

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

In the Matter of the Application of San Diego Gas & Electric Company (U902E) for Approval of its Proposals for Dynamic Pricing and Recovery of Incremental Expenditures Required for Implementation.

Application 10-07-009
(Filed July 6, 2010)

Application of San Diego Gas & Electric Company (U902E) for Authority to Update Marginal costs, Cost Allocation, and Electric Rate Design.

Application 19-03-002
(Filed March 4, 2019)

JOINT REPLY BRIEF OF CALIFORNIA SOLAR & STORAGE ASSOCIATION, OHMCONNECT, INC., AND CALIFORNIA ENERGY STORAGE ALLIANCE (“JOINT ADVANCED RATE PARTIES”) AND ENEL X NORTH AMERICA, INC.

Scott Murtishaw
Senior Advisor
California Solar & Storage Association
1107 9th Street, Suite 820
Sacramento, California 95814
Telephone: (510) 205-7774
Email: scott@calssa.org

John Anderson
Director of Energy Markets
OhmConnect, Inc.
350 Townsend St, Suite 424
San Francisco, CA 94107
Telephone: 415-697-1271
Email: john@ohmconnect.com

Sara Steck Myers
Attorney for
Enel X North America, Inc.
122 - 28th Avenue
San Francisco, CA 94121
Telephone: 415-387-1904
Facsimile: 415-387-4708
Email: ssmyers@att.net

Alex J. Morris, Executive Director
Jin Noh, Senior Policy Manager
California Energy Storage Alliance
2150 Allston Way, Suite 400
Berkeley, California 94704
Telephone: (510) 665-7811
Email: amorris@storagealliance.org

December 4, 2020

TABLE OF CONTENTS

Page

Table of Contents i

Table of Authorities ii

Summary of Recommendations iii

**I. PUBLIC ADVOCATES OFFICE JOINS JARP-ENEL X
IN RECOMMENDING COMMISSION ADOPTION OF
A PATH FORWARD TO “A MORE ROBUST RTP RATE
THAN CURRENTLY EXISTS FOR SDG&E CUSTOMERS”1**

**II. OBJECTIONS TO THE JARP-ENEL X RTP RATE
PROPOSAL RAISED BY SDG&E, TURN, AND SDAP
IN THEIR OPENING BRIEFS HAVE ALREADY BEEN
ADDRESSED AND REFUTED IN JARP-ENEL X’S JOINT
OPENING BRIEF OR MISUNDERSTAND THE PROPOSAL8**

A. Introduction8

B. SDG&E8

C. TURN15

D. SDAP19

III. CONCLUSION21

TABLE OF AUTHORITIES

Page

CPUC DECISIONS

Decision (D.) 19-03-002 14

COMMISSION RULES OF PRACTICE AND PROCEDURE

Rule 13.11 iii, 1

SUMMARY OF RECOMMENDATIONS

Rule 13.11 of the Commission’s Rules of Practice and Procedure requires a “summary of the briefing party’s recommendations following the table of authorities.” The Summary of Recommendations of the California Solar & Storage Association (CALSSA), OhmConnect, Inc., and California Energy Storage Alliance (collectively, the Joint Advanced Rate Parties (JARP)) and Enel X North America, Inc. (Enel X) for the Commission’s final decision in Application (A.) 10-07-009 – A.19-03-002, Phase 2 of the General Rate Case (GRC) of San Diego Gas and Electric Company (SDG&E) was stated in the JARP-Enel X Joint Opening Brief, at pages iii through iv. Nothing in the Opening Briefs of other parties has altered these recommendations, which are restated again, as follows, with a minor clarification in Recommended Order 3:

Recommended Findings:

1. Real-time pricing incentivizes participating customers to reduce loads during the hours of the year with the greatest demands on the electric grid.
2. Real-time pricing provides grid benefits and reduces utility costs by reducing participants’ contributions to peak loads, and therefore reduces the need for Resource Adequacy capacity.
3. Real-time pricing advances the need for greater load-flexibility identified in the Preliminary Root Cause Analysis.
4. Real-time pricing incentivizes the reduction of greenhouse gas (GHG) emissions by encouraging participants to reduce consumption when the least-efficient gas-fired plants are the marginal resource and to increase consumption when renewable energy and the most-efficient gas-fired resources are the marginal resource.
5. Real-time pricing facilitates the integration of renewable energy by encouraging flexible loads to respond to changes in renewable energy output rather than relying on additional supply-side resources to balance supply and demand.
6. Real-time pricing can help customers save money on electric bills.
7. Real-time pricing has been used successfully for many years in other jurisdictions such as Illinois and Georgia.

Recommended Orders

1. The Commission should order SDG&E to confer, within 90 days of the adoption of final decision in this proceeding, with interested parties on the rate design; marketing, education, and outreach; and evaluation and measurement details of an optional RTP to be offered to all residential, general service, and agricultural customers.

2. The Commission should order SDG&E to submit a Tier 3 advice letter with the final RTP proposal for residential and general service customers within 120 days of the adoption of a final decision in this proceeding.

3. The optional RTP tariffs proposed by SDG&E should be available to residential, general service, and agricultural customers without limitation on the number of customers enrolled.

4. The optional RTP tariffs proposed by SDG&E should include the following elements: a) day-of CAISO price signals, which may be based on either the fifteen-minute market or the five-minute real-time market, b) at least two different summer rate schedule generation cost capacity adders, which may be called on a day-ahead or morning-of basis and which may or not have prices that differ by hour (as for example, Southern California Edison Company's RTP tariffs or the electric vehicle RTP rate proposed by Pacific Gas and Electric Company in A.20-10-011); and c) billing at fifteen-minute intervals.

5. The Tier 3 advice letter shall propose a schedule to implement the optional RTP tariffs in 2022.

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

In the Matter of the Application of San Diego Gas & Electric Company (U902E) for Approval of its Proposals for Dynamic Pricing and Recovery of Incremental Expenditures Required for Implementation.

Application 10-07-009
(Filed July 6, 2010)

Application of San Diego Gas & Electric Company (U902E) for Authority to Update Marginal costs, Cost Allocation, and Electric Rate Design.

