

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

SAN FRANCISCO, CA 94102-3298

February 16, 2021

**Agenda ID #19202
Ratesetting****TO PARTIES OF RECORD IN APPLICATION 19-10-012:**

~~This is the proposed decision of Administrative Law Judge Sasha Goldberg. Until and unless the Commission hears the item and votes to approve it, the proposed decision has no legal effect. This item may be heard, at the earliest, at the Commission's March 18, 2021 Business Meeting. To confirm when the item will be heard, please see the Business Meeting agenda, which is posted on the Commission's website 10 days before each Business Meeting.~~

~~Parties of record may file comments on the proposed decision as provided in Rule 14.3 of the Commission's Rules of Practice and Procedure.~~

~~The Commission may hold a Ratesetting Deliberative Meeting to consider this item in closed session in advance of the Business Meeting at which the item will be heard. In such event, notice of the Ratesetting Deliberative Meeting will appear in the Daily Calendar, which is posted on the Commission's website. If a Ratesetting Deliberative Meeting is scheduled, ex parte communications are prohibited pursuant to Rule 8.2(c)(4)(B).~~

~~/s/ ANNE E. SIMON~~

Anne E. Simon

Chief Administrative Law Judge

~~AES:avsAttachment~~ALJ/SL5/avs**PROPOSED DECISION**Agenda ID #19202 **(REV. 1****Ratesetting****4/15/2021 Item 34**Decision PROPOSED DECISION OF ALJ GOLDBERG (Mailed 2/16/2021)

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of San Diego Gas &
Electric Company (U902E) to Extend
and Modify the Power Your Drive
Pilot Approved by Decision 16-01-045.

Application 19-10-012

**DECISION AUTHORIZING SAN DIEGO GAS & ELECTRIC COMPANY'S
POWER YOUR DRIVE EXTENSION ELECTRIC VEHICLE CHARGING
PROGRAM**

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**DECISION AUTHORIZING SAN DIEGO GAS & ELECTRIC COMPANY'S
POWER YOUR DRIVE EXTENSION ELECTRIC VEHICLE CHARGING
PROGRAM**

Summary

This decision approves \$43.5 million in funding to support Level 2 electric vehicle charge ports at workplaces and multi-unit dwellings in San Diego Gas & Electric Company's service territory. ~~We expect San Diego Gas & Electric Company will install 2,900 charge ports, using this funding. The decision also~~ This decision sets an equity requirement that 50 percent of sites be in underserved communities. In addition, ~~that his~~ decision orders an audit of San Diego Gas & Electric Company's accounting practices, and implements ~~the~~ new statutory provisions of Assembly Bill 841. This decision is another step toward meeting California's deep decarbonization and ambitious transportation electrification goals.

This decision closes the proceeding.

1. Procedural and Factual Background

On October 28, 2019, San Diego Gas & Electric Company (SDG&E) filed the instant application which is an extension of the utility's light duty electric vehicle charging pilot, Power Your Drive. In 2016, the Commission authorized SDG&E to recover up to \$45 million (M) dollars to implement the Power Your Drive Pilot, which was designed to provide charging infrastructure at multi-unit dwellings and workplaces and testing driver responsiveness to a special rate. With the pilot reaching full subscription in early 2018, SDG&E filed to extend the program in 2019. Below we describe the Power Your Drive pilot and milestones reached throughout its three-year deployment.

1.1. Power Your Drive Pilot

On April 11, 2014, SDG&E filed Application (A.) 14-04-014 seeking authorization to establish and implement a pilot program to integrate the charging of plug-in electric vehicles (PEVs) with the electric grid using an hourly time-variant rate and PEV charging infrastructure.¹ SDG&E referred to this as the vehicle-grid integration (VGI) pilot program.

SDG&E's proposed VGI pilot included the installation of utility-owned and operated electric vehicle supply equipment (EVSE) and associated infrastructure at up to 550 multi-unit dwellings (MUDs) and workplaces, for a total of 5,500 charging stations.² Sites participating in the pilot would be offered a day-ahead time-variant hourly VGI rate. The VGI rate would provide price signals intended to encourage drivers to charge at times of grid surplus to efficiently integrate and manage charging loads with grid operation.³ SDG&E requested \$103M⁴ for the VGI pilot.⁵ Approximately \$65M was anticipated to be incurred during the sign-up and installation period; with the remainder of the cost recovery, the long-term operations and maintenance expenditures, would be sought by SDG&E in future general rate case proceedings.⁶

Evidentiary hearings were held in the spring of 2015, after which, SDG&E and 16 other parties filed a joint motion for adoption of settlement (settlement motion).

The Commission ultimately rejected the settlement motion and SDG&E's original VGI pilot proposal, due to its cost and size.⁷ The Commission set forth

¹ D.16-01-045 at 4.

² D.16-01-045 at 14.

³ D.16-01-045 at 13.

⁴ All costs are designated in "millions" unless otherwise noted.

⁵ D.16-01-045 at 15.

⁶ D.16-01-045 at 3.

⁷ D.16-01-045 at 3.

alternative terms in D.16-01-045 by which SDG&E could implement its VGI pilot. Among other things, D.16-01-045 authorized \$45M (instead of the \$65M pilot originally proposed by SDG&E), at 350 sites corresponding to approximately 3,500 EV charging stations over a three-year period.⁸

SDG&E ultimately installed 3,040 utility-owned and operated charge ports at 254 sites through the VGI Pilot, or Power Your Drive (PYD Pilot/Pilot).⁹ As part of D.16-01-045's implementation requirements, SDG&E was required to submit semi-annual reports to the Commission outlining PYD Pilot milestones. On April 1, 2020, SDG&E submitted its Eighth Semi-Annual Report, highlighting that of the 254 sites, 32 percent are within Disadvantaged Communities¹⁰ (DACs), exceeding SDG&E's 10 percent target, and 39 percent are at MUDs.¹¹ SDG&E identified that from inception-to-January 31, 2020, the PYD Pilot incurred a total cost of \$70,253,053, exceeding the budget authorized in D.16-01-045 by \$25,253,053.¹²

1.2. Power Your Drive Extension: Procedural Background

This application seeks Commission approval of an extension of the PYD Pilot, referred to as Power Your Drive Extension (PYD2). In PYD2, SDG&E proposes to install approximately 2,000 charging ports at roughly 200 sites over a two-year period. Similar to the Pilot, SDG&E proposes to install Level 2 (L2) charging ports at workplaces and MUDs, locations where employees and residents park for an extended period of time on a regular basis.¹³ SDG&E

⁸ D.16-01-045 at 3.

⁹ Exhibit SDGE-2 at 2.

¹⁰ Senate Bill (SB) 350 (de Leon, 2015) refers to "disadvantaged communities" as identified in § 39711 of the Health and Saf. Code. § 39711(a) specifies that a DAC is to be identified based on geographic, socioeconomic, public health, and environmental hazard criteria."

¹¹ Exhibit NDC-2 at 2.

¹² Exhibit NDC-2 at 3.

