BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking on the Commission's Own Motion to Conduct a Comprehensive Examination of Investor Owned Electric Utilities' Residential Rate Structures, the Transition to Time Varying and Dynamic Rates, and Other Statutory Obligations.	Rulemaking 12-06-013 (Filed June 21, 2012)

PHASE 1 ADDITIONAL SUPPLEMENTARY TESTIMONY OF SAN DIEGO GAS & ELECTRIC COMPANY (U902E) PURSUANT TO ALJ RULING

Thomas R. Brill
Attorney for:
SAN DIEGO GAS & ELECTRIC COMPANY
8330 Century Park Ct.
San Diego, CA 92123-1530
Telephone: (858) 654-1601
Facsimile: (858) 654-1586
E-mail: TBrill@semprautilities.com

Dated: July 23, 2014

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking on the Commission's Own Motion to Conduct a Comprehensive Examination of Investor Owned Electric Utilities' Residential Rate Structures, the Transition to Time Varying and Dynamic Rates, and Other Statutory Obligations.	Rulemaking 12-06-013 (Filed June 21, 2012)

PHASE 1 ADDITIONAL SUPPLEMENTARY TESTIMONY OF SAN DIEGO GAS & ELECTRIC COMPANY (U902E) PURSUANT TO ALJ RULING

San Diego Gas & Electric Company ("SDG&E") hereby submits its Additional Supplementary Testimony pursuant to the Ruling of ALJ McKinney, issued July 11, 2014. In that Ruling, SDG&E was directed to answer the following question by no later than July 23, 2014:

(5) Energy Efficiency, Demand Response and Distributed Generation Programs:

d. Estimate total load reduction and peak period reduction or load shifting using the "Conservation Tab" of the PG&E RROIR Bill Impact Calculator or an equivalent tool. Use an appropriate elasticity assumption and justify and explain your choice of elasticity assumption.

SDG&E's Additional Supplementary Testimony to the ALJ's Order is set forth herein as Appendix "A." SDG&E appreciates the opportunity to submit this Supplementary Testimony.

Dated: July 23, 2014

San Diego Gas & Electric Company

/s/ Thomas R. Brill

By: Thomas R. Brill
Attorney for: SAN DIEGO GAS & ELECTRIC COMPANY
8330 Century Park Ct.
San Diego, CA 92123-1530
Telephone: (858) 654-1601
Facsimile: (858) 654-1586
E-mail: TBrill@semprautilities.com

APPENDIX A
SAN DIEGO GAS AND ELECTRIC COMPANY
IN SUPPORT OF JULY 23, 2014 ADDITIONAL SUPPLEMENTAL TESTIMONY
RULEMAKING 12-06-013 PHASE 1

In accordance with the ruling issued by Administrative Law Judge (ALJ) Jeanne M. McKinney on July 11, 2014 seeking additional supplementary testimony, San Diego Gas & Electric Company (SDG&E) hereby provides an answer to the following question:

(5) Energy Efficiency, Demand Response and Distributed Generation Programs:
d. Estimate total load reduction and peak period reduction or load shifting using the "Conservation Tab" of the PG&E RROIR Bill Impact Calculator or an equivalent tool. Use an appropriate elasticity assumption and justify and explain your choice of elasticity assumption.

In this response, SDG&E provides its estimate of conservation related to the current residential rate reform efforts. Details of this estimate are provided in the attached spreadsheet. Please note that this additional response supplements SDG&E's response submitted on May 16, 2014.

SDG&E has provided its estimate of conservation related to rate residential rate reform with the ruling and has provided its response in the attached spreadsheet. SDG&E estimates the residential price elasticity to be close to -.1. Residential elasticity estimates are based on residential sales models developed to submit residential sales forecasts to the California Energy Commission's Integrated Energy Policy Report (IEPR) process. Therefore SDG&E's preferred elasticity is -.1. The elasticity was applied to both California Alternate Rates for Energy (CARE) and non-CARE customers for Schedules DR and DRLI. SDG&E provided responses for its current baseline and the proposed baseline in its Rate Design Window application (RDW). Additionally SDG&E included a scenario of -.2 elasticity so that a more direct comparison can be made with the response of Pacific Gas and Electric Company (PG&E) labeled as "PG&E Conservation Tab" in PG&E's RROIR Bill Impact Calculator.