Application 19-03-002
(Filed March 4, 2019)

JOINT REPLY BRIEF OF CALIFORNIA SOLAR & STORAGE ASSOCIATION, OHMCONNECT, INC., AND CALIFORNIA ENERGY STORAGE ALLIANCE (“JOINT ADVANCED RATE PARTIES”) AND ENEL X NORTH AMERICA, INC.

The California Solar & Storage Association, OhmConnect, Inc., and California Energy Storage Alliance (collectively, the Joint Advanced Rate Parties or “JARP”) and Enel X North America, Inc. respectfully submit this Joint Reply Brief in Application (A.) 10-07-009 – A.19-03-002, Phase 2 of the General Rate Case (GRC) of San Diego Gas and Electric Company (SDG&E). This Joint Reply Brief is timely filed and served pursuant to the Commission’s Rules of Practice and Procedure (Rule 13.11) and the Administrative Law Judge’s (ALJ’s) Email Ruling Setting Evidentiary Hearing and Updating Procedural Schedule issued on October 19, 2020.

I.

PUBLIC ADVOCATES OFFICE JOINS JARP-ENEL X IN RECOMMENDING COMMISSION ADOPTION OF A PATH FORWARD TO “A MORE ROBUST RTP RATE THAN CURRENTLY EXISTS FOR SDG&E CUSTOMERS.”

In its Opening Brief, JARP-Enel X detailed the legal, policy, and evidentiary support for adoption of its proposed Real Time Pricing (RTP) tariff structure.¹ Of significance, the evidentiary record in this proceeding demonstrates the benefits of dynamic rates and real time

¹ JARP-Enel X Opening Brief, at pp. 3-21.

pricing for San Diego Gas and Electric Company (SDG&E) customers and the need and timeliness of moving forward now with Commission adoption of the JARP-Enel X proposal in this proceeding.² Objections to the JARP-Enel X RTP rate proposal raised in the testimony of San Diego Gas and Electric Company (SDG&E) and The Utility Reform Network (TURN), some of which were simply based on misunderstandings regarding the proposed rate, were also addressed and refuted or explanations were provided to correct misunderstandings in the JARP-Enel X Joint Opening Brief.³

Further, despite the inclusion of dynamic rates/real time pricing options as a Scoping Memo issue in this proceeding and Commission encouragement for such rate proposals,⁴ JARP-Enel X was the only party to propose and support such a proposal in its testimony.⁵ Such a circumstance, as stated by JARP-Enel X in their Joint Opening Brief, does not diminish the value of adoption of such a rate in this proceeding, especially where the JARP-Enel X RTP rate proposal is “consistent with the Commission’s recognition of the propriety of considering RTP rates in this proceeding that dates back and has continued over the last *20 months*,” further underscoring the merits and timeliness of its adoption.⁶

Those points are also recognized in the Opening Brief of the Commission’s Public Advocates Office (Cal Advocates), which details the merits of RTP and the JARP-Enel X RTP rate proposal in providing “a more robust RTP rate than currently exists for SDG&E customers.”⁷ In this regard, Cal Advocates’ Opening Brief echoes many of the compelling

² JARP-Enel X Opening Brief, at pp. 3-21.

³ *Id.*, at pp. 21-34.

⁴ *Id.*, at pp. 3-10.

⁵ *Id.*, at p. 11.

⁶ *Id.*; emphasis original.

⁷ Cal Advocates Opening Brief, at p. 12. In addition to JARP-Enel X and Cal Advocates, SDG&E, the Commission’s Public Advocates Office (Cal Advocates), TURN, and San Diego Airport Parking

policy reasons JARP-Enel X provided for moving forward with RTP for SDG&E customers now and concluded: “The Commission should authorize an RTP pilot based on the potential of system costs reductions, flattening the net load curve, [footnote omitted] and future integration of rate design with state building electrification policies....”⁸

Cal Advocates also recommends that customers should be able to choose the rate schedule on which the RTP/Critical Peak Pricing (CPP) overlay would be made, rather than only permitting the overlay to occur on Schedules EV-TOU-5 or AL-TOU.⁹ In this regard, EV-TOU-5 and AL-TOU were shown in Exhibit JARP-02 (JARP-Enel X’s Supplemental Testimony) as examples for illustrative rates for residential and commercial/industrial customers, respectively.¹⁰ It is also JARP-Enel X’s position that RTP rate options should be available to all major rate classes,¹¹ either as an overlay on all compatible tariffs within that rate class, as Cal Advocates suggests,¹² or as a separate tariff for each customer class with details to be finalized through the working group process proposed by JARP-Enel X.¹³

In its Opening Brief, Cal Advocates also provides convincing support for JARP-Enel X’s proposal to base the RTP rate on day-of market prices.¹⁴ Drawing from data request responses submitted by both JARP-Enel X and SDG&E, Cal Advocates demonstrates in its Opening Brief that day-of prices experience price spikes that tend to be larger and much more frequent than day-ahead prices.¹⁵ As Cal Advocates’ comparison shows, the day-ahead market experienced

Company (SDAP) also addressed the litigated issue of dynamic rates/real time pricing and their positions are discussed herein in Section II.

⁸ Cal Advocates Opening Brief, at pp. 2 - 3.

⁹ *Id.*, at pp. 9 - 10.

¹⁰ See, e.g., Ex. JARP-02, at pp. 2 - 5 (JARP-Enel X (Murtishaw-Mann)).

¹¹ However, street lighting tariffs, as an example, can be excluded.

¹² Cal Advocates Opening Brief, at p. 6.

¹³ JARP-Enel X Opening Brief, at p. 18.

¹⁴ Cal Advocates Opening Brief, at pp. 6-7.

