

Application: A.18-11-015

Exhibit No.: SDGE-

Witness: Neil Umali

UPDATED PREPARED DIRECT TESTIMONY OF
NEIL UMALI
CHAPTER 2
ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY

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



NOVEMBER 13, 2020

TABLE OF CONTENTS

I.	INTRODUCTION.....	1
II.	CTP BACKGROUND	2
III.	CLICK-THROUGH AUTHORIZATION ENHANCEMENTS	3
	A. Synchronous Data (OP 29, Bullet #3)	4
	B. Improvements to the CTP Authorization Process (OP 29, Bullet #4)	4
	C. Improvements in Data Delivery Process (OP 29, Bullet #5)	5
	D. Improvements to the CTP infrastructure (OP 29, Bullet #6)	6
	E. Additional CTP functionalities proposed in CDAC (OP 29, Bullet #7)	7
	F. Resolution of implementation issues from CDAC (OP 29, Bullet #8)	8
	G. Integrating CISR-DRP Form Terms and Conditions with Utility Green Button Platform – Customer Energy Network (OP 29, Bullet #9)	9
	H. Publication of Information on Utility Website (OP 29, Bullet #10)	9
IV.	WHITE PAPER RESPONSES: REQUESTS FOR ADDITIONAL DATA - RECOMMENDED.....	10
	A. Gas Usage Data:.....	12
	B. Historical Energy Efficiency Program Participation	12
	C. Customer’s Historical Rate and Rate Change Notification.....	13
V.	WHITEPAPER RESPONSE: REQUESTS FOR ADDITIONAL DATA – NOT RECOMMENDED.....	14
	A. Customer Credit History	14
	B. Screen Scraping	14
	C. Unique Identifier for Each Tariff	16
	D. 5-Minute Electric Meter Data	17
	E. Green Button Standard.....	17
	F. Grid Data.....	18
	G. Customer Email Address.....	19
	H. Other Topics Discussed in CDAC Whitepaper Responses.....	19
VI.	API SOLUTION 1 (OP 29, BULLET #2).....	20
VII.	COST RECOVERY	21
VIII.	CONCLUSION	22
IX.	STATEMENT OF QUALIFICATIONS	23
	LIST OF ACRONYMS	24

1 will also address SDG&E’s response to each of the bullet points in OP 29 from the business
2 perspective.³

3 **II. CTP BACKGROUND**

4 As part of the Resolution, SDG&E was ordered to implement the CTP. Just seven
5 months later, in March 2018, the first phase of CTP was implemented. The first phase allowed
6 for the authentication and authorization process to begin and end on the third-party website. In
7 compliance with the Commission’s directives, the customer’s identity is verified via SDG&E’s
8 My Account⁴ customer portal credentials, the customer’s information is pre-populated on the
9 DRP’s registration website and the authorization is granted all within a short, streamlined process
10 utilizing only two webpage screens and within a maximum of four clicks.⁵

11 The second phase of the project deployed on July 1, 2018, provided for “alternative
12 authentication,” allowing a customer to authenticate using their account number and the phone
13 number associated with their SDG&E account. Phase 2 further expanded the data set provided to
14 DRPs to include additional billing attributes.⁶

15 The final and third phase of the project implemented the ability for the customer to
16 revoke authorization to share data using CTP and implemented performance monitoring and
17 reporting. As described in the Moses Testimony (Chapter 3), the CTP developed by SDG&E
18 utilizes industry best practices for authentication and authorization.⁷ Since implementation, two

³ The Prepared Direct Testimony of Thomas Moses (Chapter 3) (“Moses Testimony (Chapter 3)”), will discuss SDG&E’s response and proposals from an Information Technology (“IT”) perspective.

⁴ My Account is the online SDG&E portal for customers to login and complete transactions with the utility including, managing accounts, paying bills, getting energy tips, and other useful information.

⁵ Resolution, OP 4 at 99.

⁶ *Id.*, OP 2 at 98 and OP 13 at 101.

⁷ Moses Testimony (Chapter 3), Section II, Current Business Functionality.

1 DRPs are using the CTP, and almost 30,000 customers have authorized SDG&E to share their
2 data using the CTP.⁸ The current CTP solution has accomplished the policy objectives of the
3 Commission to streamline and improve the authentication process. SDG&E received comments
4 that its current CTP is preferred over the Alternate Solution⁹ proposed by other third parties and
5 even over the Green Button Connect platform as the data access platform available for data
6 sharing with customer consent.¹⁰ The current CTP is working precisely as envisioned, and
7 SDG&E urges the Commission to consider this important feedback when considering whether to
8 require the utilities to implement an Alternate Solution or to spend additional funds on enhancing
9 the CTP when it is already working very well.

10 **III. CLICK-THROUGH AUTHORIZATION ENHANCEMENTS**

11 As discussed in my testimony below, and in the Moses Testimony (Chapter 3), some
12 enhancements to the CTP have already been implemented based on stakeholder feedback and
13 future enhancements are also described.