SDG&E provides a "Summary" tab and has each scenario labeled as a separate tab. For instance: "Conservation Tab 1 (-.1)" provides SDG&E's scenario 1 that uses and elasticity of -.1. SDG&E also has created a separate tab labeled "TOU Conservation Tab" to provide its estimates of load reduction based on its default TOU rates to become effective in 2018.

Results indicate that when applying an elasticity of (-.1) that SDG&E would expect an overall load growth of about .4% to .5% for all residential customers over the 2015-2017 timeframe – while holding everything else constant[1].

The percentages of annual kWh change for CARE versus Non-CARE are as follows:

Current Baseline:	Non-CARE	CARE
(-.1) elasticity	.67%	-.59%
(-.2) elasticity	1.35%	-1.19%
Proposed RDW Baseline:		
(-.1) elasticity	.78%	-.47%
(-.2) elasticity	1.56%	-.93%

SDG&E is providing its default Time-of-Use (TOU) example for its non-CARE and CARE customers. The proposed default TOU rate has a monthly service fee as well as a baseline credit. CARE customers receive a discounted TOU rate, and therefore there is no separate TOU rate for CARE. To simplify the analysis a weighted average Schedule DR and Schedule DRLI rates have been calculated using tier usage and accompanying rates. This weighted average rate is then compared to the proposed default TOU rates (see TOU Conservation Tab). An elasticity of -.2 has also been assumed for the non-CARE TOU example and a conservative elasticity of -.1 is being used for the CARE TOU example. The summer on-peak to off-peak price ratio is approximately 1.4 for both non-CARE and CARE TOU rates. The effect of the non-CARE elasticity shows a summer peak period reduction of 3.5%. This level of reduction is consistent with SDG&E's prior estimates of summer on-peak load reduction being between 3%-5%.

The effect of the CARE elasticity assumption shows kWh reductions (conservation) in all TOU periods for both summer and winter. The reason for this lies in the current CARE discount being closer to 40%, and the desired discount being closer to 34% in 2018. That change along with the TOU differential creates kWh reductions in all TOU periods – which is not the typical

[1]Other rate changes or changes to SDG&E's revenue requirements are not included, as economic and weather effects are also unknown.

result when applying TOU rates. Normally, the off-peak period shows kWh increases, and the on and semi-peak periods show kWh reductions.

SDG&E is providing the best elasticity assumptions it is able to provide based on currently available information. However, the exact elasticity that will be experienced once residential rate reforms have been implemented as a result of this proceeding, is currently unknown, and will depend on a number of factors. For example, under a scenario where the Net Energy Metering (NEM) program limit, established in Public Utilities Code Section 2827(c)(4)(B), is met in 2017, total residential consumption will go down by 7% when the NEM program limit has been realized (see Conservation Tab -.1 with NEM adj). Under this scenario, the upper tiers could show reductions of 14% and the bottom tiers could be reduced by 3%. However, the usage reductions will not be a direct result of rate design or rate reform, but instead result from other factors, many of which will not be under SDG&E's control.

Note: SDG&E is using its authorized sales from D.14-01-002. SDG&E did not apply its sales forecast to this response

Elasticity Assumption of -.1	2015-2017 kWh Change	2015-2017 kWh Total	Total Percent Change
Total non-CARE annual kWh change over the three year period with SDG&E's current Baseline:	37,510,285	5,566,762,291	0.67%
Total CARE annual kWh change over the three year period with SDG&E's current Baseline:	(8,436,478)	1,419,814,967	-0.59%
	29,073,807	6,986,577,259	0.42%
Total non-CARE annual kWh change over the three year period with SDG&E's proposed RDW Baseline:	43,282,684	5,566,762,291	0.78%
Total CARE annual kWh change over the three year period with SDG&E's proposed RDW Baseline:	(6,623,727)	1,419,814,967	-0.47%
	36,658,958	6,986,577,259	0.52%