¹³ A.19-10-012 at 6.

explains how the modifications ~~het~~_{he} utility proposed in PYD2 draw from lessons learned from the Pilot, and are intended to simplify program implementation, encourage customer participation, and continue to leverage and promote the private market.¹⁴ SDG&E estimates overall direct PYD2 costs to be \$43.5M, comprising \$34.7M in capital direct costs and \$8.8M in operation and maintenance direct costs.¹⁵

Application 19-10-012 appeared on the Commission's daily calendar on November 14, 2019. Application 19-10-012 was included in Resolution ALJ 176-3454, issued on January 16, 2020, to obtain Commission ratification and Need for Hearing. Protests were timely filed by the Public Advocates Office of California Public Utilities Commission (Cal Advocates), The Utility Reform Network (TURN), and the National Diversity Coalition (NDC). Responses to the application were filed by ChargePoint, Inc. (ChargePoint); Greenlots; and Tesla. A joint response was filed by The Natural Resources Defense Council (NRDC); the Coalition for California Utility Employees (CUE); Plug In America, Inc.; EVBox, Inc.; American Honda Motor Co. Inc.; General Motors, LLC; The Association of Global Automakers Inc.; and the Alliance of Automobile Manufacturers (*collectively*, the Joint Parties). SDG&E filed a Reply on December 12, 2019.

The Small Business Utility Advocates (SBUA) filed a motion for party status on November 12, 2019, that was granted via e-mail ruling on November 22, 2019. The Utility Consumers' Action Network (UCAN) filed a motion for party status on January 8, 2020, that was granted during the prehearing conference (PHC). Ecology Action and San Diego Airport Parking Company (SDAP) both motioned for party status and were granted status via email ruling.

¹⁴ A.19-10-012 at 3.

¹⁵ Exhibit SDGE-3 at 6.

A PHC was held on January 9, 2020, to discuss the issues of law and fact and determine the need for hearing and schedule for resolving this matter. The assigned Commissioner issued a Scoping Memo and Ruling (Scoping Ruling) on February 6, 2020.

Shortly after the issuance of the Scoping Ruling, California issued shelter-in-place orders in response to COVID-19. The procedural schedule adopted in the Scoping Ruling was adjusted to allow time for parties to explore settlement and to hold a technical workshop and Community Meeting, virtually. Parties coordinated with the Commission's Energy Division, and successfully held the technical workshop on May 13, 2020 and the Community Meeting on May 21, 2020. Throughout the spring/summer of 2020, parties worked amongst themselves to discuss settlement. After parties informed the Commission that settlement discussions had not progressed, evidentiary hearings were reset via email ruling to be held the week of November 9, 2020.¹⁶

Four days of evidentiary hearings were held via the Commission's remote platform, WebEx. Exhibits were marked and identified pursuant to the email ruling issued on December 16, 2020. During the evidentiary hearings, parties agreed to a condensed briefing schedule, whereby Opening Briefs would be filed on December 18, 2021 and Reply Briefs on January 15, 2021. Opening briefs were filed by SDG&E, Cal Advocates, TURN, CUE, Joint Parties, UCAN, NDC, SBUA, Tesla, and ChargePoint. Reply briefs were filed by SDG&E, Cal Advocates, TURN, Tesla, SBUA, Joint Parties, UCAN, NDC, CUE, and ChargePoint on January 15, 2021.

Pursuant to the Scoping Ruling, this proceeding stands submitted with the filing of reply briefs.¹⁷

¹⁶ A telephonic status conference was held on September 9, 2020.

¹⁷ Scoping Memo at 8.

2. Statutory and Regulatory Guidelines

In Public Utilities Code (Pub. Util. Code) § 740.12(a)(1), the Legislature found, among other things, that widespread transportation electrification is needed to achieve the goals set forth in the Charge Ahead California Initiative,¹⁸ and to reduce GHG emissions to “40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050.... .”¹⁹ Pub. Util. Code § 740.12(a)(1)(A) states that “[a]dvanced clean vehicles and fuels are needed to reduce petroleum use, to meet air quality standards, to improve public health, and to achieve greenhouse gas emissions reductions goals,” and that widespread transportation electrification “requires electrical corporations to increase access to the use of electricity as a transportation fuel.”

Pub. Util. Code §237.5²⁰ defines “Transportation Electrification” (TE) as the use of electricity from external sources of electrical power, including the electrical grid, for all or part of vehicles, vessel, trains, boats, or other equipment that are the mobile sources of air pollution and greenhouse gases and the related program charging, and propulsion infrastructure investment to enable and encourage this use of electricity.”

¹⁸ The goals of the Charge Ahead California Initiative “are to place in service at least 1,000,000 zero-emission and near-zero-emission vehicles by January 1, 2023, to establish a self-sustaining California market for zero-emission and near-zero-emission vehicles in which zero-emission and near-zero-emission vehicles are a viable mainstream option for individual vehicle purchasers, businesses, and public fleets, to increase access for disadvantaged, low-income, and moderate-income communities and consumers to zero-emission and near-zero-emission vehicles, and to increase the placement of those vehicles in those communities and with those consumers to enhance the air quality, lower greenhouse gases, and promote overall benefits for those communities and consumers.” (Health and Safety Code § 44258.4.)

¹⁹ The 2030 reductions are mandated in Health and Safety Code § 38566, and the 2050 reductions are set forth in Governor Schwarzenegger’s Executive Order S-3-05.

²⁰ Unless otherwise stated, all code section references are to the Public Utilities Code.

The Legislature recognized the impact of TE, and found at § 740.12(a)(1), in part:

- (C) Widespread TE requires increased access for disadvantaged communities, low- and moderate-income communities, and other consumers of zero-emission and near-zero-emission vehicles, and increased use of those vehicles in those communities and by other consumers to enhance air quality, lower greenhouse gases emissions, and promote overall benefits to those communities and other consumers.
- (F) Widespread TE should stimulate innovation and competition, enable consumer options in charging equipment and services, attract private capital investments, and create high-quality jobs for Californians, where technologically feasible.
- (G) Deploying electric vehicles should assist in grid management, integrating generation from eligible renewable energy resources, and reducing fuel costs for vehicle drivers who charge in a manner consistent with electrical grid conditions.
- (H) Deploying electric vehicle charging infrastructure should facilitate increased sales of electric vehicles by making charging easily accessible and should provide the opportunity to access electricity as a fuel that is cleaner and less costly than gasoline or other fossil fuels in public and private locations.

The Legislature directed the Commission to consider those findings, among others, set forth in § 740.12(a)(1) when “designing and implementing regulations, guidelines, plans, and funding programs to reduce greenhouse gas emissions.”

Pursuant to § 740.12(b):

- The proposed TE programs shall seek to minimize overall costs and maximize overall benefits.
- The Commission shall approve, or modify and approve, TE programs and investments, including those that deploy charging infrastructure, through a reasonable cost recovery mechanism.
- The approval, or modification and approval, of the programs and investments must be consistent with § 740.12, not unfairly compete with nonutility enterprises as required by § 740.3(c), include performance accountability measures, and be in the interests of ratepayers as defined in § 740.8.

