

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

Application of San Diego Gas & Electric
Company (U 902 E) for Approval of Real Time
Pricing Pilot Rate

Application No. 21-12-____
(Filed December 13, 2021)

**PREPARED DIRECT TESTIMONY OF
RAY UTAMA (CHAPTER 3)
ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY**

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

December 13, 2021



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**PREPARED DIRECT TESTIMONY OF
RAY UTAMA (CHAPTER 3)**

I. OVERVIEW AND PURPOSE

The purpose of my prepared direct testimony is to describe and propose the program implementation design and associated implementation costs for the Real-Time Pricing (RTP) Pilot. This RTP Pilot application is being filed pursuant to Ordering Paragraph (OP) 6 of California Public Utilities Commission (Commission) issued Decision (D.) 21-07-010 in San Diego Gas and Electric Company's (SDG&E) 2019 General Rate Case (GRC) Phase 2 proceeding, which directed SDG&E to file a separate application to develop and implement a RTP Pilot. This testimony will focus on new business capabilities which are required to implement the proposed RTP Pilot.

My testimony is organized as follows:

- **Section I—Overview and Purpose**
- **Section II – Implementation Design**
- **Section III – Implementation Costs**
- **Section IV – Summary and Conclusion**
- **Section V – Statement of Qualifications**
- **Attachment A – Proposed Timeline**
- **Attachment B – Proposed Participation Target**
- **Attachment C – Proposed Implementation Costs**
- **Attachment D – Proposed Incremental Revenue Requirement**
- **Attachment E – Illustrative Electric Class Average Rates**
- **Attachment F – Proposed Term Sheet**

1 **II. IMPLEMENTATION DESIGN**

2 Pursuant to D.21-07-010 and based on results from the discussions among key
3 stakeholders as further described in the prepared direct testimony of SDG&E witness Jeff DeTuri
4 (Chapter 1), SDG&E is pleased to offer this proposed RTP Pilot. The details of the RTP Pilot
5 implementation design are discussed below. In short, and pursuant to direction in D.21-07-010,
6 the RTP Pilot will take place in two stages. SDG&E is proposing specific details of Stage 1 of
7 the Pilot in this Application and the implementation and design of Stage 2 of the Pilot will be
8 determined at a later date, with the input of a working group.

9 **A. Pilot Duration and Timeline**

10 SDG&E is proposing a two-stage RTP Pilot. SDG&E is aiming for Stage 1 of the Pilot
11 to take place from November 1, 2022 until October 31, 2024. During this two-year period,
12 SDG&E’s goal is to collect sufficient data for a robust evaluation of how customers respond to
13 hourly price signals. SDG&E and the working group of interested parties will continue
14 conversations around the best way to move forward to Stage 2 of the Pilot, which SDG&E
15 currently anticipates will include an expanded group of eligible customers.

16 SDG&E recommends holding two stakeholder meetings, starting in the fourth quarter of
17 2023, to discuss available data and information from the first year of the Stage 1 Pilot (as well as
18 additional information from the second year of the Pilot as it becomes available), gather
19 feedback from interested parties, and inform Stage 2 Pilot design. Following the two proposed
20 stakeholder meetings, SDG&E proposes to seek approval for its Stage 2 Pilot design through an
21 Advice Letter (AL) filing in the second quarter of 2024, with anticipated approval in the third
22 quarter of 2024, and implementation in the fourth quarter of 2024. If approved according to this
23 proposed timeline, Stage 2 of the Pilot would begin on November 1, 2024.

1 At the end of the Stage 1 Pilot, remaining customers are anticipated to be automatically
2 enrolled over to the Stage 2 Pilot. At this time, SDG&E anticipates that the Stage 1 Pilot rate will
3 remain the same as the Stage 2 Pilot rate, however, based on the data and information available
4 at the time of the stakeholder workshops for designing Stage 2, there may be some changes to the
5 rate that will be reflected in SDG&E's Advice Letter.