Elasticity Assumption of -.2	2015-2017 kWh Change	2015-2017 kWh Total	Total Percent Change
Total non-CARE annual kWh change over the three year period with SDG&E's current Baseline:	75,020,571	5,566,762,291	1.35%
Total CARE annual kWh change over the three year period with SDG&E's current Baseline:	(16,872,956)	1,419,814,967	-1.19%
	58,147,615	6,986,577,259	0.83%
Total non-CARE annual kWh change over the three year period with SDG&E's proposed RDW Baseline:	86,565,369	5,566,762,291	1.56%
Total CARE annual kWh change over the three year period with SDG&E's proposed RDW Baseline:	(13,247,454)	1,419,814,967	-0.93%
	73,317,915	6,986,577,259	1.05%

Elasticity Assumption of -.1 with NEM Cap reached

Assumption that NEM Cap is reached , effect is that total consumption is reduced by 7% -- no conservation

	kWh total	**kWh Change**	**New Annual kWh**	**Change in total consumption**
Bottom Tiers (1 &2)	4,660,836,287	139,313,503	4,521,522,785	-3%
Upper Tiers (3 & 4)	2,325,740,971	325,064,839	2,000,676,132	-14%
Total	6,986,577,259	464,378,342	6,522,198,917	-7%

	2015-2017 kWh Change	**2015-2017 kWh Total**	**Total Percent Change**
Total non-CARE annual kWh change over the three year period with SDG&E's current Baseline:	29,989,510	5,195,259,618	0.58%
Total CARE annual kWh change over the three year period with SDG&E's current Baseline:	(8,743,676)	1,326,939,299	-0.66%
	21,245,834	6,522,198,917	0.33%
Total non-CARE annual kWh change over the three year period with SDG&E's proposed RDW Baseline:	35,433,263	5,195,259,618	0.68%
Total CARE annual kWh change over the three year period with SDG&E's proposed RDW Baseline:	(7,037,441)	1,326,939,299	-0.53%
	28,395,822	6,522,198,917	0.44%

TOU Elasticity Assumption of -.2

	2015-2017 kWh Change	**2015-2017 kWh Total**	**Total Percent Change**
Total non-CARE annual kWh change over the three year period with SDG&E's current Baseline:	46,235,601	5,566,762,291	0.83%
Total CARE annual kWh change over the three year period with SDG&E's current Baseline:	(40,351,397)	1,419,814,967	-2.84%
	5,884,203	6,986,577,259	0.08%

SDG&E 2015-2017 Price Elasticity of Energy - non CARE

Energy (Tiers)	Non-CARE (Schedule DR) Determinants (kWh)	Current Rate ($/kWh)	Proposed Rate ($/kWh)	Change in Price %	Price Elasticity of Demand (E_d) (dQ/Q) / (dP/P)	Estimated Change in quantity %	Estimated Change in annual kWh (dP/P) x E_d x Q	Estimated New kWh Quantity
Summer								
Tier 1	1,445,135,097	0.15396	0.18375	19%	(0.10)	-1.93%	(27,962,181)	1,473,097,278
Tier 2	293,387,123	0.17778	0.18375	3%	(0.10)	-0.34%	(985,218)	294,372,341
Tier 3	457,471,011	0.33323	0.23888	-28%	(0.10)	2.83%	12,952,732	444,518,279
Tier 4	677,029,294	0.35323	0.23888	-32%	(0.10)	3.24%	21,917,249	655,112,045
Winter								
Tier 1	1,562,553,827	0.15396	0.15469	0%	(0.10)	-0.05%	(740,884)	1,563,294,710
Tier 2	282,330,795	0.17778	0.15469	-13%	(0.10)	1.30%	3,666,902	278,663,893
Tier 3	405,933,950	0.29351	0.20110	-31%	(0.10)	3.15%	12,780,606	393,153,344
Tier 4	442,921,195	0.31351	0.20110	-36%	(0.10)	3.59%	15,881,079	427,040,116
	5,566,762,291					Total	**37,510,285**	**0.67%**

