Company:San Diego Gas & Electric CompanyProceeding:Residential Untiered TOU RateApplication:A.21-09-XXXExhibit:SDG&E-02

### PREPARED DIRECT TESTIMONY OF

### HANNAH CAMPI

### ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY

### **BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

September 1, 2021



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### ATTACHMENT A – ILLUSTRATIVE BILL IMPACTS

## PREPARED DIRECT TESTIMONY OF

### HANNAH CAMPI

#### I. **OVERVIEW AND PURPOSE**

The purpose of my prepared direct testimony is to present the rate design for San Diego Gas & Electric Company's (SDG&E) proposed opt-in residential un-tiered Time-of-Use (TOU) rate, Schedule TOU-ELEC,<sup>1</sup> designed to encourage beneficial electrification. SDG&E is proposing this rate in compliance with Decision (D.) 20-03-003, which orders SDG&E to develop a residential TOU rate with un-tiered volumetric (\$/kWh) charges and a fixed charge to encourage electrification (electrification rate). This rate would be available on an opt-in basis to customers with one or more qualifying electrification technologies that have the potential to displace Greenhouse Gases. Pursuant to D. 20-03-003 at Ordering Paragraph 10, the qualifying electrification technologies include:

- Electric Vehicles (EVs) •
- Energy Storage

• Electric Heat Pump Water Heaters and Climate Control Systems This testimony also presents the existing components of SDG&E's residential rates and the rate components included as part of the proposed TOU-ELEC rate, some of which are unique to the proposed rate among SDG&E's existing residential rates.

- My testimony is organized as follows:

Section II – Background:

Section III – Electric Rate Components

<sup>&</sup>lt;sup>1</sup> "TOU-ELEC" is an interim name for said rate. SDG&E reserves the right to rename this rate at a later date.

1	• Section IV – Electrification Rate Purpose and Design
2	• Section V – Time of Use Differentials
3	• Sections VI – Fixed Customer Charge
4	• Section VIII – Illustrative Rates
5	• Section IX – Illustrative Bill Impacts
6	• Section X – Summary and Conclusion: provides a summary of
7	recommendations; and
8	• Section XI – Statement of Qualifications: presents my qualifications.
9	My testimony also contains the following attachments:
10	• Attachment A: Illustrative Bill Impacts
11	II. BACKGROUND
12	As noted in the Prepared Direct Testimony of Gwendolyn Morien, SDG&E has
13	developed this rate in compliance with D. 20-03-003. On March 19, 2020, the California Public
14	Utilities Commission (Commission) adopted D. 20-03-003 in Phase 3 of the investor-owned
15	utilities' (IOUs) consolidated 2018 Residential Rate Design Window (RDW) proceeding,
16	requiring SDG&E to propose an opt-in, un-tiered residential time-of-use rate with a fixed charge
17	in its next residential rate design application. <sup>2</sup> The electrification rate would be distinct from
17 18	in its next residential rate design application. <sup>2</sup> The electrification rate would be distinct from existing TOU rates in several ways. First, the addition of a non-volumetric rate component based
18	existing TOU rates in several ways. First, the addition of a non-volumetric rate component based

<sup>&</sup>lt;sup>2</sup> D.20-03-003, Ordering Paragraph (OP) 10 at 51; *see also* Application (A.) 17-12-013, consolidated with A.17-12-011 and A.17-12-012.

charge (\$/month) based on a customer's three maximum daily non-coincident historical peaks over the prior 12 months as an essential distinguishing feature of this rate.

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### III. ELECTRIC RATE COMPONENTS

Currently, residential customers in SDG&E's service territory pay for electricity primarily on a per kilowatt-hour (kWh), or volumetric basis, with the exception of a \$0.395/day minimum bill.<sup>3</sup> For SDG&E's current residential rates, the components described below are all collected via a per-kWh rate.

SDG&E's electric rates consist of the following rate components:

- Transmission Charge for the cost of high-voltage electric infrastructure to transport electricity from generation sites to lower-voltage distribution centers. This charge is a Federal Energy Regulatory Commission (FERC) regulated component.
- Distribution Charge to distribute lower-voltage electricity from distribution centers to end-use customers. This charge includes local infrastructure such as meters, power lines, poles, and transformers, as well as maintenance, repair, and emergency services related to distribution infrastructure.
  - Public Purpose Programs (PPP) Charge for costs of certain California state policy mandates, including funding of low-income, energy efficiency, and other programs.
  - Nuclear Decommissioning (ND) Charge for retirement and decommissioning of nuclear power plants.

<sup>&</sup>lt;sup>3</sup> Non-California Alternate Rates for Energy (CARE) customers pay \$0.395/day. CARE customers pay \$0.172/day.

1	• <b>Competition Transition Charge (CTC)</b> – Charge for the cost of long-term
2	Power Purchase Agreements (PPAs) and generation power plants approved by
3	state regulators as part of SDG&E's procurement obligations that have exceed
4	market benchmark prices through the opening of generation to competition.
5	• Reliability Services (RS) – Charges for the costs associated with having
6	sufficient generating facilities available to meet electricity demand. This
7	charge is a FERC-regulated component.
8	Local Generation Charge (LGC) – Charge for costs associated
9	with generation facilities, which are required to maintain local reliability.
10	• Total Rate Adjustment Component (TRAC) – Applied to tiered residential
11	rates to provide a subsidy for energy usage below 130% of the baseline
12	collected via a charge for energy use above 130% of baseline; maintains a
13	statutory requirement for the ratio between energy consumed up to 130% of
14	baseline, and energy used beyond that amount.
15	California Wildfire Fund Non-Bypassable Charge (WF-
16	<b>NBC)</b> – Charge for cost of partially funding a source of relief money to pay or
17	reimburse eligible wildfire-related claims. <sup>4</sup>
18	• California Climate Credit (CCC) – Credit resulting from SDG&E's sale of
19	Greenhouse Gas allowances sold at auction.

<sup>&</sup>lt;sup>4</sup> D.21-01-017 and implemented into rates March 1, 2021 via Advice Letter 3696-E-A-B.

• **Commodity** – Charge for electricity provided to SDG&E's bundled customers, including costs associated with electricity generation and procurement from both utility-owned generation and third-party PPAs.