6 At the conclusion of Stage 2 of the Pilot, an evaluation of the rate will be conducted, as
7 discussed in more detail in the prepared direct testimony of SDG&E witness Leslie Willoughby
8 (Chapter 5), and a determination made as to whether the Stage 2 Pilot design should be
9 implemented fulltime, or whether further design changes are necessary. At this time, SDG&E
10 does not anticipate ending the Pilot rate; however, SDG&E reserves the right to seek
11 Commission authority to terminate the Pilot rate if the circumstances are such that maintaining
12 the rate is impractical.

13 See Attachment A for an illustration of the proposed schedule and timeline for both
14 stages of the Pilot.

15 **B. Eligibility**

16 Stage 1 of the RTP Pilot will be limited to customers currently taking Utility Distribution
17 Company (UDC) service under the following tariffs: Schedules AL-TOU, AL-TOU2, and A6-
18 TOU. This will effectively limit Stage 1 to medium and large commercial & industrial (M/L
19 C&I) customers, though some small commercial customers who opt into one of these UDC
20 tariffs could participate in the pilot.

21 In Stage 1 of the Pilot, it is important to get as clear a signal as possible for the
22 evaluation. For this reason, participating customers cannot be enrolled in any net-energy

1 metering (NEM) schedules,¹ any demand response programs, or conjunctive billing.² Further,
2 Pilot participants must be on the non-grandfathered rates of the UDC tariff. NEM, conjunctive
3 billing, and/or grandfathered rates are excluded from participating in the Stage 1 of the Pilot
4 because participation in those rates and/or programs will add noise to the data being collected,
5 making it difficult to determine whether load reduction and/or bill impact are due to the price
6 signals of the RTP Pilot. Dual participation in a demand response program while on the RTP
7 Pilot will add noise to the data being collected through the presence of another load reduction
8 signal and could result in over-compensation to the customer and thus cross-subsidization since
9 the customer could receive savings twice for their load response (aka “double counting”). Also,
10 if a customer on the Stage 1 Pilot decides to take commodity service through other Load Service
11 Entities (LSE), such as Community Choice Aggregators (CCA) or Direct Access (DA), the
12 customer would be removed from the RTP Pilot. Stage 1 of the RTP Pilot is an SDG&E
13 commodity pilot program and therefore participating customers must be taking commodity
14 service from SDG&E. SDG&E anticipates, however, having further discussions with the CCA
15 parties regarding their interest in and logistics of participating in Stage 2 of the RTP Pilot.

16 At this time, and subject to interim discussions with interested stakeholders, SDG&E is
17 considering to expand Stage 2 Pilot’s eligibility to include residential, small commercial, and
18 agriculture customer classes, as well as customers enrolled in NEM, subject to the remaining
19 exclusions from Stage 1 and with the caveat that further discussions are required with the CCA
20 parties regarding their potential participation.

¹ NEM schedules include customers on Schedule NEM, NEM-ST, RES-BCT, NEM-V, NEM-V-ST, VNM-A, VNM-A-ST, and NEM-FC.

² Conjunctive billing refers to customers with multiple meters on a single premise, where meter data is combined for the purpose of billing UDC charges.

1 **C. Enrollment**

2 For Stage 1 of the Pilot, SDG&E proposes a minimum target participation of 25 customer
3 accounts and a limit of 100 eligible customer accounts on a first-come first-served basis with no
4 overall load cap. The customer account limit represents approximately 10 percent of the Stage 1
5 RTP Pilot eligible M/L C&I population. SDG&E anticipates that this population of M/L C&I
6 customers will provide insight on how such customers respond to the hourly pricing signal. In
7 Stage 2, SDG&E expects to expand the target on participating customers as additional customer
8 classes and programs become eligible.

