boiler	2	3	48,311
Misc	Water_Tube_Boiler	1	1	35,392
Misc	Water_Tube_Boiler	1	2	38,931
Misc	Water_Tube_Boiler	1	3	42,470
Misc	Water_Tube_Boiler	2	1	28,313
Misc	Water_Tube_Boiler	2	2	31,145
Misc	Water_Tube_Boiler	2	3	33,976
Misc	Space_Heat	1	1	7,731
Misc	Space_Heat	1	2	8,504
Misc	Space_Heat	1	3	9,277
Misc	Space_Heat	2	1	6,185
Misc	Space_Heat	2	2	6,803
Misc	Space_Heat	2	3	7,422
Misc	Water_Heat	1	1	2,224
Misc	Water_Heat	1	2	2,446
Misc	Water_Heat	1	3	2,669
Misc	Water_Heat	2	1	1,779
Misc	Water_Heat	2	2	1,957
Misc	Water_Heat	2	3	2,135
Misc	Dryer	1	1	61,610

Misc	Dryer	1	2	67,771
Misc	Dryer	1	3	73,932
Misc	Dryer	2	1	49,288
Misc	Dryer	2	2	54,217
Misc	Dryer	2	3	59,145
Misc	Furnace_Oven_Kiln	1	1	341,739
Misc	Furnace_Oven_Kiln	1	2	375,913
Misc	Furnace_Oven_Kiln	1	3	410,087
Misc	Furnace_Oven_Kiln	2	1	273,391
Misc	Furnace_Oven_Kiln	2	2	300,731
Misc	Furnace_Oven_Kiln	2	3	328,070
Misc	AC	1	1	2,879
Misc	AC	1	2	3,167
Misc	AC	1	3	3,455
Misc	AC	2	1	2,303
Misc	AC	2	2	2,534
Misc	AC	2	3	2,764
Misc	Engine	1	1	5,988
Misc	Engine	1	2	6,587
Misc	Engine	1	3	7,186
Misc	Engine	2	1	4,790
Misc	Engine	2	2	5,270
Misc	Engine	2	3	5,749
Misc	Other	1	1	-
Misc	Other	1	2	-
Misc	Other	1	3	-
Misc	Other	2	1	-
Misc	Other	2	2	-
Misc	Other	2	3	-

San Diego Gas and Electric Company
Industrial GN3
Employment Forecast (in thousands)

YEAR	Mining	Food	Textile	Wood_Paper	Chemical	Petroleum	Stone	Primary_Metal	Fabricated_Metal	Transportation	Miscellaneous	Total
2019	2516	21048	1305	4712	7021	1457	2803	1694	14184	13054	46930	116725
2020	2317	21544	1190	4584	6965	1408	2770	1607	13720	12395	45724	114225
2021	2141	21759	1134	4239	6805	1355	2541	1358	12618	11838	43664	109453
2022	2251	22451	1131	4484	6922	1336	2628	1353	13292	11888	44438	112174
2023	2375	22865	1112	4651	6930	1307	2679	1389	13811	10756	44919	112795
2024	2467	23178	1086	4770	6903	1268	2719	1422	14208	10246	45356	113623
2025	2522	23380	1071	4851	6871	1234	2735	1423	14353	10158	45407	114005
2026	2548	23526	1070	4923	6863	1206	2746	1411	14453	10051	45268	114063
2027	2558	23607	1066	4907	6851	1178	2745	1365	14338	9910	44903	113428
2028	2555	23688	1064	4876	6841	1153	2737	1304	14081	9769	44390	112459
2029	2543	23811	1064	4900	6836	1132	2734	1252	13897	9599	43987	111755
2030	2524	23912	1064	4913	6814	1113	2718	1196	13683	9287	43547	110770
2031	2502	24008	1053	4950	6780	1092	2718	1155	13603	9047	43311	110220
2032	2492	24096	1036	5016	6742	1067	2750	1131	13708	8955	43344	110337
2033	2481	24156	1015	4984	6713	1043	2764	1115	13846	8968	43401	110487
2034	2468	24199	995	5046	6690	1018	2792	1106	13972	9005	43441	110733
2035	2457	24222	976	5113	6670	994	2821	1092	14026	9034	43452	110858

San Diego Gas and Electric Company
Industrial GN3
Core Industrial Demand Forecast (Mdth)
Average Temperature

Avg YEAR	Model Output GN-3 - Ind	IndGN3 EE/DSM	Core Ind Final
2019	1456.9	0.0	1456.9
2020	1438.4	1.5	1436.9
2021	1404.0	3.9	1400.2
2022	1410.8	6.5	1404.3
2023	1406.9	8.8	1398.1
2024	1401.8	10.8	1391.0
2025	1392.2	12.7	1379.5
2026	1380.2	14.3	1365.9
2027	1364.2	15.8	1348.4
2028	1346.5	17.2	1329.4
2029	1330.4	18.4	1312.0
2030	1313.0	18.2	1294.8
2031	1297.3	17.0	1280.3
2032	1283.6	15.6	1268.0
2033	1270.5	14.5	1256.0
2034	1257.2	13.8	1243.5
2035	1243.2	13.2	1230.0

San Diego Gas and Electric Company
Industrial GN3
Core Industrial Demand Forecast (Mdth)
Cold Temperature

Cold YEAR	Model Output GN-3 - Ind	IndGN3 EE/DSM	Core Ind Final
2019	1497.7	0.0	1497.7
2020	1478.3	1.5	1476.9
2021	1442.7	3.9	1438.8
2022	1449.2	6.5	1442.7
2023	1444.8	8.8	1436.0
2024	1439.2	10.8	1428.4
2025	1428.9	12.7	1416.2
2026	1416.2	14.3	1401.9
2027	1399.3	15.8	1383.5
2028	1380.8	17.2	1363.6
2029	1363.8	18.4	1345.4
2030	1345.5	18.2	1327.3
2031	1329.0	17.0	1312.0
2032	1314.5	15.6	1298.9
2033	1300.7	14.5	1286.2
2034	1286.6	13.8	1272.8
2035	1271.7	13.2	1258.6

San Diego Gas and Electric Company
Industrial GN3
Core Industrial Demand Forecast (Mdth)
Hot Temperature

Hot YEAR	Model Output GN-3 - Ind	IndGN3 EE/DSM	Core Ind Final
2019	1416.0	0.0	1416.0
2020	1397.6	1.5	1396.1
2021	1363.9	3.9	1360.0
2022	1370.1	6.5	1363.6
2023	1365.9	8.8	1357.1
2024	1360.6	10.8	1349.7
2025	1350.8	12.7	1338.2
2026	1338.8	14.3	1324.5
2027	1322.8	15.8	1307.1
2028	1305.3	17.2	1288.1
2029	1289.2	18.4	1270.8
2030	1271.9	18.2	1253.7
2031	1256.3	17.0	1239.3
2032	1242.6	15.6	1227.0
2033	1229.5	14.5	1215.0
2034	1216.2	13.8	1202.4
2035	1202.1	13.2	1189.0

San Diego Gas and Electric Company
Industrial GN3
Core Industrial Demand Forecast (Mdth)
Base Temperature

Base YEAR	Model Output GN-3 - Ind	IndGN3 EE/DSM	Core Ind Final
2019	1229.2	0.0	1229.2
2020	1213.6	1.5	1212.2
2021	1184.7	3.9	1180.9
2022	1190.5	6.5	1184.0
2023	1187.2	8.8	1178.4
2024	1182.9	10.8	1172.1
2025	1174.8	12.7	1162.2
2026	1164.8	14.3	1150.5
2027	1151.3	15.8	1135.5
2028	1136.4	17.2	1119.2
2029	1122.8	18.4	1104.4
2030	1108.2	18.2	1090.0
2031	1095.0	17.0	1077.9
2032	1083.4	15.6	1067.8
2033	1072.4	14.5	1057.9
2034	1061.2	13.8	1047.5
2035	1049.4	13.2	1036.2

2020 CALIFORNIA GAS REPORT

NONCORE COMMERCIAL, INDUSTRIAL AND COGEN DEMAND FORECAST

SDG&E Non-Core Demand Equations,

before energy efficiency and carbon-fee adjustments (MDth)

Cogeneration (MDTH_CGNNC_SD)

```
Cochrane-Orcutt
MONTHLY data for  167 periods from  FEB 2006 to  DEC 2019

 mdth_cgnnc_sd

   =    5.76423 * eisd/1000
       (32.5800)

 Sum Sq     673196   Std Err   63.8744   LHS Mean  598.354
 R Sq       0.6377   R Bar Sq   0.6355   F  2,165  145.239
 D.W.( 1)   2.2006   D.W.(12)   1.5863

 AR_0 =  + 0.73299 * AR_1
          (14.0501)
*******************************************************************************
```

Commercial (MDTH_COMNC_SD)

```
Cochrane-Orcutt
MONTHLY data for  167 periods from  FEB 2006 to  DEC 2019

 mdth_comnc_sd

   =    0.15158 * ecsd/1000 + 100.384 * dum2006janmay
       (19.1293)             (3.56968)

 Sum Sq     101908   Std Err   24.9250   LHS Mean  198.191   Res Mean   0.3635
 R Sq       0.7437   R Bar Sq   0.7406   F  3,164  158.634   %RMSE     12.2287
 D.W.( 1)   2.3336   D.W.(12)   1.2427

 AR_0 =  + 0.80665 * AR_1
          (19.5367)
*******************************************************************************
```

Industrial (MDTH_INDNC_SD)

```
Cochrane-Orcutt
MONTHLY data for  166 periods from  MAR 2006 to  DEC 2019

 mdth_indnc_sd

   =    1.64683 * eisd/1000 - 40.8019 * dum2013sepoct
       (20.6699)             (3.74067)

      + 86.2051 * dum2015mar
       (5.08001)

 Sum Sq    61779.6   Std Err   19.5886   LHS Mean  171.737
 R Sq       0.6764   R Bar Sq   0.6683   F  5,161  67.2974
 D.W.( 1)   2.1068   D.W.(12)   1.3049

 AR_0 =  + 0.46059 * AR_1 + 0.35770 * AR_2
          (6.20345)         (4.86293)
```

ANNUAL SUMMARY

SDG&E Noncore Commercial & Industrial Demand (MDth)							San Diego County Employment		Cumulative	Cumulative	Carbon Fee Impact	
	Adjusted with DSM and Carbon-Fee Impacts			Unadjusted (from regression equations)			Commercial	Industrial	DSM Cmcl	DSM Indl.	Cogen	Industrial
	Cogeneration	Commercial	Industrial	Cogeneration	Commercial	Industrial	ECSD	EISD	(MDth)	(MDth)	(MDth)	(MDth)
2006	6,253	3,757	1,374	6,253	3,757	1,374	1,219,908	104,800	0	0	0	0
2007	6,353	2,560	1,483	6,353	2,560	1,483	1,229,900	103,292	0	0	0	0
2008	6,861	2,546	1,886	6,861	2,546	1,886	1,221,750	103,658	0	0	0	0
2009	7,268	2,536	1,670	7,268	2,536	1,670	1,161,767	97,558	0	0	0	0
2010	6,371	2,559	1,912	6,371	2,559	1,912	1,155,142	96,058	0	0	0	0
2011	6,577	2,525	2,019	6,577	2,525	2,019	1,163,525	96,892	0	0	0	0
2012	7,015	2,390	2,262	7,015	2,390	2,262	1,194,292	98,675	0	0	0	0
2013	6,872	2,193	2,162	6,872	2,193	2,162	1,226,142	99,858	0	0	0	0
2014	6,616	1,912	2,088	6,616	1,912	2,088	1,251,475	102,800	0	0	0	0
2015	6,526	2,066	2,289	6,526	2,066	2,289	1,287,233	106,867	0	0	0	0
2016	7,460	2,155	2,336	7,460	2,155	2,336	1,323,083	108,692	0	0	0	0
2017	8,829	2,010	2,361	8,829	2,010	2,361	1,351,550	109,700	0	0	0	0
2018	10,130	2,016	2,476	10,130	2,016	2,476	1,380,733	113,017	0	0	0	0
2019	7,234	2,328	2,438	7,234	2,328	2,438	1,403,075	116,725	0	0	0	0
2020	6,249	2,243	2,358	6,300	2,261	2,375	1,367,055	114,225	-17	-7	-51	-10
2021	5,905	2,263	2,251	5,952	2,295	2,278	1,385,993	109,453	-32	-18	-47	-10
2022	6,089	2,349	2,291	6,140	2,397	2,332	1,441,968	112,175	-47	-30	-51	-11
2023	6,128	2,384	2,292	6,183	2,446	2,344	1,469,120	112,795	-62	-40	-54	-12
2024	6,182	2,388	2,298	6,240	2,464	2,360	1,479,038	113,623	-76	-49	-58	-13
2025	6,204	2,385	2,297	6,267	2,474	2,368	1,484,641	114,005	-89	-58	-62	-13
2026	6,206	2,381	2,290	6,271	2,483	2,369	1,489,391	114,063	-102	-65	-65	-14
2027	6,160	2,386	2,270	6,227	2,500	2,356	1,498,721	113,428	-114	-72	-66	-14
2028	6,091	2,399	2,244	6,160	2,524	2,337	1,512,170	112,459	-125	-78	-69	-15
2029	6,038	2,411	2,224	6,111	2,548	2,323	1,525,016	111,755	-136	-84	-72	-15
2030	5,968	2,437	2,205	6,043	2,568	2,304	1,535,939	110,771	-130	-83	-75	-16
2031	5,926	2,458	2,199	6,005	2,585	2,293	1,545,518	110,219	-127	-78	-79	-16
2032	5,935	2,484	2,208	6,013	2,607	2,295	1,557,415	110,337	-123	-71	-78	-16
2033	5,933	2,508	2,214	6,023	2,628	2,298	1,568,937	110,488	-120	-66	-91	-18
2034	5,944	2,527	2,221	6,040	2,644	2,303	1,577,873	110,733	-117	-63	-96	-19
2035	5,947	2,545	2,225	6,049	2,660	2,306	1,586,568	110,858	-115	-60	-102	-20
	-1.22%	0.56%	-0.57%	<==Average annual growth, 2019 - 2035.								
	7.0	2.3	2.4	<==2019 BCF figures for 2020 GCR narrative (converted from MDth using 1.0320 SDG&E therm factor)								
	5.8	2.5	2.2	<==2035 BCF figures for 2020 GCR narrative (converted from MDth using 1.0320 SDG&E therm factor)								

MONTHLY

SDG&E Noncore Commercial & Industrial Demand (MDth)							San Diego County Employment		Cumulative	Cumulative	Carbon Fee Impact	
	Adjusted with DSM and Carbon-Fee Impacts			Unadjusted (from regression equations)			Commercial	Industrial	DSM Cmcl	DSM Indl.	Cogen	Industrial
Month	Cogeneration	Commercial	Industrial	Cogeneration	Commercial	Industrial	ECSD	EISD	(MDth)	(MDth)	(MDth)	(MDth)
Jan-06	440.5	453.7	119.7	440.5	453.7	119.7	1,195,300	104,100	0.0	0.0	0.0	0.0
Feb-06	482.3	449.3	128.8	482.3	449.3	128.8	1,204,900	104,600	0.0	0.0	0.0	0.0
Mar-06	452.1	409.3	108.2	452.1	409.3	108.2	1,211,500	105,200	0.0	0.0	0.0	0.0
Apr-06	458.3	474.6	130.8	458.3	474.6	130.8	1,213,500	104,800	0.0	0.0	0.0	0.0
May-06	478.6	351.8	134.1	478.6	351.8	134.1	1,222,000	105,100	0.0	0.0	0.0	0.0
Jun-06	509.0	244.8	126.5	509.0	244.8	126.5	1,230,200	105,600	0.0	0.0	0.0	0.0
Jul-06	515.5	231.9	133.6	515.5	231.9	133.6	1,215,600	105,400	0.0	0.0	0.0	0.0
Aug-06	575.8	206.3	98.9	575.8	206.3	98.9	1,220,200	105,000	0.0	0.0	0.0	0.0
Sep-06	586.2	222.2	117.8	586.2	222.2	117.8	1,225,400	104,800	0.0	0.0	0.0	0.0
Oct-06	642.8	214.9	97.9	642.8	214.9	97.9	1,226,300	104,200	0.0	0.0	0.0	0.0
Nov-06	557.5	257.5	96.4	557.5	257.5	96.4	1,236,100	104,400	0.0	0.0	0.0	0.0
Dec-06	554.0	240.2	80.9	554.0	240.2	80.9	1,237,900	104,400	0.0	0.0	0.0	0.0
Jan-07	534.6	235.9	100.4	534.6	235.9	100.4	1,208,000	103,500	0.0	0.0	0.0	0.0
Feb-07	521.6	274.8	127.9	521.6	274.8	127.9	1,217,200	103,300	0.0	0.0	0.0	0.0
Mar-07	505.7	236.5	97.4	505.7	236.5	97.4	1,225,300	103,600	0.0	0.0	0.0	0.0
Apr-07	529.4	263.3	123.3	529.4	263.3	123.3	1,224,900	102,400	0.0	0.0	0.0	0.0
May-07	492.1	228.3	122.3	492.1	228.3	122.3	1,233,700	102,500	0.0	0.0	0.0	0.0
Jun-07	552.0	207.0	123.9	552.0	207.0	123.9	1,241,900	102,600	0.0	0.0	0.0	0.0
Jul-07	516.9	169.5	118.6	516.9	169.5	118.6	1,231,600	103,500	0.0	0.0	0.0	0.0
Aug-07	561.6	167.8	127.4	561.6	167.8	127.4	1,232,700	103,200	0.0	0.0	0.0	0.0
Sep-07	573.0	172.0	141.3	573.0	172.0	141.3	1,232,800	102,900	0.0	0.0	0.0	0.0
Oct-07	547.2	162.9	118.7	547.2	162.9	118.7	1,231,200	103,500	0.0	0.0	0.0	0.0
Nov-07	526.8	201.1	140.0	526.8	201.1	140.0	1,237,500	104,000	0.0	0.0	0.0	0.0
Dec-07	492.6	240.6	142.0	492.6	240.6	142.0	1,242,000	104,500	0.0	0.0	0.0	0.0
Jan-08	512.7	244.4	138.1	512.7	244.4	138.1	1,211,600	103,500	0.0	0.0	0.0	0.0
Feb-08	531.0	263.2	147.7	531.0	263.2	147.7	1,220,800	103,500	0.0	0.0	0.0	0.0
Mar-08	488.8	233.0	165.5	488.8	233.0	165.5	1,226,200	103,900	0.0	0.0	0.0	0.0
Apr-08	517.9	234.3	164.5	517.9	234.3	164.5	1,226,500	103,800	0.0	0.0	0.0	0.0
May-08	495.9	192.1	166.6	495.9	192.1	166.6	1,230,600	103,900	0.0	0.0	0.0	0.0
Jun-08	547.0	208.4	171.5	547.0	208.4	171.5	1,234,200	104,200	0.0	0.0	0.0	0.0
Jul-08	608.1	171.2	169.1	608.1	171.2	169.1	1,222,300	104,000	0.0	0.0	0.0	0.0
Aug-08	638.6	182.4	172.7	638.6	182.4	172.7	1,222,100	104,200	0.0	0.0	0.0	0.0
Sep-08	665.8	196.6	170.8	665.8	196.6	170.8	1,218,800	103,800	0.0	0.0	0.0	0.0
Oct-08	657.2	209.0	150.2	657.2	209.0	150.2	1,217,500	103,700	0.0	0.0	0.0	0.0
Nov-08	618.7	238.4	145.6	618.7	238.4	145.6	1,217,200	103,000	0.0	0.0	0.0	0.0
Dec-08	579.8	172.6	124.2	579.8	172.6	124.2	1,213,200	102,400	0.0	0.0	0.0	0.0
Jan-09	552.8	216.3	117.6	552.8	216.3	117.6	1,175,700	102,500	0.0	0.0	0.0	0.0
Feb-09	520.2	224.2	123.4	520.2	224.2	123.4	1,173,100	101,500	0.0	0.0	0.0	0.0
Mar-09	523.1	232.7	149.7	523.1	232.7	149.7	1,171,900	100,400	0.0	0.0	0.0	0.0
Apr-09	603.3	235.2	143.8	603.3	235.2	143.8	1,167,300	98,900	0.0	0.0	0.0	0.0
May-09	598.0	274.0	118.7	598.0	274.0	118.7	1,170,700	97,700	0.0	0.0	0.0	0.0
Jun-09	651.5	181.9	110.2	651.5	181.9	110.2	1,170,000	97,100	0.0	0.0	0.0	0.0
Jul-09	610.6	176.4	147.9	610.6	176.4	147.9	1,146,400	96,400	0.0	0.0	0.0	0.0
Aug-09	713.0	174.7	146.0	713.0	174.7	146.0	1,147,100	95,900	0.0	0.0	0.0	0.0
Sep-09	664.7	204.6	159.0	664.7	204.6	159.0	1,143,100	95,400	0.0	0.0	0.0	0.0
Oct-09	670.1	204.3	146.9	670.1	204.3	146.9	1,154,300	95,100	0.0	0.0	0.0	0.0