Note: Using SDG&E's Current Baseline

SDG&E 2015-2017 Price Elasticity of Energy CARE

Energy (Tiers)	CARE (Schedule DRLI) Determinants (kWh)	Current Rate ($/kWh)	Proposed Rate ($/kWh)	Change in Price %	Price Elasticity of Demand (E_d) (dQ/Q) / (dP/P)	Estimated Change in quantity %	Estimated Change in annual kWh (dP/P) x E_d x Q	Estimated New kWh Quantity
Summer								
Tier 1	433,534,801	0.10051	0.12480	24%	(0.10)	-2.42%	(10,477,393)	423,057,408
Tier 2	73,848,096	0.11762	0.12480	6%	(0.10)	-0.61%	(450,727)	73,397,369
Tier 3	98,315,652	0.17344	0.16501	-5%	(0.10)	0.49%	477,944	98,793,597
Tier 4	94,883,848	0.17344	0.16501	-5%	(0.10)	0.49%	461,261	95,345,109
Winter								
Tier 1	500,461,047	0.10051	0.10361	3%	(0.10)	-0.31%	(1,540,672)	498,920,375
Tier 2	69,585,502	0.11762	0.10361	-12%	(0.10)	1.19%	829,279	70,414,781
Tier 3	85,636,691	0.16204	0.13745	-15%	(0.10)	1.52%	1,299,497	86,936,188
Tier 4	63,549,330	0.16204	0.13745	-15%	(0.10)	1.52%	964,332	64,513,662
	1,419,814,967					Total	(8,436,478)	**-0.59%**

Tab Name: Conservation Tab 1. (-.1)

Printed on 07/23/2014 at 3:46 PM

SDGE Model March 21, 2013

	2015-2017 kWh Change	2015-2017 kWh Total	Total Percent Change
Total non-CARE annual kWh change over the three year period with SDG&E's current Baseline:	75,020,571	5,566,762,291	1.35%
Total CARE annual kWh change over the three year period with SDG&E's current Baseline:	(16,872,956)	1,419,814,967	-1.19%
	58,147,615	6,986,577,259	0.83%
Total non-CARE annual kWh change over the three year period with SDG&E's proposed ROW Baseline:	86,585,369	5,566,762,291	1.56%
Total CARE annual kWh change over the three year period with SDG&E's proposed ROW Baseline:	(13,247,454)	1,419,814,967	-0.93%
	73,317,915	6,986,577,259	1.05%

Note: SDG&E is using its authorized sales from D.14-01-002. SDG&E did not apply its sales forecast to this response.

SDG&E 2015-2017 Price Elasticity of Energy - non CARE

Energy (Tiers)	Non-CARE (Schedule DR) Determinants (kWh)	Current Rate ($/kWh)	Proposed Rate ($/kWh)	Change in Price %	Price Elasticity of Demand (E_d) $\frac{dQ/Q}{dP/P}$	Estimated Change in quantity %	Estimated Change in annual kWh (dP/P) x E_d x Q	Estimated New kWh Quantity
Summer								
Tier 1	1,445,135,097	0.15396	0.18375	19%	(0.20)	-3.87%	(55,924,363)	1,501,059,460
Tier 2	293,387,123	0.17778	0.18375	3%	(0.20)	-0.67%	(1,970,437)	295,357,559
Tier 3	457,471,011	0.33323	0.23888	-28%	(0.20)	5.66%	25,905,465	431,565,546
Tier 4	677,029,294	0.35323	0.23888	-32%	(0.20)	6.47%	43,834,499	633,194,796
Winter								
Tier 1	1,562,553,827	0.15396	0.15469	0%	(0.20)	-0.09%	(1,481,767)	1,564,035,594
Tier 2	282,330,795	0.17778	0.15469	-13%	(0.20)	2.60%	7,333,804	274,996,991
Tier 3	405,933,950	0.29351	0.20110	-31%	(0.20)	6.30%	25,561,212	380,372,738
Tier 4	442,921,195	0.31351	0.20110	-36%	(0.20)	7.17%	31,762,158	411,159,036
	5,566,762,291					Total	**75,020,571**	**1.35%**