However, the costs associated with many of these components, such as distribution, do not vary significantly with volumetric energy consumption. As a result, volumetric rates are higher than they would be if they only reflected the costs of each additional kWh of electricity consumption. Moving some of these costs out of the volumetric rate and instead collecting them through a fixed charge enables lower volumetric rates than the volumetric price in existing residential rates. This, in turn, reduces the cost of operating technologies with high energy consumption. TOU-ELEC includes a fixed charge that is scaled to customer demand and is designed to recover a portion of the fixed costs associated with electricity delivery. As a result, the volumetric rates are lower and better reflect the marginal cost of the energy being consumed.

#### IV. ELECTRIFICATION RATE PURPOSE AND DESIGN

This rate is designed to encourage beneficial electrification and enable building decarbonization through the adoption and use of qualifying electrification technologies while encouraging load shifting and maintaining an incentive for conservation. The rate design promotes both beneficial electrification and conservation by lowering the volumetric rate through a monthly fixed customer charge that is scaled to a customer's three highest daily points of annual non-coincident demand. This incentivizes a reduction in demand on an overall basis through a reduced fixed charge for customers who decrease their non-coincident peak demand, as well as reducing the cost to operate electrified technologies. Additionally, 20% of commodity capacity costs are moved from the summer On-Peak period to the winter On-Peak period, leading to the Peak-to-Super-Off-Peak period (PSOPP) TOU differentials shown in

HC-5

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Section V below. This creates year-round price signals that shift consumption away from the peak period. Finally, SDG&E is proposing to set the TOU differential between the Off-Peak and Super Off-Peak Period (OSOPP) at 1.5, creating a flattened TOU structure outside of the peak period.<sup>5</sup> Higher year-round TOU differentials encourage consistent load shifting, while a flatter rate outside of the peak period can encourage consumption during the day when renewable energy is generally more available.

V.

### TIME OF USE DIFFERENTIALS

SDG&E is proposing to maintain the current effective standard TOU periods and seasonal definitions adopted in D.17-08-030, which are shown in Table HC-1 below.

TOU Periods - Weekdays Winter Summer **On-Peak** 4:00 p.m. - 9:00 p.m. 4:00 p.m. - 9:00 p.m. **Off-Peak** 6:00 a.m. - 4:00 p.m.; 6:00 a.m. - 4:00 p.m. 9:00 p.m. - midnight Excluding 10:00 a.m. - 2:00 p.m. in March and April; 9:00 p.m. - midnight Midnight - 6:00 a.m. Super Off-Peak Midnight - 6:00 a.m. 10:00 a.m. - 2:00 p.m. in March and April TOU Period - Weekends and Summer Winter Holidays **On-Peak** 4:00 p.m. - 9:00 p.m. 4:00 p.m. – 9:00 p.m. Off-Peak 2:00 p.m. – 4:00 p.m.; 2:00 p.m. - 4:00 p.m.; 9:00 p.m. - midnight 9:00 p.m. - midnight Super Off-Peak Midnight - 2:00 p.m. Midnight - 2:00 p.m.

### Table HC-1: Current Effective Standard TOU Periods<sup>6</sup>

Seasons: Summer June 1 – October 31 Winter November 1 – May 31

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The 4-9 pm On-Peak period is a time of high grid strain, and shifting demand away from this period will play an important role in maintaining reliability and grid stability in the face of a changing resource mix and increasing frequency of severe weather events. TOU price signals

<sup>&</sup>lt;sup>5</sup> This differential could be reviewed in a future rate design application, *e.g.*, SDG&E's next General Rate Case Phase 2.

<sup>&</sup>lt;sup>6</sup> Differentials abbreviated as: peak-to-off-peak periods (POPP) and peak-to-super-off-peak periods (PSOPP) and off-to-super-off-peak periods (OSOPP).

encourage load shifting away from times of peak demand in order to smooth load profiles and reduce grid strain.

The proposed rate design results in PSOPP commodity differentials of 5.3 for Summer and 3.1 for Winter; however, SDG&E is not proposing set PSOPP differentials. The resulting PSOPP commodity differentials are higher than the summer PSOPP differentials seen in TOU-DR-1, SDG&E's default residential rate, creating a stronger incentive for customers who enroll in TOU-ELEC to shift their use away from the On-Peak period. Since enrollment in the rate requires a technology that may result in increased energy consumption, stronger TOU price differentials encourage the use of these technologies in a way that is compatible with electrification goals and not contributing to grid strain. A high PSOPP TOU differential also provides customers with a greater opportunity for bill savings if they are able to shift usage away from the On-Peak period.

SDG&E is proposing set commodity differentials for its OSOPP TOU periods of 1.5 for both Summer and Winter. A lower OSOPP TOU commodity differential creates a flatter rate outside of the On-Peak relative to the differentials seen in the default residential rate. This can encourage consumption during the daytime when there are more renewables (specifically solar resources) generating power.

SDG&E's proposed TOU- ELEC commodity differentials are outlined in Table HC-2.

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	Unit	Illustrative Proposed Base Commodity Rate
Summer		
On-Peak	\$/kWh	0.32354
Off-Peak	\$/kWh	0.09152
Super-Off Peak	\$/kWh	0.06101
Winter		
On-Peak	\$/kWh	0.17112
Off-Peak	\$/kWh	0.08322
Super-Off Peak	\$/kWh	0.05548
Summer Differentials		
On: Super-Off-Peak		5.3
On: Off-Peak		3.5
Off: Super-Off-Peak		1.5
Winter Differentials		
On: Super-Off-Peak		3.1
On: Off-Peak		2.1
Off: Super-Off-Peak		1.5

### Table HC-2: Illustrative TOU-ELEC Commodity Rates and TOU Differentials

As shown in the table above, the commodity differentials are the primary driver of the TOU-based incentive structure in TOU-ELEC. The total rate, including both commodity rates and all other rate components, and its resulting differentials are outlined in Table HC-3. Relative to SDG&E's default residential rate (TOU-DR-1), TOU-ELEC has higher PSOPP and POPP differentials year-round.