¹⁵ *Id.*, at p. 7.

only 25 hours with prices greater than \$0.40/kWh in 2018 and no hours above \$0.40/kWh in 2019. In contrast, fifteen-minute averages of the real-time market experienced more than 65 hours above \$0.40/kWh in 2018 and 53 hours in 2019.¹⁶

Exposing customers to the greater volatility of day-of real-time prices will achieve two important goals. It will allow participants to achieve larger bill savings than they would on day-ahead prices, and participants' load management will provide greater value to the grid because day-of prices better reflect real-time grid needs. Cal Advocates further rightly notes in its Opening Brief that concerns regarding undercollections are minimal since "the 5-minute day-of price is the marginal price for the utility...." and since "many tariffs already include a CPP rate element [the inclusion of a CPP element in JARP-Enel X's proposal] is not an additional source of undercollection."¹⁷

In addition to supporting many aspects of the rate design described in JARP-Enel X's proposals, Cal Advocates also supports the implementation process suggested by JARP-Enel X. Specifically, Cal Advocates supports the JARP-Enel X recommendation that the Commission direct SDG&E to hold three to five workshops to work out the details of the RTP rates, pilot implementation, and proposed costs, and then file a Tier 3 advice letter within 120 of the adoption of a decision for final approval of the RTP pilot.¹⁸ Cal Advocates "is willing to work with parties" on the design of that pilot in the workshop process recommended by JARP-Enel X "to flesh out details of pilot design, marketing and education, and program evaluation."¹⁹

JARP-Enel X appreciate Cal Advocates' thoughtful consideration of the JARP-Enel X RTP rate proposal. At this time, however, Cal Advocates believes that certain issues remain

¹⁶ Cal Advocates Opening Brief, at p. 7.

¹⁷ *Id.*, at p. 11.

¹⁸ *Id.*, at p. 3.

¹⁹ *Id.*, at pp. 3, 12.

unresolved and, therefore, supports only “a limited RTP pilot using day-of-15-minute pricing” to allow for study and resolution of certain billing, cost, and customer participation issues based on the following concerns:²⁰

- Cal Advocates is concerned about SDG&E’s ability to modify its billing system to incorporate day-of 15-minute RTP. Based on this concern, Cal Advocates suggests that billing may need to be performed manually, which would necessitate a more limited pilot.²¹
- Cal Advocates additionally suggests that it “may be prudent to initially limit the RTP pilot to the non-residential sector where the meters are already programmed to collect information on a 15-minute basis...”²²
- Cal Advocates recommends against a “two-stage CPP” for pilot purposes.²³

With respect to Cal Advocates’ concerns about billing costs associated with 15-minute pricing, which are currently unknown,²⁴ these concerns seem to stem from two distinct aspects of billing customers on 15-minute increments described by SDG&E: (1) the cost of pulling real-time prices from CAISO’s Open Access Same-time Information System (OASIS) application programming interface (API) and incorporating them into its billing system, and (2) the cost of reprogramming residential customer meters. On the first issue, it is JARP-Enel X response that SDG&E has not explained why pulling day-of pricing data from OASIS is any more complicated or expensive than pulling day-ahead pricing from the OASIS API. This is especially true if SDG&E were to use the fifteen-minute market price option that JARP-Enel X suggested rather than having the billing system calculate 15-minute averages from the five-minute real-time market.

²⁰ Cal Advocates Opening Brief, at p. 2.

²¹ *Id.*, at pp. 3 - 4.

²² *Id.*, at p. 4.

²³ *Id.*, at p. 5.

²⁴ *Id.*, at pp. 3 - 4.

The second argument has already been addressed by JARP-Enel X in its Joint Opening Brief. Thus, in SDG&E’s response to a JARP-Enel X data request, SDG&E acknowledged that 329,000 residential meters (approximately one quarter of its residential accounts) have already been reconfigured to record usage in 15-minute intervals.²⁵ SDG&E clearly has the capability to reprogram residential customer meters to read in 15-minute increments and has been doing so for some time as a matter of routine. Moreover, when JARP-Enel X asked SDG&E to provide evidence that a “significant investment” would be required to reprogram residential meters, SDG&E failed to provide any estimate of the anticipated costs.²⁶ If the reprogramming of 329,000 residential customers’ meters had triggered the need for substantially more Field Area Routers, data collection, storage, and other IT investments as SDG&E claimed RTP implementation would require, then cost estimates should have been readily available to SDG&E.

Since SDG&E has provided no cost estimates despite two data requests submitted to SDG&E by JARP and JARP-Enel X, we strongly disagree that the record supports either substantially limiting the overall enrollment or excluding residential customers from the RTP rate. Rather, approving a far too limited pilot or excluding the entire residential class would greatly diminish the value of the effort and robustness of the knowledge and experience gained from the pilot.

Cal Advocates also expresses doubt that the potential bill savings from RTP might not attract enough customers to justify a pilot.²⁷ The numbers Cal Advocates cites, from Exhibit JARP-02 (JARP-Enel X’s supplemental testimony), are based on fairly simplistic modeling of customer demand flexibility. It is possible that some customers could see more savings,

²⁵ JARP-Enel X Opening Brief, at p. 20.

²⁶ Ex. JARP-03, at p. 3 (SDG&E Data Response to JARP-Enel X Joint Data Requests No. 1 and No. 1a).

²⁷ Cal Advocates Opening Brief, at pp. 7 – 8.

particularly if they are modifying their consumption profile every day. It is also possible that customers could see value in participating even if savings are relatively modest, because they are attracted to the idea of participating in a novel pilot that rewards them for providing environmental and grid benefits using a combination of behavioral measures and device automation.

In its Opening Brief, Cal Advocates supports the simpler CPP adder in the proposed tariff in Exhibit JARP-02, JARP-Enel X's supplemental testimony,²⁸ in contrast to the proposal in Exhibit JARP-01 (JARP's Prepared Testimony (April 6, 2020)), which had a base generation capacity cost adder and at least two CPP surcharges.²⁹ As Cal Advocates notes, Exhibit JARP-01 described a multi-part variable peak pricing (VPP)-style capacity adder, but then performed illustrative modeling using a more conventional single-price CPP adder adapted from the SDG&E VGI rate in its supplemental testimony (Exhibit JARP-02).³⁰

In response, JARP-Enel X believes that a clarification is required regarding the CPP adders. Specifically, the modeling approach used in Exhibit JARP-02 was taken purely for the sake of simplicity, so as to more easily ensure that the rate was revenue-neutral. JARP-Enel X continue to favor a more sophisticated capacity adder rather than a simple single-price capacity adder as found in VGI.