⁸ The number of customers and DRPs who have utilized the CTP as of October 31, 2020. One additional DRP has requested integrating with the CTP but has not completed the process.

⁹ *Id.* The Alternate Solution, called “API [Application Programming Interface] Solution 1,” is discussed in the Resolution at 57. “Green Button” is a standardized data format for providing energy usage data that resulted from an effort of the Department of Energy (“DOE”) to standardize the format nationally. SDG&E customers can download their usage data or send it to third parties via a utility automated system (“Green Button Connect”). More information can be found online. *See* SDG&E, Green Button, *available at* sdge.com/green-button.

¹⁰ *See e.g.*, Response from OhmConnect, Inc. (“OhmConnect”) to the Customer Data Access Committee Solicitation of Feedback, An informal Solicitation of Feedback for Expanding the Click-Through Solutions Developed for Demand Response, to Distributed Energy Resource and Energy Management Providers (May 21, 2018) (“Whitepaper”).

1 **A. Synchronous Data (OP 29, Bullet #3)**

2 Bullet Number 3 of Resolution OP 29 requests “a cost estimate and proposal for
3 Synchronous data of the complete and expanded data set within ninety seconds.”¹¹ SDG&E
4 understands the need to ensure a positive customer experience, providing a near real-time
5 response to reduce the number of customers abandoning the process. SDG&E is currently
6 meeting these needs, as stated in its Advice Letter (“AL”) 3136-E filing:

7 Based on the sub-second performance of services indicated above,
8 SDG&E is confident at this time from current data that no additional costs
9 are required to meet the 90-second requirement on either the current Rule
10 32 data set or the expanded data set and will be able to meet the delivery
11 time requirement.¹²

12 Furthermore, SDG&E information technology (“IT”) personnel predict that this
13 performance is expected to continue should the entire population of customers in our territory
14 participate. As such, SDG&E has complied with the Commission’s request, and is not seeking
15 any additional funding for this function.

16 **B. Improvements to the CTP Authorization Process (OP 29, Bullet #4)**

17 Bullet Number 4 of Resolution OP 29 requests “improvements to the authorization
18 process that may have the effect of increasing customer enrollment in third-party demand
19 response programs.”¹³ SDG&E has implemented a communication plan to follow when a
20 planned or unplanned outage occurs to the systems impacting the CTP. The intent in
21 implementing a third-party DRP communication process was to follow a consistent, proactive
22 approach in the way SDG&E communicates any planned or unplanned system outages where

¹¹ Resolution, OP 29 at 105.

¹² AL 3136-E, approved November 1, 2018 and effective October 25, 2018 at 3.

¹³ Resolution, OP 29 at 105.

1 those outages are known to affect the availability and/or functionality of the CTP. Implementing
2 a communication process should reduce calls from third-party DRPs when there are outages
3 impacting the authorization process or the delivery of data and formalizes awareness to third-
4 party DRPs when there are known impacts. Providing DRPs with outage information allows
5 them to communicate such information to their customers, or post on their website or enrollment
6 pages, and thereby potentially reduce the number of customers who abandon the CTP. SDG&E
7 has experienced instances in which a DRP discovered an unplanned outage prior to SDG&E
8 being aware of the issue. In these instances, SDG&E worked promptly to resolve the issue,
9 communicated with the DRPs during the resolution process and confirmed once the issue had
10 been fully resolved. This communication process was implemented on August 30, 2018, and
11 accordingly SDG&E is not requesting budget for the creation and implementation of this process.
12 SDG&E believes the communication plan is a value-add for the CTP service, with the goal to
13 help make the CTP experience as efficient as possible.

14 **C. Improvements in Data Delivery Process (OP 29, Bullet #5)**

15 Bullet Number 5 of Resolution OP 29 requests “improvements in data delivery
16 processes.”¹⁴ SDG&E has determined that there are currently no immediate additional
17 improvements to recommend in the data delivery process that would provide significant value to
18 ratepayers. In the spring of 2020, SDG&E discovered that certain data elements were not being
19 delivered through the CTP. SDG&E notified the Energy Division and the affected DRPs, and
20 presented a plan to remedy the situation as soon as was possible.¹⁵ In the process, SDG&E

¹⁴ *Id.*

¹⁵ SDG&E met with the impacted DRPs in late May and early June 2020 and shared a plan to remedy the situation; SDG&E completed remediation on October 18, 2020 and the DRPs are testing the fixes with their own system integrations.

1 evaluated again the other elements of its CTP, and does not see a need for further delivery
2 improvement at this time. SDG&E has not received negative comments or feedback that
3 indicates the current data delivery processes are not adequately meeting DRPs' needs.¹⁶ SDG&E
4 further monitors the automated process with alerts to proactively address any issues as they arise.
5 SDG&E began holding monthly meetings with the DRPs starting in May 2020. The DRPs have
6 expressed positive feedback on these calls and in some instances, these calls have been jointly
7 cancelled due to lack of outstanding or unresolved issues to discuss. SDG&E also implemented
8 the use of the CPUC approved Data Issue Reporting Template in May 2020. DRPs can report
9 any data issues by completing and sending this template via email to SDG&E.