	TOU-DR-1	TOU-ELEC
Summer Energy:		
On-Peak	0.60907	0.45211
Off-Peak	0.36176	0.22010
Super Off-Peak	0.30461	0.18959
Baseline Credit	(0.08531)	
Winter Energy:		
On-Peak	0.42651	0.29970
Off-Peak	0.41544	0.21180
Super Off-Peak	0.40316	0.18406
Baseline Credit	(0.08531)	
Summer Differentials:		
On: Super-Off-Peak	2.0	2.4
On: Off-Peak	1.7	2.1
Winter Differentials:		
On: Super-Off-Peak	1.1	1.6
On: Off-Peak	1.0	1.4

#### Table HC-3: Comparison of TOU-DR1 and Illustrative TOU-ELEC Total Rates

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### VI. FIXED CUSTOMER CHARGE

SDG&E's proposed fixed monthly customer charge rates can be seen in Table HC-4 below. SDG&E is proposing a fixed monthly customer charge that would be set annually at one of four tiers using the average of a customer's top 3 hourly non-coincident demand (NCD) peaks over 12 months that do not occur on the same day. The resulting demand would be used to set the customer charge for one year, after which it would be recalculated using the most recent 12 months of usage data. For example, if the top three annual NCD peaks were 3.7 kW, 4.0 kW, and 3.6 kW, the tier would be based on a demand of 3.77 kW,<sup>7</sup> placing the customer in Tier 1.

<sup>7</sup> Example calculation: (3.7 kW+4.0 kW+3.6 kW)/3 = 3.77 kW.

The demand and resulting monthly charge for each tier are shown in Table HC-4 below. The purpose of the fixed charge design is to appropriately set a customer's fixed charge such that it is cost-based, consistent, and understandable. New SDG&E customers who opt-in to the rate but do not have a historical usage profile would be initially placed on the lowest tier and defaulted to the tier that matches their demand after six months of data on the rate that is available.<sup>8</sup>

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Table HC-4: Illustrative TOU-ELEC Fixed Monthly Customer Charge

Fixed Customer Charge kW Range	\$/Month
Tier 1: 0-4 kW	28.53
Tier 2: 4-8 kW	51.28
Tier 3: 8-10 kW	68.35
Tier 4: >10 kW	85.41

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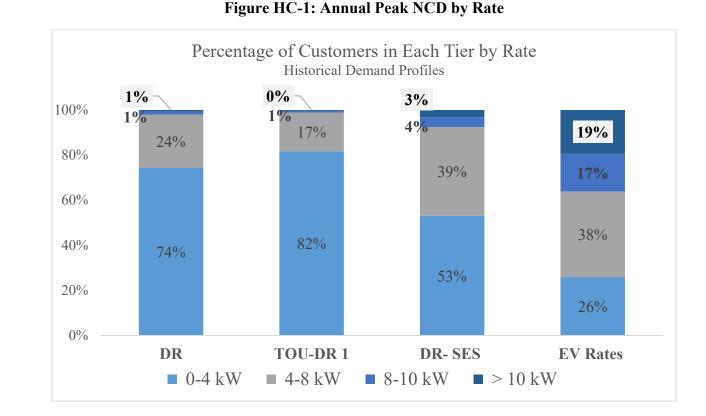
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As shown below in Figure HC-1, customers on SDG&E's existing EV<sup>9</sup> and solar-specific rate fall into higher demand tiers more often than those on the default residential TOU rate (TOU-DR1) and the non-TOU residential rate (schedule DR). This indicates that, in general, customers with qualifying technologies are more likely to have a higher peak demand. As more customers electrify and see their peak demand increase, it will become more important to ensure that rates accurately reflect the cost of service and non-TOU price signals are available to incentivize conservation.

<sup>&</sup>lt;sup>8</sup> Demand tier determined using the average of the three maximum non-coincident peaks over the 6month period.

<sup>&</sup>lt;sup>9</sup> EV rates shown include EV-TOU and EV-TOU-2. Schedule DR is one of SDG&E's non-TOU residential rates.



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3 Scaling the monthly charge to the average of three annual demand peaks achieves this by 4 sending accurate price signals that enable savings if demand is consistently reduced, as well as 5 being more targeted than a single fixed charge which would lead to lower-demand customers 6 overpaying and subsidizing higher-demand customers. This design results in a fixed charge 7 design that is aimed at limiting any potential cost shifting that could result from higher-use 8 customers being charged a flat fixed charge. For example, if a customer's annual peak demand 9 average was 9 kW, cost-based fixed charge design would place them in Tier 3 with a 10 \$68.35/month fixed charge. If a single fixed charge were proposed below \$68.35, these higher 11 demand customers would benefit, and the difference would be subsidized by other customers. 12 Similarly, a Tier 1 customer paying a fixed charge above \$28.53 would be subsidizing higher-13 demand customers.

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### VII. CARE/FERA RATES

SDG&E is proposing a 50% discount, consistent with existing low-income minimum billdiscounts, on the applicable fixed customer charge for customers eligible for CaliforniaAlternative Rates for Energy (CARE) and Family Electric Rates Assistance (FERA) programs,along with exemptions and line-item discounts that apply to current CARE and FERA customers.

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## Table HC-5: Illustrative CARE/FERA TOU-ELEC Fixed Monthly Customer Charge

Fixed Customer Charge kW Range	\$/Month
Tier 1: 0-4 kW	14.26
Tier 2: 4-8 kW	25.64
Tier 3: 8-10 kW	34.17
Tier 4: >10 kW	42.71

### VIII. ILLUSTRATIVE RATES

The total default bundled rate is shown below in Table HC-6. SDG&E's bundled

10 customers<sup>10</sup> would see the volumetric rates below paired with their applicable customer charge

11 when enrolling in this rate.

<sup>&</sup>lt;sup>10</sup> Bundled customers are those who receive both commodity (energy) and utility distribution company (UDC) service from SDG&E. Unbundled customers continue to receive electric distribution services from SDG&E, but purchase their commodity from a separate provider such as a Community Choice Aggregator (CCA).