In this regard, JARP-Enel X's preferred capacity adder approach is the Peak Capacity Allocation Factor methodology used by Pacific Gas and Electric Company (PG&E) in its proposed Day Ahead Hourly Real Time Pricing - Commercial Electric Vehicle (DAHRTP-CEV) pilot in A.20-10-011, in which the magnitude of the adder is dynamically calculated in

²⁸ Ex. JARP-02, at p. 3 (JARP-Enel X (Murtishaw-Mann)).

²⁹ Ex. JARP-01, at p. 3-2 (JARP (Murtishaw)).

³⁰ Cal Advocates Opening Brief, at p. 5, n 19.

proportion to the Adjusted Net Load during peak hours.³¹ PG&E's approach is similar to that used by Southern California Edison Company (SCE) in its RTP rate schedules. However, even a multi-price CPP adder that is not differentiated by hour within the CPP event window, such as the Oklahoma Gas & Electric Company SmartHours-VPP rate described in Exhibit JARP-01,³² is better than a single-price CPP adder.

II.
**OBJECTIONS TO THE JARP-ENEL X RTP RATE PROPOSAL
RAISED BY SDG&E, TURN, AND SDAP IN THEIR OPENING BRIEFS
HAVE ALREADY BEEN ADDRESSED AND REFUTED IN
JARP-ENEL X'S OPENING BRIEF OR MISUNDERSTAND THE PROPOSAL.**

A. Introduction

The Opening Briefs of SDG&E, The Utility Reform Network (TURN), and San Diego Parking Authority (SDAP) raised objections or concerns with adoption of the JARP-Enel X proposed RTP rate and implementation in this proceeding. JARP-Enel X believes that its Joint Opening Brief has addressed and refuted objections made on the record to their RTP rate proposal, but further responds to the allegations made by in the Opening Briefs of SDG&E, TURN, and SDAP as follows. It is JARP-Enel X's position that those objections are either without merit or are based on a misunderstanding of the JARP-Enel X RTP rate proposal.

B. SDG&E

SDG&E asserts that it currently has several dynamic rate schedules available to its customers, including CPP rates, Schedule Public Grid Integrated Rate (GIR), and Schedule VGI - Electric Vehicle Grid Integration Pilot Program ("VGI").³³ It is worth noting that the two rates that are based on wholesale prices, VGI and Public GIR, are available to only a very small subset of end users (namely, EV chargers owned by SDG&E). Therefore, there is significant additional

³¹ JARP-Enel X Joint Opening Brief, at pp. v, 5, and 16.

³² Ex. JARP-01, at pp. 2-7 – 2-8 (JARP (Murtishaw)).

³³ SDG&E Opening Brief, at p. 17.

value to be gained by giving a much broader set of customer types and end uses access to RTP options.

SDG&E belabors the point that JARP-Enel X's proposed tariff is not exactly identical to its own VGI rate, or to rates in other territories or jurisdictions.³⁴ JARP-Enel X never claimed that the proposed RTP rates exactly mirror any other rate schedule, and SDG&E cites no direction from either the Assigned Commissioner or Administrative Law Judges requiring JARP-Enel X's proposed rate to be identical in structure to any existing rate. JARP-Enel X's goal was to draw elements from currently available tariffs that have been approved and used by customers in California and elsewhere. The RTP rate proposal put forward by JARP-Enel X combines the best elements from RTP and other dynamic rates across multiple jurisdictions and diverse sets of customer classes.

In its Opening Brief, SDG&E continues to argue against an RTP tariff based on day-of market prices by claiming that day-ahead prices and real-time prices are not substantially different because their hourly average values are similar.³⁵ As previously stated by JARP-Enel X, comparing annual averages is improper and not instructive as annual averages distort the significant differences between day-ahead and real-time prices that may occur on a given day. Real-time prices are far more volatile, with a standard deviation in 2019 of \$77/MWh in the real-time market compared to \$24/MWh in the day-ahead market.³⁶ Cal Advocates' analysis of the differences between the day-ahead and day-of prices described above lends further support to the need for an RTP rate based on day-of prices.

SDG&E asserts that JARP-Enel X only provided estimates of bill savings and cost shifting for structural benefitters who did not change their energy consumption pattern and not

³⁴ SDG&E Opening Brief, at pp. 19 - 21.

³⁵ *Id.*, at pp. 21 - 22.

³⁶ JARP-Enel X Opening Brief, at p. 29.

cost shifting that could occur due to load shifting measures undertaken by participants.³⁷ That is incorrect. JARP-Enel X conducted two separate analyses, intentionally trying to isolate the impacts of self-selection by structural beneficiaries (those who would save on an RTP rate without needing to shift load) from the impacts of load shifting. In their evaluation of customer load shifting, JARP-Enel X noted that customer savings on wholesale generation energy costs are exactly matched by reductions in SDG&E's marginal generation cost, and that customer savings on generation capacity costs can be either greater than or less than SDG&E's avoided costs, based on the bookend values used.³⁸

SDG&E also mistakenly states that JARP-Enel X proposed using EV-TOU-5 as the basis for a residential RTP rate, which SDG&E asserts would be inappropriate.³⁹ As stated in Section I. above, EV-TOU-5 was only used by JARP-Enel X for illustrative modeling purposes.

Despite acknowledging that RTP participants' contributions to reducing SDG&E's coincident peak load would reduce SDG&E's Resource Adequacy (RA) requirements, SDG&E raises doubts that shifting load away from times with capacity adders would actually result in reduced costs for the utility.⁴⁰ JARP-Enel X are simply following the same basic approach used for CPP tariffs, which are available to both residential and commercial customer classes of all three large California electric utilities, but has provided greater granularity in the JARP-Enel X proposal to ensure that capacity adders match marginal generation capacity costs as closely as possible.