Nov-09	659.9	198.1	171.5	659.9	198.1	171.5	1,160,400	94,900	0.0	0.0	0.0	0.0
Dec-09	501.0	214.1	135.5	501.0	214.1	135.5	1,161,200	94,900	0.0	0.0	0.0	0.0
Jan-10	545.7	223.0	144.0	545.7	223.0	144.0	1,132,000	95,100	0.0	0.0	0.0	0.0
Feb-10	544.5	220.6	138.3	544.5	220.6	138.3	1,136,200	95,000	0.0	0.0	0.0	0.0
Mar-10	493.1	206.2	128.2	493.1	206.2	128.2	1,141,100	95,600	0.0	0.0	0.0	0.0
Apr-10	562.2	207.0	157.0	562.2	207.0	157.0	1,153,800	96,400	0.0	0.0	0.0	0.0
May-10	518.4	202.3	142.8	518.4	202.3	142.8	1,165,100	96,400	0.0	0.0	0.0	0.0
Jun-10	519.9	221.2	169.0	519.9	221.2	169.0	1,167,100	96,300	0.0	0.0	0.0	0.0
Jul-10	532.8	204.3	178.4	532.8	204.3	178.4	1,154,900	96,100	0.0	0.0	0.0	0.0
Aug-10	551.2	216.1	169.4	551.2	216.1	169.4	1,157,400	96,400	0.0	0.0	0.0	0.0
Sep-10	531.0	207.9	177.2	531.0	207.9	177.2	1,156,400	96,100	0.0	0.0	0.0	0.0
Oct-10	520.2	199.5	176.3	520.2	199.5	176.3	1,162,300	96,200	0.0	0.0	0.0	0.0
Nov-10	501.0	228.3	176.5	501.0	228.3	176.5	1,166,400	96,300	0.0	0.0	0.0	0.0
Dec-10	550.5	223.0	155.0	550.5	223.0	155.0	1,169,000	96,800	0.0	0.0	0.0	0.0
Jan-11	545.1	246.1	144.0	545.1	246.1	144.0	1,147,100	96,400	0.0	0.0	0.0	0.0
Feb-11	532.2	229.5	168.8	532.2	229.5	168.8	1,155,400	96,300	0.0	0.0	0.0	0.0
Mar-11	473.1	226.4	167.9	473.1	226.4	167.9	1,159,500	96,500	0.0	0.0	0.0	0.0
Apr-11	560.3	223.0	165.2	560.3	223.0	165.2	1,162,100	96,400	0.0	0.0	0.0	0.0
May-11	538.6	196.6	152.3	538.6	196.6	152.3	1,164,900	96,600	0.0	0.0	0.0	0.0
Jun-11	574.3	197.8	175.0	574.3	197.8	175.0	1,167,900	97,200	0.0	0.0	0.0	0.0
Jul-11	557.5	189.0	179.9	557.5	189.0	179.9	1,156,500	97,000	0.0	0.0	0.0	0.0
Aug-11	579.9	203.0	186.5	579.9	203.0	186.5	1,159,000	97,100	0.0	0.0	0.0	0.0
Sep-11	592.4	186.9	190.3	592.4	186.9	190.3	1,162,800	97,200	0.0	0.0	0.0	0.0
Oct-11	569.8	186.4	169.1	569.8	186.4	169.1	1,168,900	97,100	0.0	0.0	0.0	0.0
Nov-11	508.9	235.3	176.8	508.9	235.3	176.8	1,177,900	97,200	0.0	0.0	0.0	0.0
Dec-11	544.5	205.2	143.1	544.5	205.2	143.1	1,180,300	97,700	0.0	0.0	0.0	0.0
Jan-12	550.3	211.5	178.1	550.3	211.5	178.1	1,157,500	96,500	0.0	0.0	0.0	0.0
Feb-12	536.4	199.7	191.4	536.4	199.7	191.4	1,166,800	96,800	0.0	0.0	0.0	0.0
Mar-12	572.9	216.2	193.5	572.9	216.2	193.5	1,174,100	96,900	0.0	0.0	0.0	0.0
Apr-12	543.7	194.9	192.6	543.7	194.9	192.6	1,191,200	97,800	0.0	0.0	0.0	0.0
May-12	583.8	193.8	204.5	583.8	193.8	204.5	1,200,300	98,300	0.0	0.0	0.0	0.0
Jun-12	577.0	181.4	184.8	577.0	181.4	184.8	1,208,000	98,600	0.0	0.0	0.0	0.0
Jul-12	614.6	183.3	201.1	614.6	183.3	201.1	1,191,600	99,500	0.0	0.0	0.0	0.0
Aug-12	648.5	170.2	213.0	648.5	170.2	213.0	1,197,100	99,900	0.0	0.0	0.0	0.0
Sep-12	637.5	153.4	187.7	637.5	153.4	187.7	1,197,500	99,600	0.0	0.0	0.0	0.0
Oct-12	593.8	207.1	195.8	593.8	207.1	195.8	1,207,800	99,700	0.0	0.0	0.0	0.0
Nov-12	579.8	246.2	175.4	579.8	246.2	175.4	1,218,600	100,100	0.0	0.0	0.0	0.0
Dec-12	576.3	231.9	144.1	576.3	231.9	144.1	1,221,000	100,400	0.0	0.0	0.0	0.0
Jan-13	570.7	261.6	180.2	570.7	261.6	180.2	1,198,100	99,200	0.0	0.0	0.0	0.0
Feb-13	517.6	222.7	174.0	517.6	222.7	174.0	1,206,600	99,500	0.0	0.0	0.0	0.0
Mar-13	590.1	205.1	189.7	590.1	205.1	189.7	1,214,300	99,700	0.0	0.0	0.0	0.0
Apr-13	564.5	210.2	199.8	564.5	210.2	199.8	1,220,000	99,600	0.0	0.0	0.0	0.0
May-13	596.3	165.6	181.8	596.3	165.6	181.8	1,225,500	99,400	0.0	0.0	0.0	0.0
Jun-13	585.2	144.9	195.6	585.2	144.9	195.6	1,232,200	99,300	0.0	0.0	0.0	0.0
Jul-13	632.1	138.9	182.3	632.1	138.9	182.3	1,220,100	99,800	0.0	0.0	0.0	0.0
Aug-13	605.3	140.7	195.8	605.3	140.7	195.8	1,225,600	99,800	0.0	0.0	0.0	0.0
Sep-13	589.2	149.1	126.8	589.2	149.1	126.8	1,226,000	99,900	0.0	0.0	0.0	0.0
Oct-13	610.1	158.8	202.2	610.1	158.8	202.2	1,240,700	100,300	0.0	0.0	0.0	0.0
Nov-13	480.3	198.8	183.2	480.3	198.8	183.2	1,251,700	100,700	0.0	0.0	0.0	0.0
Dec-13	530.8	196.8	150.5	530.8	196.8	150.5	1,252,900	101,100	0.0	0.0	0.0	0.0
Jan-14	554.7	176.7	203.1	554.7	176.7	203.1	1,223,000	100,700	0.0	0.0	0.0	0.0
Feb-14	464.9	171.6	164.5	464.9	171.6	164.5	1,232,800	100,900	0.0	0.0	0.0	0.0
Mar-14	535.6	215.1	143.6	535.6	215.1	143.6	1,240,000	101,000	0.0	0.0	0.0	0.0
Apr-14	553.0	171.6	189.7	553.0	171.6	189.7	1,243,400	101,800	0.0	0.0	0.0	0.0
May-14	562.2	142.8	187.1	562.2	142.8	187.1	1,249,900	102,100	0.0	0.0	0.0	0.0
Jun-14	555.6	131.4	178.0	555.6	131.4	178.0	1,257,000	102,600	0.0	0.0	0.0	0.0
Jul-14	577.1	132.8	198.2	577.1	132.8	198.2	1,245,100	103,200	0.0	0.0	0.0	0.0
Aug-14	579.6	131.7	165.5	579.6	131.7	165.5	1,253,500	103,500	0.0	0.0	0.0	0.0
Sep-14	598.3	122.9	175.8	598.3	122.9	175.8	1,253,500	103,600	0.0	0.0	0.0	0.0
Oct-14	545.5	189.5	191.0	545.5	189.5	191.0	1,264,200	104,200	0.0	0.0	0.0	0.0
Nov-14	556.4	152.7	164.3	556.4	152.7	164.3	1,276,800	104,700	0.0	0.0	0.0	0.0
Dec-14	533.4	173.1	127.6	533.4	173.1	127.6	1,278,500	105,300	0.0	0.0	0.0	0.0
Jan-15	531.8	175.6	175.7	531.8	175.6	175.7	1,256,400	104,800	0.0	0.0	0.0	0.0
Feb-15	499.5	143.8	167.7	499.5	143.8	167.7	1,262,600	105,100	0.0	0.0	0.0	0.0
Mar-15	579.2	149.7	273.4	579.2	149.7	273.4	1,268,800	105,800	0.0	0.0	0.0	0.0
Apr-15	539.7	180.0	203.6	539.7	180.0	203.6	1,275,200	105,700	0.0	0.0	0.0	0.0
May-15	573.7	149.0	200.2	573.7	149.0	200.2	1,285,200	106,200	0.0	0.0	0.0	0.0
Jun-15	590.9	142.7	186.3	590.9	142.7	186.3	1,288,500	106,800	0.0	0.0	0.0	0.0
Jul-15	595.0	148.3	203.9	595.0	148.3	203.9	1,287,600	107,800	0.0	0.0	0.0	0.0
Aug-15	586.5	157.1	175.1	586.5	157.1	175.1	1,290,500	108,200	0.0	0.0	0.0	0.0
Sep-15	561.7	147.7	159.3	561.7	147.7	159.3	1,291,100	107,900	0.0	0.0	0.0	0.0
Oct-15	546.8	195.0	169.0	546.8	195.0	169.0	1,307,300	107,900	0.0	0.0	0.0	0.0
Nov-15	452.0	225.6	180.2	452.0	225.6	180.2	1,316,900	108,000	0.0	0.0	0.0	0.0
Dec-15	469.7	251.3	194.0	469.7	251.3	194.0	1,316,700	108,200	0.0	0.0	0.0	0.0
Jan-16	525.5	247.4	178.3	525.5	247.4	178.3	1,291,900	107,800	0.0	0.0	0.0	0.0
Feb-16	529.4	201.9	191.9	529.4	201.9	191.9	1,303,000	107,900	0.0	0.0	0.0	0.0
Mar-16	554.3	202.2	201.0	554.3	202.2	201.0	1,303,500	107,900	0.0	0.0	0.0	0.0
Apr-16	542.0	171.6	193.5	542.0	171.6	193.5	1,317,900	108,200	0.0	0.0	0.0	0.0
May-16	575.3	161.4	203.6	575.3	161.4	203.6	1,323,200	108,300	0.0	0.0	0.0	0.0
Jun-16	555.0	151.0	219.0	555.0	151.0	219.0	1,323,700	108,700	0.0	0.0	0.0	0.0
Jul-16	657.4	155.6	183.8	657.4	155.6	183.8	1,320,500	109,400	0.0	0.0	0.0	0.0
Aug-16	706.9	154.9	213.4	706.9	154.9	213.4	1,325,700	108,900	0.0	0.0	0.0	0.0
Sep-16	675.6	160.3	196.9	675.6	160.3	196.9	1,329,100	108,600	0.0	0.0	0.0	0.0
Oct-16	643.6	170.4	194.8	643.6	170.4	194.8	1,339,400	109,500	0.0	0.0	0.0	0.0
Nov-16	728.6	189.0	178.9	728.6	189.0	178.9	1,349,600	109,500	0.0	0.0	0.0	0.0
Dec-16	766.3	189.1	180.5	766.3	189.1	180.5	1,349,500	109,600	0.0	0.0	0.0	0.0
Jan-17	677.2	209.9	218.6	677.2	209.9	218.6	1,324,500	108,300	0.0	0.0	0.0	0.0

Feb-17	677.7	163.8	204.6	677.7	163.8	204.6	1,333,400	108,500	0.0	0.0	0.0	0.0
Mar-17	756.2	186.8	208.1	756.2	186.8	208.1	1,337,400	108,500	0.0	0.0	0.0	0.0
Apr-17	682.2	176.6	216.4	682.2	176.6	216.4	1,346,000	108,700	0.0	0.0	0.0	0.0
May-17	672.0	161.4	193.2	672.0	161.4	193.2	1,351,500	108,800	0.0	0.0	0.0	0.0
Jun-17	754.3	150.6	219.2	754.3	150.6	219.2	1,359,000	109,600	0.0	0.0	0.0	0.0
Jul-17	687.2	171.4	195.5	687.2	171.4	195.5	1,343,600	110,900	0.0	0.0	0.0	0.0
Aug-17	833.1	153.5	205.4	833.1	153.5	205.4	1,348,000	110,800	0.0	0.0	0.0	0.0
Sep-17	750.5	132.5	153.1	750.5	132.5	153.1	1,352,900	110,300	0.0	0.0	0.0	0.0
Oct-17	748.3	154.5	180.6	748.3	154.5	180.6	1,367,300	110,500	0.0	0.0	0.0	0.0
Nov-17	832.7	158.8	173.3	832.7	158.8	173.3	1,377,300	110,300	0.0	0.0	0.0	0.0
Dec-17	758.0	190.1	193.3	758.0	190.1	193.3	1,377,700	111,200	0.0	0.0	0.0	0.0
Jan-18	793.0	177.9	218.8	793.0	177.9	218.8	1,357,300	111,000	0.0	0.0	0.0	0.0
Feb-18	729.9	155.3	156.1	729.9	155.3	156.1	1,367,600	111,300	0.0	0.0	0.0	0.0
Mar-18	667.5	184.2	192.8	667.5	184.2	192.8	1,371,500	111,600	0.0	0.0	0.0	0.0
Apr-18	660.2	171.2	226.2	660.2	171.2	226.2	1,377,600	111,800	0.0	0.0	0.0	0.0
May-18	835.7	160.6	236.0	835.7	160.6	236.0	1,382,100	112,400	0.0	0.0	0.0	0.0
Jun-18	752.8	153.9	209.3	752.8	153.9	209.3	1,387,900	113,400	0.0	0.0	0.0	0.0
Jul-18	970.1	160.6	189.1	970.1	160.6	189.1	1,375,800	114,000	0.0	0.0	0.0	0.0
Aug-18	1,055.9	130.5	238.1	1,055.9	130.5	238.1	1,381,400	113,800	0.0	0.0	0.0	0.0
Sep-18	915.2	140.2	209.2	915.2	140.2	209.2	1,380,600	113,100	0.0	0.0	0.0	0.0
Oct-18	723.7	181.1	210.3	723.7	181.1	210.3	1,390,100	114,200	0.0	0.0	0.0	0.0
Nov-18	1,072.2	187.9	202.8	1,072.2	187.9	202.8	1,397,800	114,700	0.0	0.0	0.0	0.0
Dec-18	953.2	212.5	187.7	953.2	212.5	187.7	1,399,100	114,900	0.0	0.0	0.0	0.0
Jan-19	638.6	208.4	260.4	638.6	208.4	260.4	1,373,900	114,300	0.0	0.0	0.0	0.0
Feb-19	572.1	217.0	209.7	572.1	217.0	209.7	1,384,000	114,200	0.0	0.0	0.0	0.0
Mar-19	414.6	198.1	240.5	414.6	198.1	240.5	1,386,900	114,400	0.0	0.0	0.0	0.0
Apr-19	621.6	178.4	212.6	621.6	178.4	212.6	1,395,600	115,000	0.0	0.0	0.0	0.0
May-19	612.2	185.3	202.7	612.2	185.3	202.7	1,403,300	115,900	0.0	0.0	0.0	0.0
Jun-19	587.5	175.9	176.5	587.5	175.9	176.5	1,409,200	117,000	0.0	0.0	0.0	0.0
Jul-19	621.7	169.8	177.3	621.7	169.8	177.3	1,399,100	117,400	0.0	0.0	0.0	0.0
Aug-19	640.6	171.7	222.4	640.6	171.7	222.4	1,401,900	117,600	0.0	0.0	0.0	0.0
Sep-19	626.6	168.5	190.4	626.6	168.5	190.4	1,407,200	118,100	0.0	0.0	0.0	0.0
Oct-19	658.9	193.9	192.8	658.9	193.9	192.8	1,418,400	118,500	0.0	0.0	0.0	0.0
Nov-19	619.5	216.8	179.9	619.5	216.8	179.9	1,428,100	118,800	0.0	0.0	0.0	0.0
Dec-19	620.2	243.9	173.1	620.2	243.9	173.1	1,429,300	119,500	0.0	0.0	0.0	0.0
Jan-20	558.2	196.6	206.5	562.8	198.0	207.9	1,430,448	120,153	-1.4	-0.6	-4.6	-0.9
Feb-20	545.6	194.6	203.2	550.1	196.1	204.6	1,417,780	118,191	-1.4	-0.6	-4.5	-0.9
Mar-20	535.2	191.9	200.4	539.7	193.3	201.9	1,399,483	116,553	-1.4	-0.6	-4.4	-0.9
Apr-20	521.9	188.4	196.8	526.2	189.9	198.2	1,376,933	114,349	-1.4	-0.6	-4.3	-0.9
May-20	521.6	187.9	196.8	525.9	189.3	198.2	1,373,207	114,391	-1.4	-0.6	-4.3	-0.9
Jun-20	522.5	187.0	197.1	526.8	188.4	198.6	1,367,118	114,620	-1.4	-0.6	-4.3	-0.9
Jul-20	522.9	182.6	197.3	527.2	184.0	198.7	1,338,450	114,725	-1.4	-0.6	-4.3	-0.9
Aug-20	515.6	182.3	195.3	519.9	183.8	196.7	1,336,714	113,500	-1.4	-0.6	-4.2	-0.9
Sep-20	510.2	182.4	193.7	514.4	183.8	195.1	1,336,860	112,567	-1.4	-0.6	-4.2	-0.9
Oct-20	499.7	181.7	190.7	503.8	183.1	192.1	1,332,319	110,762	-1.4	-0.6	-4.1	-0.8
Nov-20	497.7	183.6	190.2	501.8	185.1	191.5	1,345,163	110,427	-1.4	-0.6	-4.1	-0.8
Dec-20	497.8	184.4	190.2	501.9	185.8	191.6	1,350,182	110,458	-1.4	-0.6	-4.1	-0.8
Jan-21	488.0	180.9	186.4	491.9	183.5	188.7	1,335,134	108,725	-2.6	-1.5	-3.9	-0.8
Feb-21	484.0	182.9	185.2	487.8	185.5	187.5	1,348,209	108,024	-2.6	-1.5	-3.9	-0.8
Mar-21	481.6	184.0	184.6	485.4	186.7	186.9	1,355,713	107,612	-2.6	-1.5	-3.8	-0.8
Apr-21	476.3	185.9	183.0	480.1	188.5	185.3	1,368,207	106,692	-2.6	-1.5	-3.8	-0.8
May-21	482.7	187.9	184.9	486.6	190.5	187.2	1,381,063	107,819	-2.6	-1.5	-3.8	-0.8
Jun-21	490.3	189.4	187.0	494.2	192.1	189.3	1,391,485	109,136	-2.6	-1.5	-3.9	-0.8
Jul-21	495.9	188.8	188.6	499.9	191.4	191.0	1,387,331	110,127	-2.6	-1.5	-3.9	-0.9
Aug-21	496.8	189.8	188.9	500.8	192.4	191.2	1,393,571	110,282	-2.6	-1.5	-4.0	-0.9
Sep-21	499.3	190.9	189.6	503.3	193.5	191.9	1,401,193	110,718	-2.6	-1.5	-4.0	-0.9
Oct-21	500.3	193.0	189.9	504.3	195.6	192.2	1,415,000	110,898	-2.6	-1.5	-4.0	-0.9
Nov-21	502.7	194.7	190.6	506.7	197.3	192.9	1,426,115	111,310	-2.6	-1.5	-4.0	-0.9
Dec-21	507.2	195.1	191.9	511.2	197.7	194.2	1,428,890	112,097	-2.6	-1.5	-4.0	-0.9
Jan-22	504.1	191.2	190.0	508.3	195.2	193.3	1,411,970	111,586	-3.9	-2.5	-4.2	-0.9
Feb-22	501.5	192.6	189.2	505.6	196.5	192.6	1,420,816	111,129	-3.9	-2.5	-4.2	-0.9
Mar-22	500.5	193.1	188.9	504.7	197.0	192.3	1,424,174	110,967	-3.9	-2.5	-4.2	-0.9
Apr-22	500.8	194.3	189.0	505.0	198.2	192.4	1,432,150	111,013	-3.9	-2.5	-4.2	-0.9
May-22	504.8	195.7	190.2	509.0	199.7	193.5	1,441,650	111,708	-3.9	-2.5	-4.2	-0.9
Jun-22	509.8	196.7	191.6	514.1	200.7	195.0	1,448,352	112,594	-3.9	-2.5	-4.2	-0.9
Jul-22	512.6	195.3	192.4	516.8	199.3	195.8	1,438,946	113,074	-3.9	-2.5	-4.3	-0.9
Aug-22	511.1	195.9	192.0	515.4	199.8	195.4	1,442,577	112,823	-3.9	-2.5	-4.3	-0.9
Sep-22	511.4	196.7	192.0	515.6	200.6	195.4	1,447,730	112,861	-3.9	-2.5	-4.3	-0.9
Oct-22	508.4	198.3	191.2	512.7	202.2	194.6	1,458,576	112,351	-3.9	-2.5	-4.2	-0.9
Nov-22	510.2	199.7	191.7	514.4	203.7	195.1	1,467,893	112,654	-3.9	-2.5	-4.2	-0.9
Dec-22	514.1	199.8	192.8	518.4	203.8	196.2	1,468,782	113,336	-3.9	-2.5	-4.3	-0.9
Jan-23	510.0	195.7	190.8	514.6	200.8	195.1	1,449,361	112,678	-5.2	-3.4	-4.5	-1.0
Feb-23	506.9	196.7	189.9	511.4	201.9	194.2	1,456,189	112,130	-5.2	-3.4	-4.5	-1.0
Mar-23	505.5	196.9	189.5	510.0	202.1	193.8	1,457,517	111,880	-5.2	-3.4	-4.5	-1.0
Apr-23	505.5	197.8	189.5	510.0	203.0	193.8	1,463,249	111,881	-5.2	-3.4	-4.5	-1.0
May-23	508.8	199.0	190.4	513.3	204.2	194.8	1,471,255	112,454	-5.2	-3.4	-4.5	-1.0
Jun-23	513.1	199.8	191.7	517.7	204.9	196.0	1,476,331	113,217	-5.2	-3.4	-4.6	-1.0
Jul-23	514.4	198.1	192.1	519.0	203.2	196.4	1,465,098	113,443	-5.2	-3.4	-4.6	-1.0
Aug-23	513.0	198.4	191.6	517.5	203.5	196.0	1,466,993	113,190	-5.2	-3.4	-4.6	-1.0
Sep-23	513.2	198.9	191.7	517.7	204.0	196.0	1,470,427	113,228	-5.2	-3.4	-4.6	-1.0
Oct-23	509.7	200.3	190.7	514.3	205.4	195.0	1,479,612	112,627	-5.2	-3.4	-4.5	-1.0
Nov-23	512.0	201.4	191.4	516.5	206.6	195.7	1,487,162	113,019	-5.2	-3.4	-4.5	-1.0
Dec-23	516.4	201.3	192.6	521.0	206.4	197.0	1,486,248	113,792	-5.2	-3.4	-4.6	-1.0
Jan-24	513.1	196.8	190.9	517.9	203.2	196.1	1,464,634	113,262	-6.3	-4.1	-4.8	-1.0
Feb-24	510.2	197.7	190.1	515.0	204.0	195.3	1,470,305	112,759	-6.3	-4.1	-4.8	-1.0
Mar-24	509.0	197.7	189.8	513.9	204.0	194.9	1,470,379	112,555	-6.3	-4.1	-4.8	-1.0
Apr-24	509.2	198.3	189.8	514.0	204.7	195.0	1,474,564	112,577	-6.3	-4.1	-4.8	-1.0