Section 740.8 defines the interests of ratepayers as follows:

As used in §740.3 and 740.12, “interests” of ratepayers, short-or long-term, mean direct benefits that are specific to ratepayers, consistent with both of the following:

- (a) Safer, more reliable, or less costly gas or electrical service, consistent with Section 451, including electrical service that is safer, more reliable, or less costly due to either improved use of the electric system or improved integration of renewable energy generation.
- (b) Any one of the following:
 - (1) Improvement in energy efficiency of travel;
 - (2) Reduction of health and environmental impacts from air pollution;
 - (3) Reduction of greenhouse gas emissions related to electricity and natural gas production and use;
 - (4) Increased use of alternative fuels; and
 - (5) Creating high-quality jobs or other economic benefits, including in disadvantaged communities identified pursuant to Section 39711 of the Health and Safety Code.

In addition, § 740.3(c) requires the “costs and expenses of those programs are not passed through to electric or gas ratepayers unless the commission finds and determines that those programs are in the ratepayers’ interest.” Furthermore, § 740.12(c) requires that before the Commission can authorize “an electrical corporation to collect new program costs related to transportation electrification in customer rates,” the Commission “shall review data concerning current and future electric transportation adoption and charging infrastructure utilization....”²¹

2.1. Assembly Bill (AB) 841 Provisions

On September 30, 2020, the Governor signed AB 841, which ordered the Commission to issue a decision in the instant proceeding on or before March 1, 2021.

Among other things, AB 841 provides additional directives on the Electric Vehicle Infrastructure Training Program (EVITP) and deploying infrastructure to serve underserved communities, applicable to PYD2.

Pub. Util. Code § 740.20(a)(1) requires that electric vehicle charging infrastructure and equipment located on the customer side of the electrical meter that is funded or authorized, in whole, or in part, by the Commission shall be installed by a contractor with the appropriate license classification, as determined by the Contractors’ State License Board, and at least one electrician on each crew, at any given time, who holds an EVITP certification. Pub. Util. Code § 740.20(a)(2) requires that projects installing charging port(s) supplying 25 kilowatts (kWh) or more to a vehicle have at least 25 percent of the total

²¹ Section 740.12(c) also states: “If market barriers unrelated to the investment made by an electric corporation prevent electric transportation from adequately utilizing available charging infrastructure, the commission shall not permit additional investments in transportation electrification without a reasonable showing that the investments would not result in long-term stranded costs recoverable from ratepayers.”

electricians working on the crew for the project, at any given time, hold EVITP certification. Both provisions apply to work performed on or after January 1, 2022.

Pub. Util. Code § 740.20(b)(1) clarifies that § 740.12(a) does not apply to electric vehicle charging infrastructure installed by employees of an electrical corporation or local publicly owned electric utility. Pub. Util. Code §740.20(b)(2) clarifies that § 740.20(a) does not apply to infrastructure funded by moneys derived from credits generated from the Low Carbon Fuel Standard Program.

Pub. Util. Code § 740.12(a)(2)(b) provides that not less than 35 percent of investments be in underserved communities²² as defined in Section 1601.

Finally, Pub. Util. Code § 740.18(b) requires the Commission issue [a](#) decision on PYD2 on or before March 1, 2021.²³

3. Issues Before the Commission

As identified in the Scoping Ruling, the issues to be determined in this proceeding are:

1. Does PYD2 meet the SB 350 requirements for Transportation Electrification? (*See* §§ 740.12, 740.3, and 740.8)
2. How does PYD2 build on SDG&E's previous efforts to support widespread Transportation Electrification and align with California's zero emission vehicles (ZEV) initiatives and the state's GHG emissions reduction target?
3. Lessons Learned from the Power Your Drive Pilot PYD Pilot
 - a. Are SDG&E's site cost estimates reasonable?

²² *See* Section 5.1.

²³ § 740.18(b) also requires the Commission to issue a decision on Southern California Edison Company's Charge Ready 2 Application on or before March 1, 2021. The Commission issued a decision on the Charge Ready 2 Application on September 2, 2020 (Decision 20-08-045).

- b. In what ways does PYD2 incorporate lessons learned from the Pilot to justify the site costs?
 - c. What lessons learned from the Pilot have been taken into consideration in the design of PYD2?
 - d. In what ways does PYD2 incorporate lessons learned from the Pilot overspend?
4. Disadvantaged Communities²⁴ (DACs)
- a. Do the lessons learned from the PYD Pilot support the DAC target for PYD2?
 - b. Is the proposed DAC definition appropriate for PYD2?
 - c. Is the proposed DAC target for PYD2 adequate?

²⁴ (See SB 350 and SB 1275 Charge Ahead California)

d. Should PYD2 include targets for other customers in

Environmental and Social Justice (ESJ) Communities,²⁵

²⁵<https://www.cpuc.ca.gov/uploadedFiles/CPUCWebsite/Content/UtilitiesIndustries/Energy>

/ E n e r g y P r o g r a m s / I n f r a s t r u c t u r e / D C / E n v % 2 0 a n d % 2 0 S o c

such as low-and moderate-income customers and communities?

5. Multi-Unit Dwellings (MUDs)
 - a. Do the lessons learned from the PYD Pilot support the lower MUD target for PYD2?
 - b. Are participation payments a necessary cost-sharing approach for participants at MUD sites?
 - c. Is the proposed PYD2 participation payment amount reasonable to ensure adequate participation and sufficient cost-sharing?
 - d. Is utility ownership of the electric vehicle service equipment (EVSE) and associated transportation electrification infrastructure necessary to encourage participation in MUDs? Why or why not?
6. Workplaces
 - a. Are the proposed charging station rebate amounts for workplaces a reasonable use of ratepayer funds?
 - b. What size and type of workplaces does SDG&E plan to target for PYD2?
7. Vehicle-to-Grid Rate Component
 - a. Are the proposed modifications to the Vehicle-to-Grid (VGI) rate component reasonable to meet the original intentions of offering the VGI rate while addressing the barriers identified in the PYD Pilot?
 - b. Are the proposed rate-to-driver and rate-to-host options reasonable?
 - c. What effect do the proposed modifications to the VGI rate have on load management and fuel cost savings?
 - d. Is the application of submetering reasonable and based on lessons learned from the PYD Pilot?
 - e. Do the proposed modifications to the EVSE qualification process limit the ability for SDG&E to offer a rate-to-driver rate option for workplace customers?

8. Does PYD2 address load management issues, including, for example, demand charges and technology for enabling effective load management?
9. Electric Vehicle Service Equipment (EVSE)
 - a. Does the proposed utility ownership of EVSE at MUDs adversely impact competition?
 - b. What are the proposed EVSE qualification standards and how does this impact competition?
 - c. What is the proposed EVSE qualification process and how does this process encourage competition?
 - d. Does the lack of qualification and technology standards for customer-owned EVSEs at workplaces affect load management or other technology issues?
 - e. Should qualifying EVSEs incorporate open technical standards for communication between the EVSE and back-end networks?
10. Cost Recovery / Balancing Account
 - a. Are the proposed PYD2 program costs reasonable?
 - i. Are the proposed treatment of costs for PYD2 reasonable?
 - b. Is the PYD2 cost recovery time-frame reasonable?
 - c. How should PYD2 program costs be recovered? (*e.g.*, distribution rates)
 - d. How should PYD2 program costs be allocated amongst customer classes? (*e.g.*, distribution allocator; equal cents per kilowatt-hour)
 - e. What cost recovery mechanism (*e.g.*, future cost recovery in general rate cases; treating rebates as a capital addition; one-way or two-way balancing account; advice letter tier) should be adopted for PYD2?
11. Performance Accountability Measures
 - a. Are the performance accountability measures proposed in PYD2 sufficient?