9 For Stage 2 of the Pilot, rather than a specific target and limit on participating customers,
10 SDG&E proposes a target participation based on percentage of eligible customers by class. Due
11 to potential load departure to other LSEs (such as CCA or DA), it will be difficult to provide
12 specific numbers. SDGE proposes a minimum target participation of 0.5% and a limit of 2.5%
13 of eligible residential customer accounts, and a minimum target participation of 10% and a limit
14 of 50% of eligible non-residential customer accounts. Like Stage 1, the eligibility for the Stage 2
15 Pilot will be based on a first-come first-served basis, with no overall load cap restrictions. Based
16 on the current eligible customer population, these percentages approximate a total limit of
17 approximately 35,000 customer accounts, which is the same participation cap discussed in the
18 Decision.³ The target participation numbers are further divided by customer classes. A limit of
19 50% of eligible non-residential customer accounts were determined to provide an adequate
20 sample of comparison between customers on and off the RTP Pilot, therefore the effectiveness of
21 the RTP Pilot rate can be appropriately measured. Note, however, that the eligible participants
22 may be further revised through the proposed Stage 2 AL filing. See Attachment B for a table

³ D.21-07-010 at 55.

1 showing the target (minimum and limit) participations by customer class for both stages of the
2 RTP Pilot.

3 Eligible customers can choose to opt into the RTP Pilot and will be enrolled at the
4 beginning of their next billing period.⁴ Pre-enrollment for each RTP Pilot will begin one month
5 prior to the start of each pilot stage. See Attachment A for illustration of the proposed timeline.

6 **D. Unenrollment**

7 Participating customers may unenroll from the RTP Pilot at any time and will be
8 unenrolled at the beginning of their next billing period.⁵ Once unenrolled, a customer will revert
9 to the default commodity rates for their applicable tariff or a current rate option available to that
10 customer. One consideration for hourly rates is that prices may be above or below the default
11 rates. Sophisticated customers could hop between the RTP Pilot, CCA/DA, and the default rate
12 to arbitrage the lowest price. However, SDG&E’s Electric Rule 12 tariff avoids this situation by
13 limiting customers to “only one rate schedule change...in any twelve-month period.”⁶

14 **E. Customer Notification**

15 For Stage 1, SDG&E plans to develop a page on the SDG&E website (similar to the
16 current site for posting Schedule VGI (Electric Vehicle Grid Integration Pilot Program) prices)⁷
17 to post the hourly prices for the RTP pilot by 6 pm the day before they go into effect. The hourly
18 prices will reflect the entire commodity rate for the RTP Pilot, which would be the sum of the

⁴ Customer to be enrolled at the beginning of the next billing cycle upon giving SDG&E at least five business days’ notice before the end of the customer’s billing cycle. Otherwise, customer will be enrolled at the beginning of the subsequent billing cycle.

⁵ Customer to be unenrolled at the beginning of the next billing cycle upon giving SDG&E at least five business days’ notice before the end of the customer’s billing cycle. Otherwise, customer will be unenrolled at the beginning of the subsequent billing cycle.

⁶ SDG&E, Rule 12, available at https://www.sdge.com/sites/default/files/elec_elec-rules_erule12.pdf.

⁷ SDG&E, Power Your Drive, available at www.sdge.com/pyd-map.

1 California Independent System Operator (CAISO) day-ahead hourly price, any applicable hourly
2 capacity adder, and the commodity base rate (see Chapter 3, Rate Design testimony). Hourly
3 prices can then be viewed from this page for use by customers, third parties, and CCA/DA
4 providers. For Stage 2 of the RTP Pilot, in addition to the website, SDG&E will consider
5 developing push notifications and an Application Programming Interface (API) for third parties
6 that have machine-to-machine automation.

7 SDG&E will continue to provide each RTP Pilot customer with hourly usage information
8 through the customer's account portal. If RTP Pilot participants wish to share their usage data
9 with third parties to better manage their response to hourly pricing, they can do so by following
10 SDG&E's existing data sharing protocols.