Note: Using SDG&E's Current Baseline

SDG&E 2015-2017 Price Elasticity of Energy CARE

Energy (Tiers)	CARE (Schedule DRLI) Determinants (kWh)	Current Rate ($/kWh)	Proposed Rate ($/kWh)	Change in Price %	Price Elasticity of Demand (E_d) $\frac{dQ/Q}{dP/P}$	Estimated Change in quantity %	Estimated Change in annual kWh (dP/P) x E_d x Q	Estimated New kWh Quantity
Summer								
Tier 1	433,534,801	0.10051	0.12480	24%	(0.20)	-4.83%	(20,954,786)	412,580,015
Tier 2	73,848,096	0.11762	0.12480	6%	(0.20)	-1.22%	(901,454)	72,946,643
Tier 3	98,315,652	0.17344	0.16501	-5%	(0.20)	0.97%	955,889	99,271,541
Tier 4	94,883,848	0.17344	0.16501	-5%	(0.20)	0.97%	922,523	95,806,371
Winter								
Tier 1	500,461,047	0.10051	0.10361	3%	(0.20)	-0.62%	(3,081,344)	497,379,703
Tier 2	69,585,502	0.11762	0.10361	-12%	(0.20)	2.38%	1,658,558	71,244,060
Tier 3	85,636,691	0.16204	0.13745	-15%	(0.20)	3.03%	2,598,995	88,235,686
Tier 4	63,549,330	0.16204	0.13745	-15%	(0.20)	3.03%	1,928,664	65,477,994
	1,419,814,967					Total	(16,872,956)	**-1.19%**

Note: Using SDG&E's Current Baseline

6,986,577,259 69865772.59 7,056,443,031

SDG&E 2015-2017 Price Elasticity of Energy - non CARE

Energy (Tiers)	Non-CARE (Schedule DR) Determinants (kWh)	Current Rate ($/kWh)	Proposed Rate ($/kWh)	Change in Price %	Price Elasticity of Demand (E_d) $\frac{dQ/Q}{dP/P}$	Estimated Change in quantity %	Estimated Change in annual kWh (dP/P) x E_d x Q	Estimated New kWh Quantity
Summer								
Tier 1	1,445,135,097	0.15396	0.18187	18%	(0.20)	-3.63%	(52,385,064)	1,497,520,161
Tier 2	293,387,123	0.17778	0.18187	2%	(0.20)	-0.46%	(1,349,931)	294,737,053
Tier 3	457,471,011	0.33323	0.23643	-29%	(0.20)	5.81%	26,578,156	430,892,855
Tier 4	677,029,294	0.35323	0.23643	-33%	(0.20)	6.61%	44,773,672	632,255,622
Winter								
Tier 1	1,562,553,827	0.15396	0.15281	-1%	(0.20)	0.15%	2,334,291	1,560,219,536
Tier 2	282,330,795	0.17778	0.15281	-14%	(0.20)	2.81%	7,930,926	274,399,869
Tier 3	405,933,950	0.29351	0.19865	-32%	(0.20)	6.46%	26,236,898	379,695,052
Tier 4	442,921,195	0.31351	0.19865	-37%	(0.20)	7.33%	32,454,422	410,466,773
	5,566,762,291					Total	**86,585,369**	**1.56%**

Note: Using SDG&E's ROW Baseline

SDG&E 2015-2017 Price Elasticity of Energy CARE

Energy (Tiers)	CARE (Schedule DRLI) Determinants (kWh)	Current Rate ($/kWh)	Proposed Rate ($/kWh)	Change in Price %	Price Elasticity of Demand (E_d) $\frac{dQ/Q}{dP/P}$	Estimated Change in quantity %	Estimated Change in annual kWh (dP/P) x E_d x Q	Estimated New kWh Quantity
Summer								
Tier 1	433,534,801	0.10051	0.12342	23%	(0.20)	-4.56%	(19,765,936)	413,769,265
Tier 2	73,848,096	0.11762	0.12342	5%	(0.20)	-0.99%	(728,348)	73,119,748
Tier 3	98,315,652	0.17344	0.16322	-6%	(0.20)	1.18%	1,158,491	99,474,144
Tier 4	94,883,848	0.17344	0.16322	-6%	(0.20)	1.18%	1,118,053	96,001,901
Winter								
Tier 1	500,461,047	0.10051	0.10223	2%	(0.20)	-0.34%	(1,708,505)	498,752,542
Tier 2	69,585,502	0.11762	0.10223	-13%	(0.20)	2.62%	1,821,671	71,407,173
Tier 3	85,636,691	0.16204	0.13566	-16%	(0.20)	3.26%	2,787,885	88,424,576
Tier 4	63,549,330	0.16204	0.13566	-16%	(0.20)	3.26%	2,068,835	65,618,165
	1,419,814,967					Total	(13,247,454)	**-0.93%**

Note: Using SDG&E's ROW Baseline

Assumption: that NEM Cap is reached, effects that NEM consumption is reduced by 3%

