PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

AGENDA ID #15638

ENERGY DIVISION **RESOLUTION E-4848**

May 11, 2017

R E S O L U T I O N

Resolution E-4848. Adoption of San Diego Gas & Electric Company's residential default time-of-use pricing pilot pursuant to Decision 15-07-001.

PROPOSED OUTCOME:

- Adopts San Diego Gas & Electric Company's (SDG&E's) Residential Default Time-of-Use (TOU) Pilot Plan with modifications.

SAFETY CONSIDERATIONS:

- There is no impact on safety.

ESTIMATED COST:

- The cost of SDG&E's default TOU pricing pilot is estimated to be up to $11.9 million. These costs shall be recorded and recovered as detailed in this Resolution.

By Advice Letter 3020-E, E-A and E-B, initially filed on December 16, 2016.

SUMMARY

On December 16, 2016, San Diego Gas & Electric Company (PG&E) filed its Default Time-of-Use (TOU) Pilot Plan advice letter (advice letter) in accordance with Decision (D.) 15-07-001 (the Decision)[1] and an Administrative Law Judge (ALJ) Ruling issued on December 29, 2015 in Rulemaking (R.) 12-06-013. The advice letter sets out SDG&E's plan to default approximately 120,000 residential

1 D. 15-07-001 at 166

customers onto TOU rates in March 2018. SDG&E will submit a Rate Design Window (RDW) application no later than January 1, 2018 for a default residential TOU rate and a menu of optional TOU rates. The results of this default pilot are expected to inform the resolution of that application and SDG&E's subsequent default of all eligible residential customers onto TOU rates beginning in 2019. According to the advice letter, SDG&E's proposed default pilot includes the following elements:

- Pre-default notifications will be sent to 120,000 eligible residential customers, and those who do not opt-out will be defaulted onto one of two default TOU rates (TOU-DR2 or TOU-DR3) in March 2018.

- The pilot study period will begin in March 2018 and continue for one year. Customers will remain on the default TOU rate at the end of the pilot study period unless they are removed from the pilot due to ineligibility or choose to opt-out. Customers are free to opt-out at any time prior to, during, or after the pilot study period.

- Customers will receive bill protection for 12 months from the date that they are enrolled onto the default TOU rate or up to the date that they are unenrolled from the default TOU rate, whichever occurs first.

- TOU-DR2 will have a daily peak period from 4-9pm. It also has varying part-peak and off-peak hours on weekdays and weekends. The rate has the same structure year-round. The summer peak to off-peak price (POPP) ratio will be approximately 2.0:1 for usage above baseline.

- TOU-DR3 will have a daily peak period from 4-9pm, with all other hours as off-peak. The rate has the same structure year-round. The summer POPP ratio will be approximately 1.6:1 for usage above baseline.

- SDG&E will test a variety of marketing, education and outreach (ME&O) materials.

SDG&E's default pilot will gather information on:

- SDG&E's operational readiness to default large numbers of customers onto TOU rates over a short time. This will include a "stress test" and subsequent assessment of SDG&E's business processes and system capabilities.

- The impact of different forms of ME&O on awareness of rate options, engagement with the TOU rate and customer perceptions while on a TOU rate. At a minimum, SDG&E will test multiple versions of pre-default notifications, welcome communications and seasonal communications.

- The average peak and off-peak change in energy usage by customers enrolled on TOU-DR2 and TOU-DR3.

- The bill impacts for customers enrolled on TOU-DR2 and TOU-DR3.

- The opt-out rate for customers defaulted onto TOU-DR2 and TOU-DR3.

- The impact of tools such as level pay plans (LPP) on customer retention on the default TOU rate, and load, bills and perceptions while on their default TOU rate.

This information must be collected in the evaluation and analysis of SDG&E's default pilot. SDG&E is ordered to ensure that the deliverables as outlined in this Resolution are collected through the default pilot and are presented in the proceeding to resolve SDG&E's January 1, 2018 RDW application. SDG&E's advice letter also contains a request for authorization of default pilot study costs as required by the Decision.[2]

As discussed in detail below, SDG&E's advice letter, as modified herein, fulfills the requirements of the Decision and is expected to lead to the collection of the

[2] D.15-07-001 at 166.

deliverables outlined in this Resolution. This Resolution adopts SDG&E's Default TOU Pilot Plan with modifications.

BACKGROUND

Public Utilities (P.U.) Code § 745[3] establishes the conditions for implementing default TOU rates for residential electricity customers. The Decision established the pathway toward default TOU rates for all eligible residential electricity customers of California's investor-owned utilities (SDG&E, Pacific Gas & Electric Company (PG&E) and Southern California Edison Company (SCE), collectively the "IOUs") in 2019, which includes a requirement that the IOUs conduct both opt-in and default TOU pilots.

Per the Decision's instructions, the IOUs formed a TOU Working Group (Working Group) to develop study parameters and pilot design. The Working Group collectively selected a consultant to inform its work on TOU pilot design, and has met frequently since September 2015. SDG&E's opt-in TOU pilots were the result of this collaboration and were approved in Resolution E-4769.

SDG&E enrolled approximately 16,000 customers onto its opt-in TOU pilots, which began in June 2016. Customers were enrolled onto one of three TOU rates (treatment customers) or remained on the tiered rate (control customers). These pilots are comparing the load and bills between treatment and control customers, as well as their responses to an extensive survey. The findings from the opt-in TOU pilots will inform the Commission's decisions related to Section 745(c)(2)[4], as well as provide valuable information regarding customers' understanding, acceptance and engagement while taking service on a given TOU rate.

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3 All subsequent Section references are to the California Public Utilities Code unless otherwise indicated.

4 P.U. Code § 745(c)(2) The Commission shall ensure that any time-of-use rate schedule does not cause unreasonable hardship for senior citizens or economically vulnerable customers in hot climate zones.

The Decision required a default pilot, in addition to opt-in pilots, to "study aspects of TOU that are directly impacted by self-selection bias, and to fine-tune customer education and test system operability prior to full rollout of default TOU."[5] The Working Group and its consultant collaborated on default TOU pilot design, and the final report of the consultant to the Working Group (consultant report) is attached to SDG&E's advice letter. The consultant report heavily informed SDG&E's default TOU pilot design. We expect the Working Group will remain extant to consider ongoing implementation issues related to the default pilot, further development of the monitoring and evaluation (M&E) plan for the default pilot, and the preparation of SDG&E's RDW application.