JARP-Enel X also do not understand the relevance of two comments that SDG&E makes that cast doubt on whether RTP participants' load modifications would actually result in avoided

³⁷ SDG&E Opening Brief, at p. 25.

³⁸ JARP-Enel X Opening Brief, at p. 26.

³⁹ SDG&E Opening Brief, at p. 23.

⁴⁰ *Id.*, at pp. 26 - 27.

costs for SDG&E. First, SDG&E states that because SDG&E “must procure resources to serve customer needs in all hours and not just during the coincident peak hours... lowering SDG&E’s coincident peak might not eliminate SDG&E’s need to procure incremental resources/ contracts.”⁴¹ SDG&E’s obligation to meet its customers’ *energy* requirements outside of the coincident peak is irrelevant to the *capacity* cost SDG&E incurs to meet its coincident peak loads. To meet its energy needs, SDG&E is able to choose between long-term contracts or purchases from CAISO’s day-ahead and day-of energy markets. JARP-Enel X never claimed that RTP would reduce SDG&E’s need to procure *energy* to serve its customers’ needs. The CPP adders that comprise part of our proposed RTP rate would only be designed to reflect SDG&E’s marginal capacity costs, which are driven by SDG&E’s coincident peak loads, not by electricity consumed during off-peak periods.

Second, in its Opening Brief, SDG&E states, without further explanation, that “lowering SDG&E’s load forecast and the correlating RA requirements would not reduce SDG&E’s long-term procurement contract obligations.”⁴² JARP-Enel X are not sure whether SDG&E is referring to its existing long-term contracts or new long-term contracts that it will enter into in the future. If SDG&E is referring to its existing long-term contracts, then it is true that these costs are unavoidable, but they are not marginal capacity costs and would not affect the calculation of CPP adders. At any rate, above-market long-term contract costs would be recovered from RTP participants via the Power Charge Indifference Adjustment (PCIA) type of mechanism proposed by JARP-Enel X.⁴³

If SDG&E is referring to new long-term contracts, JARP-Enel X are unsure what long-term obligations SDG&E is referring to. The only type of resource that SDG&E is obligated to

⁴¹ SDG&E Opening Brief, at p. 26.

⁴² *Id.*, at p. 27.

⁴³ Ex. JARP-02, at p. 2 (JARP-Enel X (Murtishaw-Mann)).

procure under long-term contracts is generation from renewable energy resources to meet its Renewable Portfolio Standard (RPS) requirements. However, as JARP-Enel X have explained, RPS-related costs could also be recovered either through a capacity-reservation level mechanism⁴⁴ or by including RPS costs in the PCIA-like adder.⁴⁵

Finally, with respect to avoided costs, SDG&E states that because “[c]ustomers have the ability to exercise choice behind the meter and may choose not to respond to price signals... JARP-Enel X have not adequately demonstrated that SDG&E would realize “avoided costs” from the implementation of their proposed RTP rate.”⁴⁶ JARP-Enel X do not deny that some share of customers enrolled on an RTP rate could prove to be relatively unresponsive to RTP price signals. In such an event, SDG&E will not avoid costs associated with these customers’ actions; however, nor will SDG&E suffer any revenue losses. Participants who fail to respond to RTP price signals will not save money on their bills. If SDG&E’s revenues from RTP participants remain largely unchanged, then SDG&E’s other ratepayers are unharmed by the lack of cost savings to SDG&E because no undercollection occurs.

In its Opening Brief, SDG&E contends that investing in a new rate option may not be worthwhile as it expects to lose a substantial portion of its load in the coming years to community choice aggregators (CCAs).⁴⁷ SDG&E speculates that it is “extremely unlikely” that CCAs in its territory would offer an RTP rate.⁴⁸

JARP-Enel X disagree with this assertion and note that SDG&E has not provided evidence to back these claims.⁴⁹ In fact, dynamic pricing fits into CCAs’ stated mission of

⁴⁴ Ex. JARP-01, at pp. 3-2 to 3-3 (JARP (Murtishaw)).

⁴⁵ Ex. JARP-02, at p. 2 (JARP-Enel X (Murtishaw-Mann)).

⁴⁶ SDG&E Opening Brief, at p. 27.

⁴⁷ *Id.*, at pp. 27 – 28.

⁴⁸ *Id.*, at p. 28.

⁴⁹ JARP-Enel X Opening Brief, at p. 24.

providing cheap, clean electricity. In this regard, two CCAs - East Bay Community Energy (EBCE) and Peninsula Clean Energy Authority (PCE) - recently jointly responded to PG&E's real-time pricing pilot proposal (DAHRTP-CEV) in A.20-10-011 by stating that EBCE/PCE are "extremely supportive of dynamic pricing in general" and "applaud" PG&E's proposal specifically.⁵⁰ In that Joint Response, EBCE and PCE request that PG&E's pilot rate design should not discriminate against unbundled utility customers and seek to work collaboratively with PG&E so as to allow their customers to participate in this rate design pilot.⁵¹ JARP-Enel X believe that SDG&E should design and implement RTP rate options such that interested CCAs are able to adopt their own versions, as is true of all other utility rate structures.

SDG&E also overstates the marketing, education, and outreach efforts it would undertake if ordered to offer an RTP rate by drawing comparisons between implementation of a new RTP rate and the ME&O efforts associated with the recent transition of its residential customers to default TOU.⁵² However, these two things are not comparable: one is a default rate affecting SDG&E's 1.3 million residential customers, and the other is an optional rate. Adding another dynamic rate option is not without precedent. SDG&E already has dynamic rates with CPP adders available to all residential, general service, and agricultural customers. Furthermore, SDG&E's assertion that offering an optional RTP rate "could undermine SDG&E's TOU ME&O efforts"⁵³ are vague and unsubstantiated. It is not evident how offering a new optional rate in 2022 would interfere with ME&O related to default TOU rates that will have been in effect for two years.⁵⁴

⁵⁰ A.20-10-011 (PG&E DAHRTP-CEV Pilot) EBCE-PCE Joint Response to Application (November 23, 2020), at p. 1.

⁵¹ *Id.*, at pp. 5-6.