10 **D. Improvements to the CTP infrastructure (OP 29, Bullet #6)**

11 Bullet Number 6 of Resolution OP 29 requests “upgrades to the information technology
12 infrastructure needed for click-through authorization processes.”¹⁷ SDG&E is proposing new
13 integration test environments to streamline testing. Currently, the CTP test environment is
14 shared with other SDG&E systems and is not always readily available. A dedicated test
15 environment will help to improve timely testing with third-party resource providers while
16 establishing connectivity and testing data flow. Moses Testimony (Chapter 3) further describes
17 this recommendation and its related cost estimates.¹⁸

¹⁶ See, e.g., Moses Testimony (Chapter 3), Section V. Additional Functionalities for CTP Proposed in the CDAC (OP 29, Bullet #7).

¹⁷ Resolution, OP 29 at 106.

¹⁸ Moses Testimony (Chapter 3), Section IV. Upgrades to the Information Technology Infrastructure Needed for the CTP (OP 29, Bullet #6).

1 **E. Additional CTP functionalities proposed in CDAC (OP 29, Bullet #7)**

2 Resolution OP 29, Bullet 7 asks for proposals for any “additional functionalities for click-
3 through authorization processes proposed in the Customer Data Access Committee
4 (“CDAC”).”¹⁹ Only one third-party provided recommendations for improvements to the current
5 CTP. The eight items identified below were requested of all three investor-owned utilities
6 (“IOUs”) and SDG&E’s response to each item is provided beneath the request.

- 7 1. Improvements to ongoing data delivery.
 - 8 a. SDG&E is already meeting this requirement as described above in
9 the data delivery section. Improvements SDG&E has made
10 include correcting any gaps in interval data, sending interval data
11 on a more timely basis, within a period of an hour up to a day, and
12 allowing DRPs to re-request interval data for this enhancement.²⁰
- 13 2. Functionality to inform the authorized provider with details on the status
14 of the customer authorization.
 - 15 a. SDG&E agrees this request would add value to the CTP and the
16 cost was reasonable. This functionality is described, and cost
17 estimated in the Moses Testimony (Chapter 3).
- 18 3. Use of SDG&E’s company logo on the third-party website to identify
19 where a SDG&E customer would initiate the CTP.
 - 20 a. As a matter of general enterprise-wide company policy SDG&E
21 does not allow third-party use of its company logo to promote the
22 third party’s activity due to the potential for misuse and customer
23 confusion.
- 24 4. Specific enhancement to the sign-in page providing sign-up for an online
25 account or retrieval of credentials.
 - 26 a. This is already an existing functionality in SDG&E’s CTP.
- 27 5. Functionality to facilitate resolution of enrollment conflicts as an optional
28 part of the click-through flow.

¹⁹ Resolution, OP 29 at 106.

²⁰ Moses Testimony (Chapter 3), Section V. Additional Functionalities for CTP Proposed in the CDAC (OP 29, Bullet #7).

- 1 a. SDG&E agrees this request would add value to the CTP and the
- 2 cost was reasonable. This functionality is described, and cost
- 3 estimated in the Moses Testimony (Chapter 3).

- 4 6. Improved visibility into why an individual customer may fail to complete
- 5 the CTP Open Authorization (“OAuth”)²¹ process.

- 6 a. There is no simple way to identify customer behavior and the
- 7 reason(s) behind customer abandonment of an authorization. Even
- 8 with a system that attempts to track all possible combinations of
- 9 scenarios regarding a customer’s activity, or that asks the customer
- 10 why they are leaving the process, good data may not be obtained if
- 11 customers choose not to disclose their reasons. Therefore, SDG&E
- 12 will not cost estimate this functionality as the value does not
- 13 outweigh the cost.

- 14 7. Lengthen the lifespan of the refresh tokens to at least one year.

- 15 a. This is already an existing functionality in SDG&E’s CTP with a
- 16 token lifespan of 13 months.

- 17 8. Transition of the revocation notification from email to a file (or push
- 18 notification).

- 19 a. SDG&E agrees this request would add value to the CTP. SDG&E
- 20 proposes that customers who revoke their authorization in the CTP
- 21 will receive an email confirmation, and the DRP should receive
- 22 notification via “push” file, as a data field with other batch data the
- 23 DRP already receives, rather than a separate email. This
- 24 functionality is described, and cost estimated, in the Moses
- 25 Testimony (Chapter 3).²²

26 **F. Resolution of implementation issues from CDAC (OP 29, Bullet #8)**

27 Bullet 8 of Resolution OP 29 requires “resolution of implementation issues related to
 28 OAuth Solution 3 or API [Application Program Interface] Solution 1 raised by stakeholders in
 29 the Customer Data Access Committee.”²³ There are currently no known implementation issues

²¹ The OAuth process is described in Moses Testimony (Chapter 3), Section II. Current Business Functionality.