May-24	512.9	199.4	190.9	517.7	205.8	196.0	1,481,758	113,228	-6.3	-4.1	-4.8	-1.0
Jun-24	517.7	200.1	192.3	522.6	206.4	197.4	1,486,008	114,073	-6.3	-4.1	-4.9	-1.0
Jul-24	520.1	198.1	193.0	525.0	204.5	198.1	1,473,253	114,487	-6.3	-4.1	-4.9	-1.1
Aug-24	518.4	198.4	192.5	523.3	204.7	197.6	1,474,909	114,198	-6.3	-4.1	-4.9	-1.0
Sep-24	518.4	198.9	192.5	523.3	205.2	197.6	1,478,105	114,201	-6.3	-4.1	-4.9	-1.0
Oct-24	515.2	200.2	191.6	520.1	206.6	196.7	1,486,984	113,637	-6.3	-4.1	-4.9	-1.0
Nov-24	516.8	201.3	192.0	521.7	207.7	197.2	1,494,335	113,920	-6.3	-4.1	-4.9	-1.0
Dec-24	520.6	201.2	193.1	525.6	207.5	198.3	1,493,220	114,586	-6.3	-4.1	-4.9	-1.1
Jan-25	516.3	196.8	191.2	521.5	204.2	197.1	1,471,513	113,881	-7.4	-4.8	-5.2	-1.1
Feb-25	513.1	197.6	190.3	518.3	205.0	196.2	1,477,075	113,322	-7.4	-4.8	-5.1	-1.1
Mar-25	511.7	197.6	189.9	516.8	205.0	195.8	1,476,874	113,064	-7.4	-4.8	-5.1	-1.1
Apr-25	511.4	198.2	189.8	516.5	205.6	195.7	1,480,867	113,014	-7.4	-4.8	-5.1	-1.1
May-25	514.9	199.2	190.8	520.1	206.7	196.7	1,487,790	113,633	-7.4	-4.8	-5.1	-1.1
Jun-25	519.6	199.8	192.1	524.8	207.3	198.0	1,491,806	114,446	-7.4	-4.8	-5.2	-1.1
Jul-25	521.6	197.9	192.7	526.9	205.3	198.6	1,478,731	114,810	-7.4	-4.8	-5.2	-1.1
Aug-25	519.9	198.1	192.2	525.1	205.5	198.1	1,480,133	114,502	-7.4	-4.8	-5.2	-1.1
Sep-25	519.8	198.5	192.2	525.0	206.0	198.1	1,483,092	114,488	-7.4	-4.8	-5.2	-1.1
Oct-25	516.6	199.8	191.3	521.8	207.3	197.2	1,491,657	113,925	-7.4	-4.8	-5.2	-1.1
Nov-25	518.0	200.9	191.7	523.2	208.3	197.6	1,498,751	114,171	-7.4	-4.8	-5.2	-1.1
Dec-25	521.6	200.7	192.7	526.8	208.1	198.6	1,497,401	114,801	-7.4	-4.8	-5.2	-1.1
Jan-26	517.0	196.3	190.8	522.4	204.8	197.4	1,475,274	114,044	-8.5	-5.4	-5.4	-1.2
Feb-26	513.7	197.2	189.8	519.1	205.6	196.4	1,480,946	113,459	-8.5	-5.4	-5.4	-1.2
Mar-26	512.1	197.1	189.4	517.4	205.6	195.9	1,480,864	113,176	-8.5	-5.4	-5.3	-1.2
Apr-26	511.6	197.8	189.2	516.9	206.2	195.8	1,484,909	113,085	-8.5	-5.4	-5.3	-1.2
May-26	515.1	198.8	190.2	520.4	207.3	196.8	1,492,069	113,696	-8.5	-5.4	-5.4	-1.2
Jun-26	519.6	199.5	191.5	525.1	208.0	198.1	1,496,313	114,499	-8.5	-5.4	-5.4	-1.2
Jul-26	521.7	197.5	192.1	527.1	206.0	198.7	1,483,226	114,855	-8.5	-5.4	-5.4	-1.2
Aug-26	519.8	197.8	191.6	525.3	206.3	198.2	1,485,024	114,536	-8.5	-5.4	-5.4	-1.2
Sep-26	519.7	198.3	191.6	525.1	206.8	198.1	1,488,363	114,510	-8.5	-5.4	-5.4	-1.2
Oct-26	516.8	199.6	190.7	522.1	208.1	197.3	1,497,240	113,994	-8.5	-5.4	-5.4	-1.2
Nov-26	517.8	200.8	191.0	523.2	209.2	197.6	1,504,716	114,172	-8.5	-5.4	-5.4	-1.2
Dec-26	521.0	200.6	191.9	526.4	209.1	198.5	1,503,745	114,733	-8.5	-5.4	-5.4	-1.2
Jan-27	516.2	196.3	190.0	521.8	205.8	197.2	1,481,973	113,934	-9.5	-6.0	-5.6	-1.2
Feb-27	512.4	197.3	188.9	517.9	206.7	196.1	1,488,193	113,257	-9.5	-6.0	-5.5	-1.2
Mar-27	510.2	197.3	188.3	515.7	206.8	195.5	1,488,548	112,881	-9.5	-6.0	-5.5	-1.2
Apr-27	509.2	198.0	188.0	514.7	207.5	195.2	1,493,037	112,702	-9.5	-6.0	-5.5	-1.2
May-27	512.1	199.2	188.8	517.6	208.6	196.0	1,500,731	113,212	-9.5	-6.0	-5.5	-1.2
Jun-27	516.1	199.9	190.0	521.7	209.4	197.2	1,505,452	113,913	-9.5	-6.0	-5.6	-1.2
Jul-27	517.6	197.9	190.4	523.1	207.4	197.6	1,492,648	114,165	-9.5	-6.0	-5.6	-1.2
Aug-27	515.2	198.3	189.7	520.8	207.8	196.9	1,494,973	113,752	-9.5	-6.0	-5.6	-1.2
Sep-27	514.5	198.9	189.5	520.1	208.3	196.7	1,498,841	113,631	-9.5	-6.0	-5.5	-1.2
Oct-27	510.5	200.3	188.4	516.0	209.8	195.5	1,508,448	112,931	-9.5	-6.0	-5.5	-1.2
Nov-27	511.5	201.5	188.7	517.0	211.0	195.8	1,516,244	113,104	-9.5	-6.0	-5.5	-1.2
Dec-27	514.7	201.4	189.6	520.2	210.9	196.7	1,515,567	113,656	-9.5	-6.0	-5.5	-1.2
Jan-28	509.7	197.2	187.7	515.5	207.6	195.4	1,493,985	112,844	-10.4	-6.5	-5.8	-1.2
Feb-28	506.0	198.2	186.6	511.7	208.6	194.3	1,500,605	112,186	-10.4	-6.5	-5.7	-1.2
Mar-28	503.9	198.3	186.0	509.7	208.7	193.7	1,501,286	111,827	-10.4	-6.5	-5.7	-1.2
Apr-28	502.9	199.1	185.7	508.6	209.5	193.4	1,506,339	111,646	-10.4	-6.5	-5.7	-1.2
May-28	506.0	200.2	186.6	511.7	210.7	194.3	1,514,208	112,181	-10.4	-6.5	-5.7	-1.2
Jun-28	510.1	201.0	187.8	515.9	211.4	195.5	1,519,107	112,906	-10.4	-6.5	-5.8	-1.2
Jul-28	511.6	199.1	188.2	517.4	209.5	196.0	1,506,365	113,177	-10.4	-6.5	-5.8	-1.2
Aug-28	509.5	199.4	187.6	515.3	209.9	195.3	1,508,786	112,806	-10.4	-6.5	-5.8	-1.2
Sep-28	509.1	200.0	187.5	514.8	210.5	195.2	1,512,763	112,725	-10.4	-6.5	-5.8	-1.2
Oct-28	505.4	201.5	186.4	511.1	211.9	194.1	1,522,579	112,082	-10.4	-6.5	-5.7	-1.2
Nov-28	506.5	202.7	186.7	512.3	213.1	194.5	1,530,358	112,279	-10.4	-6.5	-5.7	-1.2
Dec-28	509.8	202.6	187.7	515.6	213.0	195.4	1,529,655	112,853	-10.4	-6.5	-5.8	-1.2
Jan-29	505.0	198.4	185.9	511.1	209.8	194.1	1,508,153	112,072	-11.4	-7.0	-6.1	-1.3
Feb-29	501.4	199.4	184.8	507.5	210.7	193.1	1,514,608	111,445	-11.4	-7.0	-6.0	-1.3
Mar-29	499.6	199.4	184.3	505.5	210.8	192.6	1,514,985	111,114	-11.4	-7.0	-6.0	-1.3
Apr-29	498.8	200.2	184.1	504.8	211.5	192.3	1,519,763	110,986	-11.4	-7.0	-6.0	-1.3
May-29	501.9	201.3	184.9	507.9	212.7	193.2	1,527,464	111,519	-11.4	-7.0	-6.0	-1.3
Jun-29	506.0	202.0	186.1	512.0	213.4	194.4	1,532,202	112,240	-11.4	-7.0	-6.1	-1.3
Jul-29	507.7	200.1	186.6	513.8	211.4	194.9	1,519,220	112,542	-11.4	-7.0	-6.1	-1.3
Aug-29	505.4	200.4	186.0	511.5	211.8	194.2	1,521,352	112,143	-11.4	-7.0	-6.1	-1.3
Sep-29	504.8	201.0	185.8	510.8	212.3	194.1	1,525,034	112,033	-11.4	-7.0	-6.1	-1.3
Oct-29	501.0	202.4	184.7	507.0	213.7	193.0	1,534,329	111,365	-11.4	-7.0	-6.0	-1.3
Nov-29	501.9	203.5	185.0	507.9	214.9	193.2	1,541,982	111,531	-11.4	-7.0	-6.0	-1.3
Dec-29	505.0	203.4	185.9	511.1	214.8	194.1	1,541,103	112,072	-11.4	-7.0	-6.1	-1.3
Jan-30	500.2	200.5	184.6	506.5	211.3	192.8	1,518,619	111,281	-10.9	-6.9	-6.3	-1.3
Feb-30	496.4	201.6	183.5	502.7	212.4	191.7	1,525,695	110,614	-10.9	-6.9	-6.2	-1.3
Mar-30	494.3	201.7	182.9	500.5	212.6	191.1	1,526,566	110,242	-10.9	-6.9	-6.2	-1.3
Apr-30	493.3	202.7	182.6	499.5	213.6	190.8	1,533,161	110,057	-10.9	-6.9	-6.2	-1.3
May-30	496.1	203.8	183.4	502.3	214.6	191.6	1,540,232	110,555	-10.9	-6.9	-6.2	-1.3
Jun-30	500.0	204.4	184.5	506.3	215.3	192.8	1,544,376	111,238	-10.9	-6.9	-6.3	-1.3
Jul-30	501.4	202.3	184.9	507.6	213.1	193.2	1,530,440	111,479	-10.9	-6.9	-6.3	-1.3
Aug-30	499.1	202.5	184.3	505.3	213.4	192.5	1,532,041	111,079	-10.9	-6.9	-6.3	-1.3
Sep-30	498.4	203.0	184.1	504.7	213.9	192.3	1,535,241	110,964	-10.9	-6.9	-6.3	-1.3
Oct-30	494.4	204.2	182.9	500.6	215.1	191.1	1,543,433	110,250	-10.9	-6.9	-6.2	-1.3
Nov-30	495.5	205.4	183.3	501.8	216.3	191.5	1,551,154	110,456	-10.9	-6.9	-6.2	-1.3
Dec-30	498.8	205.3	184.2	505.1	216.2	192.4	1,550,305	111,034	-10.9	-6.9	-6.3	-1.3
Jan-31	494.0	202.2	183.3	500.6	212.8	191.1	1,528,369	110,254	-10.6	-6.5	-6.6	-1.4
Feb-31	490.7	203.2	182.3	497.2	213.8	190.2	1,534,983	109,672	-10.6	-6.5	-6.5	-1.4
Mar-31	489.1	203.2	181.9	495.6	213.9	189.7	1,535,230	109,383	-10.6	-6.5	-6.5	-1.4
Apr-31	488.4	204.0	181.7	494.9	214.6	189.5	1,539,960	109,270	-10.6	-6.5	-6.5	-1.4
May-31	491.8	205.2	182.6	498.3	215.8	190.5	1,547,799	109,853	-10.6	-6.5	-6.5	-1.4
Jun-31	496.1	205.9	183.9	502.7	216.5	191.7	1,552,717	110,622	-10.6	-6.5	-6.6	-1.4
Jul-31	497.9	203.9	184.4	504.5	214.5	192.3	1,539,557	110,941	-10.6	-6.5	-6.6	-1.4

Aug-31	496.3	204.2	183.9	502.8	214.9	191.8	1,541,796	110,644	-10.6	-6.5	-6.6	-1.4
Sep-31	496.2	204.8	183.9	502.8	215.4	191.8	1,545,667	110,632	-10.6	-6.5	-6.6	-1.4
Oct-31	493.0	206.3	183.0	499.6	216.9	190.8	1,555,133	110,075	-10.6	-6.5	-6.5	-1.4
Nov-31	494.5	207.4	183.4	501.0	218.1	191.3	1,562,930	110,328	-10.6	-6.5	-6.6	-1.4
Dec-31	498.0	207.3	184.4	504.6	217.9	192.3	1,562,074	110,953	-10.6	-6.5	-6.6	-1.4
Jan-32	494.0	204.3	183.8	500.5	214.6	191.1	1,539,915	110,238	-10.2	-5.9	-6.5	-1.4
Feb-32	490.9	205.4	182.9	497.3	215.6	190.2	1,546,655	109,688	-10.2	-5.9	-6.4	-1.4
Mar-32	489.4	205.4	182.5	495.8	215.6	189.8	1,546,945	109,429	-10.2	-5.9	-6.4	-1.4
Apr-32	489.0	206.1	182.4	495.4	216.4	189.7	1,551,882	109,352	-10.2	-5.9	-6.4	-1.4
May-32	492.5	207.3	183.4	498.9	217.6	190.7	1,559,759	109,961	-10.2	-5.9	-6.4	-1.4
Jun-32	497.0	208.1	184.7	503.5	218.3	192.0	1,564,716	110,757	-10.2	-5.9	-6.5	-1.4
Jul-32	499.1	206.1	185.3	505.7	216.3	192.6	1,551,391	111,133	-10.2	-5.9	-6.5	-1.4
Aug-32	497.4	206.4	184.8	503.9	216.7	192.1	1,553,675	110,830	-10.2	-5.9	-6.5	-1.4
Sep-32	497.3	207.0	184.8	503.8	217.3	192.1	1,557,617	110,810	-10.2	-5.9	-6.5	-1.4
Oct-32	494.0	208.5	183.8	500.5	218.7	191.1	1,567,178	110,231	-10.2	-5.9	-6.5	-1.4
Nov-32	495.5	209.7	184.2	502.0	219.9	191.5	1,575,050	110,493	-10.2	-5.9	-6.5	-1.4
Dec-32	499.1	209.5	185.3	505.6	219.8	192.6	1,574,195	111,128	-10.2	-5.9	-6.5	-1.4
Jan-33	494.1	206.4	184.4	501.7	216.4	191.5	1,551,842	110,443	-10.0	-5.5	-7.5	-1.5
Feb-33	490.9	207.4	183.5	498.4	217.4	190.5	1,558,652	109,878	-10.0	-5.5	-7.5	-1.5
Mar-33	489.4	207.5	183.0	496.8	217.5	190.1	1,558,891	109,605	-10.0	-5.5	-7.5	-1.5
Apr-33	488.8	208.3	182.9	496.3	218.2	189.9	1,563,997	109,511	-10.0	-5.5	-7.5	-1.5
May-33	492.2	209.4	183.9	499.8	219.4	190.9	1,571,731	110,111	-10.0	-5.5	-7.5	-1.5
Jun-33	496.7	210.2	185.1	504.3	220.1	192.2	1,576,551	110,897	-10.0	-5.5	-7.6	-1.5
Jul-33	498.7	208.1	185.7	506.3	218.1	192.8	1,562,988	111,248	-10.0	-5.5	-7.6	-1.5
Aug-33	497.0	208.4	185.2	504.6	218.4	192.3	1,565,039	110,951	-10.0	-5.5	-7.6	-1.5
Sep-33	496.9	209.0	185.2	504.5	219.0	192.3	1,568,782	110,938	-10.0	-5.5	-7.6	-1.5
Oct-33	493.7	210.4	184.3	501.2	220.4	191.3	1,578,177	110,363	-10.0	-5.5	-7.5	-1.5
Nov-33	495.2	211.6	184.7	502.8	221.5	191.8	1,585,862	110,633	-10.0	-5.5	-7.6	-1.5
Dec-33	498.9	211.4	185.8	506.5	221.4	192.8	1,584,730	111,275	-10.0	-5.5	-7.6	-1.5
Jan-34	494.4	208.2	184.8	502.4	217.9	191.7	1,561,975	110,575	-9.7	-5.2	-8.0	-1.6
Feb-34	491.4	209.2	184.0	499.3	218.9	190.8	1,568,517	110,036	-9.7	-5.2	-7.9	-1.6
Mar-34	490.0	209.2	183.6	497.9	218.9	190.4	1,568,461	109,790	-9.7	-5.2	-7.9	-1.6
Apr-34	489.7	209.9	183.5	497.6	219.6	190.3	1,573,184	109,740	-9.7	-5.2	-7.9	-1.6
May-34	493.2	211.0	184.5	501.2	220.8	191.3	1,580,790	110,352	-9.7	-5.2	-8.0	-1.6
Jun-34	497.7	211.7	185.8	505.8	221.5	192.6	1,585,490	111,152	-9.7	-5.2	-8.0	-1.6
Jul-34	499.8	209.6	186.4	507.9	219.4	193.2	1,571,636	111,519	-9.7	-5.2	-8.1	-1.6
Aug-34	498.2	209.9	185.9	506.2	219.7	192.7	1,573,568	111,229	-9.7	-5.2	-8.0	-1.6
Sep-34	498.1	210.5	185.9	506.2	220.2	192.7	1,577,241	111,224	-9.7	-5.2	-8.0	-1.6
Oct-34	495.1	211.9	185.0	503.1	221.6	191.8	1,586,387	110,683	-9.7	-5.2	-8.0	-1.6
Nov-34	496.5	213.1	185.4	504.5	222.8	192.3	1,594,168	110,935	-9.7	-5.2	-8.0	-1.6
Dec-34	500.0	212.9	186.4	508.1	222.6	193.3	1,593,065	111,560	-9.7	-5.2	-8.1	-1.6
Jan-35	495.6	209.6	185.4	504.0	219.2	192.1	1,570,172	110,852	-9.6	-5.0	-8.5	-1.7
Feb-35	492.3	210.6	184.5	500.7	220.2	191.2	1,576,850	110,281	-9.6	-5.0	-8.4	-1.7
Mar-35	490.8	210.6	184.1	499.1	220.2	190.7	1,576,819	110,003	-9.6	-5.0	-8.4	-1.7
Apr-35	490.3	211.3	183.9	498.6	220.9	190.6	1,581,565	109,914	-9.6	-5.0	-8.4	-1.7
May-35	493.6	212.5	184.9	502.0	222.1	191.5	1,589,300	110,504	-9.6	-5.0	-8.4	-1.7
Jun-35	498.0	213.2	186.1	506.5	222.8	192.8	1,594,133	111,280	-9.6	-5.0	-8.5	-1.7
Jul-35	499.9	211.1	186.7	508.4	220.7	193.4	1,580,245	111,617	-9.6	-5.0	-8.5	-1.7
Aug-35	498.2	211.4	186.2	506.7	221.0	192.9	1,582,300	111,308	-9.6	-5.0	-8.5	-1.7
Sep-35	498.0	212.0	186.2	506.5	221.6	192.8	1,586,144	111,285	-9.6	-5.0	-8.5	-1.7
Oct-35	494.6	213.4	185.2	503.0	223.0	191.8	1,595,472	110,676	-9.6	-5.0	-8.5	-1.7
Nov-35	496.2	214.6	185.6	504.6	224.2	192.3	1,603,409	110,958	-9.6	-5.0	-8.5	-1.7
Dec-35	499.9	214.5	186.7	508.4	224.0	193.4	1,602,410	111,615	-9.6	-5.0	-8.5	-1.7

2020 CALIFORNIA GAS REPORT

NATURAL GAS VEHICLES

SDG&E 2020 CGR Workpapers

Each of the sheets provided support the calculation of the 2020 CGR throughput forecast through 2035.

Methodology: The forecasted throughput is estimated by taking the yearly meter growth multiplied by the average throughput per meter calculated based on the 2019 actuals. Some key assumptions are that:

1) The average throughput per meter is consistent through the forecast period, and
2) Meters are added at the same rate each year through 2035.