NOTICE

Notice of AL 3020-E, E-A and E-B was made by publication in the Commission's Daily Calendar. SDG&E states that a copy of the Advice Letter was mailed and distributed in accordance with Section 4 of General Order 96-B, and was also served on the R.12-06-013 service list.

PROTESTS

SDG&E's Advice Letter AL 3020-E was timely protested by Environmental Defense Fund (EDF) and the Office of Ratepayer Advocates (ORA). SDG&E responded to the protests of EDF and ORA on February 7, 2017.

DISCUSSION

Energy Division has reviewed AL 3020-E, E-A and E-B and finds that SDG&E's Default TOU Pilot Plan fulfills the requirements outlined in D.15-07-001 and other direction provided in R.12-06-013, subject to certain modifications as discussed below.

Sample Size

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[5] D.15-07-001 at 170.

SDG&E currently estimates that 760,000 residential customers are eligible for default TOU. In order to transition this volume of customers onto TOU over a one-year period, SDG&E estimates that it would need to transition customers at a maximum rate of approximately 110,000 customers per month.

Per the Decision, a primary purpose of the default pilot is to "test system operability prior to full rollout of default TOU." Thus, the default pilot will mimic the volume of rate changes SDG&E anticipates needing to perform in the full default rollout. SDG&E will send pre-default notifications to 120,000 eligible residential customers, and default those who do not opt-out in March 2018. SDG&E will assess its operational readiness by tracking and monitoring of transactions and problems that arise during notification, enrollment and billing. Operational performance will include metrics such as processing time for rate changes, call volume and billing exceptions. SDG&E's proposed sample size is adequate to fulfill this pilot objective.

Rate Design

SDG&E proposes to send 100,000 default notifications for TOU-DR2 and 20,000 default notifications for TOU-DR3 (and their California Alternate Rates for Energy (CARE) counterparts). Both rates have a daily peak period from 4-9pm.The remaining hours are spilt between part-peak and off-peak in TOU-DR2, while all remaining hours are off-peak in TOU-DR3.

Other elements of the rate structures and illustrative pricing are provided below.[6]

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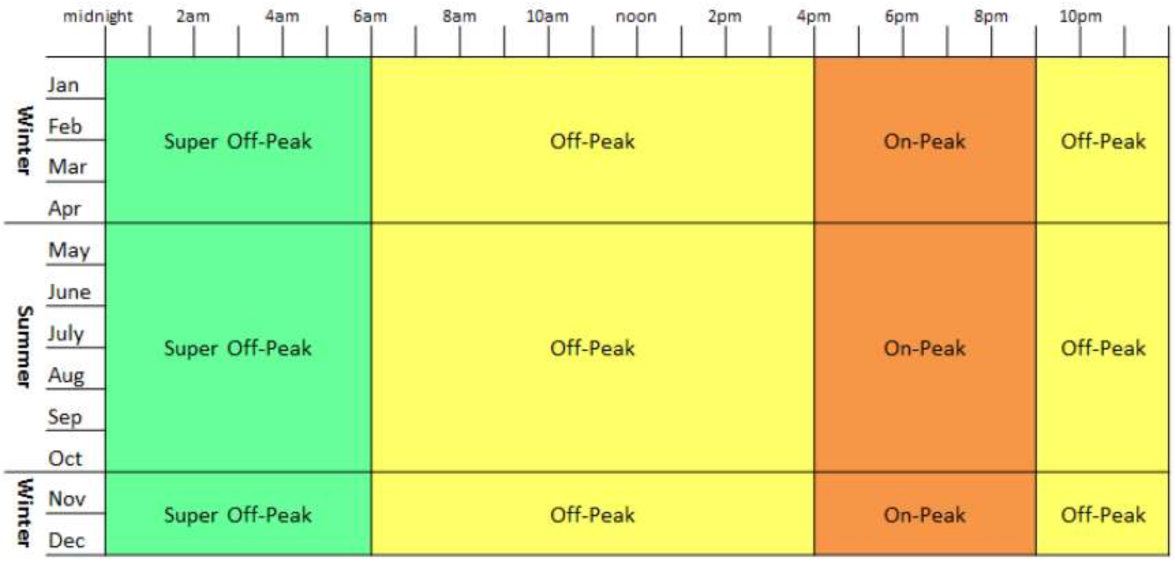
[6] AL 3020-E, Attachment B at III-12 to III-16.

All subsequent references to AL 3020-E are references to Attachment B to that advice letter, unless otherwise indicated.

SDG&E's nomenclature for rate periods for TOU-DR2 varies slightly from ours. Where we use "part-peak" SDG&E uses "off-peak." Where we use "off-peak" SDG&E uses "super off-peak." For TOU-DR2 the peak to off-peak (POPP) ratio is