²² Moses Testimony (Chapter 3), Section V. Additional Functionalities for CTP Proposed in the CDAC (OP 29, Bullet #7).

²³ Resolution, OP 29 at 106.

1 with the OAuth Solution 3 CTP, SDG&E’s operating CTP.²⁴ Accordingly, SDG&E is not
2 seeking any funding for this requirement.

3 **G. Integrating CISR-DRP Form Terms and Conditions with Utility Green**
4 **Button Platform – Customer Energy Network (OP 29, Bullet #9)**

5 Bullet 9 of Resolution OP 29 requests “costs for integrating the CISR-DRP²⁵ Request
6 Form terms and conditions into the Utility Green Button platforms – ShareMyData, Green
7 Button Connect, or Customer Energy Network.”²⁶ SDG&E has integrated the terms and
8 conditions of the CISR-DRP in every path available for customers to authorize the sharing of
9 data by signing the CISR-DRP form, both paper and electronic forms such as our Green Button
10 platforms, which is supported today by our Customer Energy Network (“CEN”).

11 SDG&E has implemented a link to the full terms and conditions in the CTP, which
12 utilizes the Customer Energy Network.²⁷ SDG&E is not seeking any additional funding for this
13 requirement.

14 **H. Publication of Information on Utility Website (OP 29, Bullet #10)**

15 Resolution OP 29, Bullet 10 orders the utilities to publish “customer friendly information
16 on the Utility website including, information about Rule 24/32, and instructions on how to
17 authorize data access or revoke authorization.”²⁸ A customer education page for CTP has been
18 developed and published. There will be no additional cost for the publication of this website.

²⁴ As discussed previously, certain data elements were discovered to be missing from the data transfer to DRPs in late May and early June 2020. That issue has now been remedied. *See supra* at n.15.

²⁵ Customer Information Service Request for DRP (“CISR-DRP”).

²⁶ Resolution, OP 29 at 106.

²⁷ SDG&E does not plan on adding the Customer Information Service Request - Demand Response Providers (CISR-DRP) Form terms and conditions to the Green Button platforms as those platforms are not being used for the CTP at SDG&E.

²⁸ Resolution, OP 29 at 106.

1 The main components of the website include:

- 2 • Introduction of the Electric Rule 32 – Direct Participation Demand
3 Response.
- 4 • Rule 32 applicable customers or entities.
- 5 • Roles and responsibilities for the customer, the third-party DRPs, and
6 SDG&E.
- 7 • DRP registration process overview.
- 8 • How to authorize data access.
- 9 • How to revoke data access authorization.
- 10 • Contact Information.

11 **IV. WHITE PAPER RESPONSES: REQUESTS FOR ADDITIONAL DATA -**
12 **RECOMMENDED**

13 In May of 2018, the Energy Division staff issued its Whitepaper.²⁹ The stated purpose of
14 the Whitepaper was to provide background on the evolution of the CTP and data delivery
15 processes in Demand Response (“DR”). It also served as an “informal solicitation of feedback
16 for expanding these processes to DER [Distributed Energy Resource] and energy management
17 providers. ... [and to] assist the investor-owned utilities [], in developing the November 2018
18 applications.”³⁰ Although the Whitepaper was widely distributed by the Energy Division to the
19 service lists for numerous Commission proceedings related to DRPs and other energy
20 management providers to solicit feedback on the CTP structure, potential enhancements and

²⁹ The Whitepaper was created by the Energy Division, with contributions from various named third parties. The Whitepaper notes at page (i) that the paper does not necessarily reflect the views of any one individual party, nor a consensus.

³⁰ Whitepaper at title page.

1 scope of applicable users, SDG&E received third-party feedback from only a handful of
2 participating energy service providers.³¹

3 The parties' requests focused on two areas: providing limited but various types of data
4 and increasing the functionality. In all cases, SDG&E evaluated the requests received to
5 determine:

- 6 1. whether the enhancement was already provided in CTP or in some other
7 platform;
- 8 2. whether it is technically feasible to provide and if so, how feasible it is;
- 9 3. whether there is a good business reason to provide it now;
- 10 4. whether there is enough value in providing the enhancement to justify the
11 cost or effort; and
- 12 5. whether there are any policy considerations.

13 Currently, SDG&E provides the data elements in the expanded data set contained in
14 Attachment 1 of the Resolution. This expanded data set is defined slightly differently for each
15 IOU, based on their own data, but with the intent to standardize the same type of data access
16 across the utilities.³²

17 SDG&E considered each third-party request for additional data carefully, evaluating the
18 request for both having a valid business need as well as providing value to ensure that the
19 benefits outweighed the estimated costs. Based upon this review, SDG&E recommends adding
20 three new data points to the current data set: 1) Gas Usage Data, 2) Historical Energy Efficiency

³¹ SDG&E received feedback on the Whitepaper via the Energy Division from the following parties: The California Efficiency + Demand Management Council ("Council"), ecobee, Home Energy Analytics, Lockheed Martin, Mission:data, OhmConnect, the Public Advocates Office, SunRun and Tesla.