1. Description - SDGE G-NGV Forecast of Volumes and Meters

2. Data

SDGE Volume Forecast Growth				
Years	Volumes		Forecast Yearly % Change	
	Compressed	Uncompressed	Compressed	Uncompressed
	M Dtherms	M Dtherms	%	%
2020	45.5	2,061.2	N/A	N/A
2021	45.5	2,134.0	0%	4%
2022	45.5	2,206.8	0%	3%
2023	45.5	2,279.7	0%	3%
2024	45.5	2,352.5	0%	3%
2025	45.5	2,425.4	0%	3%
2026	45.5	2,498.2	0%	3%
2027	45.5	2,571.1	0%	3%
2028	45.5	2,643.9	0%	3%
2029	45.5	2,716.7	0%	3%
2030	45.5	2,789.6	0%	3%
2031	45.5	2,862.4	0%	3%
2032	45.5	2,935.3	0%	3%
2033	45.5	3,008.1	0%	2%
2034	45.5	3,080.9	0%	2%
2035	45.5	3,153.8	0%	2%

SDGE Monthly Volumes													
Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Compressed Volumes - Total (M Decatherms)													
2019	3	3	3	4	4	4	4	4	4	4	4	4	46
2020	3	3	3	4	4	4	4	4	4	4	4	4	46
2021	3	3	3	4	4	4	4	4	4	4	4	4	46
2022	3	3	3	4	4	4	4	4	4	4	4	4	46
2023	3	3	3	4	4	4	4	4	4	4	4	4	46
2024	3	3	3	4	4	4	4	4	4	4	4	4	46
2025	3	3	3	4	4	4	4	4	4	4	4	4	46
2026	3	3	3	4	4	4	4	4	4	4	4	4	46
2027	3	3	3	4	4	4	4	4	4	4	4	4	46
2028	3	3	3	4	4	4	4	4	4	4	4	4	46
2029	3	3	3	4	4	4	4	4	4	4	4	4	46
2030	3	3	3	4	4	4	4	4	4	4	4	4	46
2031	3	3	3	4	4	4	4	4	4	4	4	4	46
2032	3	3	3	4	4	4	4	4	4	4	4	4	46
2033	3	3	3	4	4	4	4	4	4	4	4	4	46
2034	3	3	3	4	4	4	4	4	4	4	4	4	46
2035	3	3	3	4	4	4	4	4	4	4	4	4	46
Compressed Volumes - Public Use (M Decatherms)													
2019 - Therms	31,856	30,586	31,916	38,003	40,235	36,376	38,742	40,751	38,250	41,586	35,879	40,825	445,005
2019 - M Dtherms	3	3	3	4	4	4	4	4	4	4	4	4	45
2020	3	3	3	4	4	4	4	4	4	4	4	4	45
2021	3	3	3	4	4	4	4	4	4	4	4	4	45
2022	3	3	3	4	4	4	4	4	4	4	4	4	45
2023	3	3	3	4	4	4	4	4	4	4	4	4	45
2024	3	3	3	4	4	4	4	4	4	4	4	4	45
2025	3	3	3	4	4	4	4	4	4	4	4	4	45
2026	3	3	3	4	4	4	4	4	4	4	4	4	45
2027	3	3	3	4	4	4	4	4	4	4	4	4	45
2028	3	3	3	4	4	4	4	4	4	4	4	4	45
2029	3	3	3	4	4	4	4	4	4	4	4	4	45
2030	3	3	3	4	4	4	4	4	4	4	4	4	45
2031	3	3	3	4	4	4	4	4	4	4	4	4	45

2032	3	3	3	4	4	4	4	4	4	4	4	4	45
2033	3	3	3	4	4	4	4	4	4	4	4	4	45
2034	3	3	3	4	4	4	4	4	4	4	4	4	45
2035	3	3	3	4	4	4	4	4	4	4	4	4	45
Compressed Volumes - Utility Use (M Decatherms)													
2019 - Therms	583	930	915	899	1,100	1,090	863	861	698	731	904	669	10,243
2019 - M Dtherms	0.058	0.093	0.092	0.09	0.11	0.109	0.086	0.086	0.07	0.073	0.09	0.067	1
2020	0.06	0.09	0.09	0.09	0.11	0.11	0.08	0.08	0.07	0.07	0.09	0.07	1
2021	0.06	0.09	0.09	0.09	0.11	0.11	0.08	0.08	0.07	0.07	0.09	0.07	1
2022	0.06	0.09	0.09	0.09	0.11	0.11	0.08	0.08	0.07	0.07	0.09	0.07	1
2023	0.06	0.09	0.09	0.09	0.11	0.11	0.08	0.08	0.07	0.07	0.09	0.07	1
2024	0.06	0.09	0.09	0.09	0.11	0.11	0.08	0.08	0.07	0.07	0.09	0.07	1
2025	0.06	0.09	0.09	0.09	0.11	0.11	0.08	0.08	0.07	0.07	0.09	0.07	1
2026	0.06	0.09	0.09	0.09	0.11	0.11	0.08	0.08	0.07	0.07	0.09	0.07	1
2027	0.06	0.09	0.09	0.09	0.11	0.11	0.08	0.08	0.07	0.07	0.09	0.07	1
2028	0.06	0.09	0.09	0.09	0.11	0.11	0.08	0.08	0.07	0.07	0.09	0.07	1
2029	0.06	0.09	0.09	0.09	0.11	0.11	0.08	0.08	0.07	0.07	0.09	0.07	1
2030	0.06	0.09	0.09	0.09	0.11	0.11	0.08	0.08	0.07	0.07	0.09	0.07	1
2031	0.06	0.09	0.09	0.09	0.11	0.11	0.08	0.08	0.07	0.07	0.09	0.07	1
2032	0.06	0.09	0.09	0.09	0.11	0.11	0.08	0.08	0.07	0.07	0.09	0.07	1
2033	0.06	0.09	0.09	0.09	0.11	0.11	0.08	0.08	0.07	0.07	0.09	0.07	1
2034	0.06	0.09	0.09	0.09	0.11	0.11	0.08	0.08	0.07	0.07	0.09	0.07	1
2035	0.06	0.09	0.09	0.09	0.11	0.11	0.08	0.08	0.07	0.07	0.09	0.07	1
Uncompressed Volumes - Total (M Decatherms)													
2019	152	157	153	162	163	167	167	172	177	176	176	166	1,988
2020	158	163	158	168	170	173	173	179	184	182	183	172	2,061
2021	164	169	164	174	176	179	179	185	190	188	189	178	2,134
2022	169	175	169	180	182	185	185	191	196	195	196	184	2,207
2023	175	181	175	186	188	192	191	197	203	201	202	189	2,280
2024	180	187	180	192	194	198	197	204	209	207	209	195	2,353
2025	186	193	186	198	200	204	202	210	215	213	216	201	2,425
2026	192	199	191	205	206	210	208	216	222	220	222	207	2,498
2027	197	205	197	211	213	217	214	223	228	226	229	213	2,571
2028	203	211	202	217	219	223	220	229	235	232	235	219	2,644

2029	209	217	208	223	225	229	226	235	241	238	242	224	2,717
2030	214	223	213	229	231	235	232	241	247	245	248	230	2,790
2031	220	229	219	235	237	242	238	248	254	251	255	236	2,862
2032	225	234	224	241	243	248	244	254	260	257	262	242	2,935
2033	231	240	230	247	250	254	250	260	266	263	268	248	3,008
2034	237	246	235	253	256	260	256	266	273	270	275	253	3,081
2035	242	252	241	259	262	267	262	273	279	276	281	259	3,154
Uncompressed Volumes - Utility Procurement Customers (M Decatherms)													
2019 - Therms	682,838	671,549	698,663	705,249	712,117	727,805	772,561	780,763	816,495	824,001	772,309	792,659	8,957,009
2019 - M Dtherms	68	67	70	71	71	73	77	78	82	82	77	79	896
2020	68	67	70	71	71	73	77	78	82	82	77	79	896
2021	68	67	70	71	71	73	77	78	82	82	77	79	896
2022	68	67	70	71	71	73	77	78	82	82	77	79	896
2023	68	67	70	71	71	73	77	78	82	82	77	79	896
2024	68	67	70	71	71	73	77	78	82	82	77	79	896
2025	68	67	70	71	71	73	77	78	82	82	77	79	896
2026	68	67	70	71	71	73	77	78	82	82	77	79	896
2027	68	67	70	71	71	73	77	78	82	82	77	79	896
2028	68	67	70	71	71	73	77	78	82	82	77	79	896
2029	68	67	70	71	71	73	77	78	82	82	77	79	896
2030	68	67	70	71	71	73	77	78	82	82	77	79	896
2031	68	67	70	71	71	73	77	78	82	82	77	79	896
2032	68	67	70	71	71	73	77	78	82	82	77	79	896
2033	68	67	70	71	71	73	77	78	82	82	77	79	896
2034	68	67	70	71	71	73	77	78	82	82	77	79	896
2035	68	67	70	71	71	73	77	78	82	82	77	79	896
Uncompressed Volumes - Customer Owned Gas (M Decatherms)													
2019 - Therms	841,584	896,485	827,884	913,814	922,257	937,975	894,582	941,908	955,661	935,753	988,047	870,268	10,926,218
2019 - M Dtherms	84	90	83	91	92	94	89	94	96	94	99	87	1,093
2020	90	96	88	97	98	100	95	100	102	100	105	93	1,165
2021	95	102	94	104	105	106	101	107	108	106	112	99	1,238
2022	101	108	99	110	111	113	107	113	115	112	119	104	1,311
2023	107	114	105	116	117	119	113	119	121	119	125	110	1,384
2024	112	120	110	122	123	125	119	126	127	125	132	116	1,457
2025	118	126	116	128	129	131	125	132	134	131	138	122	1,530

2026	123	131	121	134	135	138	131	138	140	137	145	128	1,603
2027	129	137	127	140	141	144	137	144	147	143	152	133	1,675
2028	135	143	132	146	148	150	143	151	153	150	158	139	1,748
2029	140	149	138	152	154	156	149	157	159	156	165	145	1,821
2030	146	155	143	158	160	163	155	163	166	162	171	151	1,894
2031	151	161	149	164	166	169	161	170	172	168	178	157	1,967
2032	157	167	155	171	172	175	167	176	178	175	184	162	2,040
2033	163	173	160	177	178	181	173	182	185	181	191	168	2,112
2034	168	179	166	183	184	188	179	188	191	187	198	174	2,185
2035	174	185	171	189	191	194	185	195	198	193	204	180	2,258

SDGE CGR Meter Forecast Through 2035					
Year	Uncompressed Meters Total	Compressed Pub Access Meters	Compressed Fleet Meters	**Total Meters**	
2014	25.0	3	3	31	Meters added per year 2020 through 2035
2015	29.0	3	3	35	
2016	30.0	3	3	36	
2017	31.0	3	3	37	
2018	29.0	3	3	31	
2019	27.0	3	3	33	
2020	27.4	3	3	33	0.4
2021	27.8	3	3	34	
2022	28.2	3	3	34	
2023	28.6	3	3	35	
2024	29.0	3	3	35	
2025	29.4	3	3	35	
2026	29.8	3	3	36	
2027	30.2	3	3	36	
2028	30.6	3	3	37	
2029	31.0	3	3	37	
2030	31.4	3	3	37	
2031	31.8	3	3	38	
2032	32.2	3	3	38	
2033	32.6	3	3	39	
2034	33.0	3	3	39	
2035	33.4	3	3	39	

SDG&E Compressed Company Usage

(Therms)	Dec-19	Nov-19	Oct-19	Sep-19	Aug-19	Jul-19	Jun-19	May-19	Apr-19	Mar-19	Feb-19	Jan-19
SDGE Cen.Cty	88	88	137	100	126	109	159	301	207	347	292	109
SDGE Northeast	473	473	298	330	411	454	612	384	343	301	250	426
SDGE Beach Cty	108	108	296	268	324	300	319	415	349	267	388	48

Average Annual therms	Average Annual M Dtherms per meter
10,008	**0.3336**

2020 CALIFORNIA GAS REPORT

ENERGY EFFICIENCY

	A	B	C	D	E	F	G	H	I	J	K
1	**SDG&E HISTORICAL AND FORECASTED EE SAVINGS**								**9/1/2020 8:53**		
2	**TAB**	**TAB DESCRIPTION**									
3	SDGE_2020_CGR_EE Portfolio	total portfolio forecast (includes C&S)	***SDGE_CUSTOMER PROGRAMS_TABLE 1***								
4	SDGE_2020_CGR_IOU Programs	total portfolio forecast (excludes)	***SDGE_CUSTOMER PROGRAMS_TABLE 2***								
5	SDGE_2020_CGR_C&S	C&S forecast	***SDGE_CUSTOMER PROGRAMS_TABLE 3***								
6											
7											
8	***METHODOLOGY***										
9		2006-2029 reported EE savings									
10		2017-2019 reported EE savings adjusted for forecasted measurement and evaluation impacts									
11		2020 utilized filing savings adjusted to reflect historical savings									
12		2021-2030 savings based on PUC forecast (D.19-08-034)									
13		2031-2040 savings based on 2030 saving forecast									
14		All savings allocated to Gas classification									
15		All savings are converted to MMDth and MMCF									
16		Converted MMDth and MMCF savings are cumulated starting with 2020 EE savings and adjusted down to reflect average EE measure life of 10 years.									
17											
18											
19											

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1		**SDG&E HISTORICAL AND FORECASTED EE SAVINGS**					*Methodology under notation located toward the bottom of the sheet*										
2		*SDGE_CUSTOMER PROGRAMS_TABLE 1*															
3		TOTAL PORTFOLIO	Reported	Reported	Reported	Reported	Reported	Reported	Reported	Reported	Reported	Reported	Reported	Reported	Reported	Reported	Forecast
4	LINE NO		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
5			Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms
6	1	**SDGE EE Program TOTAL**	1,652,856	3,141,304	3,146,590	4,764,177	628,756	1,365,631	1,713,642	843,335	2,171,447	1,779,769	3,276,288	3,995,539	1,375,439	2,187,693	3,950,763
7	2	**PUC Goal**	2,700,000	3,100,000	3,700,000	4,100,000	3,500,000	3,800,000	4,100,000	2,200,000	2,100,000	2,500,000	3,200,000	3,300,000	3,300,000	3,600,000	3,500,000
8	3	**Difference**	(1,047,144)	41,304	(553,410)	664,177	(2,871,244)	(2,434,369)	(2,386,358)	(1,356,665)	71,447	(720,231)	76,288	695,539	(1,924,561)	(1,412,307)	450,763
9	4																
10	5		**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
11	6	SDGE	therms	therms	therms	therms	therms	therms	therms	therms	therms	therms	therms	therms	therms	therms	therms
12	7	Core Residential	505,394	891,146	906,495	1,127,509	(793,637)	161,413	(698,947)	-82,037	191,340	-111,638	2,345,725	1,145,150	846,721	1,711,144	2,432,092
13	8	Core Commercial	1,011,317	1,903,160	1,974,310	3,205,162	1,253,620	1,061,339	2,126,338	801,370	1,521,143	1,423,470	910,910	2,414,552	440,407	404,250	1,265,009
14	9	Core Industrial	20,715	40,621	40,439	65,651	25,678	21,739	43,553	2,651	45,276	49,289	19,653	19,185	5,086	3,090	14,609
15	10	NonCore Commercial	11,543	22,636	22,535	36,584	14,309	12,111	24,270	109,278	207,429	194,110	0	329,257	60,055	55,126	172,501
16	11	NonCore Industrial retail	103,887	203,722	202,811	329,252	128,779	109,026	218,428	12,075	206,259	224,539	0	87,396	23,170	14,076	66,552
17	12	NonCore Industrial refinery	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	13	**Total**	**1,652,856**	**3,141,304**	**3,146,590**	**4,764,177**	**628,756**	**1,365,631**	**1,713,642**	**843,335**	**2,171,447**	**1,779,769**	**3,276,288**	**3,995,539**	**1,375,439**	**2,187,693**	**3,950,763**
19	14																
20	15																
21	16		**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
22	17	**ANNUAL NET SAVINGS**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**
23	18	Core Residential	51	89	91	113	(79)	16	(70)	(8)	19	(11)	235	115	85	171	243
24	19	Core Commercial	101	198	197	321	125	106	213	80	152	142	91	241	44	40	127
25	20	Core Industrial	2	4	4	7	3	2	4	0	5	5	2	2	1	0	1
26	21	NonCore Commercial	1	2	2	4	1	1	2	11	21	19	-	33	6	6	17
27	22	NonCore Industrial retail	10	20	20	33	13	11	22	1	21	22	-	9	2	1	7
28	23	NonCore Industrial refinery	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	24	**Total**	**165**	**314**	**315**	**476**	**63**	**137**	**171**	**84**	**217**	**178**	**328**	**400**	**138**	**219**	**395**
30	25																
31	26																
32	27								**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
33	28	**Cumulative Savings Mdth**							**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**
34	29	**Core Residential**															243
35	30	**Core Commercial**															127
36	31	**Core Industrial**															1
37	32	**NonCore Commercial**															17
38	33	**NonCore Industrial regular**															7
39	34	**NonCore Industrial refinery**											1.0320				-
40	35	**Total Load Impacts**															**395**
41	36																
42	37												MMCF factor:	**1.032**			
43	38								2012	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
44	39	**Cumulative Savings MMCF**							mmcf	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**
45	40	**Core Residential**							-		-	-	-	-	-	-	236
46	41	**Core Commercial**							-		-	-	-	-	-	-	123
47	42	**Core Industrial**							-		-	-	-	-	-	-	1
48	43	**NonCore Commercial**							-		-	-	-	-	-	-	17
49	44	**NonCore Industrial regular**							-		-	-	-	-	-	-	6
50	45	**NonCore Industrial refinery**							-		-	-	1	-	-	-	-
51	46	**Total Cumulative Load**							-		**-**	**-**	**1**	**-**	**-**	**-**	**383**

	A	B	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK
1		**SDG&E HISTORICAL AND FORECASTED EE SAVINGS**																				
2		*SDGE_CUSTOMER PROGRAMS_TABLE 1*																				
3		TOTAL PORTFOLIO	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
4	LINE NO		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
5			Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms
6	1	**SDGE EE Program TOTAL**																				
7	2	**PUC Goal**	3,700,000	3,800,000	3,900,000	4,000,000	4,000,000	3,800,000	3,700,000	3,700,000	3,600,000	3,700,000	3,700,000	3,700,000	3,700,000	3,700,000	3,700,000	3,700,000	3,700,000	3,700,000	3,700,000	3,700,000	3,700,000
8	3	**Difference**																				
9	4																					
10	5																					
11	6	**SDGE**																				
12	7	Core Residential	64.2%	61.4%	65.7%	68.1%	69.4%	70.3%	71.2%	71.9%	72.3%	72.7%	72.7%	72.7%	72.7%	72.7%	72.7%	72.7%	72.7%	72.7%	72.7%	72.7%
13	8	Core Commercial	28.3%	30.5%	27.3%	26.7%	24.7%	24.1%	23.4%	22.9%	22.6%	22.4%	22.4%	22.4%	22.4%	22.4%	22.4%	22.4%	22.4%	22.4%	22.4%	22.4%
14	9	Core Industrial	0.6%	0.7%	0.6%	0.5%	0.5%	0.4%	0.4%	0.4%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
15	10	NonCore Commercial	3.9%	4.2%	3.7%	3.5%	3.4%	3.3%	3.2%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%
16	11	NonCore Industrial retail	2.9%	3.2%	2.7%	2.2%	2.1%	2.0%	1.8%	1.7%	1.6%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
17	12	NonCore Industrial refinery	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
18	13	**Total**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
19	14																					
20	15																					
21	16		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
22	17	**ANNUAL NET SAVINGS**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**
23	18	Core Residential	238	233	256	272	277	267	263	266	260	269	269	269	269	269	269	269	269	269	269	269
24	19	Core Commercial	105	116	106	103	99	91	87	85	81	83	83	83	83	83	83	83	83	83	83	83
25	20	Core Industrial	2	3	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26	21	NonCore Commercial	14	16	15	14	13	12	12	12	11	11	11	11	11	11	11	11	11	11	11	11
27	22	NonCore Industrial retail	11	12	11	9	8	7	7	6	6	6	6	6	6	6	6	6	6	6	6	6
28	23	NonCore Industrial refinery	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	24	**Total**	**370**	**380**	**390**	**400**	**400**	**380**	**370**	**370**	**360**	**370**	**370**	**370**	**370**	**370**	**370**	**370**	**370**	**370**	**370**	**370**
30	25																					
31	26																					
32	27		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
33	28	**Cumulative Savings Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**
34	29	Core Residential	481	714	970	1,243	1,520	1,787	2,050	2,316	2,577	2,602	2,634	2,669	2,682	2,679	2,670	2,672	2,678	2,681	2,689	2,689
35	30	Core Commercial	231	347	454	556	655	747	833	918	1,000	956	934	901	878	858	842	833	830	828	829	829
36	31	Core Industrial	4	7	9	11	13	14	16	17	18	18	17	16	15	14	13	13	13	12	12	12
37	32	NonCore Commercial	32	47	62	76	89	102	114	125	136	130	127	123	120	117	115	114	113	113	113	113
38	33	NonCore Industrial regular	18	30	40	49	58	65	72	78	84	83	78	71	66	63	60	58	57	56	56	56
39	34	NonCore Industrial refinery	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	35	**Total Load Impacts**	**765**	**1,145**	**1,535**	**1,935**	**2,335**	**2,715**	**3,085**	**3,455**	**3,815**	**3,790**	**3,790**	**3,780**	**3,760**	**3,730**	**3,700**	**3,690**	**3,690**	**3,690**	**3,700**	**3,700**
41	36																					
42	37																					
43	38		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
44	39	**Cumulative Savings MMCF**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**
45	40	Core Residential	466	692	940	1,204	1,473	1,732	1,987	2,244	2,497	2,522	2,552	2,587	2,599	2,596	2,587	2,589	2,595	2,598	2,606	2,606
46	41	Core Commercial	224	337	440	539	635	724	808	890	969	926	905	873	850	831	816	808	804	802	803	803
47	42	Core Industrial	4	6	9	10	12	14	15	17	18	18	17	15	14	13	13	12	12	12	12	12
48	43	NonCore Commercial	31	46	60	74	87	99	110	121	132	126	123	119	116	113	111	110	110	109	110	110
49	44	NonCore Industrial regular	17	29	39	48	56	63	70	76	81	80	75	69	64	61	58	56	55	55	54	54
50	45	NonCore Industrial refinery	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51	46	**Total Cumulative Load**	**741**	**1,110**	**1,487**	**1,875**	**2,263**	**2,631**	**2,989**	**3,348**	**3,697**	**3,672**	**3,672**	**3,663**	**3,643**	**3,614**	**3,585**	**3,576**	**3,576**	**3,576**	**3,585**	**3,585**