- b. What types of performance accountability measures should PYD2 have?
12. Is PYD2 reasonable and in the ratepayers' interests? (*See* §§ 740.3 and 740.8) Is PYD2 an appropriate use of ratepayer funds? Do the proposed projects equitably benefit ratepayers? What specific ratepayer benefits will result from PYD 2? (*See* § 740.8.)
13. Are the proposed permitting processes for PYD2 reasonable to ensure local governments retain sufficient jurisdiction over the infrastructure installation process?
14. Are the Electric Vehicle Infrastructure Training Program (EVITP) requirements reasonable? What barriers, if any, do the EVITP requirements create to participation by potential installers?
15. Does PYD2 sufficiently leverage funding by other sources?
16. How does PYD2 protect against the risk of stranded assets?
17. Does PYD2 address the safety concerns set forth in §§ 740.8(a) and 740.12(b)?
18. What data gathering, reporting, and evaluation requirements should be imposed?
 - a. How does PYD2 incorporate lessons learned from the PYD Pilot, and how should the data collection and evaluation of PYD2 be aligned with ongoing data gathering and reporting from PYD Pilot program participants?
 - b. How should data collection and evaluation of PYD2 be aligned with ongoing data gathering and reporting from authorized transportation electrification programs (*See* D.18-01-024 and D.18-05-040.)
19. Is PYD2 scalable?
20. Does PYD2 align with the Commission's Distributed Energy Resources Action Plan?
21. Are the proposed requirements for requests for information and requests for offers reasonable?

4. Power Your Drive Extension (PYD2)

SDG&E requests authority to provide EV charging infrastructure and charging stations for approximately 2,000 L2²⁶ EV charger ports.²⁷ This will result in approximately 5,000 total ports from both the Pilot and PYD2.²⁸

Through PYD2, SDG&E plans to install EV charging infrastructure and charging stations at workplaces and MUD sites over a two-year period.²⁹ SDG&E proposes 25 percent of site locations will be deployed at MUDs, with an overall program DAC target of 10 percent.³⁰ For the Pilot, the Commission authorized SDG&E to use either a service territory-based or state-wide definition to identify DACs.³¹ For PYD2, SDG&E proposes to define DACs as the top quartile of census tracts as identified by the CalEnviroScreen 3.0 tool on an SDG&E service territory-wide basis, as it did in the PYD Pilot.³²

SDG&E provides a breakdown of the differences between the Pilot, as authorized, and PYD2 in testimony. We discuss the distinctions between MUD and workplace sites in the sections to follow.

Table 1: Comparison Between the PYD Pilot and the Proposed PYD Extension Program³³

	PYD Pilot	PYD2
Customer Segment:	MUDs and workplaces	MUDs and workplaces
Size:	At minimum 3,000 ports installed at	Approximately 2,000 ports at 200 sites ³

²⁶ Exhibit SDGE-2 at 7, footnote 10: Level 2 charging requires a 208- or 240-volt AC power connection and is discussed in more detail on the United States Department of Energy website. See Office of Energy Efficiency & Renewable Energy, *Charging at Home*, available at: <https://www.energy.gov/eere/electricvehicles/charging-home>.

²⁷ Exhibit SDGE-2 at 1.

²⁸ Exhibit SDGE-2 at 1.

²⁹ Exhibit SDG&E-2 at 2.

³⁰ Exhibit SDGE-2 at 2.

³¹ Exhibit SDGE-2 at 2, citing D.16-01-045 at 173.

³² Exhibit SDGE-2 at 2.

³³ Exhibit SDGE-2 at Table 2-1.

	300 sites	
DAC Target:	10% Target	10% Target
EVSE Ownership / Maintenance:	Utility ownership	Utility ownership in MUDs; customer ownership in workplaces
DAC Definition:	SDG&E Territory, or State, whichever is broader ⁴	SDG&E Territory, or State, whichever is broader
Workplace EVSE Rebate:	n/a	Up to \$3,000/port
Participation Payments in Non-DAC MUD:	\$235/port	\$350/port
Rate Options:	VGI Rate	Defaulted to Modified VGI Rate for MUDs, Modified VGI Rate or C&I Rate for Workplaces

As with the PYD Pilot, SDG&E proposes to work with Community Based Organizations (CBO) to assist with education and outreach, as well as pre-qualifying and signing-up site hosts for participation in the PYD Program to support accelerated EV adoption in DACs.³⁴

4.1. MUD Site Specifics

For MUDs, SDG&E proposes essentially the same program framework as was authorized in the Pilot, including utilizing the same DAC definition that it used in the Pilot.³⁵ SDG&E explains this will help maintain continuity with the Pilot and minimize confusion caused by changing DAC definitions in PYD2.³⁶ Based on lessons learned in the Pilot, SDG&E proposes reducing the MUD target in PYD2 from 40 percent to a minimum of 25 percent, which SDG&E purports

³⁴ SDG&E Opening Brief at 50.

³⁵ "DACs" are defined as the top quartile of census tracts as identified by the CalEnviroScreen 3.0 toll on an SDG&E service territory-side basis.

³⁶ Exhibit SDGE-2 at 5.

will “...allow for greater flexibility in selecting MUD locations that generally cost less to deploy”.³⁷ SDG&E states that this modification reflects challenges found in the Pilot that led to some potential MUD sites not being viable for the following reasons: (1) longer overall distances from the power source to the EVSE; (2) multiple floors in parking garages – leading to possible concrete core drilling between floors, longer distances to the power source, and higher costs to ensure structural stability; (3) smaller sizes – leading to higher average costs per port; (4) deeded parking places – leading to longer conduit runs as chargers may be in different locations instead of contiguous; and (5) higher costs for the new electric service due to specific site conditions.³⁸

To remove financial barriers to ownership and maintenance at MUD sites, SDG&E proposes a “turnkey” solution for MUD sites, featuring utility-owned and maintained infrastructure and EVSE.³⁹ This is the same architecture for MUDs as in the Pilot.⁴⁰ SDG&E points to the Pilot which showed that MUD sites can be more difficult to enroll and construct than workplaces for several reasons, including (1) more challenging physical layouts, (2) a longer approval process due to more decision maker involvement (homeowner association board, property manager, and property owner(s), for example), (3) financial constraints that could limit the purchase of EVSE, and (4) overall property amenity goals (management may choose other amenities that target a larger resident population).⁴¹ SDG&E provides that these challenges were similar to the ones

³⁷ Exhibit SDGE-2 at 5.

³⁸ Exhibit SDGE-2 at 5.

³⁹ Exhibit SDGE-2 at 9 to 10.

⁴⁰ Exhibit SDGE-2 at 9 to 10.

⁴¹ Exhibit SDGE-2 at 9 to 10.