³² This fact is evidenced in the Resolution, which includes different "expanded data set" data field lists for each individual IOU as part of the attachments to the Resolution, instead of one list for all IOUs.

1 Program Participation, and 3) Customer’s Rate Change Notification. The reasons are discussed
2 below.

3 **A. Gas Usage Data:**

4 SDG&E agrees that providing historical gas interval data for purposes of demand
5 response and energy efficiency programs related to gas therm savings is appropriate and could
6 assist in efforts to reduce greenhouse gas (“GHG”) emissions. By having the previous three
7 years of gas data, DRPs may be able to assist customers who have the highest gas usage by
8 offering relevant programs. DRPs would be able to target those high gas usage customers who
9 have greater potential to conserve gas usage. The additional cost to include historical daily gas
10 interval data in the data set is provided in the Moses Testimony (Chapter 3).³³

11 **B. Historical Energy Efficiency Program Participation**

12 Historical energy efficiency (“EE”) program participation can be provided from the data
13 that is currently available in SDG&E’s energy efficiency system. Currently, SDG&E has
14 historical EE program participation data for approximately 38 programs. Such data may assist
15 DRPs to evaluate customers for participation in their programs. For example, DRPs may be able
16 to leverage knowledge that a customer already participated in an EE thermostat program, to
17 target that particular customer for another compatible program to signal that thermostat. DRPs
18 may request available historical EE program participation and the incremental cost associated
19 with adding this information to the current data set is provided in the Moses Testimony
20 (Chapter 3).³⁴

³³ Moses Testimony (Chapter 3), Section VI. CDAC Whitepaper Responses. SDG&E currently provides gas data on a once-daily interval. Third parties requested gas interval data in more frequent intervals. *See e.g.*, Response from Home Energy Analytics to the Whitepaper at 5. Moses Testimony (Chapter 3) addresses why it is not feasible to provide gas data on a shorter interval.

³⁴ Moses Testimony (Chapter 3), Section VI. CDAC Whitepaper Responses.

1 **C. Customer’s Historical Rate and Rate Change Notification**

2 The request for notification that a customer’s rate has changed is reasonable and in
3 alignment with the purposeful use of the customer data. A customer’s rate change can impact
4 which programs or product offers are relevant to the customer. Therefore, SDG&E recommends
5 that this additional data point be added to the current data set. SDG&E will also provide the last
6 12 months of historical rate data. The CTP can be enhanced to include this information
7 automatically and timely. Moses Testimony (Chapter 3) discusses the scope and cost for
8 addition of these elements to the data set in his testimony.³⁵

9 Upon Commission approval of these enhancements, SDG&E will be required to update
10 its Electric Rule 32 tariff as well as its Customer Information Service Request - Demand
11 Response Providers (CISR-DRP) Form. SDG&E will also be required to notify all customers
12 with active CISR-DRP forms of the additional data that will be shared with the DRPs and
13 provided the opportunity to stop sharing their data. The estimated business cost, separate from
14 IT costs, to notify these customers is \$39,546. This estimate includes the partial services of one
15 Program Manager to provide requirements and oversee the project, of one Business Systems
16 Analyst to gather requirements, troubleshoot and help resolve any issues that arise with the
17 implementation, and of one Project Specialist to support administrative project tasks associated
18 with the customer notification project. The IT estimates related to notify these customers are
19 described in the Moses Testimony (Chapter 3).³⁶

³⁵ *Id.*

³⁶ Moses Testimony (Chapter 3), Section VI at TM-15.

1 **V. WHITEPAPER RESPONSE: REQUESTS FOR ADDITIONAL DATA – NOT**
2 **RECOMMENDED**

3 SDG&E carefully evaluated each of the third-party requests for data enhancements. Each
4 request was evaluated using the criteria discussed in Section IV above. In many cases, SDG&E
5 determined that the data being requested was already included as part of the current data set
6 delineated in Attachment 1 of the Resolution. I do not address any of the requests for data
7 elements that are already included in the current CTP data set. The remaining requests are
8 discussed below, and I explain why SDG&E does not recommend inclusion of those requests in
9 the current CTP data set.

10 **A. Customer Credit History**

11 Although the current data set for the CTP includes some bill line items, a customer's
12 payment and balance history are not included. SDG&E strongly opposes providing a customer's
13 payment and balance history in the data set as there are other means for the third-party to obtain
14 data necessary to determine customer credit-worthiness. The third-party should collect this type
15 of data from their customer directly. Like any other business, the customer's credit worthiness
16 could and should be assessed by the third-party provider through its own transaction history or
17 through a credit report. This is a reasonable cost of doing business for a third party and should
18 not be borne by SDG&E's ratepayers.