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	Units	TOU-ELEC
Fixed Customer		
Charge:		
Tier 1: 0-4 kW	\$/Month	28.53
Tier 2: 4-8 kW	\$/Month	51.28
Tier 3: 8-10 kW	\$/Month	68.35
Tier 4: >10kW	\$/Month	85.41
Summer Energy:		
On-Peak	\$/kWh	0.44620
Off-Peak	\$/kWh	0.21418
Super Off-Peak	\$/kWh	0.18368
Winter Energy:		
On-Peak	\$/kWh	0.29379
Off-Peak	\$/kWh	0.20589
Super Off-Peak	\$/kWh	0.17815

Table HC-6 – Illustrative Total Rate: TOU-ELEC

Unbundled residential customers who choose to opt-in to the rate would see the rates shown below and a separate commodity rate set by their commodity provider. Since TOU differentials are driven by the commodity component of volumetric rates, unbundled customers would have these differentials set by their commodity provider, which may or may not be similar to the commodity differentials shown in Table HC-2. Since the fixed charge component of the rate recovers costs associated with UDC service, unbundled customers enrolling in TOU-ELEC would still see savings in their volumetric rates relative to SDG&E's other residential rate options.<sup>11</sup>

<sup>&</sup>lt;sup>11</sup> With the exception of EV-TOU-5, where the Super-Off-Peak rate is lower than the proposed TOU-ELEC Super-Off-Peak rate.

	Units	TOU- ELEC	DR-SES <sup>12</sup> UDC Rate
Fixed Customer Charge:			
Tier 1: 0-4 kW	\$/Month	28.53	
Tier 2: 4-8 kW	\$/Month	51.28	
Tier 3: 8-10 kW	\$/Month	68.35	
Tier 4: >10kW	\$/Month	85.41	
Summer Energy:			
On-Peak	\$/kWh	0.12266	0.20922
Off-Peak	\$/kWh	0.12266	0.20922
Super Off-Peak	\$/kWh	0.12266	0.20922
Winter Energy:			
On-Peak	\$/kWh	0.12266	0.20922
Off-Peak	\$/kWh	0.12266	0.20922
Super Off-Peak	\$/kWh	0.12266	0.20922
Minimum Bill	\$/Day		0.345

 Table HC-7 – Illustrative Unbundled Rate: TOU-ELEC

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### IX. BILL IMPACTS

Illustrative bill impacts provided in Attachment A are based on a sample of 2019 load profiles.<sup>13</sup> These profiles include both CARE and non-CARE customers, as well as EV and non-EV customers. The variety of eligible technologies available for enrollment on this rate means that there is not a single usage profile representing all eligible customers. To account for this, several profiles are shown in the attachment with a range of consumption, daily usage patterns, and maximum annual demand peaks.

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Additionally, because SDG&E has both all-electric and combined gas and electric

customers, not all bill impacts will reflect a change in gas bills. For customers who are already

<sup>&</sup>lt;sup>12</sup> DR-SES is SDG&E's existing untiered residential rate.

<sup>&</sup>lt;sup>13</sup> Due to COVID-19, customer consumption in 2020 is anomalous to prior years. Therefore, SDG&E presents illustrative bill impacts based on 2019 data.

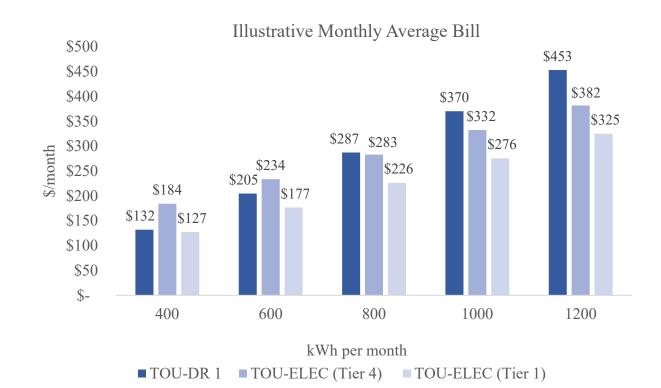
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all-electric and purchase a qualifying technology, bill impacts will only reflect the increased kWh consumption that results from additional consumption resulting from a new technology such as an EV, or the modified usage patterns that could result from adopting a technology such as a storage device. For customers who have both gas and electric service, bill impacts can reflect additional costs of increased electric use as well as a reduction in natural gas use and bills, if the new technology results in a reduction in natural gas consumption. However, some customers may adopt a qualifying technology such as an EV that is not displacing residential natural gas use, and therefore would not result in savings on the customer's gas bill.

Actual bill impacts for a given customer will depend on their specific usage pattern, technology adoption, ability to respond to TOU price signals, and whether they are qualifying for the rate by replacing a natural gas-powered technology or increasing electricity consumption without changing natural gas consumption. An Illustrative profile of an average bill at varying consumption levels for a customer under TOU-DR-1, TOU-ELEC (Tier 1) and TOU-ELEC (Tier 4) is shown below in Figure HC-2.





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### X. SUMMARY AND CONCLUSION

The current volumetric pricing design of residential electric rates can hinder electrification goals through the high operating cost of electric appliances. SDG&E developed this residential electrification rate to reduce the ongoing operating cost of these technologies and incentivize an overall reduction in residential maximum demand. Combining a fixed charge scaled to non-coincident demand, reduced volumetric pricing, and higher year-round PSOPP TOU differentials provides a unique residential rate option that enables greater electrification opportunities for a variety of technologies and customer profiles. This concludes my prepared direct testimony.

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### XI. STATEMENT OF QUALIFICATIONS

My name is Hannah Campi. My business address is 8330 Century Park Court, San Diego, California 92123. I am employed as a Business/Economics Advisor in the Customer Pricing Department of SDG&E. I have worked for SDG&E since May 2020.

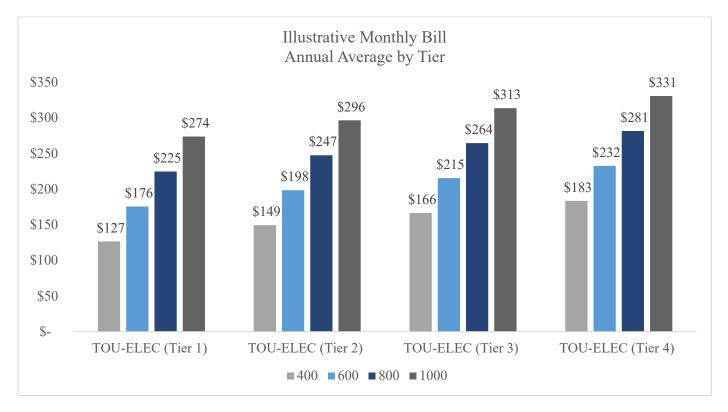
5 I received a Bachelor of Science degree in Environmental Science from the University of
6 California, Riverside. I received a Master of International Affairs: Energy and Environmental
7 Policy degree from the University of California, San Diego.