	2015-2017 kWh Change	2015-2017 kWh Total	Total Percent Change
Total non-CARE annual kWh change over the three year period with SDG&E's current Baseline:	26,989,518	5,195,259,628	0.58%
Total CARE annual kWh change over the three year period with SDG&E's current Baseline:	(5,535,579)	1,326,939,299	-0.66%
	21,453,939	6,522,198,917	0.33%
Total non-CARE annual kWh change over the three year period with SDG&E's proposed ROW Baseline:	36,411,283	5,195,259,628	0.68%
Total CARE annual kWh change over the three year period with SDG&E's proposed ROW Baseline:	(7,915,461)	1,326,939,299	-0.58%
	28,495,822	6,522,198,917	0.44%

Note: SDG&E is using its authorized sales from D.14-01-002; SDG&E did not apply its sales forecast to this response.

					Current	Add	@ Cap	% Added
Total	6,988,577,259	464,378,447	6,522,198,912	3%				
Upper Tiers	2,475,246,871	125,064,839	2,600,676,157	14%				
Lower Tiers	4,462,830,347	339,313,561	4,521,522,788	3%				

SDG&E 2017 Price Elasticity of Energy – non CARE

Energy (Tiers)	Non-CARE (Schedule DR) Determinants (kWh)	Current Rate ($/kWh)	Proposed Rate ($/kWh)	Change in Price %	Price Elasticity of Demand (E_d) (ΔQ/Q)/(ΔP/P)	Estimated Change in quantity %	Estimated Change in annual kWh (ΔP/P) x E_d x Q	Estimated New kWh Quantity
Summer								
Tier 1	1,400,188,633	0.15196	0.15371	1%	[illegible]	[illegible]	(27,092,880)	1,427,281,132
Tier 2	284,762,224	0.17778	0.15371	3%	[illegible]	[illegible]	(554,578)	285,316,798
Tier 3	397,488,726	0.33323	0.24888	-26%	[illegible]	[illegible]	11,254,487	386,234,239
Tier 4	588,219,127	0.35322	0.24682	-42%	[illegible]	[illegible]	38,043,534	549,255,632
Winter								
Tier 1	1,511,995,438	0.15196	0.15409	0%	[illegible]	[illegible]	(747,803)	1,516,673,237
Tier 2	276,549,787	0.17774	0.15409	-15%	[illegible]	[illegible]	3,092,894	269,456,913
Tier 3	352,709,896	0.29551	0.20550	-31%	[illegible]	[illegible]	11,104,859	341,604,297
Tier 4	384,546,640	0.31351	0.20110	-36%	[illegible]	[illegible]	13,728,798	371,047,842
	5,195,259,628					Total	20,989,518	0.58%

Note: Using SDG&E's current Baseline

SDG&E 2017 Price Elasticity of Energy CARE

Energy (Tiers)	CARE (Schedule DRL) Determinants (kWh)	Current Rate ($/kWh)	Proposed Rate ($/kWh)	Change in Price %	Price Elasticity of Demand (E_d) (ΔQ/Q)/(ΔP/P)	Estimated Change in quantity %	Estimated Change in annual kWh (ΔP/P) x E_d x Q	Estimated New kWh Quantity
Summer								
Tier 1	422,323,440	0.10015	0.12468	24%	[illegible]	[illegible]	(10,206,444)	412,116,996
Tier 2	71,958,359	0.11762	0.12468	6%	[illegible]	[illegible]	(458,621)	71,499,238
Tier 3	79,647,245	0.17344	0.16901	-3%	[illegible]	[illegible]	387,185	80,034,430
Tier 4	76,867,080	0.17344	0.16901	-3%	[illegible]	[illegible]	373,676	77,240,756
Winter								
Tier 1	487,518,950	0.10015	0.10363	3%	[illegible]	[illegible]	(1,290,839)	486,228,111
Tier 2	87,745,997	0.11762	0.10311	-12%	[illegible]	[illegible]	807,823	88,553,820
Tier 3	69,371,793	0.16284	0.13795	-15%	[illegible]	[illegible]	1,060,748	70,432,540
Tier 4	51,452,434	0.16284	0.13795	-15%	[illegible]	[illegible]	781,222	52,233,656
	1,326,939,299					Total	(5,535,579)	-0.66%