11 **III. IMPLEMENTATION COSTS**

12 Pursuant to D.21-07-010, Section 5.5(e), and to effectively support the proposed RTP
13 Pilot, SDG&E proposes to include certain implementation costs to be tracked and recovered
14 through memorandum or balancing accounts. As addressed in the prepared direct testimony of
15 SDG&E witness Eric Dalton (Chapter 6), SDG&E proposes that all implementation costs shown
16 below are to be tracked and recovered through an RTP Balancing Account.

17 All estimated implementation costs outlined below are specifically for Stage 1 of the RTP
18 Pilot only. RTP Pilot costs summarized below and in Attachment C hereto reflect the capital and
19 incremental costs incurred by SDG&E in executing the Stage 1 of the RTP Pilot.

20 Stage 2 estimated implementation costs will be further developed during this proceeding
21 and via the proposed workshops and approved through the proposed Stage 2 AL filing in the
22 second quarter of 2024. This AL process will allow SDG&E to incorporate any relevant lessons
23 learned from Stage 1 and gather feedback from interested parties to effectively design the Stage
24 2 Pilot.

1 **A. Meter Reprogramming**

2 Most of SDG&E’s meters considered for the Stage 1 Pilot are a fifteen minute or hourly
3 interval data recording meter and are compatible with the proposed rate design described in the
4 prepared direct testimony of Sam Shannon (Chapter 2). Implementation costs due from meter
5 reprogramming should be minimal, and for that reason, SDG&E is not requesting recovery of
6 meter reprogramming costs for Stage 1 of the RTP Pilot.

7 **B. Billing System**

8 In order to lower the overall billing system implementation costs for the RTP, where
9 possible, SDG&E plans to leverage existing functionality within its system that is being used to
10 support the Grid Integrated Rate (Schedule PUBLIC GIR). Using this approach, SDG&E is
11 forecasting that the total costs for implementing the RTP within its billing system to be
12 approximately \$1,015,000. These costs will include tasks associated with: 1) planning,
13 analyzing, and developing requirements; 2) designing, building, and validating the new RTP rate
14 and calculations within the billing system; 3) designing, building, and validating new auto-
15 enrollment notifications; 4) performing quality assurance and end-to-end testing to ensure overall
16 accuracy of the system; and 5) deploying and stabilizing the implemented changes.

17 **C. Price Webpage, Push Notifications, and Application Programming Interface**
18 **(API)**

19 For Stage 1 of the Pilot, SDG&E plans to implement a webpage to display the hourly
20 RTP prices for customers on a daily basis. To implement the webpage, SDG&E is forecasting
21 costs of approximately \$185,000.

22 For Stage 2 of the Pilot, SDG&E will consider and address the feasibility of developing
23 push notifications and an API to transmit price signals. Implementation costs associated with

1 these efforts will be further considered during this proceeding and later during the workshop and
2 AL process for Stage 2 of the Pilot.

3 **D. Marketing, Education and Outreach (ME&O)**

4 Description of all Marketing, Education and Outreach (ME&O) proposal, customer
5 support, and the associated estimated budget are addressed in the prepared direct testimony of
6 SDG&E witness April Bernhardt (Chapter 4). The cost associated with the ME&O effort as
7 described in April Bernhardt's testimony is estimated to be \$119,156.

8 **E. Measurement and Evaluation (M&E)**

9 Description of all Measurement and Evaluation (M&E) plan, including load impacts, load
10 shifts, battery storage consideration and the associated estimated budget are addressed in the
11 prepared direct testimony of SDG&E witness Leslie Willoughby (Chapter 5). The cost
12 associated with the evaluation effort as described in Leslie Willoughby's testimony is estimated
13 to be \$750,000.