⁵² SDG&E Opening Brief, at pp. 31 - 32.

⁵³ *Id.*, at p. 32.

⁵⁴ JARP-Enel X Opening Brief, at p. 31.

In its Opening Brief, SDG&E repeatedly emphasizes the complexities associated with implementation and billing (given its implementation of a customer information system (CIS) replacement program) and states that the JARP-Enel X RTP rate proposal does not provide sufficient detail about implementation.⁵⁵ JARP-Enel X acknowledge that more work remains to be done, but, as made clear in their testimony and Joint Opening Brief, the goal of the workshops and Tier 3 advice letter proposed by JARP-Enel X is to do just that – namely, work through and resolve any remaining implementation details.⁵⁶

There is a final point that SDG&E raises related to implementation that JARP-Enel X would like to address. Specifically, in its Opening Brief, SDG&E states that it “would likely be expected to file a separate application for the design, cost, implementation, etc., of any RTP rate proposal...”⁵⁷ JARP-Enel X strongly oppose this suggestion. In D.19-03-002, denying a petition for rulemaking filed by JARP, Enel X, and other parties, the Commission found that “[t]he analysis of a particular utility’s costs and billing determinants in GRC Phase 2 proceedings is essential to the task of rate design, including the task of designing demand charges and RTP tariffs.”⁵⁸ More specifically, D.19-03-002 named the instant proceeding as an appropriate venue for the petitioners to litigate RTP tariffs and the Scoping Memo for this proceeding explicitly included “real-time pricing or other dynamic pricing rate option” within the scope of this proceeding.⁵⁹ The Commission should give no weight to SDG&E’s suggestion that a decision on RTP implementation be deferred to another application.

⁵⁵ SDG&E Opening Brief, at p. 34.

⁵⁶ JARP-Enel X Opening Brief, at pp. 3, 11-12, 18-21.

⁵⁷ SDG&E Opening Brief, at p. 36.

⁵⁸ D.19-03-002, at pp. 8 and 11.

⁵⁹ Scoping Memo, at p. 2.

C. TURN

In its Opening Brief, TURN states that bill savings under any new rate design should not exceed avoided costs, that there must be a mechanism to prevent cost-shifting, and that cost savings must be tracked and deducted from the revenue requirement.⁶⁰ However, modeling in Exhibit JARP-02 (JARP-Enel X's Supplemental Testimony) performed a preliminary avoided-cost analysis and demonstrated that bill savings were either slightly lower than or slightly higher than avoided costs, depending on RA cost assumptions.

TURN is concerned about structural benefitters and that the percentage of structural benefitters could be higher than the 10% considered in JARP-Enel X's illustrative analysis.⁶¹ JARP-Enel X calculated the distribution of structural benefitters and losers in Exhibit Cal-Advocates-03, JARP-Enel X's response to Cal Advocates' Data Request DR-1, with the results presented below in Figure 1 (included in that data response).⁶²

TURN is correct that the percentage of structural benefitters could be higher than 10%; in fact, our analysis of residential customers showed that 79% of customers were structural benefitters (although most of these benefited very slightly). But, TURN incorrectly assumes that 3 times as many structural benefitters would mean 3 times the cost shift. Due to the declining rate of benefits per account, subsequent deciles of the residential population would save considerably less than the top decile, as explained in JARP-Enel X's Joint Opening Brief.⁶³

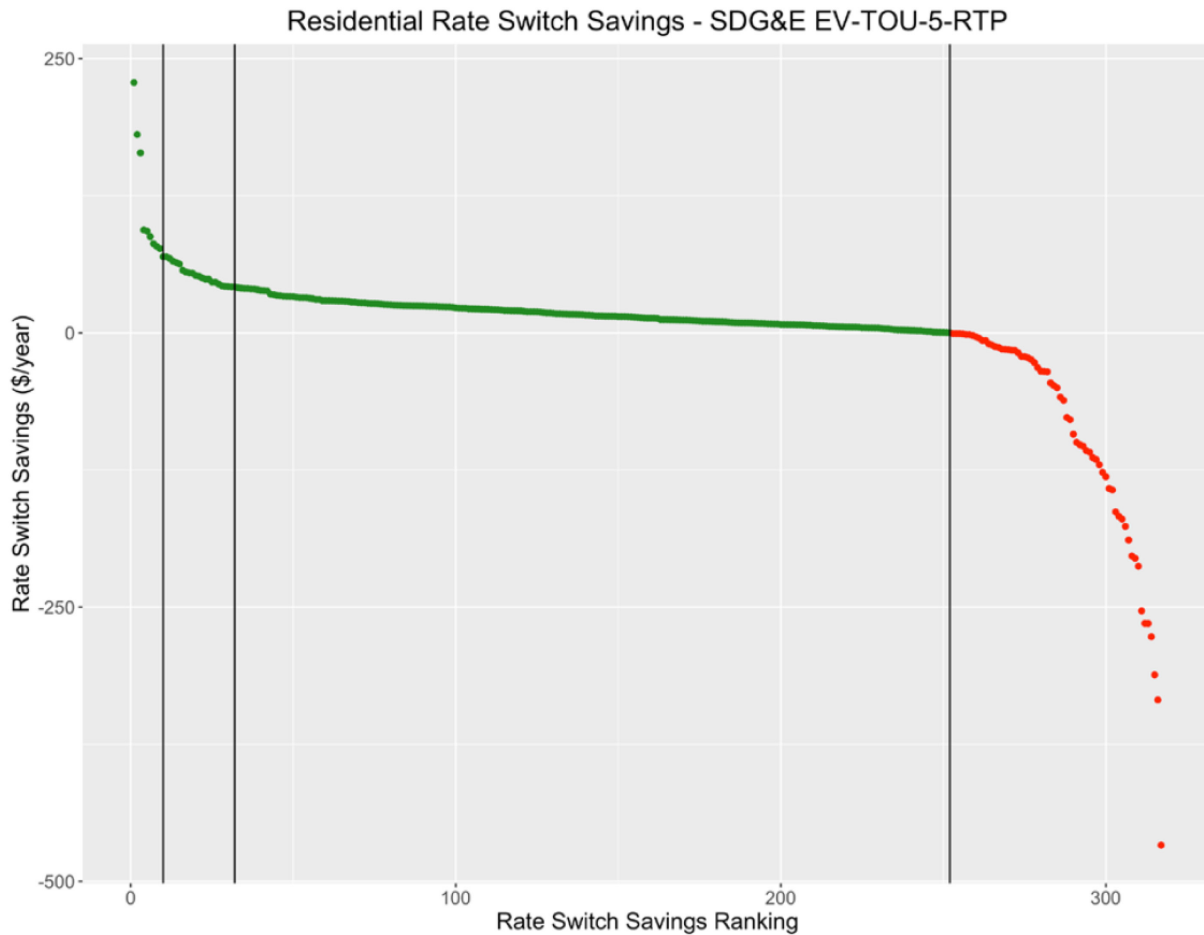
⁶⁰ TURN Opening Brief, at p. 1.