19 **B. Screen Scraping**

20 A number of the third parties that submitted comments to the Whitepaper indicated that if
21 the utilities did not provide a customer's payment history among other data points as part of the
22 data set, DRPs would then use self-help tactics and "screen scrape" the customer's data.³⁷

³⁷ See e.g., Response from Mission:data to the Whitepaper at 6; see also, Response from OhmConnect to the Whitepaper at 4.

1 “Screen scraping” is the practice of improperly using the customer’s credentials to access the
2 customer’s account to capture more customer information, including available billing and
3 payment data.³⁸ This practice is highly discouraged by SDG&E, and should be prohibited by the
4 Commission for several reasons. First, customers who share their credentials with third parties
5 are in violation of SDG&E’s terms and conditions for use of the My Account portal.³⁹ Anyone
6 with knowledge of a customer password can gain access to My Account and all the services
7 available within the account. Customers may not realize what data is viewable on their account,
8 beyond just their energy usage, including on-bill financing and line item purchases among other
9 information, and may not be aware that providing their credentials also permits third parties to
10 take actions that may not have been authorized by the customer. Additionally, when screen
11 scraping occurs there is no record of the transaction, hampering the ability to audit whether data
12 was inappropriately captured or changed by a third party. Ultimately, the performance metrics
13 ordered by the Commission⁴⁰ and collected by SDG&E would be skewed and not representative
14 of accurate activity should third parties access a customer’s data through screen scraping.

³⁸ “Screen scraping,” also known as web scraping, is the process of extracting data on the web. With the right tools and credentials, anything that is visible on a web page can be extracted. This may occur where the customer provides account access credentials to the third party, usually for one specific purpose, and the third-party captures the customer’s data through the screen scraping process for other purposes.

³⁹ See SDG&E, My Account Terms and Conditions, available at <https://www.sdge.com/my-account-terms-and-conditions>, requiring that customers keep passwords and credentials confidential per their agreement with SDG&E. The terms state: “The unique User ID and password (collectively, ‘Password’) selected by you to access My Account must be held on a confidential basis by you and not given to other people. Anyone with knowledge of your Password can gain access to My Account and all the services available within the account ... You are responsible for maintaining the Password against improper disclosure. One of the terms and conditions of this agreement is that you are solely responsible for any claims, losses, damages, expenses and costs incurred by the use of your Password by others.”

⁴⁰ Resolution, OP 21 at 102-103 and OP 27 at 104-105.

1 SDG&E recommends that the Commission prohibit third parties from using this method of
2 collecting customer data.

3 **C. Unique Identifier for Each Tariff**

4 Third parties also requested various versions of a similar function: a unique identifier to
5 link to a data base that would provide the tariff that a particular customer is on that could be
6 machine-read across all IOUs. The purpose for this request, as SDG&E understands it, is to
7 provide each third-party with a customer's specific rate at any given time with a link to the
8 applicable tariff for that rate, to potentially enable a third party to determine what parameters
9 may exist for the customer to participate in other programs. This request requires significant
10 additional delineation of details such as: what tariffs should be listed? Who would maintain the
11 tariff database in real time to ensure the data is accurate since tariffs change frequently? How
12 would the value of this database be measured and what protections would exist to ensure that
13 ratepayer funded-system integrations would not be later stranded if this database is not
14 maintained for any reason? Most importantly, the third parties have failed to provide an
15 adequate business purpose for this information to justify the necessity and ratepayer expense for
16 this type of database. The current data set already provides the customer's existing rate, and all
17 tariffs are listed on SDG&E's website. SDG&E does not believe that a common centralized
18 database that is machine-readable across tariffs for all IOUs is in the ratepayers' best interests or
19 within the scope of this proceeding.

1 **D. 5-Minute Electric Meter Data**

2 Several third parties requested that the utilities provide 5-minute electric interval usage
3 data.⁴¹ SDG&E is currently able to provide 15-minute interval data. The Commission
4 previously considered, and rejected, a request by third parties for 5-minute electric interval usage
5 data.⁴² SDG&E highlighted the downsides of providing shorter interval usage data in an earlier
6 Rule 32 application.⁴³ It would be an enormous project, with costs so large that it was hard to
7 quantify because of the complexity and size of the back office infrastructure that would be
8 needed for handling all that data. Ultimately, the Commission agreed with SDG&E that such
9 costs were not justified.⁴⁴ This conclusion remains applicable today, and SDG&E will continue
10 to provide 15-minute interval data for commercial electric meters.

11 **E. Green Button Standard**

12 Green Button was an initiative implemented in 2012 to provide customers with their
13 interval energy usage data and allow customers to share that data with SDG&E-registered third
14 parties. One third-party has requested that the utilities “consistently adhere to the Green Button
15 standard, and take advantage of PG&E’s work to gracefully incorporate Rule 24 information

⁴¹ See e.g., Response from ecobee to the Whitepaper at 7; Response from Mission:data to the Whitepaper at 5; Response from OhmConnect to Whitepaper at 4; Response from Tesla to Whitepaper at 4; and Response from Sunrun to the Whitepaper at 3.