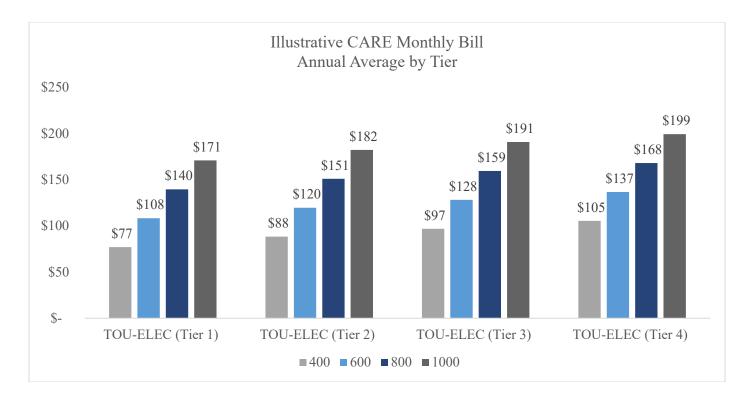
I have previously testified before the California Public Utilities Commission.

### ATTACHMENT A

Illustrative Bill Impacts







A-1

#### **Illustrative Monthly Bill Impacts: Aggregated Customer Data**

Illustrative monthly bill impacts are based on aggregated customer load profiles. Various profiles were used to illustrate the range of bill impacts that could result from enrollment on the rate. Actual bill impacts will depend on an individual customer's usage habits and qualifying electrification technology, among other factors. Where increased monthly kWh is shown (Scenario 2), monthly bills may also change if the increased consumption also leads to increased non-coincident demand and a resulting increase in fixed charge tier. In the illustrative bill impacts shown, only kWh was adjusted, and the customer tier remained set at the initial level as shown in Scenario 1.

	Profile 14: Non-CARE, Dual Fuel, Inland, TOU-DR-1								
Month	Monthly kWh	Bill: Standard Rate	Bi	ll: TOU-ELEC	Bill	Change (\$)	Bill Change (%)		
January	1425.7	\$ 558.45	\$	398.39	\$	(160.06)	-29%		
February	1329.2	\$ 521.51	\$	377.20	\$	(144.32)	-28%		
March	1266.6	\$ 492.73	\$	363.45	\$	(129.28)	-26%		
April	1118.3	\$ 432.49	\$	330.90	\$	(101.59)	-23%		
May	1162.0	\$ 449.54	\$	340.49	\$	(109.06)	-24%		
June	1107.2	\$ 413.85	\$	370.11	\$	(43.74)	-11%		
July	1246.9	\$ 467.94	\$	406.04	\$	(61.90)	-13%		
August	1340.9	\$ 504.80	\$	430.22	\$	(74.57)	-15%		
September	1295.8	\$ 487.79	\$	418.63	\$	(69.16)	-14%		
October	1155.3	\$ 432.06	\$	382.50	\$	(49.56)	-11%		
November	1175.1	\$ 455.94	\$	343.37	\$	(112.57)	-25%		
December	1393.7	\$ 545.24	\$	391.36	\$	(153.87)	-28%		
Annual	15016.7	\$ 5,762.34	\$	4,552.66	\$	(1,209.69)	-21%		

### Scenario 1: No Change in Consumption

Annual NCD (kW)11.0Fixed Charge\$ 85.41

Profile 12: Non-CARE, Dual Fuel, Coastal, TOU-DR1								
Month	Total kWh	Bill: S	tandard Rate	Bill	: ELEC-TOU	Bill (	Change (\$)	Bill Change (%)
January	682.7	\$	251.35	\$	222.76	\$	(28.59)	-11%
February	625.3	\$	230.60	\$	209.76	\$	(20.84)	-9%
March	619.5	\$	225.14	\$	208.45	\$	(16.68)	-7%
April	568.9	\$	205.18	\$	197.01	\$	(8.17)	-4%
May	584.6	\$	210.69	\$	200.57	\$	(10.12)	-5%
June	597.8	\$	216.33	\$	231.84	\$	15.52	7%
July	746.2	\$	276.46	\$	272.43	\$	(4.03)	-1%
August	797.8	\$	297.69	\$	286.52	\$	(11.17)	-4%
September	794.3	\$	297.26	\$	285.58	\$	(11.69)	-4%
October	643.4	\$	234.10	\$	244.31	\$	10.20	4%
November	613.8	\$	223.79	\$	207.16	\$	(16.63)	-7%
December	715.4	\$	264.88	\$	230.14	\$	(34.74)	-13%
Annual	7989.7	\$	2,933.47	\$	2,796.52	\$	(136.95)	-5%

Annual NCD (kW)	8.3
Fixed Charge	\$ 68.35

	Profile	13: No	on-CARE All-El	ectric,	Coastal, TOL	J-DR-:	1	
Month	Monthly kWh	Bill: Standard Rate		Bill	: TOU-ELEC	Bill (	Change (\$)	Bill Change (%)
January	441.2	\$	152.10	\$	148.97	\$	(3.13)	-2%
February	408.6	\$	141.52	\$	141.74	\$	0.21	0%
March	335.9	\$	110.13	\$	125.65	\$	15.51	14%
April	284.9	\$	93.41	\$	114.35	\$	20.94	22%
May	254.8	\$	83.56	\$	107.70	\$	24.14	29%
June	238.4	\$	74.58	\$	113.64	\$	39.06	52%
July	276.9	\$	89.21	\$	123.72	\$	34.51	39%
August	304.2	\$	100.04	\$	130.86	\$	30.82	31%
September	330.9	\$	111.30	\$	137.84	\$	26.53	24%
October	300.1	\$	98.41	\$	129.79	\$	31.37	32%
November	327.9	\$	107.53	\$	123.89	\$	16.36	15%
December	408.2	\$	138.46	\$	141.66	\$	3.20	2%
Annual	3912.2	\$	1,300.25	\$	1,539.79	\$	239.54	18%