Footnote continued on next page

TOU-DR2: Weekdays



TOU-DR2: Weekends and Holidays

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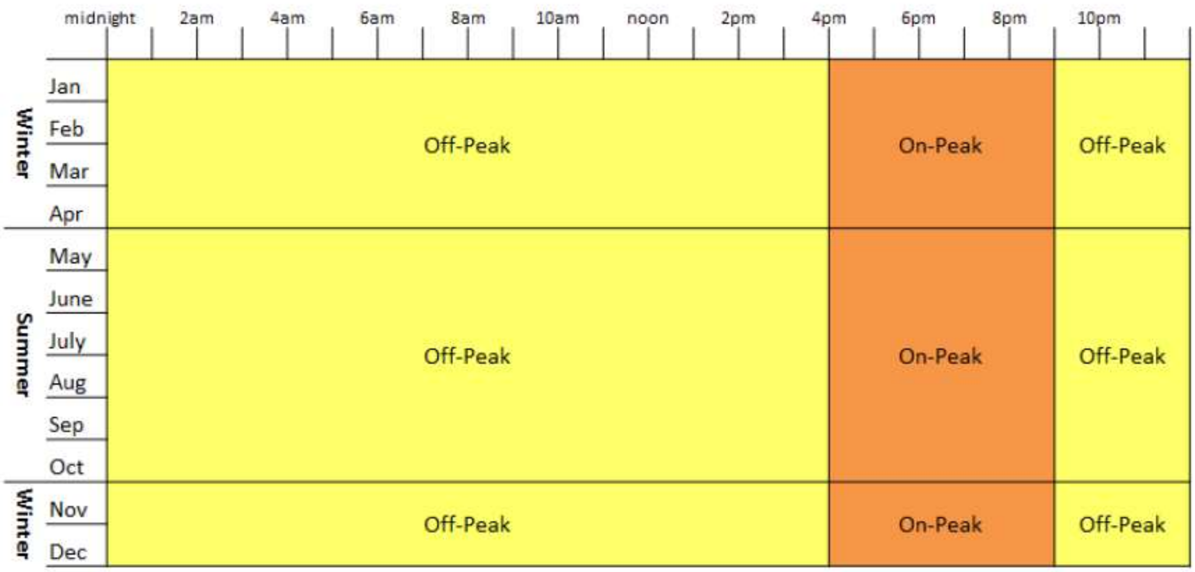
calculated as the ratio between the "On-Peak: Summer" Total Rate and the "Super Off-Peak: Summer" Total Rate.

TOU-DR3: Weekdays, Weekends, and Holidays



ILLUSTRATIVE RATES FOR TOU-DR2 AND TOU-DR3[14]

Non-CARE			
TOU-DR2 (3 Periods)	**Total Rate**	**TOU-DR3 (2 Periods)**	**Total Rate**
On-Peak: Summer	0.45338	On-Peak: Summer	0.42240
Off-Peak: Summer	0.27329	Off-Peak: Summer	0.26870
Super Off-Peak: Summer	0.23007	On-Peak: Winter	0.28775
On-Peak: Winter	0.28775	Off-Peak: Winter	0.27489
Off-Peak: Winter	0.27856	Up to 130% of Baseline Credit, Summer	(0.08204)
Super Off-Peak: Winter	0.26948	Up to 130% of Baseline Credit, Winter	(0.07342)
Up to 130% of Baseline Credit, Summer	(0.08204)	Minimum Bill	0.32900
Up to 130% of Baseline Credit, Winter	(0.07342)		
Minimum Bill	0.32900		

ILLUSTRATIVE CARE RATES FOR TOU-DR2 AND TOU-DR3[15]

CARE					
TOU-DR2 (3 Periods)	**Total Rate**	**Effective Rate After Discount**	**TOU-DR3 (2 Periods)**	**Total Rate**	**Effective Rate After Discount**
On-Peak: Summer	0.44546	0.29425	On-Peak: Summer	0.41448	0.27348
Off-Peak: Summer	0.26537	0.17351	Off-Peak: Summer	0.26078	0.17044
Super Off-Peak: Summer	0.22215	0.14454	On-Peak: Winter	0.27983	0.18321
On-Peak: Winter	0.27983	0.18321	Off-Peak: Winter	0.26697	0.17459
Off-Peak: Winter	0.27064	0.17705	Up to 130% of Baseline Credit, Summer	(0.08204)	(0.05500)
Super Off-Peak: Winter	0.26156	0.17096			
Up to 130% of Baseline Credit, Summer	(0.08204)	(0.05500)	Up to 130% of Baseline Credit, Winter	(0.07342)	(0.04922)
Up to 130% of Baseline Credit, Winter	(0.07342)	(0.04922)	Minimum Bill	0.16400	0.16400
Minimum Bill	0.16400	0.16400			

TOU-DR2 has a summer POPP[7] ratio of approximately 2.0:1 for usage above baseline. TOU-DR3, a slightly less cost-based rate, has a summer POPP ratio of approximately 1.6:1. Both rates will have a projected summer baseline credit of 8.2 cents/kWh.

The bill impacts of SDG&E's two proposed default TOU rates are quite modest.

Table 1 – TOU-DR2 (4-9pm peak, 3 rate periods) – Monthly Bill Changes

			Non-CARE	*CARE/FERA*
Average monthly bill change, tiered → default TOU rate, % of customers	*decrease*	*>$10*	4.7%	0.4%
		$5-10	3.6%	0.7%
		$2-5	11.3%	5.7%
		$1-2	13.4%	13.2%
	no change	*-$1 to +$1*	38.8%	62.3%
	increase	*$1-2*	8.4%	8.4%
		$2-5	11.8%	6.0%
		$5-10	5.6%	0.9%

7 SDG&E uses Calculated as the ratio between the "On-Peak: Summer" Total Rate and the "Super Off-Peak: Summer" Total Rate.

		>$10	2.3%	2.4%
*Total**			100%	100%

*Percentages in the table may not add to exactly 100% due to rounding.

			Non-CARE	*CARE/FERA*
Average monthly bill change, tiered → default TOU rate, % of customers	*decrease*	*>$10*	5.2%	0.5%
		$5-10	3.7%	0.5%
		$2-5	10.5%	2.8%
		$1-2	9.0%	9.1%
	no change	*-$1 to +$1*	49.2%	75.5%
	increase	*$1-2*	11.7%	7.4%
		$2-5	7.2%	3.9%
		$5-10	2.7%	0.4%
		>$10	4.6%	0.0%
*Total**			100%	100%

Assuming no shift in usage, only 2.3% and 4.6% of non-CARE customers would experience monthly bill impacts of greater than $10 on TOU-DR2 and TOU-DR3 respectively. Only 3.3% and 0.4%% of CARE customers would experience monthly impacts of greater than $5 on TOU-DR2 and TOU-DR3 respectively. Thus, TOU-DR2 and TOU-DR3 fit the Decision's criteria for an initial default "TOU Lite" rate, that allows customers to learn the new rate structure but avoids adverse bill impacts.[8] SDG&E's proposed rates are approved. The load impact, bill impact and customer perception findings from SDG&E's default pilot will help SDG&E to determine which of the two rates to use as the default rate in its full default rollout.

In its protest, EDF argues that the scope and objectives of SDG&E's default pilot are too narrowly defined and that the pilot should additionally be testing how different TOU rates impact customers' interest in distributed energy resources (DERs).