14 **F. Rate Impact**

15 For Stage 1 of the RTP Pilot, the total incremental revenue requirement, including
16 Franchise Fees and Uncollectibles (FF&U), compared to what is currently being collected in
17 rates would be approximately \$2.6 million. Included in the total incremental revenue
18 requirement, SDG&E forecasts a total implementation cost of approximately \$2.1 million,
19 further broken down to approximately \$1.3 million in 2022, \$0.3 million in 2023, \$0.3 million in
20 2024, and \$0.1 million in 2025. See Attachment D for the Stage 1 Pilot incremental revenue
21 requirement broken down by year.

22 If approved, SDG&E requests that recovery of the proposed implementation costs
23 become effective on January 1, 2023 or the next available rate change. SDG&E anticipates that
24 recovery of these costs will result in an increase in electric rates of approximately 0.02%. The

1 average monthly bill for a typical bundled, non-California Alternate Rates for Energy (CARE),
2 residential customer⁸ living in the inland and coastal climate zone and using 400 kWh per month
3 would see an increase of \$0.02 in 2023. See Attachment E for the current and illustrative class
4 average electric rates for January 1, 2023.

5 **IV. SUMMARY AND CONCLUSION**

6 SDG&E recommends that the Commission adopt the proposed RTP Pilot program design
7 and implementation costs associated with Stage 1 as in the best interest of rate payers and as
8 reasonable and just in order to effectively support the proposed RTP Pilot.

9 This concludes my prepared direct testimony.

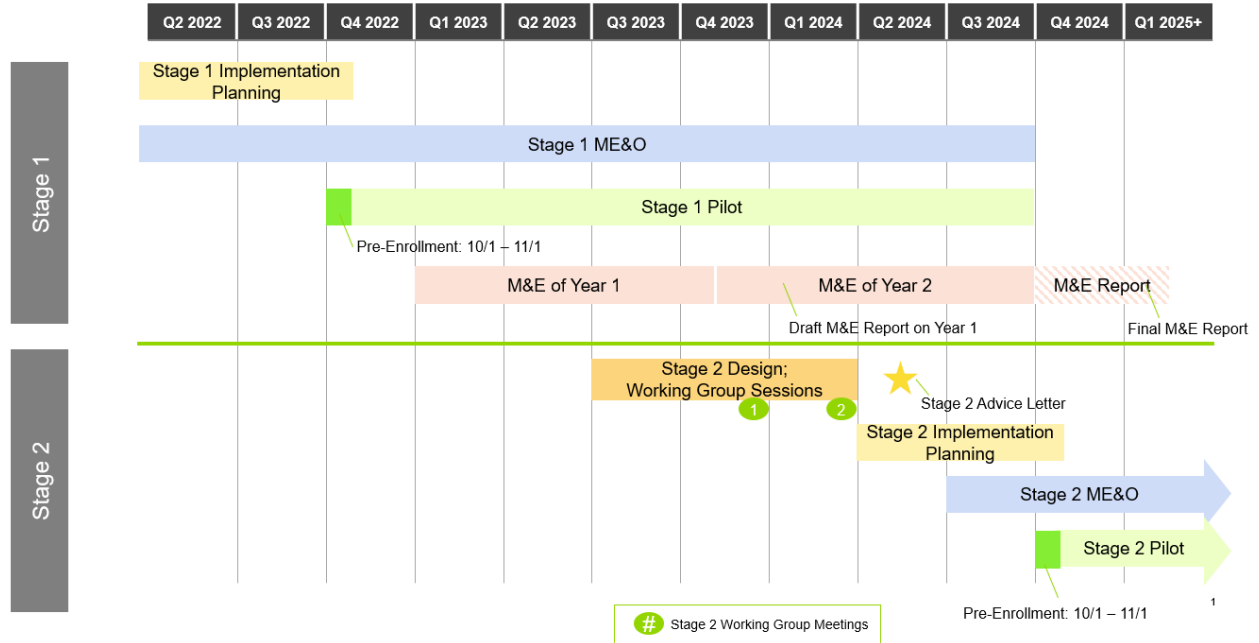
⁸ A bundled customer is one who takes both UDC and commodity service from SDG&E, such as on rate Schedule TOU-DR1.