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1		**SDG&E HISTORICAL AND FORECASTED EE SAVINGS**				*Methodology under notation located toward the bottom of the sheet*											
2		*SDGE_CUSTOMER PROGRAMS_TABLE 2*															
3		**INCENTIVE PROGRAMS**	**Reported**	**Reported**	**Reported**	**Reported**	**Reported**	**Reported**	**Reported**	**Reported**	**Reported**	**Reported**	**Reported**	**Reported**	**Reported**	**Reported**	**Forecast**
4	LINE NO		**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
5			**Therms**	**Therms**	**Therms**	**Therms**	**Therms**	**Therms**	**Therms**	**Therms**	**Therms**	**Therms**	**Therms**	**Therms**	**Therms**	**Therms**	**Therms**
6	1	**SDGE EE Program TOTAL**	1,652,856	3,141,304	3,146,590	4,764,177	628,756	1,365,631	1,713,642	843,335	2,171,447	1,779,769	3,140,131	100,740	(324,029)	489,294	1,180,678
7	2	**PUC Goal**	2,700,000	3,100,000	3,700,000	4,100,000	3,500,000	3,800,000	4,100,000	2,200,000	2,100,000	2,500,000	3,200,000	2,700,000	1,700,000	2,000,000	2,000,000
8	3	**Difference**	(1,047,144)	41,304	(553,410)	664,177	(2,871,244)	(2,434,369)	(2,386,358)	(1,356,665)	71,447	(720,231)	(59,869)	(2,599,260)	(2,024,029)	(1,510,706)	(819,322)
9	4																
10	5		**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
11	6	SDGE	**therms**	**therms**	**therms**	**therms**	**therms**	**therms**	**therms**	**therms**	**therms**	**therms**	**therms**	**therms**	**therms**	**therms**	**therms**
12	7	Core Residential	505,394	891,146	906,495	1,127,509	(793,637)	161,413	(698,947)	-82,037	191,340	-111,638	2,248,240	(470,132)	(469,436)	291,392	726,826
13	8	Core Commercial	1,011,317	1,983,180	1,974,310	3,205,182	1,253,628	1,061,339	2,126,338	801,370	1,521,143	1,423,470	873,054	469,845	103,093	159,048	378,045
14	9	Core Industrial	20,715	40,621	40,439	65,651	25,678	21,739	43,553	2,651	45,276	49,289	18,836	6,652	5,086	3,090	4,366
15	10	NonCore Commercial	11,543	22,636	22,535	36,584	14,309	12,114	24,270	109,278	207,429	194,110	-	64,070	14,058	21,688	51,552
16	11	NonCore Industrial retail	103,887	203,722	202,811	329,252	128,779	109,026	218,428	12,075	206,259	224,539	-	30,305	23,170	14,076	19,889
17	12	NonCore Industrial refinery	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	13	**Total**	**1,652,856**	**3,141,304**	**3,146,590**	**4,764,177**	**628,756**	**1,365,631**	**1,713,642**	**843,335**	**2,171,447**	**1,779,769**	**3,140,131**	**100,740**	**(324,029)**	**489,294**	**1,180,678**
19	14																
20	15																
21	16		**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
22	17	**ANNUAL NET SAVINGS**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**
23	18	Core Residential	51	89	91	113	(79)	16	(70)	(8)	19	(11)	225	(47)	(47)	29	73
24	19	Core Commercial	101	198	197	321	125	106	213	80	152	142	87	47	10	16	38
25	20	Core Industrial	2	4	4	7	3	2	4	0	5	5	2	1	1	0	0
26	21	NonCore Commercial	1	2	2	4	1	1	2	11	21	19	-	6	1	2	5
27	22	NonCore Industrial retail	10	20	20	33	13	11	22	1	21	22	-	3	2	1	2
28	23	NonCore Industrial refinery	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	24	**Total**	**165**	**314**	**315**	**476**	**63**	**137**	**171**	**84**	**217**	**178**	**314**	**10**	**(32)**	**49**	**118**
30	25																
31	26																
32	27								**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
33	28	**Cumulative Savings Mdth**							**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**
34	29	**Core Residential**															73
35	30	**Core Commercial**															38
36	31	**Core Industrial**															0
37	32	**NonCore Commercial**															5
38	33	**NonCore Industrial regular**															2
39	34	**NonCore Industrial refinery**															-
40	35	**Total Load Impacts**															**118**
41	36																
42	37											MMCF factor:	**1.032**				
43	38								2012	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
44	39	**Cumulative Savings MMCF**							mmcf	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**
45	40	**Core Residential**							-		-	-	-	-	-	-	70
46	41	**Core Commercial**							-		-	-	-	-	-	-	37
47	42	**Core Industrial**							-		-	-	-	-	-	-	0
48	43	**NonCore Commercial**							-		-	-	-	-	-	-	5
49	44	**NonCore Industrial regular**							-		-	-	-	-	-	-	2
50	45	**NonCore Industrial refinery**							-		-	-	-	-	-	-	-
51	46	**Total Cumulative Load**							-		**-**	**-**	**-**	**-**	**-**	**-**	**114**

	A	B	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK
1		**SDG&E HISTORICAL AND FORECASTED EE SAVINGS**																				
2		***SDGE CUSTOMER PROGRAMS TABLE 2***																				
3		**INCENTIVE PROGRAMS**	**Forecast**	**Forecast**	**Forecast**	**Forecast**	**Forecast**	**Forecast**	**Forecast**	**Forecast**	**Forecast**	**Forecast**	**Forecast**	**Forecast**	**Forecast**	**Forecast**	**Forecast**	**Forecast**	**Forecast**	**Forecast**	**Forecast**	**Forecast**
4	LINE NO		**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**	**2037**	**2038**	**2039**	**2040**
5			**Therms**	**Therms**	**Therms**	**Therms**	**Therms**	**Therms**	**Therms**	**Therms**	**Therms**	**Therms**	**Therms**	**Therms**	**Therms**	**Therms**	**Therms**	**Therms**	**Therms**	**Therms**	**Therms**	**Therms**
6	1	**SDGE EE Program TOTAL**																				
7	2	**PUC Goal**	2,200,000	2,200,000	2,300,000	2,300,000	2,400,000	2,500,000	2,500,000	2,600,000	2,700,000	2,800,000	2,800,000	2,800,000	2,800,000	2,800,000	2,800,000	2,800,000	2,800,000	2,800,000	2,800,000	2,800,000
8	3	**Difference**																				
9	4																					
10	5																					
11	6	SDGE																				
12	7	Core Residential	64.2%	61.4%	65.7%	68.1%	69.4%	70.3%	71.2%	71.9%	72.3%	72.7%	72.7%	72.7%	72.7%	72.7%	72.7%	72.7%	72.7%	72.7%	72.7%	72.7%
13	8	Core Commercial	28.3%	30.5%	27.3%	25.7%	24.7%	24.1%	23.4%	22.9%	22.6%	22.4%	22.4%	22.4%	22.4%	22.4%	22.4%	22.4%	22.4%	22.4%	22.4%	22.4%
14	9	Core Industrial	0.6%	0.7%	0.6%	0.5%	0.5%	0.4%	0.4%	0.4%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
15	10	NonCore Commercial	3.9%	4.2%	3.7%	3.5%	3.4%	3.3%	3.2%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%
16	11	NonCore Industrial retail	2.9%	3.2%	2.7%	2.2%	2.1%	2.0%	1.8%	1.7%	1.6%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
17	12	NonCore Industrial refinery	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
18	13	**Total**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
19	14																					
20	15																					
21	16		**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**	**2037**	**2038**	**2039**	**2040**
22	17	**ANNUAL NET SAVINGS**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**
23	18	Core Residential	141	135	151	157	166	176	178	187	195	204	204	204	204	204	204	204	204	204	204	204
24	19	Core Commercial	62	67	63	59	59	60	59	60	61	63	63	63	63	63	63	63	63	63	63	63
25	20	Core Industrial	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26	21	NonCore Commercial	9	9	9	8	8	8	8	8	8	9	9	9	9	9	9	9	9	9	9	9
27	22	NonCore Industrial retail	6	7	6	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4
28	23	NonCore Industrial refinery	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	24	**Total**	**220**	**220**	**230**	**230**	**240**	**250**	**250**	**260**	**270**	**280**	**280**	**280**	**280**	**280**	**280**	**280**	**280**	**280**	**280**	**280**
30	25																					
31	26																					
32	27		**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**	**2037**	**2038**	**2039**	**2040**
33	28	**Cumulative Savings Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**	**Mdth**
34	29	**Core Residential**	214	349	500	657	823	999	1,177	1,364	1,559	1,690	1,752	1,820	1,873	1,920	1,957	1,985	2,010	2,027	2,035	2,035
35	30	**Core Commercial**	100	167	230	289	348	409	467	527	588	613	613	609	609	612	616	618	623	626	627	627
36	31	**Core Industrial**	2	3	5	6	7	8	9	10	11	12	11	10	10	10	10	9	9	9	9	9
37	32	**NonCore Commercial**	14	23	31	39	48	56	64	72	80	84	84	83	83	84	84	84	85	85	86	86
38	33	**NonCore Industrial regular**	8	15	22	27	32	37	41	46	50	52	50	47	45	44	44	43	43	43	43	43
39	34	**NonCore Industrial refinery**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	35	**Total Load Impacts**	**338**	**558**	**788**	**1,018**	**1,258**	**1,508**	**1,758**	**2,018**	**2,288**	**2,450**	**2,510**	**2,570**	**2,620**	**2,670**	**2,710**	**2,740**	**2,770**	**2,790**	**2,800**	**2,800**
41	36																					
42	37																					
43	38		**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**	**2037**	**2038**	**2039**	**2040**
44	39	**Cumulative Savings MMCF**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**	**mmcf**
45	40	**Core Residential**	207	338	485	636	798	968	1,140	1,321	1,511	1,637	1,698	1,764	1,815	1,860	1,896	1,923	1,948	1,964	1,972	1,972
46	41	**Core Commercial**	97	162	223	280	338	396	453	510	570	594	594	590	590	593	597	599	603	606	608	608
47	42	**Core Industrial**	2	3	5	6	7	8	9	10	11	11	11	10	10	9	9	9	9	9	9	9
48	43	**NonCore Commercial**	13	22	30	38	46	54	62	70	78	81	81	80	80	81	81	82	82	83	83	83
49	44	**NonCore Industrial regular**	8	15	21	26	31	36	40	44	49	51	49	46	44	43	42	42	41	41	41	41
50	45	**NonCore Industrial refinery**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51	46	**Total Cumulative Load**	**328**	**541**	**764**	**986**	**1,219**	**1,461**	**1,704**	**1,955**	**2,217**	**2,374**	**2,432**	**2,490**	**2,539**	**2,587**	**2,626**	**2,655**	**2,684**	**2,703**	**2,713**	**2,713**

SDG&E HISTORICAL AND FORECASTED EE SAVINGS

Methodology under notation located toward the bottom of the sheet

SDGE_CUSTOMER PROGRAMS_TABLE 3

		CODES AND STANDARDS	Reported 2006 Therms	Reported 2007 Therms	Reported 2008 Therms	Reported 2009 Therms	Reported 2010 Therms	Reported 2011 Therms	Reported 2012 Therms	Reported 2013 Therms	Reported 2014 Therms	Reported 2015 Therms	Reported 2016 Therms	Reported 2017 Therms	Reported 2018 Therms	Reported 2019 Therms	Forecast 2020 Therms
1		**SDGE EE Program TOTAL**	1,652,856	3,141,304	3,146,590	4,764,177	628,756	1,365,631	1,713,642	843,335	2,171,447	1,779,769	3,596,770	2,500,764	1,699,468	1,698,399	2,770,086
2		**PUC Goal**	2,700,000	3,100,000	3,700,000	4,100,000	3,500,000	3,800,000	4,100,000	2,200,000	2,100,000	2,500,000	3,200,000	600,000	1,600,000	1,600,000	1,500,000
3		**Difference**	(1,047,144)	41,304	(553,410)	664,177	(2,871,244)	(2,434,369)	(2,386,358)	(1,356,665)	71,447	(720,231)	396,770	1,900,764	99,468	98,399	1,270,086
4																	
5			2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
6		SDGE	therms	therms	therms	therms	therms	therms	therms	therms	therms	therms	therms	therms	therms	therms	therms
7		Core Residential	505,394	891,146	906,495	1,127,509	(793,637)	161,413	(698,947)	-82,037	191,340	-111,638	2,575,181	1,037,137	1,316,157	1,419,752	1,705,266
8		Core Commercial	1,011,317	1,983,180	1,974,310	3,205,182	1,253,628	1,061,339	2,126,338	801,370	1,521,143	1,423,470	1,000,014	1,248,653	337,314	245,209	886,964
9		Core Industrial	20,715	40,621	40,439	65,651	25,678	21,739	43,553	2,651	45,276	49,289	21,576	8,047	0	0	10,243
10		NonCore Commercial	11,543	22,636	22,535	36,584	14,309	12,114	24,270	109,278	207,429	194,110	-	170,271	45,997	33,438	120,950
11		NonCore Industrial retail	103,887	203,722	202,811	329,252	128,779	109,026	218,428	12,075	206,259	224,539	-	36,657	0	0	46,663
12		NonCore Industrial refinery	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13		**Total**	**1,652,856**	**3,141,304**	**3,146,590**	**4,764,177**	**628,756**	**1,365,631**	**1,713,642**	**843,335**	**2,171,447**	**1,779,769**	**3,596,770**	**2,500,764**	**1,699,468**	**1,698,399**	**2,770,086**
14																	
15																	
16			2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
17		**ANNUAL NET SAVINGS**	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth
18		Core Residential	51	89	91	113	(79)	16	(70)	(8)	19	(11)	258	104	132	142	171
19		Core Commercial	101	198	197	321	125	106	213	80	152	142	100	125	34	25	89
20		Core Industrial	2	4	4	7	3	2	4	0	5	5	2	1	-	-	1
21		NonCore Commercial	1	2	2	4	1	1	2	11	21	19	-	17	5	3	12
22		NonCore Industrial retail	10	20	20	33	13	11	22	1	21	22	-	4	-	-	5
23		NonCore Industrial refinery	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24		**Total**	**165**	**314**	**315**	**476**	**63**	**137**	**171**	**84**	**217**	**178**	**360**	**250**	**170**	**170**	**277**
25																	
26																	
27									2012	2013	2014	2015	2016	2017	2018	2019	2020
28		**Cumulative Savings Mdth**							Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth
29		**Core Residential**															171
30		**Core Commercial**															89
31		**Core Industrial**															1
32		**NonCore Commercial**															12
33		**NonCore Industrial regular**															5
34		**NonCore Industrial refinery**															-
35		**Total Load Impacts**															**277**
36																	
37												MMCF factor:	1.032				
38									2012	2013	2014	2015	2016	2017	2018	2019	2020
39		**Cumulative Savings MMCF**							mmcf	mmcf	mmcf	mmcf	mmcf	mmcf	mmcf	mmcf	mmcf
40		**Core Residential**							-		-	-	-	-	-	-	165
41		**Core Commercial**							-		-	-	-	-	-	-	86
42		**Core Industrial**							-		-	-	-	-	-	-	1
43		**NonCore Commercial**							-		-	-	-	-	-	-	12
44		**NonCore Industrial regular**							-		-	-	-	-	-	-	5
45		**NonCore Industrial refinery**							-		-	-	-	-	-	-	-
46		**Total Cumulative Load**							-		**-**	**-**	**-**	**-**	**-**	**-**	**268**

	A	B	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AC	AH	AI	AJ	AK
1		SDG&E HISTORICAL AND FORECASTED EE SAVINGS																				
2		*SDGE_CUSTOMER PROGRAMS_TABLE 3*																				
3		CODES AND STANDARDS	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
4			2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
5			Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms	Therms
6	1	SDGE EE Program TOTAL																				
7	2	PUC Goal	1,600,000	1,600,000	1,600,000	1,700,000	1,600,000	1,300,000	1,200,000	1,100,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000
8	3	Difference																				
9	4																					
10	5																					
11	6	SDGE																				
12	7	Core Residential	64.2%	61.4%	65.7%	68.1%	69.4%	70.3%	71.2%	71.9%	72.3%	72.7%	72.7%	72.7%	72.7%	72.7%	72.7%	72.7%	72.7%	72.7%	72.7%	72.7%
13	8	Core Commercial	28.3%	30.5%	27.3%	25.7%	24.7%	24.1%	23.4%	22.9%	22.6%	22.4%	22.4%	22.4%	22.4%	22.4%	22.4%	22.4%	22.4%	22.4%	22.4%	22.4%
14	9	Core Industrial	0.6%	0.7%	0.6%	0.5%	0.5%	0.4%	0.4%	0.4%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
15	10	NonCore Commercial	3.9%	4.2%	3.7%	3.5%	3.4%	3.3%	3.2%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%
16	11	NonCore Industrial retail	2.9%	3.2%	2.7%	2.2%	2.1%	2.0%	1.8%	1.7%	1.6%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
17	12	NonCore Industrial refinery	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
18	13	Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
19	14																					
20	15																					
21	16		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
22	17	ANNUAL NET SAVINGS	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth
23	18	Core Residential	96	98	105	116	111	91	85	79	65	65	65	65	65	65	65	65	65	65	65	65
24	19	Core Commercial	40	49	44	44	40	31	20	25	20	20	20	20	20	20	20	20	20	20	20	20
25	20	Core Industrial	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	21	NonCore Commercial	6	7	6	6	5	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3
27	22	NonCore Industrial retail	4	5	4	4	3	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1
28	23	NonCore Industrial refinery	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	24	Total	150	160	160	170	160	130	120	110	90	90	90	90	90	90	90	90	90	90	90	90
30	25																					
31	26																					
32	27		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
33	28	Cumulative Savings Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth	Mdth
34	29	Core Residential	267	365	470	586	697	788	874	953	1,018	913	882	849	809	759	713	687	667	654	654	654
35	30	Core Commercial	131	180	224	267	307	338	366	391	412	343	321	292	269	245	226	215	207	202	202	202
36	31	Core Industrial	2	3	4	5	6	6	7	7	7	7	6	5	5	4	4	3	3	3	3	3
37	32	NonCore Commercial	18	25	30	36	42	46	50	53	56	47	44	40	37	33	31	29	28	28	28	28
38	33	NonCore Industrial regular	9	14	19	22	26	28	30	32	34	30	27	24	21	18	16	15	14	14	14	14
39	34	NonCore Industrial refinery	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	35	Total Load Impacts	427	587	747	917	1,077	1,207	1,327	1,437	1,527	1,340	1,280	1,210	1,140	1,060	990	950	920	900	900	900
41	36																					
42	37																					
43	38		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
44	39	Cumulative Savings MMCF	mmcf	mmcf	mmcf	mmcf	mmcf	mmcf	mmcf	mmcf	mmcf	mmcf	mmcf	mmcf	mmcf	mmcf	mmcf	mmcf	mmcf	mmcf	mmcf	mmcf
45	40	Core Residential	259	354	456	568	675	764	847	923	986	884	854	823	784	735	691	666	647	634	634	634
46	41	Core Commercial	127	174	217	259	297	328	355	379	399	333	311	283	261	238	219	208	201	196	195	195
47	42	Core Industrial	2	3	4	5	5	6	6	7	7	6	6	5	4	4	3	3	3	3	3	3
48	43	NonCore Commercial	17	24	30	35	41	45	48	52	54	45	42	39	36	32	30	28	27	27	27	27
49	44	NonCore Industrial regular	9	14	18	22	25	27	30	31	33	30	27	23	20	18	16	15	14	13	13	13
50	45	NonCore Industrial refinery	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51	46	Total Cumulative Load	414	569	724	889	1,044	1,170	1,286	1,392	1,480	1,298	1,240	1,172	1,105	1,027	959	921	891	872	872	872

55		
56	[redacted]	
57		NOTATION 9/1/2020 8:53
58	LINE NO	DESCRIPTION
59	1	2006-2015 years: recorded savings from prior submittaL | 2016 -2017 exante net savings x Realization Rate | 2018-2019 Exante Net savings | 2020 : 2020 ABAL filing forecast adjusted to 2017 &2018 reported savings
60	2	2010-2012 : Decision 09-09-047 |2013-2014 Decision 12-11-015 |2015 Decision 14-10-046 |2016-2017 D. 15-10-028 |2018-2019 D. Decision 17-09-025 |2020-2030 Decision 19-08-034 August 15, 2019 2031-2040 |2030 value
61	7-13	2006-2015 recorded savings |2016-2017 exante net savings x Realization Rate |2018-2019 Exante Net savings |2020 ABAL filing forecast adjusted to 2017&2018 reported savings| 2021-2030 Splits based on 2019 IEPR forecast for therms adjusted to gas classification |2031-2040 based on 2030 splits
62	18-24	2006-2020 Conversion of Line 7-13 therms to MDth | 2021-2030 Goals (line 2) x 2019 IEPR forecast allocation factors in MDth |2031-2040 2030 Goals and allocations factors
63	29-35	Cumulative savings starting in 2020 adjusted down to reflect avg savings life of 10 years
64	40-46	Cumulative savings starting in 2020 adjusted down to reflect avg savings life of 10 years
65	[redacted]	

2020 CALIFORNIA GAS REPORT

Electric Generation

Please refer to SoCalGas' 2020 California Gas Report workpapers for detail on the documentation regarding non-cogen EG forecasting.