Southern California Edison faced when trying to enroll MUD site hosts for their Charge Ready Program.⁴²

SDG&E states it will provide the same standard of service it does to all other utility owned assets installed in its service territory, to ensure that the charging stations are safe, reliable, and available for drivers to use.⁴³ SDG&E points to comments on the PlugShare app/website where existing EV drivers have expressed value in having reliable and available charging stations in the San Diego region.⁴⁴

SDG&E additionally proposes participation payment changes for PYD2 from the Pilot. The participation payment for non-DAC, utility owned MUD sites will increase approximately 50 percent from \$235 per port to \$350 per port.⁴⁵ No participation payment will be required for MUD sites in DACs, similar to the Pilot.⁴⁶

4.2. Workplace Site Specifics

Based on lessons learned from the Pilot, SDG&E proposes modifications for workplaces sites, including eliminating utility ownership and maintenance of the EVSE.⁴⁷ In lieu of a participation payment, SDG&E proposes to provide a flat rebate of up to \$3,000 per port (not to exceed the EVSE purchase price).⁴⁸ SDG&E will provide the rebate to the customer after the site is energized.⁴⁹ The site host will be responsible for purchase, installation, maintenance, and availability of the

⁴² Exhibit SDGE-2 at 10.

⁴³ Exhibit SDGE-2 at 10.

⁴⁴ Exhibit SDGE-2 at 10; referencing "PlugShare" phone app/website.

⁴⁵ Exhibit SDGE-2 at 6.

⁴⁶ Exhibit SDGE-2 at 6.

⁴⁷ Exhibit SDGE-2 at 3.

⁴⁸ Exhibit SDGE-2 at 3.

⁴⁹ Exhibit SDGE-2 at 6.

EVSE.⁵⁰ Workplace site hosts will also have the option of making their charging stations available to the public.

Under PYD2, the workplace site host or the electric vehicle service provider (EVSP) will be the customer of record and bill from an SDG&E smart meter.⁵¹ The customer of record will have the option of being billed at the VGI rate or any applicable SDG&E Commercial and Industrial (C&I) time-of-use (TOU) rate.⁵² Under SDG&E's proposal, all workplaces will be on the "Rate-to-Host" billing option.⁵³ SDG&E claims this is necessary because the utility cannot ensure accuracy of the embedded EVSE submeter if it is not owned and maintained by SDG&E.⁵⁴ The workplace site host will provide SDG&E with a load management plan that will address how the charging stations will be operated on days when the modified VGI rate has pricing adders (or on Critical Peak Pricing ["CPP"] / Reduce Your Use day events / on-peak hours for other rates, if applicable).⁵⁵ The site host's load management plan will also include how they intend to charge drivers using the equipment and what rate will be passed on to the driver.⁵⁶

4.3. VGI Rate

SDG&E also proposes changes to the VGI rate that was offered through the Pilot.⁵⁷ SDG&E frames these as "two minor modifications to the VGI rate calculation process."⁵⁸

⁵⁰ Exhibit SDGE-2 at 6.

⁵¹ Exhibit SDGE-2 at 3.

⁵² Exhibit SDGE-2 at 3.

⁵³ Exhibit SDGE-2 at 3.

⁵⁴ Exhibit SDGE-2 at 3; SDG&E individually tested each EVSE's embedded submeter in the Pilot.

⁵⁵ Exhibit SDGE-2 at 4.

⁵⁶ Exhibit SDGE-2 at 4.

⁵⁷ Exhibit SDGE-2 at 21.

⁵⁸ Exhibit SDGE-2 at 21.

4.3.1. Elimination of California Independent System Operator (CAISO) Day-Of Hourly Adjustment in the VGI Rate

The first modification to the calculation process touches on the commodity portion of the VGI rate, which is the day-ahead CAISO hourly energy price.⁵⁹ In some instances, a CAISO day-of hourly adjustment for surplus energy is applied to the rate calculation.⁶⁰ This day-of hourly adjustment is only made if the difference between the day-of CAISO price is one cent or greater per kWh lower than the day-ahead price.⁶¹ These day-of prices must be received by 1:00 a.m. from CAISO to be considered in the true-up calculation for that day.⁶² A lesson learned from the Pilot is that tracking and calculating the deviations between the day-ahead and day-of CAISO pricing adds complexity to the billing process.⁶³ In testimony, SDG&E explains that in order to apply this adjustment, every hourly day-ahead and day-of hourly price must be synchronized and true-up. SDG&E claims this process adds complexity, is burdensome, and adds an extra failure point in the billing calculation. Moreover, when the true-up calculation process is invoked, the day-of pricing adjustment has occasionally caused confusion when customers try to check the math on their EV charging bills, since at the start of the charging session customers only have access to the day-ahead prices and not the day-of prices or adjustment amounts.⁶⁴ SDG&E explains that because the customer cannot see the day-of price when setting their pricing thresholds, they are not really responding to the day-of price.⁶⁵ This timing issue means that the day-of pricing does not truly influence customer charging

⁵⁹ Exhibit SDGE-2 at 22.

⁶⁰ Exhibit SDGE-2 at 22.

⁶¹ Exhibit SDGE-2 at 22.

⁶² Exhibit SDGE-2 at 22.

⁶³ Exhibit SDGE-2 at 22.

⁶⁴ Exhibit SDGE-2 at 22 to 23.

⁶⁵ Exhibit SDGE-2 at 23.

behavior.⁶⁶ Given this, and to avoid customer confusion, SDG&E proposes to eliminate the CAISO day-of hourly adjustment process from the VGI rate and base the hourly energy prices exclusively on the CAISO day-ahead prices.⁶⁷

4.3.2. Eliminating the CAISO Price Averaging Methodology on Event Days in the VGI Rate

The second modification relates to eliminating the CAISO price averaging methodology from the VGI rate calculation process.⁶⁸

One of the steps in building the VGI hourly price is to calculate whether there should be a system peak load pricing adder or a distribution circuit peak load pricing adder applied to the hour.⁶⁹ This calculation is performed for every hourly price in the day-ahead VGI rate.⁷⁰ If the circuit of system loading conditions occur and adders are applied, then the CAISO day-ahead prices during the adder hours are averaged and this average price is used in the rate and billing calculation for the event hours.⁷¹

As part of lessons learned from the Pilot, SDG&E explains that this averaging aspect of the VGI rate billing process adds extra steps and complexity to the rate calculations without a commensurate customer benefit.⁷² SDG&E states that the VGI rate calculations would be simpler and easier to maintain if the price averaging process was eliminated and the individual CAISO day-ahead hourly prices were used instead during event hours.⁷³

⁶⁶ Exhibit SDGE-2 at 23.

⁶⁷ Exhibit SDGE-2 at 23.

⁶⁸ Exhibit SDGE-2 at 23 to 24.

⁶⁹ Exhibit SDGE-2 at 23.

⁷⁰ Exhibit SDGE-2 at 23.

⁷¹ Exhibit SDGE-2 at 23.

⁷² Exhibit SDGE-2 at 23.

⁷³ Exhibit SDGE-2 at 23 to 24.