In its reply to EDF's protest, SDG&E states that the objectives of its default pilot align with the objectives set in the proceeding. SDG&E states that it will support

[8] D.15-07-001 at 134-135.

and encourage the use of technology in default pilot communications, but that specific DER offerings should only be implemented in the future.

We disagree with EDF that the default pilot is the appropriate venue to test rate designs that impact the value proposition of DERs. The types of rates likely to provide the value proposition for DERs (shorter peak period, larger differences between period prices)[9] do not fit the criteria of an initial default "TOU Lite" rate.[10] As EDF itself states, there are other ongoing pilots in which such rates are being considered. Furthermore, SDG&E's proposal is but one consideration of many rate designs in the default TOU development process. We encourage EDF to engage in those efforts and to look for other opportunities to continue this exploration.

Exclusions from the Default Pilot

Section 745 describes certain categories of customers that may not be defaulted onto TOU rates, customers that the Commission may elect to default or not, subject to certain considerations, and conditions that must be met before customers can be defaulted onto TOU rates. In addition, SDG&E proposes to exclude additional customers due to operational considerations.

Section 745(c)(1)

Section 745(c)(1) describes three categories of customers that may not be defaulted onto TOU rates: customers receiving a medical baseline allowance, customers requesting third-party notification and customers requiring an in-person visit from a utility representative prior to disconnection.[11]

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[9] EDF Protest at 4.

[10] D.15-07-001 at 135.

[11] P.U. Code Section 745(c)(1) Residential customers receiving a medical baseline allowance pursuant to subdivision (c) of Section 739, customers requesting third-party notification pursuant to subdivision (c) of Section 779.1, customers who the commission has ordered cannot be disconnected from service without an in-person visit from a utility representative (Decision 12-03-054 (March 22, 2012), Decision on Phase II Issues: Adoption of Practices to Reduce the Number of Gas and Electric

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SDG&E is able to identify the customers that fall into one of these categories in its billing system, and thus these customers are easily excluded from default TOU. SDG&E will also include language in its pre-default notifications that customers should contact SDG&E if they believe they qualify for one of the aforementioned categories. SDG&E will also look for opportunities with its community partner network and local government to promote the medical baseline program and the other two offerings.

The suggested processes are sufficient to guard against the unintentional inclusion of these customers in the default pilot.

Section 745(c)(2)

Section 745(c)(2) requires that the Commission "ensure that any time-of-use rate schedule does not cause unreasonable hardship for senior citizens or economically vulnerable customers in hot climate zones."[12] The Commission defined "senior citizens" as any household customer 65 years or older. For the purposes of 745(c)(2), the Commission will consider any customer whose household includes a senior citizen who is a full-time permanent occupant of the household.[13] The senior citizen need not be the customer of record. The Commission defined "economically vulnerable customers" as any customer who is eligible for the CARE or Family Electric Rate Assistance (FERA) program even if that customer is not enrolled.[14]

Service Disconnections, Order 2 (b) at page 55), and other customers designated by the commission in its discretion shall not be subject to default time-of-use rates without their affirmative consent.

12 P.U. Code Section 745(c)(2) The commission shall ensure that any time-of-use rate schedule does not cause unreasonable hardship for senior citizens or economically vulnerable customers in hot climate zones.

13 D.16-09-016 at 10.

14 D.16-09-016 at 8.

SDG&E's opt-in TOU pilot was specifically designed to provide the Commission with the information necessary to determine whether or not TOU rates cause unreasonable hardship for these two groups of customers. The Scoping Ruling lays out the process for considering the evidence and anticipates issuing a Decision in September 2017, prior to the start of the default pilot.

D.16-09-016 required the IOUs to work with the Working Group to develop processes for identifying and excluding these customers, should the Commission decide that it is necessary to do so. SDG&E and the Working Group reached consensus on the processes below for the default pilot.

- Customers enrolled in CARE or FERA
  SDG&E can identify customers enrolled in CARE or FERA in its billing system and can easily exclude existing CARE and FERA customers in the hot climate zone.

- Customers eligible for, but not enrolled in CARE or FERA & Households with senior(s)
  SDG&E proposes to conduct a campaign in October 2017 to all customers in its hot climate zone (about 17,000) communicating the opportunity for customers to enroll in CARE or FERA and/or to self-certify that a senior citizen lives in their household. Customers who enroll or self-certify will be excluded from the default pilot. SDG&E will also include similar language in its pre-default notification.

The proposed processes are sufficient to guard against the unintentional inclusion of these customers in the default pilot.

Section 745(c)(4)

Section 745(c)(4) requires that a customer be "provided with not less than one year of interval usage data from an advanced meter and associated customer education."[15] SDG&E states that no customers with less than 12 months of

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[15] P.U. Code Section 745(c)(4) A residential customer shall not be subject to a default time-of-use rate schedule unless that residential customer has been provided with not less than one year of interval usage data from an advanced meter and associated

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interval usage data will be selected for the default pilot. SDG&E will provide all customers in the default pilot will be with a rate comparison in their pre-default notification, thus fulfilling the second part of the requirement.

Other Exclusions

Finally, SDG&E proposes to exclude certain other categories of customers, including customers already on a TOU rate, customers accepted into the opt-in TOU pilots, smart-meter opt-out customers, customers without a TOU meter, master-metered customers and direct access customers.

Default TOU is aimed at customers not already on a TOU rate, so it is reasonable to exclude those customers. The Working Group agreed that customers accepted into the opt-in TOU pilots should not be made to participate in another pilot. We agree, and additionally note that these customers are no longer representative of the typical default customer. Smart-meter opt-out customers and customers without a TOU meter would be excluded anyway under Section 745(c)(4), due to insufficient interval usage data. Master-metered customers will not see or experience the TOU price signals and direct access customers do not receive their generation service from SDG&E. Thus, these exclusions are also reasonable.

Section 745(d)

Section 745(d)(1) and 745(d)(2) require that the Commission consider whether or not default TOU rates will cause hardship to "customers located in hot, inland areas, assuming no changes in overall usage by those customers during peak periods" and "[r]esidential customers living in areas with hot summer weather, as a result of seasonal bill volatility, assuming no change in summertime usage or in usage during peak periods."