Annual NCD (kW)5.4Fixed Charge\$ 51.28

	Profi	le 9: No	n-CARE, All El	ectric,	Coastal, TO	J-DR1		
Month	Total kWh	Bill: S	Bill: Standard Rate		Bill: ELEC-TOU		Change (\$)	Bill Change (%)
January	258.3	\$	85.08	\$	87.20	\$	2.13	2%
February	251.9	\$	82.95	\$	85.74	\$	2.78	3%
March	216.5	\$	71.31	\$	77.71	\$	6.40	9%
April	188.4	\$	62.06	\$	71.33	\$	9.27	15%
May	191.0	\$	62.91	\$	71.92	\$	9.00	14%
June	192.9	\$	62.82	\$	81.17	\$	18.35	29%
July	231.2	\$	75.31	\$	91.63	\$	16.32	22%
August	242.6	\$	79.01	\$	94.73	\$	15.73	20%
September	247.8	\$	81.78	\$	96.16	\$	14.38	18%
October	209.8	\$	68.34	\$	85.79	\$	17.45	26%
November	206.1	\$	67.88	\$	75.34	\$	7.46	11%
December	247.4	\$	81.48	\$	84.72	\$	3.24	4%
Annual	2684.1	\$	880.92	\$	1,003.45	\$	122.52	14%

Annual NCD (kW)	2.8
Fixed Charge	\$ 28.53

		Pro	file 14: CARE, D	ual F	uel. Inland. T(	<u>-</u> 20-1	DR-1	
Month	Monthly kWh	1	Standard Rate	; ;			Bill Change (\$)	Bill Change (%)
January	1425.7	\$	355.07	\$	241.22	\$	(113.85)	-32%
February	1329.2	\$	331.90	\$	227.77	\$	(104.13)	-31%
March	1266.6	\$	312.06	\$	219.06	\$	(93.00)	-30%
April	1118.3	\$	272.97	\$	198.41	\$	(74.55)	-27%
May	1162.0	\$	283.79	\$	204.49	\$	(79.30)	-28%
June	1107.2	\$	263.40	\$	225.09	\$	(38.30)	-15%
July	1246.9	\$	298.50	\$	248.11	\$	(50.39)	-17%
August	1340.9	\$	322.58	\$	263.60	\$	(58.98)	-189
September	1295.8	\$	311.70	\$	256.17	\$	(55.53)	-18%
October	1155.3	\$	275.06	\$	233.03	\$	(42.03)	-15%
November	1175.1	\$	288.31	\$	206.32	\$	(81.99)	-28%
December	1393.7	\$	346.42	\$	236.76	\$	(109.66)	-32%
Annual	15016.7	\$	3,661.76	\$	2,760.04	\$	(901.73)	-25%

Scenario 1: No Change in Consumption, CARE Discount Applied

Annual NCD (kW)11.0Fixed Charge\$42.71

		Profi	le 12: CARE, D	ual F	uel, Coastal, 1	-UO	DR1	
Month	Nonth Total kWh		tandard Rate	Bil	I: ELEC-TOU	Bi	ill Change (\$)	Bill Change (%)
January	682.7	\$	153.61	\$	132.31	\$	(21.30)	-14%
February	625.3	\$	141.08	\$	124.05	\$	(17.03)	-12%
March	619.5	\$	136.45	\$	123.22	\$	(13.23)	-10%
April	568.9	\$	123.74	\$	115.94	\$	(7.80)	-6%
May	584.6	\$	126.99	\$	118.21	\$	(8.79)	-7%
June	597.8	\$	131.23	\$	139.28	\$	8.05	6%
July	746.2	\$	170.24	\$	165.36	\$	(4.87)	-3%
August	797.8	\$	184.13	\$	174.42	\$	(9.71)	-5%
September	794.3	\$	184.20	\$	173.82	\$	(10.38)	-6%
October	643.4	\$	142.52	\$	147.29	\$	4.77	3%
November	613.8	\$	135.92	\$	122.39	\$	(13.52)	-10%
December	715.4	\$	162.47	\$	137.00	\$	(25.47)	-16%
Annual	7989.7	\$	1,792.56	\$	1,673.29	\$	(119.27)	-7%
Annual NCD (kW)	8.3							

Fixed Charge \$	34.17
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Profile 13: CARE, All-Electric, Coastal, TOU-DR-1										
Month	Monthly kWh	Bill: Sta	andard Rate	Bill:	TOU-ELEC	Bill	Change (\$)	Bill Change (%)		
January	441.2	\$	89.11	\$	87.64	\$	(1.47)	-2%		
February	408.6	\$	83.20	\$	83.05	\$	(0.15)	0%		
March	335.9	\$	62.19	\$	72.83	\$	10.65	17%		
April	284.9	\$	52.74	\$	65.67	\$	12.93	25%		
Мау	254.8	\$	47.18	\$	61.45	\$	14.27	30%		
June	238.4	\$	41.79	\$	65.63	\$	23.84	57%		
July	276.9	\$	51.12	\$	72.09	\$	20.97	419		
August	304.2	\$	58.20	\$	76.67	\$	18.47	32%		
September	330.9	\$	65.79	\$	81.15	\$	15.35	23%		
October	300.1	\$	57.14	\$	75.98	\$	18.85	33%		
November	327.9	\$	60.71	\$	71.72	\$	11.00	189		
December	408.2	\$	80.19	\$	83.00	\$	2.81	49		
Annual	3912.2	\$	749.36	\$	896.87	\$	147.51	20%		