⁴² Decision (“D.”) 16-03-008 at 20 states: “While it is more than likely that the Commission would gain experience and information from working with 5-minute intervals, the additional expense of the 5-minute interval makes the 15-minute interval a more reasonable pathway.”

⁴³ In its Rule 32 Application, (A.14-06-002, Testimony of Liying Wang dated June 2, 2014), SDG&E estimated the cost to convert 7,000 meters to 5-minute data would be over \$2 million, and the cost for 100,000 meters (comparable to the mass market trajectory the Commission has ordered the IOUs to be on for Rule 32 registrations), would be so high that it would be hard to quantify. Those costs were in 2014 dollars. The Commission agreed this was cost prohibitive. See D.16-03-008 at 6.

⁴⁴ D.16-03-008 at 20.

1 within Green Button.”⁴⁵ SDG&E’s Green Button offerings (Green Button Download My Data,
2 and Green Button Connect) still serve customers today and provide the safe provision of energy
3 usage data with customer consent. SDG&E does not recommend investing additional resources
4 to change its Green Button platform.⁴⁶ Instead, SDG&E recommends that DRPs who are
5 participating in Rule 32 utilize the CTP for now, which has been proven to work successfully in
6 obtaining customer authorization, and which provides the expanded data set (*i.e.*, more than only
7 customer usage data provided via the Green Button authorization). The CTP is an effective
8 solution implemented to meet the specific needs of SDG&E’s Electric Rule 32 and that of the
9 DRPs. Additionally, it is worth noting that the expansion of the CTP to provide the DRP
10 expanded data set to any third party with Green Button access, is out of scope this proceeding.

11 **F. Grid Data**

12 Multiple third parties requested grid-related data and specifically wanted to know the
13 location of customers in relationship to SDG&E’s electric grid. To protect customer privacy, the
14 grid and its critical infrastructure, SDG&E opposes providing any customer grid-locational
15 information that is related to grid data including circuit information, or energy and capacity loss
16 factors. The Commission has adopted new approaches to what data is accessible in the
17 Distributed Resource Planning rulemaking.⁴⁷ The third-party requests for this grid data does not
18 satisfy the criteria defined in this rulemaking. Ultimately, it is SDG&E’s responsibility to keep
19 the grid safe.

⁴⁵ Response from Mission:data to the Whitepaper at 8.

⁴⁶ Unlike other utilities, SDG&E does not use its Green Button platform for the CTP.

⁴⁷ See Rulemaking 14-08-013, Administrative Law Judge’s Ruling Addressing Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company’s Claims for Confidential Treatment and Redaction of Distribution System Planning Data Ordered by Decisions 17-09-026 and 18-02-004 (July 24, 2018) at 9-23.

1 Third parties also requested peak load contribution system data, defined by SDG&E as
2 either the percentage or a ratio of the customer's peak demand compared to the statewide system
3 peak. The elements necessary to calculate this information are already available to DRPs, and it
4 would be more efficient for the DRPs to run calculations specific to their needs. The cost to
5 ratepayers for this request is outweighed by the benefit to be achieved where DRPs already have
6 the ability to determine this data point.

7 **G. Customer Email Address**

8 One or more third parties requested that a customer's email address be added to the data
9 set. While customers may supply SDG&E with an email address, that data may not be kept
10 current with SDG&E by the customer. Since DRPs have a business relationship with the
11 customer for program participation, the DRP is in the best position to collect their customer's
12 email address.

13 **H. Other Topics Discussed in CDAC Whitepaper Responses**

14 One third-party asked to eliminate the need for customer login and utility credentials,
15 eliminate captcha⁴⁸ and eliminate login requirements for utility bill download. The Commission
16 considered and rejected this approach in the Resolution.⁴⁹ It is imperative that the customer enter
17 some identifying information for security purposes to allow authentication of the customer's
18 identity and validity of the customer's authorization to share their otherwise confidential
19 information. Whether this is My Account credentials or an alternate authentication, there must
20 be some form of an identification mechanism to ensure the safe-keeping and security of customer
21 data. This is no different than a bank requiring authentication to access banking information.

⁴⁸ Captcha is the process by which a website's host determines that a user is not a robot; often requiring the user to insert numbers or letters that refresh and are unique to that moment.

⁴⁹ Resolution at 12-13.

1 Customers would not want their data easily accessible to anyone without a secure form of
2 authentication required.

3 **VI. API SOLUTION 1 (OP 29, BULLET #2)**

4 OP 29 Bullet 2 requires the IOUs to provide a cost estimate and proposal for API
5 Solution 1,⁵⁰ which SDG&E refers to as the “Alternate Solution” to differentiate it from the
6 current CTP deployed today. As proposed, the Alternate Solution would allow a customer to
7 authenticate and authorize their data sharing on the third party DRP’s site without having to leave
8 the site. This solution would propose to use a type of multi-factor authentication--the use of a
9 unique code, in combination with an email address.