2020 CALIFORNIA GAS REPORT

CORE PEAKDAY FORECAST

SDG&E Monthly Heating Degree Day (HDD) Weather Designs					
Month	Cold		Average	Hot	
	1-in-35 Design	1-in-10 Design		1-in-10 Design	1-in-35 Design
Jan-2019	287.6	272.4	243.8	215.2	200.0
Feb-2019	253.5	240.1	214.9	189.7	176.3
Mar-2019	197.6	187.1	167.5	147.9	137.4
Apr-2019	129.0	122.2	109.3	96.5	89.7
May-2019	58.1	55.0	49.2	43.5	40.4
Jun-2019	10.7	10.2	9.1	8.0	7.5
Jul-2019	0.6	0.6	0.6	0.5	0.5
Aug-2019	0.1	0.1	0.1	0.0	0.0
Sep-2019	0.9	0.8	0.8	0.7	0.6
Oct-2019	26.8	25.4	22.7	20.0	18.6
Nov-2019	131.8	124.8	111.7	98.6	91.7
Dec-2019	302.4	286.4	256.3	226.3	210.3
Jan-2020	287.2	272.0	243.4	214.8	199.6
Feb-2020	253.1	239.7	214.5	189.3	175.9
Mar-2020	197.3	186.9	167.2	147.6	137.1
Apr-2020	128.8	122.0	109.2	96.3	89.5
May-2020	58.0	54.9	49.1	43.4	40.3
Jun-2020	10.7	10.2	9.1	8.0	7.5
Jul-2020	0.6	0.6	0.5	0.5	0.5
Aug-2020	0.1	0.1	0.0	0.0	0.0
Sep-2020	0.9	0.8	0.7	0.7	0.6
Oct-2020	26.7	25.3	22.7	20.0	18.6
Nov-2020	131.6	124.7	111.6	98.5	91.5
Dec-2020	302.0	286.0	255.9	225.9	209.9
Jan-2021	286.8	271.5	243.0	214.4	199.2
Feb-2021	252.7	239.3	214.2	189.0	175.6
Mar-2021	197.0	186.6	166.9	147.3	136.9
Apr-2021	128.6	121.8	109.0	96.2	89.3
May-2021	57.9	54.8	49.1	43.3	40.2
Jun-2021	10.7	10.1	9.1	8.0	7.4
Jul-2021	0.6	0.6	0.5	0.5	0.4
Aug-2021	0.1	0.1	0.0	0.0	0.0
Sep-2021	0.9	0.8	0.7	0.7	0.6
Oct-2021	26.7	25.3	22.6	20.0	18.6
Nov-2021	131.4	124.5	111.4	98.3	91.3
Dec-2021	301.5	285.5	255.5	225.4	209.4
Jan-2022	286.3	271.1	242.6	214.0	198.8
Feb-2022	252.4	239.0	213.8	188.6	175.2
Mar-2022	196.8	186.3	166.7	147.0	136.6
Apr-2022	128.4	121.6	108.8	96.0	89.2
May-2022	57.8	54.7	49.0	43.2	40.1
Jun-2022	10.7	10.1	9.1	8.0	7.4
Jul-2022	0.6	0.6	0.5	0.5	0.4
Aug-2022	0.1	0.1	0.0	0.0	0.0
Sep-2022	0.9	0.8	0.7	0.7	0.6
Oct-2022	26.7	25.3	22.6	19.9	18.5
Nov-2022	131.2	124.3	111.2	98.1	91.1
Dec-2022	301.1	285.1	255.1	225.0	209.0
Jan-2023	285.9	270.7	242.1	213.6	198.4
Feb-2023	252.0	238.6	213.4	188.2	174.8
Mar-2023	196.5	186.0	166.4	146.8	136.3
Apr-2023	128.2	121.4	108.6	95.8	89.0
May-2023	57.7	54.7	48.9	43.1	40.0
Jun-2023	10.7	10.1	9.0	8.0	7.4
Jul-2023	0.6	0.6	0.5	0.5	0.4
Aug-2023	0.1	0.1	0.0	0.0	0.0
Sep-2023	0.9	0.8	0.7	0.7	0.6

SDG&E Monthly Heating Degree Day (HDD) Weather Designs					
Month	Cold		Average	Hot	
	1-in-35 Design	1-in-10 Design		1-in-10 Design	1-in-35 Design
Oct-2023	26.6	25.2	22.6	19.9	18.5
Nov-2023	131.1	124.1	111.0	97.9	90.9
Dec-2023	300.7	284.7	254.6	224.6	208.6
Jan-2024	285.5	270.3	241.7	213.2	198.0
Feb-2024	251.7	238.3	213.1	187.9	174.5
Mar-2024	196.2	185.7	166.1	146.5	136.0
Apr-2024	128.1	121.2	108.4	95.6	88.8
May-2024	57.6	54.6	48.8	43.0	40.0
Jun-2024	10.7	10.1	9.0	8.0	7.4
Jul-2024	0.6	0.6	0.5	0.5	0.4
Aug-2024	0.1	0.1	0.0	0.0	0.0
Sep-2024	0.9	0.8	0.7	0.7	0.6
Oct-2024	26.6	25.2	22.5	19.9	18.4
Nov-2024	130.9	123.9	110.8	97.7	90.7
Dec-2024	300.2	284.2	254.2	224.1	208.1
Jan-2025	285.1	269.9	241.3	212.8	197.5
Feb-2025	251.3	237.9	212.7	187.5	174.1
Mar-2025	195.9	185.5	165.8	146.2	135.7
Apr-2025	127.9	121.1	108.2	95.4	88.6
May-2025	57.6	54.5	48.7	43.0	39.9
Jun-2025	10.6	10.1	9.0	7.9	7.4
Jul-2025	0.6	0.6	0.5	0.5	0.4
Aug-2025	0.1	0.1	0.0	0.0	0.0
Sep-2025	0.9	0.8	0.7	0.7	0.6
Oct-2025	26.6	25.1	22.5	19.8	18.4
Nov-2025	130.7	123.7	110.6	97.5	90.5
Dec-2025	299.8	283.8	253.8	223.7	207.7
Jan-2026	284.7	269.5	240.9	212.3	197.1
Feb-2026	250.9	237.5	212.3	187.2	173.8
Mar-2026	195.6	185.2	165.5	145.9	135.5
Apr-2026	127.7	120.9	108.1	95.2	88.4
May-2026	57.5	54.4	48.6	42.9	39.8
Jun-2026	10.6	10.1	9.0	7.9	7.4
Jul-2026	0.6	0.6	0.5	0.5	0.4
Aug-2026	0.1	0.1	0.0	0.0	0.0
Sep-2026	0.9	0.8	0.7	0.7	0.6
Oct-2026	26.5	25.1	22.4	19.8	18.4
Nov-2026	130.5	123.5	110.4	97.3	90.4
Dec-2026	299.4	283.4	253.3	223.3	207.3
Jan-2027	284.3	269.1	240.5	211.9	196.7
Feb-2027	250.6	237.2	212.0	186.8	173.4
Mar-2027	195.3	184.9	165.3	145.6	135.2
Apr-2027	127.5	120.7	107.9	95.1	88.2
May-2027	57.4	54.3	48.6	42.8	39.7
Jun-2027	10.6	10.0	9.0	7.9	7.3
Jul-2027	0.6	0.6	0.5	0.5	0.4
Aug-2027	0.1	0.1	0.0	0.0	0.0
Sep-2027	0.9	0.8	0.7	0.7	0.6
Oct-2027	26.5	25.1	22.4	19.7	18.3
Nov-2027	130.3	123.3	110.2	97.1	90.2
Dec-2027	298.9	282.9	252.9	222.8	206.9
Jan-2028	283.9	268.7	240.1	211.5	196.3
Feb-2028	250.2	236.8	211.6	186.4	173.0
Mar-2028	195.1	184.6	165.0	145.3	134.9
Apr-2028	127.3	120.5	107.7	94.9	88.0
May-2028	57.3	54.2	48.5	42.7	39.6
Jun-2028	10.6	10.0	9.0	7.9	7.3

SDG&E Monthly Heating Degree Day (HDD) Weather Designs					
Month	Cold		Average	Hot	
	1-in-35 Design	1-in-10 Design		1-in-10 Design	1-in-35 Design
Jul-2028	0.6	0.6	0.5	0.5	0.4
Aug-2028	0.1	0.1	0.0	0.0	0.0
Sep-2028	0.9	0.8	0.7	0.7	0.6
Oct-2028	26.4	25.0	22.4	19.7	18.3
Nov-2028	130.1	123.1	110.0	97.0	90.0
Dec-2028	298.5	282.5	252.5	222.4	206.4
Jan-2029	283.5	268.3	239.7	211.1	195.9
Feb-2029	249.8	236.4	211.3	186.1	172.7
Mar-2029	194.8	184.3	164.7	145.1	134.6
Apr-2029	127.1	120.3	107.5	94.7	87.9
May-2029	57.2	54.2	48.4	42.6	39.5
Jun-2029	10.6	10.0	8.9	7.9	7.3
Jul-2029	0.6	0.6	0.5	0.5	0.4
Aug-2029	0.1	0.1	0.0	0.0	0.0
Sep-2029	0.9	0.8	0.7	0.6	0.6
Oct-2029	26.4	25.0	22.3	19.7	18.2
Nov-2029	129.9	123.0	109.9	96.8	89.8
Dec-2029	298.1	282.1	252.0	222.0	206.0
Jan-2030	283.1	267.8	239.3	210.7	195.5
Feb-2030	249.5	236.1	210.9	185.7	172.3
Mar-2030	194.5	184.0	164.4	144.8	134.3
Apr-2030	127.0	120.1	107.3	94.5	87.7
May-2030	57.1	54.1	48.3	42.5	39.5
Jun-2030	10.6	10.0	8.9	7.9	7.3
Jul-2030	0.6	0.6	0.5	0.5	0.4
Aug-2030	0.1	0.1	0.0	0.0	0.0
Sep-2030	0.9	0.8	0.7	0.6	0.6
Oct-2030	26.4	24.9	22.3	19.6	18.2
Nov-2030	129.7	122.8	109.7	96.6	89.6
Dec-2030	297.6	281.6	251.6	221.5	205.6
Jan-2031	282.6	267.4	238.9	210.3	195.1
Feb-2031	249.1	235.7	210.5	185.3	171.9
Mar-2031	194.2	183.8	164.1	144.5	134.0
Apr-2031	126.8	119.9	107.1	94.3	87.5
May-2031	57.1	54.0	48.2	42.5	39.4
Jun-2031	10.6	10.0	8.9	7.9	7.3
Jul-2031	0.6	0.6	0.5	0.5	0.4
Aug-2031	0.1	0.1	0.0	0.0	0.0
Sep-2031	0.9	0.8	0.7	0.6	0.6
Oct-2031	26.3	24.9	22.2	19.6	18.2
Nov-2031	129.5	122.6	109.5	96.4	89.4
Dec-2031	297.2	281.2	251.2	221.1	205.1
Jan-2032	282.2	267.0	238.4	209.9	194.7
Feb-2032	248.8	235.4	210.2	185.0	171.6
Mar-2032	193.9	183.5	163.8	144.2	133.8
Apr-2032	126.6	119.8	106.9	94.1	87.3
May-2032	57.0	53.9	48.1	42.4	39.3
Jun-2032	10.5	10.0	8.9	7.8	7.3
Jul-2032	0.6	0.6	0.5	0.5	0.4
Aug-2032	0.1	0.1	0.0	0.0	0.0
Sep-2032	0.9	0.8	0.7	0.6	0.6
Oct-2032	26.3	24.9	22.2	19.5	18.1
Nov-2032	129.4	122.4	109.3	96.2	89.2
Dec-2032	296.8	280.8	250.7	220.7	204.7
Jan-2033	281.8	266.6	238.0	209.5	194.3
Feb-2033	248.4	235.0	209.8	184.6	171.2
Mar-2033	193.6	183.2	163.6	143.9	133.5

SDG&E Monthly Heating Degree Day (HDD) Weather Designs					
Month	Cold		Average	Hot	
	1-in-35 Design	1-in-10 Design		1-in-10 Design	1-in-35 Design
Apr-2033	126.4	119.6	106.8	93.9	87.1
May-2033	56.9	53.8	48.1	42.3	39.2
Jun-2033	10.5	10.0	8.9	7.8	7.3
Jul-2033	0.6	0.6	0.5	0.5	0.4
Aug-2033	0.1	0.1	0.0	0.0	0.0
Sep-2033	0.9	0.8	0.7	0.6	0.6
Oct-2033	26.3	24.8	22.2	19.5	18.1
Nov-2033	129.2	122.2	109.1	96.0	89.0
Dec-2033	296.3	280.3	250.3	220.3	204.3
Jan-2034	281.4	266.2	237.6	209.1	193.8
Feb-2034	248.0	234.6	209.4	184.3	170.9
Mar-2034	193.4	182.9	163.3	143.6	133.2
Apr-2034	126.2	119.4	106.6	93.8	86.9
May-2034	56.8	53.7	48.0	42.2	39.1
Jun-2034	10.5	9.9	8.9	7.8	7.2
Jul-2034	0.6	0.6	0.5	0.5	0.4
Aug-2034	0.1	0.1	0.0	0.0	0.0
Sep-2034	0.9	0.8	0.7	0.6	0.6
Oct-2034	26.2	24.8	22.1	19.5	18.1
Nov-2034	129.0	122.0	108.9	95.8	88.8
Dec-2034	295.9	279.9	249.9	219.8	203.8
Jan-2035	281.0	265.8	237.2	208.6	193.4
Feb-2035	247.7	234.3	209.1	183.9	170.5
Mar-2035	193.1	182.6	163.0	143.4	132.9
Apr-2035	126.0	119.2	106.4	93.6	86.8
May-2035	56.7	53.7	47.9	42.1	39.1
Jun-2035	10.5	9.9	8.9	7.8	7.2
Jul-2035	0.6	0.6	0.5	0.5	0.4
Aug-2035	0.1	0.1	0.0	0.0	0.0
Sep-2035	0.9	0.8	0.7	0.6	0.6
Oct-2035	26.2	24.8	22.1	19.4	18.0
Nov-2035	128.8	121.8	108.7	95.6	88.7
Dec-2035	295.5	279.5	249.4	219.4	203.4

SDG&E Annual Heating Degree Day (HDD) Weather Designs (Calendar Based)					
Year	Cold		Average	Hot	
	1-in-35 Design	1-in-10 Design		1-in-10 Design	1-in-35 Design
2019	1399.0	1325.0	1186.0	1047.0	973.0
2020	1397.0	1323.0	1184.0	1045.0	971.0
2021	1395.0	1321.0	1182.0	1043.0	969.0
2022	1393.0	1319.0	1180.0	1041.0	967.0
2023	1391.0	1317.0	1178.0	1039.0	965.0
2024	1389.0	1315.0	1176.0	1037.0	963.0
2025	1387.0	1313.0	1174.0	1035.0	961.0
2026	1385.0	1311.0	1172.0	1033.0	959.0
2027	1383.0	1309.0	1170.0	1031.0	957.0
2028	1381.0	1307.0	1168.0	1029.0	955.0
2029	1379.0	1305.0	1166.0	1027.0	953.0
2030	1377.0	1303.0	1164.0	1025.0	951.0
2031	1375.0	1301.0	1162.0	1023.0	949.0
2032	1373.0	1299.0	1160.0	1021.0	947.0
2033	1371.0	1297.0	1158.0	1019.0	945.0
2034	1369.0	1295.0	1156.0	1017.0	943.0
2035	1367.0	1293.0	1154.0	1015.0	941.0

2020-CGR Sales + Transport + Exchange for Month of DECEMBER (units=Mdth/Day)
"1-in-2" Likelihood Cold Day Temperature

No.	"CGR_B"	CLASS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2030	2035
1		RESIDEN	265.3	262.6	261.9	261.8	260.3	259.3	258.2	257.2	255.9	253.1	252.4
2		Com GN3	88.1	88.0	88.2	88.2	88.0	87.7	87.3	86.9	86.7	86.5	86.5
2		GAC 2/	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2		GEN 2/	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3		Ind GN3	5.4	5.3	5.2	5.2	5.1	5.1	5.0	5.0	4.9	4.6	4.3
4		NGV 2/	5.5	5.7	5.9	6.1	6.2	6.4	6.6	6.8	7.0	7.6	8.5
	Total:	MDth/day	364.2	361.6	361.1	361.2	359.8	358.5	357.2	355.9	354.5	351.8	351.7
		MMcf/day 4/	352.4	349.8	349.4	349.5	348.1	346.9	345.6	344.3	343.0	340.3	340.3
		Days per Mo	31	31	31	31	31	31	31	31	31	31	31
		Pk-Day Temp. (deg-F) =	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8
		Hdd: December--AvgYr =	256.3	255.9	255.5	255.1	254.6	254.2	253.8	253.3	252.9	251.6	249.4
		Hdd: December--ColdYr =	302.4	302.0	301.5	301.1	300.7	300.2	299.8	299.4	298.9	297.6	295.5
		"Wkday/Wkend" Factor-Res:	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
		"Wkday/Wkend" Factor-NonRes:	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Use this Methodology for the 2020-CGR Res and Core C&I Calculations

Notes:

1/ =("Avg-Dec" / 31 days) + {[("Cold-Dec" - "Avg-Dec") / ("Cold-Dec-Hdd" - "Avg-Dec-Hdd")]
* [(65 degF - 47.8 degF) - (Avg-Dec-Hdd / 31 days)]}

2/ "Non-temperature" sensitive market segment.

3/ "Weekday/Weekend" Factor applies to the "raw" estimate.

4/ Dth/Mcf= 1.0336

2020-CGR Sales + Transport + Exchange for Month of DECEMBER (units=Mdth/Day)
"1-in-10" Likelihood Cold Day Temperature

No.	"CGR_B"	CLASS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2030	2035
1		RESIDEN	308.3	305.5	304.9	304.8	303.3	302.3	301.2	300.1	298.8	295.8	294.9
2		Com GN3	96.3	96.2	96.4	96.5	96.3	96.0	95.6	95.2	94.9	94.7	94.7
2		GAC 2/	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2		GEN 2/	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3		Ind GN3	5.8	5.7	5.5	5.5	5.5	5.4	5.4	5.3	5.2	4.9	4.5
4		NGV 2/	5.5	5.7	5.9	6.1	6.2	6.4	6.6	6.8	7.0	7.6	8.5
	Total:	MDth/day	415.9	413.2	412.7	412.9	411.4	410.1	408.8	407.4	405.9	403.0	402.7
		MMcf/day 4/	402.4	399.7	399.3	399.5	398.0	396.8	395.5	394.2	392.8	389.9	389.6
		Days per Mo	31	31	31	31	31	31	31	31	31	31	31
	Pk-Day Temp. (deg-F) =		44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6
	Hdd: December--AvgYr =		256.3	255.9	255.5	255.1	254.6	254.2	253.8	253.3	252.9	251.6	249.4
	Hdd: December--ColdYr =		302.4	302.0	301.5	301.1	300.7	300.2	299.8	299.4	298.9	297.6	295.5
	"Wkday/Wkend" Factor-Res:		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	"Wkday/Wkend" Factor-NonRes:		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Use this Methodology for the 2020-CGR Res and Core C&I Calculations

Notes:

1/ =("Avg-Dec" / 31 days) + {[("Cold-Dec" - "Avg-Dec") / ("Cold-Dec-Hdd" - "Avg-Dec-Hdd")]
* [(65 degF - 44.6 degF) - (Avg-Dec-Hdd / 31 days)]}

2/ "Non-temperature" sensitive market segment.

3/ "Weekday/Weekend" Factor applies to the "raw" estimate.

4/ Dth/Mcf= 1.0336

2020-CGR Sales + Transport + Exchange for Month of DECEMBER (units=Mdth/Day)
"1-in-35" Likelihood Cold Day Temperature

No.	"CGR_B"	CLASS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2030	2035
1	RESIDEN		329.8	327.0	326.4	326.4	324.8	323.8	322.7	321.6	320.3	317.2	316.2
2	Com GN3		100.4	100.4	100.5	100.6	100.4	100.1	99.7	99.3	99.1	98.9	98.8
2	GAC 2/		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	GEN 2/		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	Ind GN3		6.0	5.9	5.7	5.7	5.7	5.6	5.5	5.5	5.4	5.1	4.7
4	NGV 2/		5.5	5.7	5.9	6.1	6.2	6.4	6.6	6.8	7.0	7.6	8.5
			======	======	======	======	======	======	======	======	======	======	======
	Total:	MDth/day	441.7	439.0	438.5	438.8	437.2	435.9	434.5	433.2	431.7	428.7	428.1
		MMcf/day 4/	427.3	424.7	424.3	424.5	423.0	421.7	420.4	419.1	417.6	414.7	414.2
		Days per Mo	31	31	31	31	31	31	31	31	31	31	31
	Pk-Day Temp. (deg-F) =		43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0
	Hdd: December--AvgYr =		256.3	255.9	255.5	255.1	254.6	254.2	253.8	253.3	252.9	251.6	249.4
	Hdd: December--ColdYr =		302.4	302.0	301.5	301.1	300.7	300.2	299.8	299.4	298.9	297.6	295.5
	"Wkday/Wkend" Factor-Res:		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	"Wkday/Wkend" Factor-NonRes:		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Use this Methodology for the 2020-CGR Res and Core C&I Calculations

Notes:

1/ =("Avg-Dec" / 31 days) + {[("Cold-Dec" - "Avg-Dec") / ("Cold-Dec-Hdd" - "Avg-Dec-Hdd")]
* [(65 degF - 43.0 degF) - (Avg-Dec-Hdd / 31 days)]}

2/ "Non-temperature" sensitive market segment.

3/ "Weekday/Weekend" Factor applies to the "raw" estimate.