Note: Using SDG&E's current Baseline

SDG&E 2017 Price Elasticity of Energy – non CARE

Energy (Tiers)	Non-CARE (Schedule DR) Determinants (kWh)	Current Rate ($/kWh)	Proposed Rate ($/kWh)	Change in Price %	Price Elasticity of Demand (E_d) (ΔQ/Q)/(ΔP/P)	Estimated Change in quantity %	Estimated Change in annual kWh (ΔP/P) x E_d x Q	Estimated New kWh Quantity
Summer								
Tier 1	1,400,188,633	0.15196	0.18187	18%	[illegible]	[illegible]	(25,582,733)	1,425,771,366
Tier 2	284,267,224	0.17778	0.18187	2%	[illegible]	[illegible]	(651,881)	284,916,105
Tier 3	397,488,726	0.33111	0.21443	-43%	[illegible]	[illegible]	11,946,653	385,542,073
Tier 4	588,259,127	0.35323	0.21644	-48%	[illegible]	[illegible]	19,451,478	568,807,650
Winter								
Tier 1	1,512,955,416	0.15194	0.15381	-1%	[illegible]	[illegible]	4,130,843	1,512,824,573
Tier 2	273,549,767	0.17774	0.15761	-14%	[illegible]	[illegible]	3,842,120	269,707,432
Tier 3	352,709,016	0.29511	0.19860	-47%	[illegible]	[illegible]	11,300,264	341,308,752
Tier 4	384,840,640	0.31351	0.19865	-45%	[illegible]	[illegible]	14,090,946	370,747,694
	5,195,259,628					Total	36,411,283	0.68%

Note: Using SDG&E proposed Baseline

SDG&E 2017 Price Elasticity of Energy CARE

Energy (Tiers)	CARE (Schedule DRL) Determinants (kWh)	Current Rate ($/kWh)	Proposed Rate ($/kWh)	Change in Price %	Price Elasticity of Demand (E_d) (ΔQ/Q)/(ΔP/P)	Estimated Change in quantity %	Estimated Change in annual kWh (ΔP/P) x E_d x Q	Estimated New kWh Quantity
Summer								
Tier 1	422,323,440	0.10015	0.12467	23%	[illegible]	[illegible]	(9,627,196)	412,696,244
Tier 2	71,958,359	0.11762	0.12467	5%	[illegible]	[illegible]	(324,756)	71,383,602
Tier 3	79,647,245	0.17344	0.16474	-5%	[illegible]	[illegible]	469,257	80,116,502
Tier 4	76,867,080	0.17344	0.16322	-6%	[illegible]	[illegible]	452,877	77,319,957
	650,776,124							
Winter								
Tier 1	487,518,950	0.10011	0.10724	7%	[illegible]	[illegible]	(832,400)	486,686,550
Tier 2	87,745,997	0.11762	0.10724	-13%	[illegible]	[illegible]	887,281	88,673,278
Tier 3	69,371,793	0.16284	0.13568	-12%	[illegible]	[illegible]	1,124,297	70,469,652
Tier 4	51,452,434	0.16284	0.13568	-16%	[illegible]	[illegible]	828,000	52,328,434
	1,326,939,299					Total	[illegible]	-0.58%

Note: Using SDG&E proposed Baseline

Res MW	175	275	449	Res	40%
Non-Res MW	90	64	118	Non-Res	20%
Total MW	269	338	607		
Capacity Factor	19.6%	19.6%			
PV Tier Offset					
Lower Tier %	30%	30%			
Upper Tier %	70%	70%			
Lower Tier kWh	91,907,362	139,313,508	231,220,869		
Upper Tier kWh	214,448,844	325,064,839	539,513,683		

Schedule DR 131,450,802 assume 30% of NEM are Schedule DR bottom tiers
Summer 260,011,371 assume 80% of NEM are Schedule DR top tiers
DR Original sales estimate reduction from NEM NEM adjusted sales