Annual NCD (kW)5.4Fixed Charge\$25.64

		Profil	e 9: CARE, All	Electr	ric, Coastal, 1	OU-DR	1	
Month	Total kWh	Bill: S	tandard Rate	Bill:	ELEC-TOU	Bill (	Change (\$)	Bill Change (%)
January	258.3	\$	48.08	\$	51.57	\$	3.48	7%
February	251.9	\$	46.88	\$	50.63	\$	3.75	8%
March	216.5	\$	40.30	\$	45.53	\$	5.23	13%
April	188.4	\$	35.07	\$	41.47	\$	6.40	18%
May	191.0	\$	35.55	\$	41.85	\$	6.29	18%
June	192.9	\$	35.42	\$	48.10	\$	12.68	36%
July	231.2	\$	42.46	\$	54.83	\$	12.36	29%
August	242.6	\$	44.55	\$	56.82	\$	12.27	28%
September	247.8	\$	46.58	\$	57.73	\$	11.16	24%
October	209.8	\$	38.53	\$	51.07	\$	12.54	33%
November	206.1	\$	38.36	\$	44.02	\$	5.66	15%
December	247.4	\$	46.05	\$	49.99	\$	3.94	9%
Annual	2684.1	\$	497.84	\$	593.61	\$	95.77	19%

Annual NCD (kW)	2.8				
Fixed Charge	\$	14.26			

	Profile 14: Non-CARE, Dual Fuel, Inland, TOU-DR-1										
Month	Monthly kWh	Bill: S	Standard Rate	Bill	: TOU-ELEC	Bill	Change (\$)	Bill Change (%)			
January	1675.7	\$	661.67	\$	453.27	\$	(208.40)	-31%			
February	1579.2	\$	624.73	\$	432.08	\$	(192.66)	-31%			
March	1516.6	\$	595.95	\$	418.33	\$	(177.63)	-30%			
April	1368.3	\$	535.72	\$	385.78	\$	(149.93)	-28%			
Мау	1412.0	\$	552.77	\$	395.37	\$	(157.40)	-28%			
June	1357.2	\$	511.83	\$	434.40	\$	(77.43)	-15%			
July	1496.9	\$	565.92	\$	470.33	\$	(95.59)	-17%			
August	1590.9	\$	602.78	\$	494.51	\$	(108.27)	-18%			
September	1545.8	\$	585.77	\$	482.91	\$	(102.86)	-18%			
October	1405.3	\$	530.04	\$	446.79	\$	(83.25)	-16%			
November	1425.1	\$	559.16	\$	398.25	\$	(160.91)	-29%			
December	1643.7	\$	648.46	\$	446.24	\$	(202.22)	-31%			
Annual	18016.7	\$	6,974.80	\$	5,258.25	\$	(1,716.55)	-25%			

### Scenario 2: 250 kWh/month Increased in consumption

Annual NCD (kW)	11.0
Fixed Charge	\$ 85.41

Profile 12: Non-CARE, Dual Fuel, Coastal, TOU-DR1											
Month	Total kWh	Bill: S	Standard Rate	Bill	: ELEC-TOU	Bill	Change (\$)	Bill Change (%)			
January	932.7	\$	354.97	\$	279.30	\$	(75.67)	-21%			
February	875.3	\$	334.22	\$	266.30	\$	(67.91)	-20%			
March	869.5	\$	328.76	\$	264.99	\$	(63.76)	-19%			
April	818.9	\$	308.80	\$	253.55	\$	(55.25)	-18%			
May	834.6	\$	314.31	\$	257.11	\$	(57.20)	-18%			
June	847.8	\$	319.31	\$	300.21	\$	(19.10)	-6%			
July	996.2	\$	379.44	\$	340.80	\$	(38.65)	-10%			
August	1047.8	\$	400.67	\$	354.89	\$	(45.78)	-11%			
September	1044.3	\$	400.25	\$	353.94	\$	(46.30)	-12%			
October	893.4	\$	337.08	\$	312.67	\$	(24.41)	-7%			
November	863.8	\$	327.41	\$	263.70	\$	(63.71)	-19%			
December	965.4	\$	368.50	\$	286.68	\$	(81.82)	-22%			
Annual	10989.7	\$	4,173.73	\$	3,534.15	\$	(639.57)	-15%			

Fixed Charge \$ 68.35

	Profile 13	8: Nor	n-CARE All-Elec	tric,	Coastal, TO	J-DR	-1	
Month	Monthly kWh	Bill:	Standard Rate	Bill	: TOU-ELEC	Bill (	Change (\$)	Bill Change (%)
January	691.2	\$	255.39	\$	204.32	\$	(51.08)	-20%
February	658.6	\$	244.82	\$	197.08	\$	(47.74)	-19%
March	585.9	\$	211.87	\$	180.99	\$	(30.87)	-15%
April	534.9	\$	191.76	\$	169.70	\$	(22.06)	-129
Мау	504.8	\$	178.38	\$	163.05	\$	(15.33)	-9%
June	488.4	\$	173.83	\$	179.03	\$	5.20	39
July	526.9	\$	188.46	\$	189.11	\$	0.65	0%
August	554.2	\$	199.30	\$	196.25	\$	(3.05)	-2%
September	580.9	\$	210.56	\$	203.23	\$	(7.33)	-3%
October	550.1	\$	197.67	\$	195.18	\$	(2.49)	-19
November	577.9	\$	209.56	\$	179.23	\$	(30.32)	-149
December	658.2	\$	241.76	\$	197.01	\$	(44.75)	-19%
Annual	6912.2	\$	2,503.36	\$	2,254.19	\$	(249.17)	-10%

Annual NCD (kW)	5.4
Fixed Charge	\$ 51.28

	Profile 9	: Nor	n-CARE, All Elec	tric,	Coastal, TO	U-D	R1	
Month	Total kWh	Bill:	Standard Rate	Bil	: ELEC-TOU	Bill	Change (\$)	Bill Change (%)
January	508.3	\$	180.56	\$	143.99	\$	(36.57)	-20%
February	501.9	\$	180.81	\$	142.53	\$	(38.29)	-21%
March	466.5	\$	163.22	\$	134.49	\$	(28.73)	-18%
April	438.4	\$	152.55	\$	128.11	\$	(24.44)	-16%
May	441.0	\$	152.65	\$	128.70	\$	(23.95)	-16%
June	442.9	\$	161.94	\$	149.39	\$	(12.55)	-8%
July	481.2	\$	177.04	\$	159.86	\$	(17.18)	-10%
August	492.6	\$	181.71	\$	162.96	\$	(18.75)	-10%
September	497.8	\$	184.52	\$	164.38	\$	(20.14)	-11%
October	459.8	\$	168.24	\$	154.02	\$	(14.23)	-8%
November	456.1	\$	159.88	\$	132.13	\$	(27.75)	-17%
December	497.4	\$	176.03	\$	141.51	\$	(34.52)	-20%
Annual	5684.1	\$	2,039.17	\$	1,742.06	\$	(297.10)	-15%
Annual NCD (kW)	2.8							
Fixed Charge	\$ 28.53	]						