4/ Dth/Mcf= 1.0336

2020-CGR Sales + Transport + Exchange for Month of DECEMBER (units=Mdth/Day)

Temp=December, Average Year

No.	"CGR_CLASS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2030	2035
1	Residen	4,504.6	4,418.3	4,389.8	4,370.0	4,327.6	4,290.5	4,252.8	4,216.1	4,175.8	4,086.6	4,059.9
2	Com GN3	2,015.6	2,012.3	2,016.5	2,017.4	2,010.1	1,998.8	1,985.8	1,972.9	1,963.9	1,954.5	1,947.8
2	GAC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	GEN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	Ind GN3	133.9	132.0	128.6	128.9	128.3	127.6	126.5	125.2	123.5	118.5	112.3
4	NGV	170.4	176.2	182.0	187.8	193.6	199.4	205.2	211.0	216.8	234.2	263.2
		6,824.5	6,738.8	6,716.9	6,704.1	6,659.6	6,616.3	6,570.2	6,525.2	6,480.0	6,393.8	6,383.1

2020-CGR Sales + Transport + Exchange for Month of DECEMBER (units=Mdth/Day)

Temp=December, Cold Year

No.	"CGR_CLASS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2030	2035
1	Residen	5,123.0	5,036.3	5,008.1	4,989.8	4,946.2	4,908.8	4,871.0	4,834.1	4,793.0	4,701.2	4,670.9
2	Com GN3	2,134.4	2,131.1	2,135.3	2,136.2	2,128.9	2,117.6	2,104.6	2,091.7	2,082.7	2,073.3	2,066.6
2	GAC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	GEN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	Ind GN3	139.5	137.5	133.8	134.1	133.4	132.6	131.3	129.9	128.1	122.6	115.7
4	NGV	170.4	176.2	182.0	187.8	193.6	199.4	205.2	211.0	216.8	234.2	263.2
		7,567.3	7,481.1	7,459.3	7,447.9	7,402.1	7,358.4	7,312.1	7,266.7	7,220.5	7,131.3	7,116.4
	Mdth/Hdd:	16.1	16.1	16.1	16.2	16.1	16.1	16.1	16.1	16.1	16.0	15.9

2020 CALIFORNIA GAS REPORT

SUPPORTING DATA

2020 CALIFORNIA GAS REPORT

WEATHER: HEATING DEGREE DAYS – AVERAGE AND "COLD" YEAR DESIGNS; AND WINTER PEAK DAY DESIGN TEMPERATURES

Weather for SDG&E: Heating Degree Days – Average and Cold Year Designs; and Winter Peak Day Design Temperatures

I. Overview

San Diego Gas and Electric Company's service area for natural gas extends from southern Orange County throughout San Diego County to the Mexican border. To quantify the overall temperature experienced within this region, SDG&E aggregates daily temperature recordings from three U.S. Weather Bureau weather stations into one system average heating degree-day ("HDD") figure. The table below lists weather station locations along with its associated temperature zone(s).

Table 1

Representative Weather Stations with Temperature Zones

Station Location	Weight	Temperature Zone
1. El Cajon[1]	1/3	Coastal and Inland
2. San Diego's Lindbergh Field	(2/3) x (#Coastal/(#Coastal + #Inland))	Coastal
3. Miramar Naval Air Station	(2/3) x (#Inland/(#Coastal + #Inland))	Inland

SDG&E uses 65° Fahrenheit to calculate the number of HDDs. One heating degree-day is accumulated for each degree that the daily average is *below* 65° Fahrenheit. To arrive at the system average HDDs figure for its entire service area, SDG&E weights the HDD figure for each zone using the weights[2] shown in Table 1. These weights are used in calculating the data shown from January 2000 to December 2019.

Daily maximum and minimum temperatures, for each individual weather station in the table above, are compiled from National Weather Service data, at the website http://www.wrh.noaa.gov/sgx/obs/rtp/rtpmap.php?wfo=sgx which

[1] The location of the station for El Cajon is at the boundary of the Coastal and Inland zones. Correspondingly, both the Coastal and Inland zones are considered represented in the data for the El Cajon station.

[2] As of December 2019, there were 482,353 gas customers associated with the Coastal temperature zone and 412,522 gas customers associated with the Inland temperature zone. The following URL shows a map of the SDG&E service area and temperature zones: http://www.sdge.com/tm2/pdf/ELEC_MAPS_Maps_-_Elec.pdf ; less than 0.04% of SDG&E's gas customers were in the mountain and desert zones.

provides easy access to temperature data for San Diego and parts of surrounding counties. For each station, the average temperature is computed as the (maximum + minimum)/2 and this value is used to compute the heating degrees (i.e., the *daily* HDD) for each station as well. System average values of HDD are then computed using the weights for each respective station. Annual and monthly HDDs for the entire SDG&E service area from 2000 to 2019 are listed in Table 2, below.

Table 2

Calendar Month Heating Degree-Days (Jan. 1998 through Dec. 2017)

	Month												Total "Cal-Year"
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
2000	247	216	224	94	28	3	0	0	0	50	237	227	**1326**
2001	352	298	199	198	30	5	0	0	0	9	127	325	**1543**
2002	315	225	247	158	90	13	0	0	2	54	81	294	**1479**
2003	141	201	179	184	95	32	0	0	0	7	157	275	**1271**
2004	273	269	97	65	14	4	1	0	0	52	200	266	**1241**
2005	244	197	159	118	33	5	0	0	4	38	95	231	**1124**
2006	275	204	305	144	33	0	0	0	1	35	88	287	**1372**
2007	365	225	155	139	64	20	0	0	4	28	112	340	**1452**
2008	331	278	187	131	89	16	0	0	0	13	59	287	**1391**
2009	177	247	202	141	30	11	0	0	0	41	124	291	**1264**
2010	240	212	195	178	88	24	10	1	2	31	181	239	**1401**
2011	220	278	196	96	75	20	0	0	0	25	172	340	**1422**
2012	232	239	230	129	37	13	0	0	0	16	102	268	**1266**
2013	323	270	150	104	23	6	0	0	0	40	104	241	**1261**
2014	158	140	80	78	20	1	0	0	0	0	44	170	**691**
2015	161	87	58	44	46	0	0	0	0	0	105	259	**760**
2016	237	82	95	42	27	0	0	0	0	0	67	196	**746**
2017	243	156	82	27	42	4	0	0	0	1	38	149	**742**
2018	113	171	136	57	48	1	0	0	0	1	47	199	**773**
2019	227	301	173	59	72	4	0	0	2	13	94	241	**1186**
20-Yr-Avg (Jan2000-Dec2019)													
Avg.	243.7	214.8	167.5	109.3	49.2	9.1	0.6	0.1	0.8	22.7	111.7	256.3	**1185.6**
St.Dev.	70.6	63.1	63.0	50.7	26.6	9.2	2.2	0.2	1.3	19.0	54.1	52.3	**281.2**
Min.	113.0	82.0	58.0	27.0	14.0	0.0	0.0	0.0	0.0	0.0	38.0	149.0	**691.0**
Max.	365.0	301.0	305.0	198.0	95.0	32.0	10.0	1.0	4.0	54.0	237.0	340.0	**1543.0**

II. Calculations to Define Our Average-Temperature Year

The simple average of the 20-year period (January 2000 through December 2019) was used to represent the Average Year total and the individual monthly values for HDD. In this CGR, the standard deviation has been calculated using an approach that compensates for the annual HDD values for the years 2014-2018 in SDG&E's service territory being dramatically lower than in any preceding year going back to 1972. A regression with a time trend and a dummy variable for the years 2014-2018 has been used to estimate a shift in the level of annual HDD that occurred beginning in 2014. A dummy variable takes the value one for some observations to indicate the presence of an effect or membership in a group and zero for the remaining observations. Estimating the effect of the dummy variable gives an estimate of that effect or the impact of membership in that group. A dummy variable is used here to estimate the average effect on annual HDD of a given year having membership in the group of years 2014-2018. The dataset is SDG&E system-wide annual HDD for the years 2000-2019. The regression equation is:

$$HDD_t = \alpha + \beta * t + \beta_{2014-2018} * D_{2014-2018} + \varepsilon$$

where $D_{2014-2018}$ is a dummy variable for the years 2014-2018 and $\beta_{2014-2018}$ is the corresponding dummy coefficient. This regression equation estimates average HDD over the period 1998-2018 controlling for time trends in HDD and the warm weather regime of years 2014-2018. It's important to note that p-value for the estimate of $\beta_{2014-2018}$ is 0.000000188% indicating an extremely low probability that membership in the group of years 2014-2018 had no effect on annual HDDs. Please see Table 3 below for the full regression output.

Table 3

Dummy Regression for Calculation of Heating Degree-Day Standard Deviation

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.933557577
R Square	0.871529749
Adjusted R Squar	0.864392513
Standard Error	103.5449804
Observations	20

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	1309212.817	1309212.817	122.1102577	1.88021E-09
Residual	18	192988.1333	10721.56296		
Total	19	1502200.95			

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	1333.266667	26.73519897	49.86933772	9.50482E-21
Regime Dummy	-590.8666667	53.47039795	-11.05035102	1.88021E-09

The dummy variable's estimated effect, $\beta_{2014-2018}$, is subtracted from the actual annual HDD data for years 2014-2018 to adjust the data to remove the level shift. The standard deviation has been calculated using this adjusted

dataset. This standard deviation has been used to design the two Cold Years based on a "1-in-10" and "1-in-35" chance, ***c***, that the respective annual "Cold Year" $\boldsymbol{hdd_c}$ value would be exceeded. A probability model for the annual HDD is based on a t-Distribution with N-1 degrees of freedom, where, N is the number of years of HDD data we use, μ is the average of the last 20 years of HDD, and S_{20} is the average of the standard deviations of the 20 most recent 20 year periods:

$U = (HDD_y - \mu)/S_{20}$, has a t-Distribution with N-1 degrees of freedom.

III. Calculating the Cold-Temperature Year Weather Designs

Cold Year HDD Weather Designs

For SDG&E, cold-temperature-year HDD weather designs are developed with a 1-in-35 year chance of occurrence. In terms of probabilities this can be expressed as the following for a "1-in-35" cold-year HDD value in equation 1 and a "1-in-10" cold-year HDD value in equation 2, with Annual HDD as the random variable:

(1) Prob { Annual HDD > "1-in-35" Cold-Yr HDD } = 1/35 = 0.0286

(2) Prob { Annual HDD > "1-in-10" Cold-Yr HDD } = 1/10 = 0.1000

An area of 0.0286 under one tail of the T-Distribution translates to 2.025 standard deviations *above* an average-year based on a t-statistic with 19 degrees of freedom. Using the standard deviation calculated as described earlier, 105.0 HDD, these equations yield values of about 1,399 HDD for a "1-in-35" cold year and 1,325 as the number of HDDs for a "1-in-10" cold year (an area of 0.1000 under one tail of the T-Distribution translates to 1.328 standard deviations *above* an average-year based on a t-statistic with 19 degrees of freedom). For example, the "1-in-35" cold-year HDD is calculated as follows:

(3) Cold-year HDD = 1,399 which equals approximately

1,186 average-year HDDs + 2.025 * 105.0

Table 4 below shows monthly HDD figures for "1-in-35" cold year, "1-in-10" cold year and, average year temperature designs. The monthly average-temperature-year HDDs are calculated from weighted monthly HDDs from 2000 to 2019, as shown as the bottom of Table 2, above. For example, the average-year December value of 256.3 HDD equals the simple average of the 20 December HDD figures from 2000 to 2019. SDG&E calculates the cold--temperature-year monthly HDD values using the same shape of the average-year HDDs. For example, since 21.6 percent of average-temperature-year HDDs occurred in December, the estimated number of HDDs during December for a cold-year is equal to 1,399 HDDs multiplied by 21.6 percent, or 302.4 HDDs.

Table 4

Calendar Month Heating Degree-Day Designs

	Cold		Average	Hot	
	1-in-35 Design	1-in-10 Design		1-in-10 Design	1-in-35 Design
January	287.6	272.4	243.8	215.2	200.0
February	253.5	240.1	214.9	189.7	176.3
March	197.6	187.1	167.5	147.9	137.4
April	129.0	122.2	109.3	96.5	89.7
May	58.1	55.0	49.2	43.5	40.4
June	10.7	10.2	9.1	8.0	7.5
July	0.6	0.6	0.6	0.5	0.5
August	0.1	0.1	0.1	0.0	0.0
September	0.9	0.8	0.8	0.7	0.6
October	26.8	25.4	22.7	20.0	18.6
November	131.8	124.8	111.7	98.6	91.7
December	302.4	286.4	256.3	226.3	210.3
	1399	1325	1186	1047	973

IV. Adjusting Forecasted HDDs for a Climate-Change Trend

SDG&E incorporates a climate-change warming trend that gradually reduces HDDs by 2 HDDs per year over the forecast period. The annual reduction is based on the latest twenty-year trend in 20-year-averaged HDDs. That is, they are based on the observed trend in changes starting with average HDDs for years 1981-2000, then 1982-2001, 1983-2002...and ending with the average HDDs for years 2000-2019.

Table 5 below shows system HDDs, rolling 20-year averaged HDDs, and the annual changes in those rolling 20-year averages. The actual average annual change is -1.9 HDDs for the most recent twenty of the 20-year averages (with ending years from 2000 through 2019). A simple “ordinary least squares” regression-fitted time trend (using Microsoft Excel’s “LINEST” function) was applied to those same annual changes, resulting in a fitted estimation of -2.0 HDDs per year. Given the fitted and actual average annual changes of -2.0 and -1.9 HDDs, respectively, it was decided to decrease average-year and cold-year forecasted HDD’s by an even 2 HDDs per year, starting with the first forecast year of 2020.

Table 5

Average Annual Changes in 20-Year Averaged Heating-Degree Days

	Regression Fitted trend	Actual
20 years (2000-2019)	-2.0	-1.9

Year	SDG&E System HDDs	20-year averaged HDDs	Annual change in 20-year averaged HDDs
1981	951		
1982	1332		
1983	1106		
1984	1115		
1985	1394		
1986	1028		
1987	1398		
1988	1269		
1989	1258		
1990	1315		
1991	1316		
1992	994		
1993	1107		
1994	1464		
1995	1073		
1996	1152		
1997	1153		
1998	1571		
1999	1610	1223.8	
2000	1327	1246.7	22.9
2001	1543	1276.3	29.6
2002	1478	1283.6	7.3
2003	1270	1291.8	8.2
2004	1241	1298.1	6.3
2005	1122	1284.5	-13.6
2006	1372	1301.7	17.2
2007	1451	1304.3	2.6
2008	1391	1310.4	6.1
2009	1263	1310.7	0.2
2010	1402	1315.0	4.3
2011	1422	1320.3	5.3
2012	1267	1334.0	13.7
2013	1262	1341.8	7.8
2014	692	1303.2	-38.6
2015	759	1287.5	-15.7
2016	746	1267.1	-20.3
2017	744	1246.7	-20.4
2018	774	1206.8	-39.9
2019	1186	1185.6	-21.2

V. Calculating the Peak-Day Design Temperature

SDG&E's Peak-Day design temperature of 43.0 degrees Fahrenheit, denoted "Deg-F," is determined from a statistical analysis of observed annual minimum daily system average temperatures constructed from daily temperature recordings from the three U.S. Weather Bureau weather stations discussed above. Since we have a time series of daily data by year, the following notation will be used for the remainder of this discussion:

(1) $AVG_{y,d}$ = system average value of Temperature
for calendar year "y" and day "d".

The calendar year, y, can range from 1972 through 2019, while the day, d, can range from 1 to 365, for non leap years, or from 1 to 366 for leap years. The "upper" value for the day, d, thus depends on the calendar year, y, and will be denoted by n(y)=365, or 366, respectively, when y is a non-leap year or a leap year.

For each calendar year, we calculate the following statistic from our series of daily system average temperatures defined in equation (1) above:

(2) $$MinAVG_y = \min_{d=1}^{n(y)}\{ AVG_{y,d} \}, \text{ for } y=1972, 1973, \ldots, 2019.$$

(The notation used in equation 2 means "For a particular year, y, list all the daily values of system average temperature for that year, then pick the smallest one.")

The resulting minimum annual temperatures are shown in Table 6, below. Note that most of the minimum temperatures occur in the months of December or January; however, for some calendar years the minimums occurred in other months (the observed minimum for 1991 was in March, and for 2004 it was in November).

The statistical methods we use to analyze this data employ software developed to fit three generic probability models: the Generalized Extreme Value (GEV) model, the Double-Exponential or GUMBEL (EV1) model and a 2-Parameter Students' T-Distribution (T-Dist) model. [The GEV and EV1 models have the same mathematical specification as those implemented in a DOS-based executable-only computer code that was developed by Richard L. Lehman and described in a paper published in the Proceedings of the Eighth Conference on Applied Climatology, January 17-22, 1993, Anaheim, California, pp. 270-273, by the American Meteorological Society, Boston, MA., with the title "Two Software Products for Extreme Value Analysis: System Overviews of ANYEX and DDEX." At the time he wrote the paper, Dr. Lehman was with the Climate Analysis Center, National Weather Service/NOAA in Washington, D.C., zip code 20233.] The Statistical Analysis Software (SAS) procedure for nonlinear statistical model estimation (PROC MODEL, from SAS V6.12) was used to do the calculations. Further, the calculation procedures were implemented to fit the probability models to observed *maximums* of data, like heating degrees. By recognizing that:

$$- \text{MinAVG}_y = - \min_{d=1}^{n(y)}\{\text{AVG}_{y,d}\} = \max_{d=1}^{n(y)}\{ -\text{AVG}_{y,d}\}, \text{ for y=1972, …, 2019;}$$

this same software, when applied to the *negative* of the minimum temperature data, yields appropriate probability model estimation results.

The calculations done to fit any one of the three probability models chooses the parameter values that provide the "best fit" of the parametric probability model's calculated cumulative distribution function (CDF) to the empirical cumulative distribution function (ECDF). Note that the ECDF is constructed based on the variable "-MinAVG$_y$" (which is a *maximum* over a set of *negative* temperatures) with values of the variable MinAVG$_y$ that are the same as shown in Table 6, below.

In Table 6, the data for -MinAVG$_y$ are shown after they have been sorted from "lowest" to "highest" value. The ascending *ordinal* value is shown in the column labeled "RANK" and the empirical cumulative distribution function is calculated and shown in the next column. The formula used to calculate this function is:

$$\text{ECDF} = (\text{RANK} - \alpha)/[\text{MaxRANK} + (1 - 2\,\alpha)],$$

where the parameter "α" (shown as *alpha* in Table 7) is a "small" positive value (usually less than ½) that is used to bound the ECDF away from 0 and 1.

Of the three probability models considered (GEV, EV1, and T_Dist) the results obtained for the T_Dist model were selected since the fit to the ECDF was better than that of either the GEV model or the EV1 model. (Although convergence to stable parameter estimates is occasionally a problem with fitting a GEV model to the ECDF, the T_Dist model had no problems with convergence of the iterative procedure to estimate parameters.)

The T_Dist model used here is a three-parameter probability model where the varable $z = (-\text{MinAVG}_y - \gamma) / \theta$, for each year, y, is presumed to follow a T_Dist with location parameter, γ, and scale parameter, θ, and a third parameter, v, that represents the number of degrees of freedom. For a given number of years of data, N, then v=N-2.

The following mathematical expression specifies the T_Dist model we fit to the data for "-MinAVG$_y$ " shown in Table 6, below.

(3) $\text{ECDF}(-\text{MinAVG}_y) = \text{Prob}\{ -T < -\text{MinAVG}_y \} = \text{T\_Dist}\{z; \gamma, \theta, v=N-2\}$,

where "T_Dist{ . }" is the cumulative probability distribution function for Student's T-Distribution[3], and

[3] A common mathematical expression for Student's T-Distribution is provided at http://en.wikipedia.org/wiki/Student%27s_t-distribution; with a probability density function

$$f(t) = \frac{\Gamma\left(\frac{\nu+1}{2}\right)}{\sqrt{\nu\pi}\,\Gamma\left(\frac{\nu}{2}\right)} \left(1 + \frac{t^2}{\nu}\right)^{-\frac{\nu+1}{2}},$$

(4) $z = (-MinAVG_y - \gamma) / \theta$, for each year, y, and

the parameters "γ" and "θ" are estimated for this model for given degrees of freedom v=N-2. The estimated values for γ and θ are shown in Table 7 along with the fitted values of the model CDF (the column: "Fitted" Model CDF).

Now, to calculate a *peak-day design temperature*, $TPDD_\delta$, with a specified likelihood, δ, that a value less than $TPDD_\delta$ would be observed, we use the equation below:

(5) $\delta = Prob\{ T \leq TPDD_\delta \}$, which is equivalent to

(6) $\delta = Prob\{ [(-T - \gamma) / \theta] \geq [(-TPDD_\delta - \gamma) / \theta] \}$, $= Prob\{ [(-T - \gamma) / \theta] \geq [z_\delta] \}$,

where $z_\delta = [(-TPDD_\delta - \gamma) / \theta]$. In terms of our probability model,

(7) $\delta = 1 - T\_Dist\{ z_\delta; \gamma, \theta, v=N-2\}$,

which yields the following equation for z_δ,

(7') $z_\delta = \{ TINV\_Dist\{ (1-\delta); \gamma, \theta, v=N-2\}$, where "TINV_Dist{ . }" is the inverse function of the T_Dist{ . } function[4]. The implied equation for $TPDD_\delta$ is:

(8) $TPDD_\delta = - [\gamma + (z_\delta)(\theta)]$.

To calculate the minimum daily (system average) temperature to define our extreme weather event, we specify that this COLDEST-Day be one where the temperature would be lower with a "1-in-35" likelihood. This criterion translates into two equations to be solved based on equations (7) and (8) above:

(9) solve for "z_δ" from equation (7') above with $(1-\delta) = (1 - 1/35) = 1 - 0.0286$,

(10) solve for "$TPDD_\delta$" from $TPDD_\delta = - [\gamma + (z_\delta)(\theta)]$.

The value of $z_\delta = 1.951$ and $TPDD_\delta = - [\gamma + (z_\delta)(\theta)] = 43.0$ degrees Fahrenheit, with values for "v=N-2"; along with "γ" and "θ" in Table 7, below.

SDG&E's "1-in-10" peak-day design temperature of 44.6 degrees Fahrenheit, is calculated in a methodologically similar way as for the 43.0 degree "1-in-35" peak day temperature. The criteria specified in equation (9) above for a "1-in-35" likelihood would be replaced by a "1-in-10" likelihood.

(9') solve for "z_δ" from equation (7') above with $(1-\delta) = (1 - 1/10) = 1 - 0.1000$,

which yields a "z_δ" value of $z_\delta = 1.300$ and, $TPDD_\delta = - [\gamma + (z_\delta)(\theta)] = 44.6$ with values for "v=N-2"; along with "γ" and "θ" in Table 7, below.