4.4. Stranded Asset Mitigation

SDG&E asserts PYD2's program design mitigates future stranded asset risk.⁷⁴ For the utility-owned make-ready and EVSE sites, SDG&E will ensure that the appropriate infrastructure is reliably operated and maintained, either by using internal company personnel or contractors to troubleshoot and repair any issues.⁷⁵ SDG&E's states the proposed ownership structure ensures that facilities will be reliable and available to drivers, mitigating the risk of insufficient maintenance, supplier bankruptcy, or insufficient site host funding.⁷⁶ SDG&E plans to continue to provide data on EV adoption and charging infrastructure utilization related to this program to the Program Advisory Council (PAC) stakeholders and the Commission.⁷⁷

For workplace sites, SDG&E will own and maintain the make-ready infrastructure leading up to the charging stations.⁷⁸ The site host will agree to procure, install and maintain the EVSE to ensure they are reliable and available.⁷⁹ SDG&E proposes to add a provision to the customer agreement to ensure that the site host's responsibilities for maintaining the charging stations and keeping them in working order is clearly defined.⁸⁰

4.5. Cost Components

SDG&E requests \$34.7M in capital direct costs and \$8.8M in O&M direct costs for PYD2.⁸¹ SDG&E provides that the forecasted revenue requirement for

⁷⁴ Exhibit SDGE-2 at 16.

⁷⁵ Exhibit SDGE-2 at 16.

⁷⁶ Exhibit SDGE-2 at 16.

⁷⁷ Exhibit SDGE-2 at 16.

⁷⁸ Exhibit SDGE-2 at 16.

⁷⁹ Exhibit SDGE-2 at 16.

⁸⁰ Exhibit SDGE-2 at 16.

⁸¹ Exhibit SDGE-3 at 6.

PYD2 is \$126.5 million over the years 2021 through 2084.⁸² SDG&E bases its cost assumptions on the following approximations:

- 75 percent of sites will be at workplaces, and 25 percent at MUDs;
- At workplaces, 78 percent of sites will be installed in parking lots and 22 percent will be installed in parking structures;
- In MUDs, 66 percent of sites will be installed in parking lots and 34 percent will be installed in structures;
- For both MUDs and workplaces, average of 10 ports per site, \$3,000 cost per EVSE port, \$2,000 for high-side connection costs per site, \$2,000 for standby costs per site, and \$5,000 for construction change orders per site.⁸³

SDG&E provides definitions for these costs in footnotes to Exhibit SDGE-3:

- “High-side costs” represent the cost to connect to the distribution grid from the utility transformer.
- “Standby costs” are costs incurred by contractors at the construction site for idle time waiting to energy/de-energize/test facilities.
- “Construction change order costs” are caused by unknowns discovered once construction begins at a site that require a change order with the contractor.

SDG&E conducted further analysis to calculate the weighted construction direct costs for all sites in the PYD2 program. Once the total construction direct cost estimates were calculated and weighted by site type (MUD and workplace, as well as parking lot versus structure) then the overall construction direct cost estimates for all the sites were calculated, leading to an average construction cost per site of \$118,109.⁸⁴

⁸² Exhibit SDGE-5 at 1.

⁸³ SDGE-3 at 2.

⁸⁴ Exhibit SDGE-3 at 3.

Table 2. Total Capital and O&M Costs Requested by SDG&E⁸⁵*(In Millions, includes escalation, overheads, AFUDC, and capitalized property tax)*

	2021	2022	2023	2024	Total
Capital	\$5.8	\$25.9	\$13.8	\$0.0	\$45.5
O&M	\$0.4	\$3.5	\$3.1	\$0.0	\$7.0
Total Implementation:	\$6.2	\$29.4	\$16.9	\$0.0	\$52.5
Ongoing O&M	\$0.5	\$1.6	\$1.9	\$1.9	\$5.9
Total Request:	\$6.7	\$31.0	\$18.8	\$1.9	\$58.4

The total requested amount when including total capital, escalation, overheads, AFUDC, and capitalized property taxes is \$58.4M.⁸⁶ SDG&E requests that in order to maintain maximum flexibility within the project as it is executed, the dollar amounts in those respective capital and O&M categories be classified as fungible and be allowed to cross over between the categories.⁸⁷ It asserts that during program implementation, customer demand may result in more MUD sites than originally budgeted or larger site deployments than expected.⁸⁸ SDG&E claims the ability to shift between capital and O&M cost categories will allow flexibility to meet customer demand, as long as the total Commission approved budget is not exceeded.⁸⁹

4.5.1. Proposed Cost Recovery and Balancing Account

SDG&E requests authority to establish a new two-way Power Your Drive 2 Balancing Account (PYD2BA) to record revenues, costs associated with PYD2 as well as participation payments received from site hosts.⁹⁰

SDG&E's incremental costs for PYD2 include: (1) capital-related

⁸⁵ Exhibit SDGE-3 at Table 3-6.

⁸⁶ Exhibit SDGE-3 at 6.

⁸⁷ Exhibit SDGE-3 at 6.

⁸⁸ Exhibit SDGE-3 at 6.

⁸⁹ Exhibit SDGE-3 at 6.

⁹⁰ Exhibit SDGE-6 at 1.

costs (*e.g.*, depreciation expense, authorized return on investment, and taxes); (2) operations and maintenance (O&M) costs associated with initial deployment; (3) costs incurred to qualify vendors if SDG&E is ordered to qualify additional vendors; (4) costs incurred to collect, integrate, validate, analyze and otherwise make useful data from charging stations not owned by SDG&E if ordered to provide data at the charging station level rather than the utility meter level; (5) costs incurred to meet other regulatory requirements; and (6) other on-going O&M costs necessary to maintain the ports in good condition until a future General Rate Case (GRC).⁹¹ SDG&E proposes recovering the costs allocated through distribution rates.⁹² Costs properly allocated to the Federal Energy Regulatory Commission (FERC) will be recovered through transmission rates.⁹³

SDG&E explains that a two-way balancing account is reasonable because it will allow the utility to track actual costs to an amount authorized for recovery by the Commission, ensuring that ratepayers are charged for only actual costs and refunded any overcollections.⁹⁴ In turn, the utility does not make or lose money due to uncertainties in the scope of the work.⁹⁵ SDG&E proposes to dispose of the PYD2BA balance in its Tier 2 Advice Letter submission for its Annual Regulatory Account Balance Update, or other applicable proceeding as directed by the Commission.⁹⁶ SDG&E clarifies that during the installation period (estimated to be completed in 2023), any over/under collection in the PYD2BA will be carried forward to the following year.⁹⁷ SDG&E proposes to utilize the PYD2BA until a time when the costs associated with the electric

⁹¹ Exhibit SDGE-6 at 1 to 2.

⁹² Exhibit SDGE-6 at 2.

⁹³ Exhibit SDGE-6 at 2.

⁹⁴ Exhibit SDGE-6 at 2.

⁹⁵ Exhibit SDGE-6 at 2.

⁹⁶ Exhibit SDGE-6 at 2.