1 **V. STATEMENT OF QUALIFICATIONS**

2 My name is Ray Utama and I am a Rate Strategy Project Manager II in the Customer
3 Pricing department for SDG&E. My business address is 8330 Century Park Court, San Diego,
4 California, 92123. I have held this position for approximately four months and have been
5 employed by the Sempra Energy family of companies for approximately 9 years. I received a
6 Bachelor of Science degree in Accountancy, with a minor in Economics, from the San Diego
7 State University in 2010. I am a Certified Public Accountant, licensed in the state of California.
8 I have not previously testified before the Commission. I have previously submitted testimony
9 before the Federal Energy Regulatory Commission.

ATTACHMENT A
PROPOSED TIMELINE¹

Proposed Timeline



¹ SDG&E notes that this is a proposed timeline only with a date of November 1, 2022 as the date of commencement of Pilot Stage 1. To the extent the Pilot Stage 1 commences later (but before the end of 2022), other dates on this timeline may shift accordingly.

ATTACHMENT B
PROPOSED PARTICIPATION TARGET
FOR RTP PILOT STAGE 1

Customer Class	Number of Eligible Customer Accounts*	Proposed Stage 1 Target	
		Minimum	Limit
Residential	-	-	-
Small Commercial	-	-	-
M/L C&I	1,100	25	100
Agriculture	-	-	-
Target Total	1,100	25	100

*Approximate number of current eligible customer accounts for Stage 1 of the RTP Pilot. Per the Eligibility section of this testimony, eligible customers cannot be enrolled in any NEM schedules, any demand response programs, conjunctive billing or take commodity service through other LSEs, (such as CCA or DA).

PROPOSED PARTICIPATION TARGET
FOR RTP PILOT STAGE 2

Customer Class	Number of Eligible Customer Accounts*	Proposed Stage 2 Target		Proposed Stage 2 Target Equivalent**	
		Minimum	Limit	Minimum	Limit
Residential	1,200,000	0.5%	2.5%	6,000	30,000
Small Commercial	5,500	10%	50%	550	2,750
M/L C&I	1,500	10%	50%	150	750
Agriculture	3,500	10%	50%	350	1,750
Target Total	1,210,500			7,050	35,250

*Approximate number of current eligible customer accounts for Stage 2 of the RTP Pilot. Per the Eligibility section of this testimony, SDG&E is considering to expand Stage 2 Pilot’s eligibility to include residential, small commercial, and agriculture customer classes, as well as customers enrolled in NEM, subject to the remaining exclusions from Stage 1.

**Approximate target (minimum and limit) participations for Stage 2 of the RTP Pilot based on current eligible customer population and the proposed target percentages.

ATTACHMENT C
PROPOSED IMPLEMENTATION COSTS
FOR RTP PILOT STAGE 1

Activity / Item	Estimated Cost for Stage 1	Treatment
Meter Reprogramming*	\$0	RTP Balancing Account
Billing System	\$1,015,000	RTP Balancing Account
Price Webpage	\$185,000	RTP Balancing Account
Push Notification*	\$0	RTP Balancing Account
Application Programming Interface (API)*	\$0	RTP Balancing Account
Marketing, Education and Outreach (ME&O)	\$119,156	RTP Balancing Account
Measurement and Evaluation (M&E)	\$750,000	RTP Balancing Account
Total	\$2,069,156	

*Implementation costs associated with these efforts will be further considered during this proceeding and later during the workshop and AL process for Stage 2 of the Pilot.