10 SDG&E strongly recommends that the Commission reject implementation of an Alternate
11 Solution to the current CTP.⁵¹ The CTP is working as designed and is meeting the needs of
12 those DRPs currently using the solution.⁵² There would be cost savings to ratepayers if the
13 Commission orders the continued use of the existing CTP solution with the enhancements
14 proposed in this Application and does not order the Alternate Solution. However, in compliance
15 with Resolution OP 29 bullet #2, SDG&E has provided a cost estimate and a description of the
16 proposed Alternate Solution in the Moses Testimony (Chapter 3).

17 SDG&E opposes moving forward with the Alternate Solution for the reasons discussed in
18 both the Moses Testimony (Chapter 3) and Mr. Vera’s prepared direct testimony (Chapter 4).

⁵⁰ Resolution, OP 29 at 105.

⁵¹ SDG&E’s recommendation that the Commission reject implementation of the Alternate Solution, is based upon the architecture and security concerns related to that Alternate Solution. This recommendation applies regardless of the third-party utilizing the customer authentication/authorization process as the risk applies equally.

⁵² As of October 31, 2020, SDG&E has two DRPs who have registered with SDG&E and utilize the CTP. A third DRP is in the process of registering to use the CTP.

1 Should the Commission nevertheless order SDG&E to implement the Alternate Solution,
2 SDG&E's business requirements would increase by the need for an additional Business Systems
3 Analyst plus office equipment and expenses, for a total of \$205,076 over one year and eight
4 months.⁵³ These estimated expenses are not included in SDG&E's budget request since SDG&E
5 opposes the Alternate Solution due to SDG&E's concern about the customer privacy and
6 security risks the Alternate Solution poses.

7 **VII. COST RECOVERY**

8 As required by the Resolution, SDG&E is submitting estimated budgets and costs for the
9 elements contained in OP 29. For purposes of SDG&E's proposals, SDG&E has estimated all
10 costs for three years. This length of time gives SDG&E authorization to build and operate the
11 functionality and systems for the CTP enhancements without having to return to the Commission
12 too quickly to seek additional funding. In addition, it is not clear to SDG&E what the use of the
13 CTP will be by DRPs in the future, until there is a Commission decision on whether the Demand
14 Response Auction Mechanism is a regular program, and past the pilot stage. While SDG&E
15 seeks budgets for up to three years of operating costs, and approximates those costs on a yearly
16 basis, some activity may shift within the years. Therefore, for all costs in this Application,
17 SDG&E seeks the flexibility to spend as needed within that three-year period, up to the total cap.
18 The cost recovery of costs beyond three years to support the CTP will be sought in a future
19 SDG&E General Rate Case.

20 Finally, the prepared direct testimony of witness Claire Olegario (Chapter 6) discusses
21 SDG&E's entire estimated cost recovery. Although SDG&E does not recommend the
22 implementation of the Alternate Solution, should the Commission order SDG&E to implement

⁵³ The support covers three years, less the build time of 16 months.

1 this element, SDG&E is requesting a two-way balancing account for the recovery of costs related
2 to the Alternate Solution, due to the significant uncertainty and risk involved in the final design
3 of this element. Given this risk, unforeseen implications and corresponding costs are likely. A
4 two-way balancing account assures SDG&E that it can recover its reasonable costs associated
5 with implementation. Furthermore, if the Applications of the other two IOUs differ in their
6 approach for the Alternate Solution, and the Commission desires a cohesive statewide approach,
7 there may be additional costs that result in system or other functionality changes that SDG&E
8 cannot foresee at this time. For the foregoing reasons, the Commission should grant SDG&E the
9 two-way balancing account treatment as requested in the prepared direct testimony of witness
10 Claire Olegario (Chapter 6).

11 **VIII. CONCLUSION**

12 SDG&E has strived to balance the needs of third-party service providers with the benefits
13 and risks to SDG&E's customers. I believe this balance has been achieved with SDG&E's
14 recommendations and requests.

15 This concludes my prepared direct testimony

1 **IX. STATEMENT OF QUALIFICATIONS**

2 My name is Neil Umali, and I am the Customer Programs Systems Support Manager at
3 San Diego Gas & Electric Company. My business address is 8335 Century Park Court, San
4 Diego, CA 92123. My current responsibilities include managing the team that supports the
5 systems solutions for energy efficiency, customer assistance areas, demand response, and
6 SDG&E's Electric Rule 32. I have been employed at SDG&E for 15 years. I obtained my
7 Bachelor of Science Degree in Information Systems from National University in 2015.

8 I have not previously testified before the Commission.

LIST OF ACRONYMS

A.	Application
AL	Advice Letter
CDAC	Customer Data Access Committee
CPUC	California Public Utility Commission
CTP	Click-Through Authorization Processes
DR	Demand Response
DRPs	Demand Response Provider
GHG	Greenhouse Gas
IOU	Investor-Owned Utilities
OP/OPs	Ordering Paragraphs
SDG&E	San Diego Gas & Electric Company