⁹⁷ Exhibit SDGE-6 at 2.

vehicle charging ports described in this instant application are incorporated into SDG&E's base business and addressed in its GRC proceeding, at which time SDG&E proposes to close the PYD2BA.⁹⁸

4.5.2. Illustrative Rate Impact

SDG&E provides the following rate impact analysis attributable to the utility's PYD2 proposal: In 2021, the illustrative annual bill impact of the proposed revenue requirements is approximately \$0.43 for a typical residential customer using 500 kilowatt-hours (kWh) per month in both the inland and coastal climate zones, as compared to current rates. On a percentage basis, this equates to an illustrative annual bill impact of 0.02%. In 2022, the illustrative annual bill impact of the proposed revenue requirements is approximately \$3.84 for a typical residential customer using 500 kWh per month in both the inland and coastal climate zones, as compared to current rates. On a percentage basis, this equates to an illustrative annual increase of 0.21%. In 2023, the illustrative annual bill impact of the proposed revenue requirements is approximately \$5.55 for a typical residential customer using 500 kWh per month in both the inland and coastal climate zones, as compared to current rates. On a percentage basis, this equates to an illustrative annual increase of 0.31%.

5. Analysis and Modifications to PYD2

Pursuant to § 740.12(b), the Commission shall approve, or modify and approve, TE programs and investments, including those that deploy charging infrastructure, through a reasonable cost recovery mechanism. Any approval, or modification and approval, of the programs and investments must be consistent with § 740.12, not unfairly compete with nonutility enterprises as required by §

⁹⁸ Exhibit SDGE-6 at 2.

740.3(c), include performance accountability measures, and be in the interests of ratepayers as defined in § 740.8.

The appropriate standard in a ratesetting matter is preponderance of the evidence.⁹⁹ Preponderance of the evidence usually is defined “in terms of probability of truth, *e.g.*, ‘such evidence when weighed with that opposed to it, has more convincing force and the greater probability of truth’.”¹⁰⁰ As the applicant, SDG&E has the burden to demonstrate their proposal is just and reasonable, and that it will effectively and efficiently provide ratepayer benefits.¹⁰¹

Cal Advocates, TURN, NDC, SBUA, and UCAN attempt to show how SDG&E fails to justify their cost assumptions, proposed program size and costs, and DAC/underserved community target.¹⁰² NDC’s comments reflect the sentiments of many, explaining that “only with substantial modifications to maximize ratepayer benefits, minimize costs, and direct support to areas that need it the most should the Commission consider allowing SDG&E to attempt another TE program.”¹⁰³

The following sections analyze the points of contention in PYD2 applying the appropriate standard and statutory provisions to the different arguments and supporting evidence submitted.

5.1. DAC Definition and Target

NDC, Cal Advocates, TURN and the Joint Parties call for an increased focus on siting infrastructure in disadvantaged communities in PYD2. As discussed above, SDG&E proposes to maintain the PYD Pilot’s service territory

⁹⁹ D.16-12-063 at 9.

¹⁰⁰ D.12-12-030 at 45, *aff’d* D.15-07-044 at 28-30.

¹⁰¹ NDC Reply Brief at 2.

¹⁰² NDC Reply Brief at 4.

¹⁰³ NDC Reply Brief at 4.

DAC definition¹⁰⁴ and the 10 percent minimum deployment target for PYD2. As noted above, SDG&E exceeded its 10 percent goal in the Pilot by deploying 32 percent of PYD Pilot sites in DACs. By keeping the same DAC definition and target, SDG&E testifies this will help maintain continuity between the PYD Pilot and PYD2 and minimize confusion on which customers would affect participation payment criteria.¹⁰⁵

5.1.1. Defining DACs for PYD2

Regarding the DAC definition, under the service territory-wide definition, 25 percent of SDG&E's service territory is labeled as "disadvantaged."¹⁰⁶ Under the state-wide DAC definition, only 6.7 percent of SDG&E's territory would be considered disadvantaged.¹⁰⁷ NDC asserts that applying the overly broad service territory-wide definition makes an inappropriately large number of tracts that are not actually disadvantaged eligible to received funding meant for communities that are in the most need.¹⁰⁸ NDC testifies that the state-wide DAC definition embodies the legislative requirement¹⁰⁹ that program funds be directed to areas that are truly disadvantaged on account of both pollution and poverty.¹¹⁰

TURN however, does not oppose SDG&E's proposal to define DACs using the service territory-wide definition – so long as it is used for the limited purposes of setting minimum deployment requirements for PYD2.¹¹¹ TURN

¹⁰⁴ SDG&E proposes to define DACs as the top quartile of census tracts as identified by the CalEnviroScreen 3.0 tool on an SDG&E service territory-wide basis.

¹⁰⁵ Exhibit SDGE-2 at 5.

¹⁰⁶ NDC Reply Brief at 5.

¹⁰⁷ NDC Reply Brief at 5 to 6.

¹⁰⁸ Exhibit NDC-1 at 14.

¹⁰⁹ SB 350 (de Leon, 2015) refers to "disadvantaged communities" as identified in § 39711 of the Health and Saf. Code. § 39711(a) specifies that a DAC is to be identified based on geographic, socioeconomic, public health, and environmental hazard criteria."

¹¹⁰ Exhibit NDC-1 at 16 to 17.

¹¹¹ TURN Reply Brief at 19.

clarifies that it does not support the application of the definition to qualify sites for enhanced funding.¹¹²

5.1.2. Underserved Communities

AB 841 and Executive Order N-79-20 call for increased TE infrastructure deployment in communities disproportionately impacted by poor air quality and economic inequalities.

Executive Order N-79-20, signed by the Governor on September 23, 2020, directs the Commission to accelerate deployment of affordable fueling and charging options for ZEVs, in ways that serve all communities, and in particular low-income and disadvantaged communities, consistent with State and federal law.¹¹³

AB 841 establishes a minimum equity investment target of 35 percent in “underserved communities” and includes specific criteria to define this term. Public Utilities Code § 1601(e)(1) states that an underserved community

many will meet one of the following criteria:

- A community with a median household income less than 80 percent of the statewide average.¹¹⁴
- Census tracts with median household incomes at or below 80 percent of the statewide median income or with median household incomes at or below the threshold designated as low income by the Department of Housing and Community Development’s list of state income limits adopted pursuant to Health and Safety Code § 50093.¹¹⁵

¹¹² TURN Reply Brief at 19 to 20.

¹¹³ Executive Order N-79-20, available at:

<https://www.gov.ca.gov/wp-content/uploads/2020/09/9.23.20-EO-N-79-20-text.pdf>.

¹¹⁴ Pub. Util. Code § 1601(e)(1), citing Pub. Resources Code § 75005(g). As noted in D.20-12-027, there appears to be a misapplication of the concept of median income when compared with average income and ambiguity in the use of the term “community;” but this language is directly from statute and cannot be modified by this decision. The electrical corporations should use good faith efforts to reasonably apply this definition.

¹¹⁵ Pub. Util. Code § 1601(e)(2), citing Health & Saf. Code § 39713(d)(2).