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customer education and, following the passage of this period, is provided with no less than one year of bill protection during which the total amount paid by the residential customer for electric service shall not exceed the amount that would have been payable by the residential customer under that customer s previous rate schedule.

The Working Group concluded that "hot climate zone," "hot inland areas," and "areas with hot summer weather" all cover the same geographic area in SDG&E's service territory. This includes SDG&E's mountain and desert zones.[16]

The analyses provided in AL 3020-E, E-A and E-B are insufficient to consider the hardship from the potential bill impacts and bill volatility of SDG&E's default pilot rates and rates that differ significantly from those rates. The Commission will consider the hardship from the potential bill impacts and bill volatility of different rate options in Phase 3 of R.12-06-013.[17]

Removal from the Default Pilot

Eligible customers who are selected to participate in the default pilot may opt-out at any time prior to, during or after the default pilot study period. They may go back to the tiered rate or choose another available rate option.

Default pilot customers who terminate service with SDG&E will be automatically removed from the default pilot.

Default pilot customers who move and transfer service to another premise within SDG&E's service territory will also automatically be removed from the default pilot and be put back on the tiered rate. This is reasonable for purposes of the default pilot. The Commission will consider treatment of these customers for the full default rollout in Phase 3 of R.12-06-013.[18]

It is worth noting particular customers who will *not* be automatically removed from the pilot. If in the course of the default pilot, customers' situations change such that they meet one of the criteria described in Section 745(c)(1), SDG&E states that they will not be automatically removed from the default pilot. Instead, the customer will be given the option to stay on the default TOU rate, to go back

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[16] D.16-09-016 at 38.

[17] Assigned Commissioner and Administrative Law Judge's Ruling Amending Scoping Memorandum and Ruling issued January 23, 2017 (Scoping Ruling) at 10.

[18] Scoping Ruling at 10.

to the tiered rate or to choose another available rate option. These customers (and all other default pilot customers) will receive up to 12 months of bill protection, as described below. This approach maximizes customer choice and is appropriate.

Bill Protection

Section 745(c)(4) requires that customers defaulted onto a TOU rate receive one year of bill protection, such that the "total amount paid by the residential customer for electric service shall not exceed the amount that would have been payable by the residential customer under that customer's previous rate schedule."

SDG&E proposes only to default those customers currently on the tiered rate. Thus, SDG&E will compare the amount that customers pay on the default TOU rate against the amount they would have paid on the tiered rate. If the customer would have paid less on the tiered rate, the customer will be credited the difference.

SDG&E will make this calculation at the time a customer is unenrolled from the default TOU rate, or 12 months after a customer begins service on the default TOU rate, whichever occurs first. As stated in the previous section, customers may leave or be automatically removed from the default pilot for numerous reasons.

Section 745(c)(4) only requires that bill protection be provided to those customers defaulted onto a TOU rate. However, a question arose in the Working Group regarding bill protection for those customers excluded from default TOU (per Section 745 or Commission direction) who nonetheless elect to participate in TOU. Per ALJ Ruling, bill protection shall be provided to any customer who opts-in to the default TOU rate, on or before the last day of the default pilot period.[19] This expansion of the bill protection provision guards against the odd

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[19] February 6, 2017 Prehearing Conference Transcript at 452-459.

March 6, 2017 Email Ruling Regarding Bill Protection for Customers Opting-in to Default TOU Pilot Programs result in which vulnerable customers ineligible for default TOU, who nonetheless elect to participate in TOU, would be ineligible for a consumer protection afforded to non-excluded customers.

This expansion applies to *all* customers who opt-in to TOU-DR2 or TOU-DR3, regardless of whether or not the tiered rate was their previous rate schedule. Bill protection will be calculated for these customers in the same manner as for customers who move from the tiered rate to TOU-DR2 or TOU-DR3, meaning that, even if customers opt-in to the TOU-DR2 or TOU-DR3 from a different TOU rate, SDG&E will compare the amount the customers paid on their default TOU rate against the amount they would have paid on the tiered rate, not their former TOU rate.

Bill Protection Revenue Shortfall

SDG&E estimates a revenue shortfall of $1.5 million related to providing bill protection.[20] SDG&E will record this as a generation revenue shortfall, as generation is the only time varying component of TOU-DR2 and TOU-DR3. This revenue shortfall will be recovered across all of SDG&E's residential generation customers.[21]
In its protest, ORA requests more information on the projected revenue shortfalls associated with bill protection payments and load shifting, and the estimated cost savings resulting from load shifting. In its reply to ORA's protest, SDG&E states that it can better estimate the revenue shortfalls and/or cost savings due to load shifting after the results from the opt-in TOU pilots are in.

We find that SDG&E has provided sufficient documentation to support its projected revenue shortfall of $1.5 million. We agree with SDG&E that estimates of revenue shortfalls and/or cost savings due to load shifting can be better assessed after the results from the opt-in TOU pilots are in.

Marketing, Education and Outreach

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20 Response to ED email request, dated January 31, 2017.

21 D.15-07-001 at 162.

Per the Decision, a primary purpose of the default pilot is to "fine-tune customer education… prior to full rollout of default TOU." SDG&E recasts this into primary marketing objectives for its default pilot:

1. to determine how best to maximize, at reasonable cost, customer awareness of the fact that they will be defaulted onto a new rate unless they opt out,
2. to inform customers about the options they have if they want to opt out to the tiered rate or choose a TOU rate that is different from the default rate,
3. to determine cost-effective ways of educating customers about how to manage their energy use and control costs under TOU rates, and
4. to provide tools for managing seasonal bill volatility in order to retain customers on TOU rates over time.[22]

To achieve the above objectives, SDG&E proposes to provide customers with variations of pre-default notifications, welcome communications, seasonal communications, end-of-bill protection notices and other ME&O materials from across SDG&E's other business areas not specific to TOU, and to gauge their relative success using outcome metrics including opt-out rates and customer perceptions.

SDG&E's proposed variations include ten variations in pre-default notifications with respect to channel, granularity of rate comparison information (annual and seasonal or monthly) and number of rate options provided in the rate comparison. SDG&E also proposes to test whether including an energy efficiency item or an offer for an energy efficiency item (e.g. an LED light bulb) along with its welcome communication serves to enhance customer perceptions of TOU.