ATTACHMENT D

**PROPOSED INCREMENTAL REVENUE REQUIREMENT
FOR RTP PILOT STAGE 1**

<i>(\$ Thousands)</i>	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
Incremental Revenue Requirement (with FF&U)	\$219	\$708	\$643	\$469	\$314	\$212	-\$4	\$0	\$0	\$2,560

ATTACHMENT E

ILLUSTRATIVE ELECTRIC CLASS AVERAGE RATES FOR RTP PILOT STAGE 1

Customer Class	Current Rates (11/1/2021)	Proposed Rates	Change	Change
	(¢ / kWh)	(¢ / kWh)	(¢ / kWh)	(%)
Residential	32.072	32.079	0.007	0.02%
Small Commercial	28.876	28.882	0.006	0.02%
M/L C&I	26.090	26.094	0.004	0.02%
Agriculture	20.026	20.030	0.004	0.02%
Lighting	26.140	26.147	0.007	0.03%
System Total	28.036	28.041	0.005	0.02%

ATTACHMENT F

**PROPOSED TERM SHEET
FOR RTP PILOT STAGE 1**

Proposal: SDG&E Real-Time Pricing (RTP) Dynamic Pricing Pilot Options – Stage 1

Item	Description
Objectives/Purpose	Stage 1 Pilot will provide Medium/Large Commercial & Industrial (M/L C&I) customers a choice to receive hourly price signals a day ahead to encourage changes in their load patterns to contribute to California’s (CA’s) clean energy goals and reduce utility operating costs to help keep rates affordable
Enrollment	<ul style="list-style-type: none"> • Optional program: <ul style="list-style-type: none"> ○ Customer chooses to enroll in the RTP Stage 1 Pilot (Opt-In) ○ Customer may unenroll from the RTP Stage 1 Pilot at any time subject to unenrollment requirements below ○ Customer must have interval meter • Stage 1 Pilot period limited to: <ul style="list-style-type: none"> ○ Pre-enrollment begins on 10/1/2022 ○ Stage 1 Pilot aims to begin on 11/1/2022, with customers enrolled in “pre-enrollment” period placed on RTP Pilot rate for the first billing period on/after 11/1/2022 ○ For enrollment after the start date, customer to be enrolled at the beginning of the next billing cycle upon giving SDG&E at least five business days’ notice before the end of the customer’s billing cycle. Otherwise, customer will be enrolled at the beginning of the subsequent billing cycle. ○ Stage 1 Pilot terminates two years after the start date ○ Following the Stage 1 Pilot termination, remaining customers are to be automatically enrolled to the RTP Stage 2 Pilot • Unenrollment: <ul style="list-style-type: none"> ○ Customer to be unenrolled at the beginning of the next billing cycle upon giving SDG&E at least five business days’ notice before the end of the customer’s billing cycle. Otherwise, customer will be unenrolled at the beginning of the subsequent billing cycle ○ Upon unenrollment, customer reverts to existing default commodity rate structures or a current rate option available to that customer
Eligibility	<ul style="list-style-type: none"> • Stage 1 Pilot is limited to SDG&E M/L C&I customers currently taking Utility Distribution Company (UDC) electric service on Schedules AL-TOU, AL-TOU2, or A6-TOU • Stage 1 Pilot size is limited to 100 customer accounts • First 100 customer accounts to enroll are eligible for Stage 1, with no overall load cap • Customers enrolled on the following current programs are not eligible (unless they unenroll) for Stage 1: <ul style="list-style-type: none"> ○ Net-Energy-Metering (NEM) ○ Community Choice Aggregation (CCA) / Direct Access (DA) ○ Any SDG&E-offered Demand Response (DR) program, including the default Critical Peak Pricing (CPP) program ○ Grandfathered rates of the UDC tariff ○ Conjunctive billing
Rate Design	<ul style="list-style-type: none"> • New “Commodity Rate” in SDG&E’s commodity tariff for Stage 1: <ul style="list-style-type: none"> ○ Volumetric hourly rate based on California Independent System Operator (CAISO) day ahead hourly price ○ Volumetric capacity adder equal to the Schedule Public GIR commodity CPP hourly adder, applied to hours in which load is greater than the previous years’ 150th peak hour ○ Volumetric rate equal to the commodity base rate in Schedule Public GIR • Customers will continue to take UDC electric service on their current applicable UDC rate