⁶¹ *Id.*, at p. 2.

⁶² Ex. Cal Advocates-03, at pp. 5-6 (JARP –Enel X Response to Cal Advocates DR-1).

⁶³ JARP-Enel X Opening Brief, at p. 26.

Figure 1. Residential Rate Switch Savings – SDG&E EV-TOU-5-RTP



In its Opening Brief, TURN also states that it was not clear on why JARP did not conduct a revenue-neutrality analysis to assess whether a revenue shortfall would occur if 100% of customers switched to our illustrative RTP rate.⁶⁴ In fact, JARP-Enel X clearly testified in Exhibit JARP-02 that the RTP rate based on EV-TOU-5 is revenue neutral, although it could have been clearer that the illustrative AL-TOU rate was also designed to be revenue neutral.⁶⁵

TURN further speculates in its Opening Brief that real-world cost-shifting would exceed the numbers from our structural-benefitters analysis since “the above figures [i.e., the structural benefitter analysis] only account for cost shifts *if the customer makes no changes in energy*

⁶⁴ TURN Opening Brief, at p. 3.

⁶⁵ Ex. JARP-02, at p. 3 (JARP-Enel X (Murtishaw-Mann)).

usage.”⁶⁶ However, the JARP-Enel X load-shifting analysis demonstrates that using a range of standard avoided capacity cost values, revenues from RTP participants could result in either an overcollection or an undercollection, with the overcollection values substantially exceeding the undercollection values.⁶⁷

Despite JARP-Enel X’s undisputed estimates showing minimal cost-shifting potential, TURN takes the position that simply tracking and reporting undercollection is not enough to mitigate its concerns regarding cost shifting and that undercollections should be collected only from RTP participants.⁶⁸ JARP-Enel X thoroughly rebutted the need to track undercollections and re-allocate them solely to RTP participants and demonstrated that, with a 35,000 account cap on residential enrollments, the worst-case structural benefitter annual cost shift would barely exceed \$2 per non-participant.⁶⁹

In its Opening Brief, TURN also argues that, while smart plugs and smart thermostats are more affordable than energy storage, they may also provide less benefit and are less automated.⁷⁰ While TURN acknowledges the JARP-Enel X position that third parties could help streamline the process of configuring low-cost devices, it then decries the fact that these third parties might then take a split of the savings.⁷¹

However, JARP-Enel X’s testimony in Exhibit JARP-04 fully rebutted TURN’s assertions on these points. Third-party Distribution Energy Resource (DER) companies might take a share of the savings from smart thermostats or smart plugs if they are helping to program

⁶⁶ TURN Opening Brief, at p. 3; emphasis original.

⁶⁷ JARP-Enel X Opening Brief, at p. 26.

⁶⁸ TURN Opening Brief, at p. 4.

⁶⁹ JARP-Enel X Opening Brief, at p. 27.

⁷⁰ TURN Opening Brief, at p. 5.

⁷¹ *Id.*, at p. 6.

them, but that is effectively the same arrangement that could be used by energy storage system providers, and the same arrangement used by demand response aggregators currently.⁷²

Finally, TURN questions whether bill savings will be matched by equivalent reductions in SDG&E's revenue requirement, stating that "Joint Parties postulate, without corroboration from SDG&E, that they believe costs savings to SDG&E will flow through to ratepayers and therefore no tracking mechanism should be necessary."⁷³ TURN then selectively quotes from SDG&E's response to JARP-Enel X data request to support its position.⁷⁴

However, what TURN excludes is that in Exhibit JARP-03 (SDG&E's responses to JARP-Enel X Data Requests No. 1 and No 1a), SDG&E states: "If RTP customers lower their consumption/energy usage and the wholesale costs of electricity decreases, SDG&E's load costs would decrease, which will be reflected in lower Energy Resource Recovery Account (ERRA) expenses."⁷⁵ Because the energy-related (as opposed to capacity-related) bill savings opportunities depend on RTP participants shifting their load from high cost intervals to low cost intervals, the cost for SDG&E to serve the RTP participants necessarily declines. SDG&E's caveat about several factors affecting the wholesale price following the quoted language above seems to reflect a misunderstanding that JARP-Enel X's question referred to the possibility of RTP participants' load impacts reducing the wholesale price. Regarding the pass-through of capacity-related savings, SDG&E further acknowledged: "If SDG&E's overall load forecasts are reduced [by RTP participants' load shifting actions], and SDG&E does not need to procure

⁷² Ex. JARP-04, at pp. 2-3 (JARP-Enel X (Belenky)).

⁷³ TURN Opening Brief, at p. 7.

⁷⁴ *Id.*

⁷⁵ Ex. JARP-03, at p. 1 (SDG&E Response to JARP-Enel X Joint Data Requests No. 01 and No. 1a).

incremental [RA] resources/contract, then additional costs will not be spent to procure [sic] and these additional costs will not be added to ERA.”⁷⁶

TURN states that “it would be a slippery slope for the Commission to adopt optional rates that only benefit a particular segment of customers at the expense of other customers.”⁷⁷

However, this ignores the fact that the Commission has already created a number of rates that are specific to specific customer segments and technology types. RTP is actually a step towards more cost-based, technology-neutral, customer-class-neutral rate design.