A plot of the cumulative distribution function for $MinAVG_y$ based on "v=N-2", the fitted model parameters, "γ" and "θ" with values in Table 7, below, is shown in Figure 1.

such that $T\_Dist\{z; \gamma, \theta, v=N-2\} = \int f(t)\, dt$, from $t=-\infty$ to $t=z$. Also, the notation Γ(.) is known in mathematics as the GAMMA function; see http://www.wikipedia.org/wiki/Gamma_function for a description. Also, see *Statistical Theory*, 3rd Ed., B.W. Lindgren, MacMillian Pub. Inc, 1976, pp. 336-337.

[4] Computer software packages such as SAS and EXCEL have implemented statistical and mathematical functions to readily calculate values for T_Dist{ . } and TINV_Dist{ . } as defined above.

Table 6

YEAR	MINAVG	Month(MinAvg)
1972	46.7654	Dec
1973	46.1874	Jan
1974	44.2081	Dec
1975	44.1874	Jan
1976	45.0727	Jan
1977	50.6614	Mar
1978	42.7134	Dec
1979	45.1561	Jan
1980	53.7967	Jan
1981	49.8487	Jan
1982	48.8227	Dec
1983	51.4894	Jan
1984	48.4634	Dec
1985	46.1040	Dec
1986	50.1040	Feb
1987	41.4894	Dec
1988	45.4374	Dec
1989	45.1561	Jan
1990	43.7707	Feb
1991	48.7707	Mar
1992	47.1561	Dec
1993	46.7707	Jan
1994	48.0520	Nov
1995	51.1561	Dec
1996	48.7707	Feb
1997	49.0780	Dec
1998	46.7707	Dec
1999	48.7967	Jan
2000	50.3593	Jan
2001	47.6927	Jan
2002	45.7447	Jan
2003	49.0520	Dec
2004	47.7447	Nov
2005	47.7967	Jan
2006	48.3593	Dec
2007	43.3593	Jan
2008	48.7187	Dec
2009	48.4114	Feb
2010	48.1821	Dec
2011	49.0780	Feb
2012	48.1301	Dec
2013	44.1301	Jan
2014	47.7707	Dec
2015	48.2607	Jan
2016	50.2994	Feb
2017	51.2680	Jan
2018	49.9352	Dec
2019	48.4894	Feb

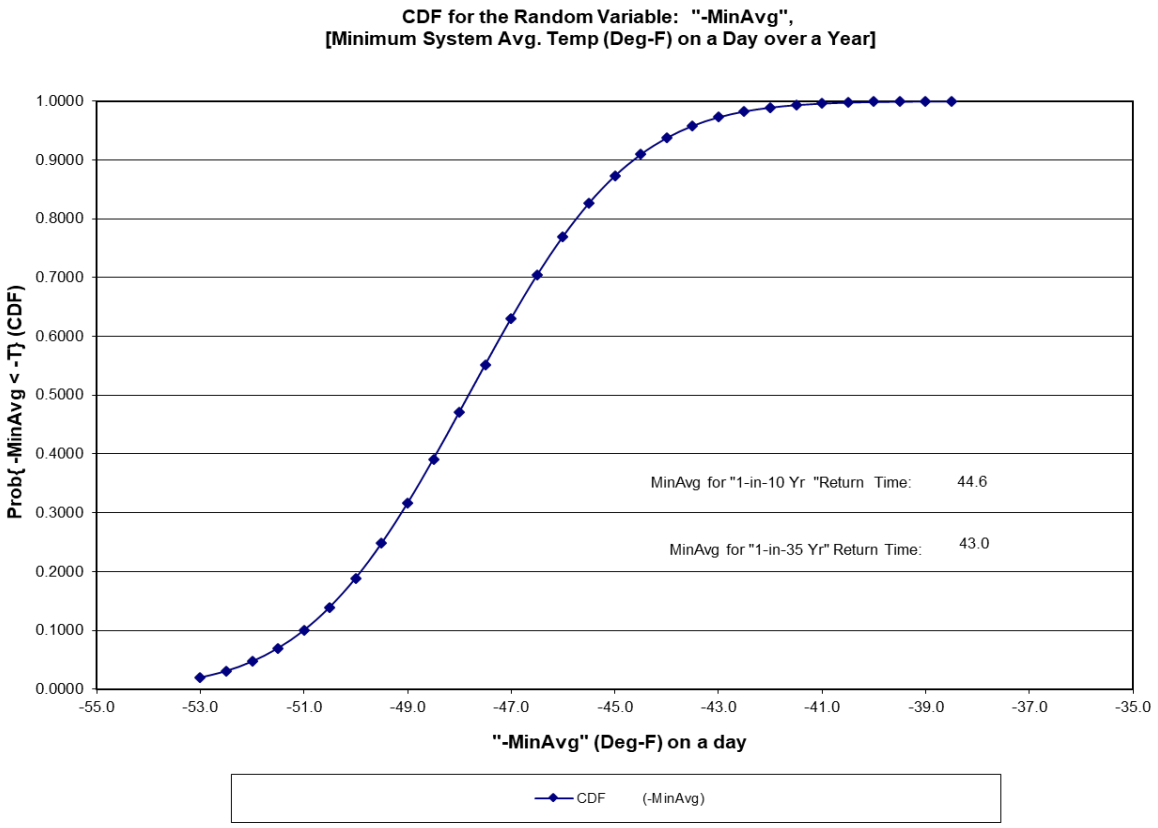
Table 7

alpha= 0.375

Year	Days/Yr	-MinAvg	Month (-MinAvg)	Rank	Emprical CDF	Fitted Model CDF
1980	366	-53.7967	Jan	1	0.0204	-2.105
1983	365	-51.4894	Jan	2	0.0408	-1.780
2017	365	-51.2680	Jan	3	0.0612	-1.574
1995	365	-51.1561	Dec	4	0.0816	-1.417
1977	365	-50.6614	Mar	5	0.1020	-1.288
2000	366	-50.3593	Jan	6	0.1224	-1.178
2016	366	-50.2994	Feb	7	0.1429	-1.080
1986	365	-50.1040	Feb	8	0.1633	-0.992
2018	365	-49.9352	Dec	9	0.1837	-0.910
1981	365	-49.8487	Jan	10	0.2041	-0.835
1997	365	-49.0780	Dec	11	0.2245	-0.764
2011	365	-49.0780	Feb	12	0.2449	-0.696
2003	365	-49.0520	Dec	13	0.2653	-0.632
1982	365	-48.8227	Dec	14	0.2857	-0.570
1999	365	-48.7967	Jan	15	0.3061	-0.510
1991	365	-48.7707	Mar	16	0.3265	-0.452
1996	366	-48.7707	Feb	17	0.3469	-0.396
2008	366	-48.7187	Dec	18	0.3673	-0.341
2019	365	-48.4894	Feb	19	0.3878	-0.287
1984	366	-48.4634	Dec	20	0.4082	-0.234
2009	365	-48.4114	Feb	21	0.4286	-0.181
2006	365	-48.3593	Dec	22	0.4490	-0.129
2015	365	-48.2607	Jan	23	0.4694	-0.077
2010	365	-48.1821	Dec	24	0.4898	-0.026
2012	366	-48.1301	Dec	25	0.5102	0.026
1994	365	-48.0520	Nov	26	0.5306	0.077
2005	365	-47.7967	Jan	27	0.5510	0.129
2014	365	-47.7707	Dec	28	0.5714	0.181
2004	366	-47.7447	Nov	29	0.5918	0.234
2001	365	-47.6927	Jan	30	0.6122	0.287
1992	366	-47.1561	Dec	31	0.6327	0.341
1993	365	-46.7707	Jan	32	0.6531	0.396
1998	365	-46.7707	Dec	33	0.6735	0.452
1972	366	-46.7654	Dec	34	0.6939	0.510
1973	365	-46.1874	Jan	35	0.7143	0.570
1985	365	-46.1040	Dec	36	0.7347	0.632
2002	365	-45.7447	Jan	37	0.7551	0.696
1988	366	-45.4374	Dec	38	0.7755	0.764
1979	365	-45.1561	Jan	39	0.7959	0.835
1989	365	-45.1561	Jan	40	0.8163	0.910
1976	366	-45.0727	Jan	41	0.8367	0.992
1974	365	-44.2081	Dec	42	0.8571	1.080
1975	365	-44.1874	Jan	43	0.8776	1.178
2013	365	-44.1301	Jan	44	0.8980	1.288
1990	365	-43.7707	Feb	45	0.9184	1.417
2007	365	-43.3593	Jan	46	0.9388	1.574
1978	365	-42.7134	Dec	47	0.9592	1.780
1987	365	-41.4894	Dec	48	0.9796	2.105

"Gamma" (Fitted) = -47.82
"Theta" (Fitted) = 2.45
Deg. Freedom= 46

Figure 1


CDF for the Random Variable: "-MinAvg",
[Minimum System Avg. Temp (Deg-F) on a Day over a Year]
Prob{ -MinAvg < -T} (CDF)
1.0000
0.9000
0.8000
0.7000
0.6000
0.5000
0.4000
0.3000
0.2000
0.1000
0.0000
-55.0
-53.0
-51.0
-49.0
-47.0
-45.0
-43.0
-41.0
-39.0
-37.0
-35.0
"-MinAvg" (Deg-F) on a day
MinAvg for "1-in-10 Yr "Return Time: 44.6
MinAvg for "1-in-35 Yr" Return Time: 43.0
CDF (-MinAvg)

VI. Estimating the Uncertainty in the Peak-Day Design Temperature

The calculated peak-day design temperatures in section V above also have a statistical uncertainty associated with them. The estimated measures of uncertainty recommended for our use are calculated from the fitted model for the probability distribution and are believed to be reasonable, although rough, approximations.

The basic approach used the estimated parameters for the probability distribution (see the results provided in Table 7, above) to calculate the fitted temperatures as a function of the empirical CDF listed in Table 7. These fitted temperatures are then "compared" with the observed temperatures by calculating the difference = "observed" – "fitted" values. The full set of differences are then separated into the lower third (L), the middle third (M) and the upper third (U) of the distribution. Finally, calculate values of the root-mean-square error (RMSE) of the differences in each third of the distribution, along with the entire set of differences overall. The data in Table 8, below, show the temperature data and the resulting RMSE values.

The formula below is used to calculate the RMSE for a specified set of "N" data differences:

$$\text{RMSE} = \text{SQRT}\left\{ \left(\sum_{i=1, \ldots, N} e[\, i \,]^{2} \right) / (N-2) \right\},$$

where e[i] = *observed* less *fitted* value of temperature, T[i]. The number of estimated parameters (3 for the GEV model, 2 for the T-Dist and EV1 models) is subtracted from the respective number of data differences, N, in the denominator of the RMSE expression.

Since both the "1-in-35" and "1-in-10" peak-day temperature values are in the lower third quantile of the fitted distribution, the calculated standard error for these estimates is 0.52 Deg-F.

Table 8

Quantile: (Lower, Middle, Upper 3rd's)	Observed $T_{[i]}$ Temp. Ranked	Fitted Value of $T_{[i]}$	Residual $e_{[i]}$: Obs'd. less Fitted Value of $T_{[i]}$	Square of $e_{[i]}$:
U	53.7967	53.4534	0.3433	0.117857
U	51.4894	52.4050	-0.9156	0.838241
U	51.2680	51.8222	-0.5542	0.307188
U	51.1561	51.4007	-0.2447	0.059859
U	50.6614	51.0631	-0.4017	0.161388
U	50.3593	50.7772	-0.4179	0.174618
U	50.2994	50.5265	-0.2271	0.051592
U	50.1040	50.3013	-0.1973	0.038917
U	49.9352	50.0954	-0.1602	0.025667
U	49.8487	49.9044	-0.0557	0.003099
U	49.0780	49.7255	-0.6474	0.419156
U	49.0780	49.5562	-0.4782	0.228668
U	49.0520	49.3950	-0.3430	0.117632
U	48.8227	49.2404	-0.4177	0.174455
U	48.7967	49.0914	-0.2946	0.086819
U	48.7707	48.9470	-0.1763	0.031069
M	48.7707	48.8065	-0.0358	0.001278
M	48.7187	48.6692	0.0495	0.002451
M	48.4894	48.5346	-0.0452	0.002041
M	48.4634	48.4021	0.0613	0.003752
M	48.4114	48.2714	0.1400	0.019589
M	48.3593	48.1420	0.2174	0.047247
M	48.2607	48.0135	0.2472	0.061132
M	48.1821	47.8855	0.2966	0.087969
M	48.1301	47.7577	0.3724	0.138661
M	48.0520	47.6297	0.4223	0.178350
M	47.7967	47.5012	0.2955	0.087340
M	47.7707	47.3718	0.3989	0.159161
M	47.7447	47.2410	0.5037	0.253678
M	47.6927	47.1086	0.5841	0.341153
M	47.1561	46.9740	0.1821	0.033154
M	46.7707	46.8367	-0.0660	0.004355
L	46.7707	46.6962	0.0745	0.005553
L	46.7654	46.5518	0.2136	0.045632
L	46.1874	46.4028	-0.2154	0.046388
L	46.1040	46.2482	-0.1441	0.020772
L	45.7447	46.0869	-0.3422	0.117131
L	45.4374	45.9177	-0.4803	0.230721
L	45.1561	45.7388	-0.5827	0.339521
L	45.1561	45.5478	-0.3917	0.153461
L	45.0727	45.3419	-0.2691	0.072424
L	44.2081	45.1166	-0.9085	0.825460
L	44.1874	44.8660	-0.6786	0.460463
L	44.1301	44.5801	-0.4500	0.202514
L	43.7707	44.2424	-0.4717	0.222527
L	43.3593	43.8210	-0.4616	0.213087
L	42.7134	43.2382	-0.5248	0.275440
L	41.4894	42.1897	-0.7003	0.490487

Overall RMSE ($e_{[i]}$):	**0.42**	**°F**
Upper 3rd RMSE ($e_{[i]}$):	**0.45**	**°F**
Middle 3rd RMSE ($e_{[i]}$):	**0.32**	**°F**
Lower 3rd RMSE ($e_{[i]}$):	**0.52**	**°F**

VII. The Relationship between Annual Likelihoods for Peak-Day Temperatures and "Expected Return Time"

The event whose probability distribution we've modeled is the likelihood that the minimum daily temperature over a calendar year is less than a specified value. And, in particular, we've used this probability model to infer the value of a temperature, our *peak-day design temperature* ($TPDD_{\delta}$), that corresponds to a pre-defined likelihood, δ, that the observed minimum temperature is less than or equal to this design temperature.

(1) δ = Prob{ Minimum Daily Temperature over the Year < $TPDD_{\delta}$ }.

For some applications, it is useful to think of how this specified likelihood (or "risk level" δ) relates to the expected number of years until this Peak-Day event would first occur. This expected number of years is what is meant by the *return period*. The results stated below are found in the book: ***Statistics of Extremes***, E.J. Gumbel, Columbia University Press, 1958, on pages 21-25.

(2) E[#Yrs for Peak-Day Event to Occur] = 1 / δ,

1 / Prob{ Minimum Daily Temperature over the Year < $TPDD_{\delta}$ }.

For our peak-day design temperature (43.0°F) associated with a 1-in-35 annual likelihood, the return period is 35 years (δ=1/35). For the 44.6°F peak-day design temperature, the return period is 10 years (δ=1/10). Occasionally, a less precise terminology is used. For example, the 43.0°F peak-day design temperature may be referred to as a "1-in-35 year cold day"; and the 44.6°F peak-day design temperature may be referred to as a "1-in-10 year cold day."

The probability model for the *return period*, as a random variable, is a geometric (discrete) distribution with positive integer values for the *return period*. The parameter δ = Prob{ Minimum Daily Temperature over the Year < $TPDD_{\delta}$ }.

(3) Prob{ *return period* = r } = $(1 - \delta)^{(r-1)}$ δ, for r = 1, 2, 3, . . .

The expected value of the *return period* is already given in (2) above; the variance of the *return period* is:

(4) Var[*return period*] = $(E[\textit{ return period }])^2$ x $(1- (1 / E[\textit{ return period }]))$,

(4') Var[*return period*] = $(E[\textit{ return period }])$ x $(E[\textit{ return period }] - 1)$.

Equations (4) and (4') indicate that the standard deviation (square root of the variance) of the *return period* is nearly equal to its expected value. Thus, there is substantial variability about the expected value—a *return period* is not very precise.

2020 CALIFORNIA GAS REPORT

SERVICE AREA ECONOMIC FORECAST

SAN DIEGO GAS & ELECTRIC COMPANY SERVICE AREA ECONOMIC FORECAST

(based on Global Insight's February 2020 Regional Forecast, adjusted using Global Insight's March 20, 2020 updated interim US Forecast)

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
EMPLOYMENT (1000's)										
Total	1,431.8	1,461.2	1,493.8	1,519.8	1,481.3	1,495.4	1,554.1	1,581.9	1,592.7	1,598.6
I: Industrial (all manufacturing + mining)	108.7	109.7	113.0	116.7	114.2	109.5	112.2	112.8	113.6	114.0
C1: Office (Financial+Bus. & Professional Svcs)	307.5	313.4	324.7	331.0	314.9	316.1	343.5	355.1	361.1	365.5
C2: Restaurants	131.4	135.3	138.5	139.6	123.9	133.8	133.4	136.9	138.3	138.6
C3: Retail Trade	147.5	149.0	148.2	145.7	131.8	133.6	145.2	144.3	143.6	141.6
C4: Laundry & other Personal Services	20.1	20.1	20.5	21.5	21.6	21.7	21.9	22.0	21.8	21.7
C5: Wholesale Trade & Warehouses	45.7	45.9	45.8	45.5	44.0	44.0	45.1	46.1	46.3	46.4
C6: Primary & Secondary Schools	96.0	96.9	98.6	102.9	105.6	107.5	111.1	113.3	113.8	114.2
C7: Colleges (including other adult education)	45.4	46.2	46.5	47.2	48.5	49.4	51.0	52.0	52.2	52.4
C8: Health Services	169.0	174.7	179.4	184.0	188.7	192.2	198.7	202.6	203.5	204.2
C9: Accommodation	30.1	30.9	31.0	31.7	28.1	30.3	30.2	31.1	31.4	31.4
C10: Misc. (all other commercial employment)	63.2	64.4	65.3	66.6	66.9	67.2	67.9	68.1	67.6	67.3
C11: Government (non-education)	130.6	132.8	133.6	135.9	139.4	139.3	140.3	141.3	142.2	143.2
C12: Transportation, Information, and Utilities	51.5	53.9	55.4	55.6	55.4	54.0	54.3	54.8	54.6	54.4
C13: Construction	76.3	79.5	84.2	87.2	89.6	88.1	90.7	92.9	94.0	95.1
C14: Agriculture	8.9	8.7	9.1	8.8	8.7	8.7	8.6	8.6	8.5	8.5
OTHER INDICATORS										
Southern California Consumer Inflation*	1.9%	2.8%	3.8%	3.1%	1.2%	2.2%	2.4%	2.7%	2.5%	2.3%
Inflation--US Gross Domestic Product**	1.0%	1.9%	2.4%	1.8%	1.0%	1.0%	1.6%	2.1%	2.3%	2.3%

* Consumer Price Index for Greater Los Angeles area (Los Angeles and Orange Counties)

** Chained Price Index--US GDP: from Global Insight's March 20, 2020 updated interim Forecast of the U.S. Economy; beyond 2030 is from their February 2020 Forecast.

SAN DIEGO GAS & ELECTRIC COMPANY SERVICE AREA ECONOMIC FORECAST

(based on Global Insight's February 2020 Regional Forecast, adjusted using Global Insight's March 20, 2020 updated interim US Forecast)

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
EMPLOYMENT (1000's)										
Total	1,603.5	1,612.1	1,624.6	1,636.8	1,646.7	1,655.7	1,667.8	1,679.4	1,688.6	1,697.4
I: Industrial (all manufacturing + mining)	114.1	113.4	112.5	111.8	110.8	110.2	110.3	110.5	110.7	110.9
C1: Office (Financial+Bus. & Professional Svcs)	368.5	372.6	378.5	383.0	385.8	388.9	392.2	395.0	396.4	397.8
C2: Restaurants	138.9	139.6	140.9	142.6	144.1	145.7	147.2	148.7	150.0	151.4
C3: Retail Trade	139.8	139.0	138.9	139.1	138.8	139.0	139.8	140.9	141.6	142.4
C4: Laundry & other Personal Services	21.7	21.8	21.9	22.0	22.1	22.1	22.2	22.2	22.2	22.2
C5: Wholesale Trade & Warehouses	46.4	46.5	46.3	46.1	45.9	45.7	45.5	45.4	45.1	44.9
C6: Primary & Secondary Schools	114.7	115.6	116.8	117.8	118.6	119.5	120.5	121.5	122.5	123.4
C7: Colleges (including other adult education)	52.7	53.1	53.6	54.1	54.5	54.9	55.3	55.8	56.2	56.7
C8: Health Services	205.1	206.7	208.8	210.7	212.1	213.6	215.4	217.2	219.0	220.6
C9: Accommodation	31.5	31.7	31.9	32.3	32.7	33.0	33.4	33.7	34.0	34.3
C10: Misc. (all other commercial employment)	67.3	67.5	67.9	68.2	68.4	68.5	68.6	68.7	68.8	68.8
C11: Government (non-education)	144.1	145.0	145.8	146.5	148.3	148.2	149.0	149.8	150.7	151.6
C12: Transportation, Information, and Utilities	54.3	54.0	53.5	52.9	52.2	51.7	51.7	51.8	51.7	51.5
C13: Construction	95.9	97.1	98.9	101.5	104.2	106.4	108.4	110.0	111.4	112.8
C14: Agriculture	8.5	8.4	8.4	8.3	8.3	8.3	8.2	8.2	8.1	8.1
OTHER INDICATORS										
Southern California Consumer Inflation*	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	2.1%	2.2%	2.1%	2.1%
Inflation--US Gross Domestic Product**	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.2%	2.2%	2.2%

* Consumer Price Index for Greater Los Angeles area (Los Angeles and Orange Counties)

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