Summer					
Tier 1	1,445,131,097	44,946,464	1,400,188,633.24	3%	2,373,072,545
Tier 2	293,437,126	9,174,900	284,262,226.16	3%	
Tier 3	457,471,051	59,982,261	397,488,725.95	13%	
Tier 4	677,029,296	88,770,137	588,259,157.18	13%	
Winter					
Tier 1	1,562,554,827	48,598,453	1,513,955,416.26	3%	2,691,759,767
Tier 2	282,330,395	8,781,027	273,549,767.29	3%	
Tier 3	405,933,950	53,224,054	352,709,896.37	13%	
Tier 4	442,931,195	58,074,555	384,846,639.73	13%	
	5,166,742,281				
DRL					
Summer					
Tier 1	433,534,301	11,213,181	422,321,440.28	3%	700,587,597
Tier 2	73,848,096	1,909,737	71,938,359.00	3%	
Tier 3	98,111,651	18,468,407	79,643,245.03	19%	
Tier 4	94,384,848	18,014,768	76,367,079.85	19%	
Winter					
Tier 1	500,461,047	12,942,097	487,518,950.45	3%	719,232,370
Tier 2	89,985,502	1,299,505	87,745,996.58	3%	
Tier 3	85,636,691	16,260,898	69,371,793.31	19%	
Tier 4	63,540,340	12,088,898	51,452,433.67	19%	
	1,419,914,957				

	2015-2017 kWh Change	2015-2017 kWh Total	Total Percent Change
Total non-CARE annual kWh change over the three year period with SDG&E's current Baseline:	46,235,601	5,566,762,291	0.83%
Total CARE annual kWh change over the three year period with SDG&E's current Baseline:	(40,351,397)	1,419,814,967	-2.84%
	5,884,203	6,986,577,259	0.08%

Note: SDG&E is using its authorized sales from D.14-01-002. SDG&E did not apply its sales forecast to this response.

SDG&E 2015-2017 Price Elasticity of Energy - non CARE (TOU example)

Energy (Tiers)	Non-CARE (Schedule DR) Determinants (kWh)	Current Rate ($/kWh)	Proposed Rate ($/kWh)	Change in Price %	Price Elasticity of Demand (E_d) $\frac{(dQ/Q)}{(dP/P)}$	Estimated Change in quantity %	Estimated Change in annual kWh (dP/P) x E_d x Q	Estimated New kWh Quantity
Summer								
On-peak	637,811,000	0.23190	0.27279	18%	(0.20)	-3.53%	(22,495,314)	660,306,335
Semi-peak	821,684,442	0.23190	0.22758	-2%	(0.20)	0.37%	3,058,375	818,626,067
Off-peak	1,413,527,082	0.23190	0.19682	-15%	(0.20)	3.03%	42,760,962	1,370,766,120
Winter								
On-peak	317,861,292	0.20372	0.21351	5%	(0.20)	-0.96%	(3,054,943)	320,916,235
Semi-peak	985,908,755	0.20372	0.20196	-1%	(0.20)	0.17%	1,703,795	984,204,960
Off-peak	1,389,969,720	0.20372	0.18594	-9%	(0.20)	1.75%	24,262,746	1,365,706,974
	5,566,762,291					Total	**46,235,601**	**0.83%**

Note: Using SDG&E's Current Baseline

SDG&E 2015-2017 Price Elasticity of Energy CARE (TOU example)

Energy (Tiers)	CARE (Schedule DRLI) Determinants (kWh)	Current Rate ($/kWh)	Proposed Rate ($/kWh)	Change in Price %	Price Elasticity of Demand (E_d) $\frac{(dQ/Q)}{(dP/P)}$	Estimated Change in quantity %	Estimated Change in annual kWh (dP/P) x E_d x Q	Estimated New kWh Quantity
Summer								
On-peak	164,704,259	0.12243	0.19914	63%	(0.10)	-6.27%	(10,319,933)	154,384,326
Semi-peak	201,385,120	0.12243	0.16613	36%	(0.10)	-3.57%	(7,189,417)	194,195,702
Off-peak	353,143,192	0.12243	0.14368	17%	(0.10)	-1.74%	(6,130,030)	347,013,162
Winter								
On-peak	79,866,393	0.11493	0.15586	36%	(0.10)	-3.56%	(2,844,444)	77,021,949
Semi-peak	258,514,905	0.11493	0.14743	28%	(0.10)	-2.83%	(7,310,498)	251,204,407
Off-peak	362,201,099	0.11493	0.13574	18%	(0.10)	-1.83%	(6,557,075)	355,644,024
	1,419,814,967					Total	(40,351,397)	**-2.84%**