Finally, as part of it summer seasonal communications, SDG&E will test 1) an educational campaign designed to encourage the use of programmable thermostats, 2) a campaign to promote enrollment in its level pay plan program (to address seasonal bill volatility associated with TOU) and 3) tailored messaging based on SDG&E's customer personas versus more generic messaging.

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22 Consultant Report at 7-8, AL 3020-E at I-4 to I-5.

SDG&E has not yet determined the exact messaging and design for its M&EO materials and will consider the results of current and future planned customer research in creating the final ME&O materials.

In its protest, EDF states that SDG&E should consider a broader set of customer attributes, such as the shape of the diurnal load and history of other energy interventions, and how these attribute vary between benefiters and non-benefiters, when determining which mitigation strategies to target at each customer. In its reply to EDF's protest, SDG&E states that it will segment its customers beyond identifying them as benefiters or non-benefiters, including segmenting by climate zone type and hardship.

We agree with EDF that SDG&E's proposed ME&O strategies require further refinement. We direct SDG&E to collaborate with Energy Division and the Working Group to finalize its ME&O collateral and strategies. We further direct SDG&E to file a Tier 2 advice letter with the final testing plan by November 1, 2017 and to include copies of all marketing collateral in its quarterly Progress on Residential Rate Reform reports.

SDG&E's objectives for its default pilot ME&O are appropriate and its proposed tests for its communications materials are expected to provide valuable information to inform the ME&O for the full default rollout. The measurement and evaluation of SDG&E's proposed tests is discussed below.

Metrics and Measurement & Evaluation

The default pilot will require extensive ex post measurement and evaluation (M&E) to ensure that SDG&E is prepared for the full default rollout, to identify aspects of the default pilot that worked well and to identify areas that require changes or augmentation. SDG&E's advice letter and the consultant report attached to the advice letter begin the process of detailing the metrics by which the pilot will be assessed and the associated M&E activities needed to gather information on those metrics.

For instance, SDG&E proposes the metrics and M&E activities below to assess its ME&O approaches:[23]

Directly Observable:
1. Opt-out rates prior to and after the default transition
2. The percent of customers that choose the option with the lowest projected bill amount based on their rate comparison
3. Load impacts by rate period

Through Customer Surveys:
4. Customer awareness that they will be or have been (depending on timing of the awareness survey) transitioned to a TOU rate
5. Customer satisfaction on the default TOU rates
6. Reported usage behavior or changes in usage behavior
7. Feedback on the various MEO treatments and changes to the treatments that might be of interest to customers

SDG&E will also measure overall load and bill impacts, and load and bill impacts for other selected segments yet to be determined. SDG&E will provide load and bill impact results through the Demand Response Measurement and Evaluation Committee's annual April 1 filings. We additionally require SDG&E to provide load and bill impacts from the first summer by fall 2018.

SDG&E proposes to assess its operational readiness for the full default rollout by tracking and monitoring transactions and issues that arise during the default process. Some specific examples of metrics include time required to process rate change requests, volume of billing exceptions and call center volumes.

In its protest, ORA requests that the Commission adopt metrics to assess the default pilot's effectiveness and success, and that the Commission consider SDG&E's performance on these metrics as a part of its reasonableness review.

In its reply to ORA's protest, SDG&E opposes the idea that cost recovery be tied to attainment of pre-defined and yet-to-be defined success metrics.

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[23] Consultant Report at 2, AL 3020-E at I-5.

We agree with ORA that we should define metrics by which to assess the default pilot. We find that SDG&E's proposed areas of evaluation and M&E activities for load and bill impacts and operational readiness are appropriate to assess the default pilot. We direct SDG&E to work with Energy Division and the Working Group to define the customer segments for whom load and bill impacts are desired, and to further enumerate the metrics used to assess operational readiness.

With respect to the various ME&O approaches being tested, we find value in harmonizing the customer research activities across the IOUs. Therefore, we direct SDG&E to work closely with Energy Division, the Working Group and the other two IOUs to further refine, and harmonize across the three IOUs, the metrics and M&E activities required to assess the various ME& O approaches.

While these measures will help to gauge the success of the default pilot, their primary purpose is to inform the operational requirements and ME&O needed for the subsequent rollout of default TOU to the remainder of eligible residential customers. Thus, we decline to tie default pilot cost recovery to achievement on these metrics.

Budget and Cost Recovery

SDG&E estimates default pilot implementation costs of approximately $20.4 million over the period of 2016-2019, and proposes to record these costs in its RRRMA.

$10 million of this total is budgeted for staff augmentation to support customer billing and associated customer offerings such as My Account. SDG&E's existing customer information system has difficulty implementing billing calculations that include elements such as interval meter data and bill protection. As a result, SDG&E anticipates that a large number of customer bills will require manual review and/or processing. SDG&E refers to these as "billing exceptions." SDG&E will propose to replace its customer information system in its upcoming 2017 General Rate Case Phase I (GRC I). However, if approved, the new system would not go live until 2021, well after the default pilot and the anticipated full default rollout.

Default TOU for residential customers has been a possibility since AB 327 (Perea) was passed in 2013 and D.15-07-001 was voted out in 2015. SDG&E has had ample time to consider the potential customer information system needs and impacts of defaulting residential customers to TOU rates. It is SDG&E's responsibility to assess its infrastructure needs to provide service (including billing service) to its customers and to request recovery of the associated costs in its GRC I. Therefore, we do not authorize SDG&E to record expenses associated with billing exceptions in its RRMA.

SDG&E additionally estimates a generation revenue shortfall of $1.5 million related to providing bill protection.[24] This revenue shortfall will be recovered across all of SDG&E's residential generation customers.[25]

In its protest, ORA requests that SDG&E provide detailed cost information (budgeted and actual costs incurred) on a quarterly basis to aid in tracking and reasonableness review of SDG&E's default pilot costs. ORA also seeks information regarding SDG&E's accounting practices, to ensure that default pilot expenses are recorded in a transparent manner that facilitates future reasonableness review, and that prevents default pilot costs from being mistaken as part of the GRC revenue requirement. ORA wants SDG&E to provide a more detailed budget, and clarification on how the requested expenditures align with or are incremental to requests made in other recent filings in R.12-06-013.