Item	Description
Key Program Parameters	<ul style="list-style-type: none"> • Pricing webpage on the SDG&E website (similar to the current site for posting Schedule VGI (Electric Vehicle Grid Integration Pilot Program) prices) • SDG&E will post the day ahead hourly RTP prices by 6 pm the day before they go into effect • Customers will self-serve and pull pricing from SDG&E's webpage
Duration with Start Year and Ramp	<ul style="list-style-type: none"> • Stage 1 Pilot Proposed Timing <ul style="list-style-type: none"> ○ Q2 2022: ME&O begins ○ 10/1/2022: Pre-enrollment starts, ending when enrollment threshold is met ○ 11/1/2022: Start RTP Stage 1 Pilot rate and billing ○ Q1 2024: Draft M&E Report on Year 1 ○ 10/31/2024: End of Stage 1 Pilot ○ 2/1/2025: Final M&E Report • Stage 2 Pilot Proposed Timing <ul style="list-style-type: none"> ○ Q2 2024: Submit Stage 2 Design ○ 10/1/2024: Pre-enrollment starts, ending when enrollment threshold is met ○ 11/1/2024: Start Stage 2 program rates and billing
Measurements & Evaluation	<p>SDG&E will perform ex-post load impacts, process evaluation, participant and non-participant surveys and/or focus groups as well as Post Event surveys. For the Stage 1 Pilot, these activities will inform and help shape the program design for Stage 2.</p> <p>Evaluation methodology:</p> <ul style="list-style-type: none"> • Load impacts due to shifts and or reductions including impact of technology on load shift will be conducted. <ul style="list-style-type: none"> ○ SDG&E may conduct customer interviews to determine how the customer may have changed their behavior or invested in technology to change load patterns and usage levels. • Bill savings quantification <ul style="list-style-type: none"> ○ SDG&E will compare customer bills on the RTP pilot to their bills on their previous rate • Participant and non-participant surveys (to include customer understanding and satisfaction) <ul style="list-style-type: none"> ○ SDG&E may conduct customer interviews to gain insights on the customer's pilot experience and reasons for enrolling ○ SDG&E will interview any customer who unenrolls to gain insights on reasons for unenrollment ○ SDG&E will interview customers that meet the eligibility requirement but do not enroll to find out what the obstacles are for the customer. • Cost shift quantification and carbon reduction quantification <ul style="list-style-type: none"> ○ SDG&E will calculate the cost shift by participating customer and into total for the pilot as part of the M&E ○ Cost shift will be quantified as the difference in revenue collected from the customer under the RTP tariff versus the customer's previous tariff less the benefits of cost and carbon reduction from the 'impact estimation'
Marketing, Customer Education and Outreach	<p>SDG&E will provide third parties access to resources and collateral to facilitate their promotion of the RTP Stage 1 Pilot rate within their current offerings. Resources to include a webinar and website with downloadable fact sheets and information on the Stage 1 Pilot. To help further drive enrollment, SDG&E will also conduct low cost outreach (emails, website, etc.). SDG&E's Account Executives will also coordinate with eligible C&I customers on the Stage 1 Pilot option to help drive enrollment. Once SDG&E customers are enrolled, SDG&E will also provide ongoing outreach to participants via email to help them be successful on the plan and create a consistent customer experience. The costs</p>

Item	Description
	for Stage 2 are unknown at this time and will vary based on the findings from Stage 1 and the number of eligible participants.
Contingencies	In the event that day ahead hourly RTP prices are not available by 6 pm on the day before they go into effect, the previous day's pricing will be applied
Participation Incentives	None
Bill Protection	None
Risk Protection	None
Cost Tracking and Recovery	SDG&E will establish a two-way balancing account to track program costs to be addressed annually via SDG&E's Annual Regulatory Account Balance Update, with the exception of the consultant and facilitation costs of up to \$150,000, which will be tracked and recovered through SDG&E's existing Residential Reform Memorandum Account