D. SDAP

SDAP objects to the use of AL-TOU as the basis for commercial RTP rates, given its high demand charges.⁷⁸ JARP and Enel X generally agree with SDAP’s point that high demand charges, such as those in AL-TOU, can be at cross purposes to the economic signals found in the RTP energy rate, with negative grid and environmental consequences. In fact, Enel X made very similar points during the August 2019 workshop when comparing AL-TOU and Vehicle Grid Integration (VGI).⁷⁹ Further, as stated above, JARP-Enel X only used AL-TOU for illustrative purposes. JARP-Enel X did so simply because it is the most common non-residential rate among SDG&E customers.

SDAP suggests that SDG&E’s Public GIR be used as the basis for a non-residential RTP rate rather than AL-TOU. If the Commission approves JARP-Enel X’s proposed implementation plan, JARP-Enel X would discuss with SDG&E and other interested parties whether the RTP rate should be an overlay option for several rate schedules or whether Public GIR or DG-R could serve as the basis for the non-residential RTP rate rather than AL-TOU.

⁷⁶ Ex. JARP-03, at p. 2 (SDG&E Response to JARP-Enel X Joint Data Requests No. 01 and No. 1a).

⁷⁷ TURN Opening Brief, at p. 6.

⁷⁸ SDAP Opening Brief, at p. 18.

⁷⁹ A10-07-009 – A19-03-002 (SDG&E GRC Phase 2) SDG&E Response with Demand Charge Workshop Report (September 12, 2019), Attachment A, at pp. 1-3; Attachment B.

In its Opening Brief, SDAP also expresses concern that the CPP adder is duplicative of marginal capacity costs included in the wholesale energy price during high-priced periods and that the pass-through of wholesale market prices combined with a CPP adder could potentially impose excessive costs on participants.⁸⁰ Because of this concern about double-recovery of capacity costs, SDAP proposes that either that the CAISO market-based real-time prices be capped or that during CPP event hours, the volumetric price should reflect the higher of either the CAISO price or the CPP adder, rather than the sum of the two.⁸¹

JARP-Enel X disagree with SDAP's proposal. It is true that generators can receive scarcity rents from being paid both for RA capacity under contract with SDG&E and receiving revenues above marginal cost during periods of scarcity, but these are costs that SDG&E incurs regardless of whether one believes that the generators' revenues are just and reasonable. As long as the CPP adder appropriately reflects the marginal capacity costs that SDG&E incurs, any capping of the wholesale price by SDG&E or the CPP adder would result in an undercollection.

SDAP expresses some concern about the fact that the combination of wholesale market-based prices and CPP adders in the illustrative RTP rate would have resulted in total prices above \$1.99 per kWh for three consecutive hours on August 18, 2020.⁸² While this may appear to be an unreasonably high level on its face, it is actually considerably lower than the highest "hot summer day" prices on Southern California Edison Company's (SCE's) TOU-GS-3-RTP rate schedule, which are above \$3.50 per kWh from 5 pm to 7 pm.⁸³

JARP-Enel X note that Cal Advocates in its Opening Brief also raises a couple of interesting points regarding the double compensation issue. As Cal Advocates explains, SDG&E

⁸⁰ SDAP Opening Brief, at p. 19.

⁸¹ *Id.*

⁸² *Id.*

⁸³ Ex. JARP-01, at p. 3-2 (JARP (Murtishaw)).

already reduces the marginal generation capacity cost used to design the CPP adders to reflect the energy market benefit of reducing load during high demand events.⁸⁴ In effect, the double compensation effect is mitigated to some extent by lowering the CPP adder.

Additionally, Cal Advocates points out that the VGI CPP adder JARP-Enel X used for the illustrative RTP rates only recovers 50% of the marginal generation capacity cost.⁸⁵ Thus, the CPP in the VGI tariff is substantially capped. Rather than complicate RTP billing with caps on the RTP rate, JARP-Enel X propose that, to the extent any adjustments are needed in the RTP rates to prevent unwarranted overcollection of capacity-related costs, parties work with SDG&E to implement those adjustments in the design of the CPP adder.

III. CONCLUSION

As supported by both the JARP-Enel X Opening Brief and this Reply Brief, JARP and Enel X again respectfully request that the Commission approve the JARP-Enel X proposed RTP rate and implementation approach in its decision in this proceeding. Nothing in the Opening Briefs of other parties alters the facts that the JARP-Enel X RTP rate proposals are supported by the legal and policy framework and evidentiary record on this issue, are just and reasonable, and should be adopted in that decision consistent with the JARP-Enel X recommendations summarized in the Summary of Recommendations included in the JARP-Enel X Joint Opening Brief at pages iv through v and restated again in this Joint Reply Brief, with a minor clarification, at pages iii through iv.

⁸⁴ Cal Advocates Opening Brief, at p. 8.

⁸⁵ *Id.*, at p. 9.

Respectfully submitted,

December 4, 2020

/s/ SARA STECK MYERS

Sara Steck Myers
On Behalf of the
Joint Advanced Rate Parties
(CALSSA, OhmConnect, and CESA)
And
Enel X North America, Inc.

122 -28th Avenue
San Francisco, CA 94121
Telephone: (415) 387-1904
Facsimile: (415) 387-4708
Email: ssmyers@att.net

Scott Murtishaw
Senior Advisor
California Solar & Storage Association
1107 9th Street, Suite 820
Sacramento, California 95814
Telephone: (510) 205-7774
Email: scott@calssa.org

Alex J. Morris, Executive Director
Jin Noh, Senior Policy Manager
California Energy Storage Alliance
2150 Allston Way, Suite 400
Berkeley, California 94704
Telephone: (510) 665-7811
Email: amorris@storagealliance.org

John Anderson
Director of Energy Markets
OhmConnect, Inc.
350 Townsend St, Suite 424
San Francisco, CA 94107
Telephone: 415-697-1271
Email: john@ohmconnect.com