In its reply to ORA's protest, SDG&E states that it is too early in the default pilot planning process to provide a detailed budget that can serve as a baseline by which to assess future expenditures. SDG&E suggests that it can use its quarterly PRRR reports and Working Group meetings to keep stakeholders apprised of expenditures. SDG&E states that all default pilot expenditures will be recorded in its Rate Reform Memorandum Account (RRMA) using established guidelines and specific charge numbers.

We agree with ORA that a detailed budget provides a necessary baseline against which to conduct future reasonableness review of expenditures. We order

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24 Response to ED email request, dated January 31, 2017.

25 D.15-07-001 at 162.

SDG&E to track actual expenditures to date against its estimated costs as part of its PRRR reports, using each of the line item categories highlighted in the attached budget (Attachment 1), separating default pilot costs from opt-in TOU pilot costs where applicable. These reports and level of detail will better enable reasonableness review of SDG&E's default pilot expenses.

While termed a "pilot," we note that this is really the first step towards defaulting the entire eligible residential class onto TOU rates. Thus, some of the operational and system improvements required for the default pilot will also serve SDG&E for the full default rollout.

Other Issues Raised by Parties

In its protest, EDF states that SDG&E be prepared to apply findings from other pilots that occur prior to 2018, such as the Distribution Resources Plan (DRP) demonstrations and the Demand Response Auction Mechanism, to the default pilot.

In its reply to EDF's protest, SDG&E agrees that it will work closely with the groups and business areas identified by EDF.

We agree with EDF that SDG&E should look to incorporate findings from other relevant pilots into the default pilot. SDG&E should also keep Energy Division and the Working Group apprised of any applicable findings from other pilots.

COMMENTS

Public Utilities Code section 311(g)(1) provides that this resolution must be served on all parties and subject to at least 30 days public review and comment prior to a vote of the Commission. Section 311(g)(2) provides that this 30-day period may be reduced or waived upon the stipulation of all parties in the proceeding.

The 30-day comment period for the draft of this resolution was neither waived nor reduced. Accordingly, this draft resolution was mailed to parties for comments, and will be placed on the Commission's agenda no earlier than 30 days from today.

FINDINGS

1. D.15-07-001 (the Decision) and the Administrative Law Judge's Ruling (Ruling) of December 19, 2015 directed San Diego Gas & Electric Company (SDG&E) to file an Advice Letter proposing a default time-of-use (TOU) pilot for its residential customers.
2. SDG&E will submit a Rate Design Window (RDW) application no later than January 1, 2018 for a default residential TOU rate and a menu of optional TOU rates.
3. SDG&E estimates that 760,000 residential customers are currently eligible for default TOU.
4. SDG&E will default approximately 120,000 residential customers in its default pilot to test its operational readiness to default the remainder of residential customers to TOU rates in 2019.
5. SDG&E will default customers onto either TOU-DR2 or TOU-DR3.
6. TOU-DR2 has a 4-9pm peak period on summer weekdays and a peak to off-peak (POPP) ratio of approximately 2.0:1 in the summer for usage above baseline.
7. TOU-DR3 has a 4-9pm peak period on summer weekdays and a peak to off-peak (POPP) ratio of approximately 1.6:1 in the summer for usage above baseline.
8. California Public Utilities Code Section 745 requires that certain customers be excluded from default TOU. SDG&E will exclude these customers from its default pilot. SDG&E will also exclude certain other customers in addition to the statutory exclusions.
9. Customers may opt-out of default TOU at any time.
10. Customers may be removed from the default TOU rate if they become ineligible for default TOU.
11. Customers defaulted onto TOU-DR2 or TOU-DR3 or who opt-in to TOU-DR2 or TOU-DR3 will receive up to 12 months of bill protection.
12. SDG&E will test variations of marketing, education and outreach (ME&O) materials
13. SDG&E will promote its Balanced Payment Plan (BPP) program to a subset of customers.
14. SDG&E will measure load and bill impacts of the default TOU rate.

15. SDG&E will assess its business processes and system capabilities, and monitor transactions and issues that arise during the default process, to determine its operational readiness for the full rollout of default TOU in 2019.
16. SDG&E will conduct customer research to determine the appropriate ME&O options to use for the full rollout of default TOU in 2019.
17. SDG&E will record default pilot implementation expenses in its Rate Reform Memorandum Account (RRMA).
18. SDG&E will record revenue shortfalls related to bill protection as generation revenue shortfalls.

THEREFORE IT IS ORDERED THAT:

1. SDG&E's Default TOU Pilot Plan advice letter (AL 3020-E, E-A and E-B) is approved as modified herein.
2. SDG&E is ordered to ensure that the deliverables as outlined in this Resolution are presented as part of its January 1, 2018 Rate Design Window (RDW) filing for a default TOU rate and a menu of TOU rate options.
3. SDG&E must provide up to 12 months of bill protection to all customers who opt-in to the default TOU rate, regardless of whether or not the tiered rate was their previous rate schedule.
4. SDG&E must consult with Energy Division and the TOU Working Group to finalize its ME&O collateral, and to determine appropriate sample sizes and customer makeup for each of its ME&O test tracks.
5. SDG&E must file a Tier 2 advice letter with the final testing plan by November 1, 2017.
6. SDG&E must include copies of all marketing collateral in its quarterly Progress on Residential Rate Reform (PRRR) reports.
7. SDG&E must provide load and bill impacts from the first summer of the default pilot by fall 2018.
8. SDG&E must consult with Energy Division, the TOU Working Group, SCE and PG&E to refine and harmonize the metrics and M&E activities required to assess the various ME&O approaches.
9. SDG&E must track its actual expenditures to date against its estimated costs in its PRRR reports, using each of the line item categories highlighted in the attached budget (Attachment 1).