Profile 14: CARE, Dual Fuel, Inland, TOU-DR-1									
Month	Monthly kWh	Bill: St	andard Rate	Bill: TOU-ELEC		Bill	Change (\$)	Bill Change (%)	
January	1675.7	\$	422.63	\$	318.73	\$	(103.90)	-25%	
February	1579.2	\$	399.46	\$	305.29	\$	(94.18)	-24%	
March	1516.6	\$	379.62	\$	296.57	\$	(83.05)	-22%	
April	1368.3	\$	340.53	\$	275.93	\$	(64.60)	-19%	
May	1412.0	\$	351.35	\$	282.01	\$	(69.34)	-20%	
June	1357.2	\$	327.40	\$	308.98	\$	(18.42)	-6%	
July	1496.9	\$	362.51	\$	332.00	\$	(30.51)	-8%	
August	1590.9	\$	386.59	\$	347.49	\$	(39.10)	-10%	
September	1545.8	\$	375.71	\$	340.06	\$	(35.65)	-9%	
October	1405.3	\$	339.07	\$	316.92	\$	(22.15)	-79	
November	1425.1	\$	355.87	\$	283.83	\$	(72.04)	-20%	
December	1643.7	\$	413.98	\$	314.28	\$	(99.71)	-24%	
Annual	18016.7	\$	4,454.73	\$	3,722.08	\$	(732.65)	-16%	

### Scenario 2: 250 kWh/month Increased in consumption , CARE Discount Applied

Annual NCD (kW)	11.0
Fixed Charge	\$ 42.71

Profile 12: CARE, Dual Fuel, Coastal, TOU-DR1									
Month	Total kWh	Bill: S	Standard Rate	Bil	ll: elec-tou	Bil	l Change (\$)	Bill Change (%)	
January	932.7	\$	221.44	\$	202.42	\$	(19.02)	-9%	
February	875.3	\$	208.91	\$	194.16	\$	(14.75)	-7%	
March	869.5	\$	204.28	\$	193.32	\$	(10.95)	-5%	
April	818.9	\$	191.57	\$	186.05	\$	(5.52)	-3%	
May	834.6	\$	194.82	\$	188.32	\$	(6.51)	-3%	
June	847.8	\$	198.63	\$	217.40	\$	18.77	9%	
July	996.2	\$	237.63	\$	243.49	\$	5.85	2%	
August	1047.8	\$	251.53	\$	252.55	\$	1.02	0%	
September	1044.3	\$	251.59	\$	251.94	\$	0.35	0%	
October	893.4	\$	209.91	\$	225.41	\$	15.50	7%	
November	863.8	\$	203.75	\$	192.50	\$	(11.24)	-6%	
December	965.4	\$	230.30	\$	207.11	\$	(23.19)	-10%	
Annual	10989.7	\$	2,604.35	\$	2,554.66	\$	(49.70)	-2%	

Annual NCD (kW)	8.3				
Fixed Charge	\$	34.17			

Profile 13: CARE, All-Electric, Coastal, TOU-DR-1									
Month	Monthly kWh	Bill: St	andard Rate	Bil	I: TOU-ELEC	Bill	Change (\$)	Bill Change (%)	
January	691.2	\$	156.72	\$	148.40	\$	(8.32)	-5%	
February	658.6	\$	150.81	\$	143.81	\$	(7.00)	-5%	
March	585.9	\$	128.23	\$	133.60	\$	5.37	4%	
April	534.9	\$	115.41	\$	126.43	\$	11.02	10%	
May	504.8	\$	106.31	\$	122.21	\$	15.90	15%	
June	488.4	\$	106.66	\$	133.20	\$	26.54	25%	
July	526.9	\$	115.99	\$	139.67	\$	23.68	20%	
August	554.2	\$	123.07	\$	144.24	\$	21.17	179	
September	580.9	\$	130.66	\$	148.72	\$	18.05	149	
October	550.1	\$	122.01	\$	143.56	\$	21.55	189	
November	577.9	\$	127.06	\$	132.48	\$	5.43	49	
December	658.2	\$	147.80	\$	143.77	\$	(4.03)	-39	
Annual	6912.2	\$	1,530.74	\$	1,660.10	\$	129.36	8%	

Annual NCD (kW)	5.4
Fixed Charge	\$ 25.64

	Pro	file 9:	CARE, All Elec	tric	, Coastal, TOU-D	DR1		
Month	Total kWh	Bill: S	Standard Rate	E	Bill: ELEC-TOU	Bi	ll Change (\$)	Bill Change (%)
January	508.3	\$	107.76	\$	101.93	\$	(5.83)	-5%
February	501.9	\$	108.93	\$	101.00	\$	(7.93)	-7%
March	466.5	\$	96.41	\$	95.89	\$	(0.52)	-1%
April	438.4	\$	89.76	\$	91.84	\$	2.08	2%
May	441.0	\$	89.49	\$	92.21	\$	2.72	3%
June	442.9	\$	99.04	\$	106.21	\$	7.18	7%
July	481.2	\$	108.68	\$	112.94	\$	4.26	4%
August	492.6	\$	111.74	\$	114.94	\$	3.20	3%
September	497.8	\$	113.81	\$	115.85	\$	2.04	2%
October	459.8	\$	102.93	\$	109.19	\$	6.26	6%
November	456.1	\$	94.56	\$	94.39	\$	(0.17)	0%
December	497.4	\$	104.79	\$	100.35	\$	(4.44)	-4%
Annual	5684.1	\$	1,227.90	\$	1,236.74	\$	8.84	1%
		_						
Annual NCD (kW)	2.8							
Fixed Charge	\$ 14.26							