10. SDG&E must not record expenses associated with billing exceptions in its RRRMA.

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on May 11, 2017; the following Commissioners voting favorably thereon:

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TIMOTHY J. SULLIVAN
Executive Director

Attachment 1

SDG&E Default Pilot Budget Tables -- AL 3020-E						
DESCRIPTION	**2016**	**2017**	**2018**	**2019**	**TOTAL**	**ASSUMPTIONS**
Planning, Design, Implementation & Post-Implementation						
Nexant Implementation Support		$34,000	$34,000		$68,000	SDG&E's share of cofunding agreement with other IOUs for Nexant consultant work for ongoing support with default TOU pilot
Staff Augmentation						
Program Management/Employee Training	$100,000	$2,075,000	$2,025,000		$4,200,000	2016 - associated costs for one incremental FTE for default pilot planning; 2017/2018- $1.2M in incremental FTEs to manage design and implementation of default pilot; $75k for employee; training in 2017; $25k for follow-up training in 2018; 2017/2018 - $800k in consulting fees
Subtotal: Planning, Design, Implementation & Post-Implementation	$100,000	$2,109,000	$2,059,000	$0	$4,268,000	
Marketing, Education & Outreach (ME&O)						
Material Development		$200,000			$200,000	Material Development costs are based on development by an outside agency and includes copywriting, design/art, project coordination with customization of the materials for the current five SDG&E segments.
Pre Transition Communications						
Early Awareness Communication		$60,000			$60,000	150,000 pieces x $0.40
BRC Card & Processing			$98,000		$98,000	120,000 pieces x $0.65 + [(120,000 pieces x 10% response)] x $1.67/piece (processing)
Rate Comparison via direct mail			$162,000		$162,000	108,000 pieces x $1.50 (aligns with treatment)
Rate Comparison via email			$325		$325	65,000 pieces x $0.005 (aligns with treatment)
Post Transition Communications						
Welcome Package via direct mail			$187,500		$187,500	75,000 pieces x $2.50 (aligns with treatment)
Welcome Package via email			$125		$125	25,000 pieces x $0.005 (aligns with treatment)
Extreme Non-Benefiter calls			$27,600		$27,600	100,000 customers x 2.3% non-benefit * $12/call
Programmable Thermostat			$40,000		$40,000	100,000 pieces x $0.40
Level Pay Plan Information			$40,000		$40,000	100,000 pieces x $0.40
Summer Rate Information			$40,000		$40,000	100,000 pieces x $0.40
Winter Rate Information			$40,000		$40,000	100,000 pieces x $0.40
Bill Protection			$444,000	$1,036,000	$1,480,000	100,000 total customers, 2%/mo. non-benefiter drop-off rate, $3.16/mo. average bill protection
End of Bill Protection Communication				$40,000	$40,000	100,000 pieces x $0.40
Material Development						
Website		$100,000	$10,000		$110,000	Develop web pages for two default pilot rates
Smart App		$250,000	$50,000		$300,000	Develop Smart App for two default pilot rates
Video Bill			$160,000		$160,000	Develop video bill for two default pilot rates
Energy Efficiency Component for Welcome Package			$30,000		$30,000	3,000 LED light bulbs x $10
Staff Augmentation						
Customer Communications		$450,000	$450,000	$362,000	$1,262,000	2017/2018 - 3.5 incremental FTEs to implement education and communication plan; 2019 - 3 FTE's to implement 1 year anniversary communications
Customer Outreach & Engagement			$153,000	$47,000	$200,000	2017/2018 -2 incremental FTEs for outreach activities focused on default pilot customers; 2019 - percentage allocation (30%) for outreach resources focused on default pilot customers in 2019 versus full default pilot customer base
Subtotal ME&O		$1,060,000	$1,932,550	$1,485,000	$4,477,550	

Customer Insight & Research						
Message/Communications Testing		$75,000			$75,000	costs associated with testing default notification, welcome kit as well as any other letters/communications – we are assuming 4-6 groups so we can cover a wide range of demographic groups and/or all 5 customer segments
Surveys			$600,000		$600,000	Two waves (March/April and fall)
Opt-Out Focus Groups			$150,000		$150,000	Two focus group sessions (summer and fall) with 2-3 focus groups and 8-10 participants each
Qualitative Research			$100,000		$100,000	The $100k for qualitative in 2018 was for the Opt-Out focus groups and any other initiatives that may arise (focus groups targeting certain "hardship" segments, testing solutions, refining communications, are some ideas that I believe we presented). $100k is a conservative estimate for two qualitative efforts.
Design Thinking Focus Group			$175,000		$175,000	This cost should be in the 2017 column as it is for the Design Thinking work currently underway.
Segmentation Deeper Dive		$120,000			$120,000	This is the estimate from our outside vendor to conduct further studies into the Connected Costal and Skeptical Solution Seeker segments
Staff Augmentation						
Customer Data Analytics & Research		$275,000	$182,000	$132,000	$589,000	2 incremental FTE's in 2017, 1.5 in 2018 and 1 in 2019 to conduct research and run analytics on default pilot customers
Subtotal Customer Insight & Research		$470,000	$1,207,000	$132,000	$1,809,000	
Measurement & Evaluation						
Load Impacts		$50,000	$100,000	$50,000	$200,000	cost associated with external consultant to measure load impacts
Staff Augmentation						
Electric Load Analysis		$100,000	$100,000		$200,000	1 incremental FTE for M&E associated with default pilot
Subtotal Measurement & Evaluation		$150,000	$200,000	$50,000	$400,000	
Operations & Production Support						
Staff Augmentation						
~~Information Technology~~		~~$1,500,000~~	~~$6,000,000~~		~~7,500,000~~	
~~Billing/Customer Operations Support~~		~~$500,000~~	~~$2,000,000~~		~~2,500,000~~	
Advanced Metering Operations			$240,000		240,000	2 incremental FTEs to support advanced metering operations for the 100K customers on TOU
Customer Contact Center		$144,000	$216,000	$270,000	630,000	estimated cost associated with increased call volume and extended calls due to complexity of questions related to default pilot. 2017 - anticipated increase in calls due to pre-default communication; 2018 - increase in call volume as default pilot launches and moves forward; 2019 - calls associated with bill protection, opting-out, staying on rate.
Branch Offices		$20,000	$20,000		40,000	.5 incremental FTE for default pilot customer support
Subtotal Operations & Production Support		$2,164,000	$8,476,000	$270,000	$10,910,000	
Total Default TOU Pilot Estimate O&M Costs	**$100,000**	**$3,953,000**	**$5,874,550**	**$1,937,000**	**$11,864,550**	
	2016	**2017**	**2018**	**2019**	**TOTAL**	