- Is within an area identified as among the most disadvantaged 25 percent in the state according to the California Environmental Protection Agency and based on the most recent California Communities Environmental Health Screening Tool, also known as CalEnviroScreen.¹¹⁶
- A community in which at least 75 percent of public-school students in the project area are eligible to receive free or reduced-price meals under the National School Lunch Program.¹¹⁷
- A community located on lands belonging to a federally recognized California Indian tribe.¹¹⁸

Because AB 841 includes the state-wide DAC definition as one of the criteria to qualify which communities are underserved, the argument put forward by SDG&E as a reason to utilize the service territory definition for PYD2 is effectively moot. Instead of utilizing the service territory-wide definition as the PYD Pilot and other SDG&E TE programs do, SDG&E should utilize the criteria provided in AB 841 to qualify which areas are underserved in its service territory.

Applying the underserved community definition to PYD2 is also consistent with Executive Order N-79-20's directive that [the](#) Commission accelerate deployment charging options for ZEVs in low-income or underserved communities. SDG&E should work with its PAC to [qualify](#)[determine](#) which geographic areas qualify under the underserved community definition. SDG&E should file a Tier 2 AL no later than 90 days after the decision is adopted to

¹¹⁶ Pub. Util. Code § 1601(e)(3).

¹¹⁷ Pub. Util. Code § 1601(e)(4). As noted by comments to the proposed decision, there is ambiguity in the use of the term "community;" but this language is directly from statute and cannot be modified by this decision. The electrical corporations should use good faith efforts to reasonably apply this definition.

¹¹⁸ Pub. Util. Code § 1601(e)(5). As noted by comments to the proposed decision, there is ambiguity in the use of the term "community;" but this language is directly from statute and cannot be modified by this decision. The electrical corporations should use good faith efforts to reasonably apply this definition.

reflect how the utility will develop materials and conduct outreach to deploy charging infrastructure in underserved communities.

5.1.3. Deployment Target

As to the DAC deployment target, SDG&E discusses the process that helped “scale up” PYD Pilot deployment in DACs beyond the 10 percent minimum goal – including screening criteria, complementing other government programs, contractor goals to hire from DACs, and vendor marketing efforts.¹¹⁹ However, SDG&E fails to explain how it will use these lessons to maximize DAC participation for PYD2 or why the PYD2 DAC target should not align with the DAC participation rate in the Pilot.¹²⁰ Moreover, setting such a low minimum deployment goal does not recognize the successes of California’s other investor-owned utilities, and indeed SDG&E itself, in deploying TE programs within DACs. Ultimately, SDG&E’s proposed 10 percent target does not align with the legislative directives of AB 841, which establishes a minimum equity investment target of 35 percent.¹²¹

NDC, TURN, Cal Advocates and the Joint Parties urge the Commission to raise SDG&E’s 10 percent DAC target. TURN supports NDC’s recommendation for a 50 percent deployment target, explaining that a higher minimum deployment requirement is necessary and consistent with AB 841’s directive that 35 percent of the investments be made in underserved communities. As NDC explains, applying the “underserved communities” definition of AB 841 to SDG&E’s service territory includes low-income areas that could cover approximately 40 percent of utility’s territory, and likely more.¹²² This would result in deploying infrastructure in approximately 40 percent of the lowest

¹¹⁹ SDG&E Opening Brief at 50 to 51; NDC Reply Brief at 5.

¹²⁰ NDC Reply Brief at 5.

¹²¹ § 740.12(b).

¹²² NDC Reply Brief at 12.

income and most polluted communities in SDG&E's service territory.¹²³ NDC asserts that SDGE's proposed 10 percent DAC target fails to incorporate lessons learned from PYD Pilot and other TE pilots.¹²⁴ NDC provides that for Pacific Gas & Electric Company's (PG&E) EV Charge Network program, PG&E has achieved ~~a~~ 26 percent DAC deployment, exceeding its 15 to 20 percent minimum deployment goal.¹²⁵ For Southern California Edison Company's (SCE) Charge Ready Pilot, SCE has achieved ~~a~~ 50 percent DAC deployment, far exceeding its 10 percent minimum deployment goal.¹²⁶

Cal Advocates supports NDC's recommendation that 50 percent of PYD2 investments target underserved communities – with the caveat that at least 25 percent of ports be installed pursuant to the CalEnviroScreen statewide definition.¹²⁷ The Joint Parties believe to promote more equitable distribution of the benefits of transportation electrification, SDG&E should increase its proposed 10 percent DAC target.¹²⁸

SDG&E's proposed 10 percent target falls short of AB 841's minimum equity requirement of 35 percent. It also falls below the utility's own DAC deployment achievement in the Pilot. SDG&E further cannot rebut the fact that other investor-owned utilities running similar TE programs (PG&E's EV Charge Network and SCE's Charge Ready Pilot) have been successful in exceeding a 10 percent DAC target.

Consistent with § 740.12(b) and party comments about what is achievable in SDG&E's territory, PYD2's equity target should be 50 percent. SDG&E must

¹²³ NDC Reply Brief at 12 to 13.

¹²⁴ Exhibit NDC-1 at 26 to 27.

¹²⁵ NDC-1 at 26 to 27.

¹²⁶ NDC-1 at 26 to 27.

¹²⁷ Cal Advocates Reply Brief at 9 to 10.

¹²⁸ Joint Parties Opening Brief at 1.

place 50 percent of PYD2 sites in underserved communities pursuant to § 1601. This increased target focuses charging infrastructure deployment in the most polluted and lowest income communities in SDG&E's service territory. This 50 percent target is reflective of other equity goals the Commission has adopted for TE programs (e.g. Charge Ready 2) and will help further the strong equity goals in the recently issued Executive Order N-79-20.

~~Not before twelve months into the implementation of PYD2, if SDG&E finds the 50 percent target renders PYD2 unfeasible, the utility may request modifications through a Tier 2 advice letter process. To support such a request, SDG&E is required to provide a comprehensive explanation and data to show why the 50 percent target is unachievable in PYD2 and efforts the utility made to achieve the target.~~

5.2. Workplace and MUD Targets

SDG&E proposes reducing the MUD target from the Pilot from 40 percent to a minimum of 25 percent of sites, asserting a 25 percent target will allow for greater flexibility in selecting MUD locations that generally cost less to deploy.¹²⁹ SDG&E explains the lower MUD target reflects challenges discovered during the PYD Pilot that led to some potential MUD sites not being viable for various construction issues.¹³⁰

As TURN provides in testimony, the PYD pilot had generally low utilization - with 47 percent of workplace sites and 65 percent of MUD sites

¹²⁹ Exhibit SDGE-2 at 5.

¹³⁰ Exhibit SDGE-2 at 5: (1) longer overall distances from the power source to the EVSE; (2) multiple floors in parking garages -leading to possible concrete core drilling between floors, longer distances to the power source, and higher costs to ensure stability; (3) smaller site sizes - leading to higher average costs per port; (4) deeded parking places - leading to longer conduit runs as chargers may be in different locations; and (5) higher costs for the new electric service due to specific site conditions.

having less than 1 percent utilization.¹³¹ TURN clarifies these utilization rates may be due to the fact that most pilot sites were installed in 2018 and 2019, providing little time for customers to adapt to these newly installed chargers.¹³² And while TURN generally recommends minimum utilization targets to properly incentivize the utility, the advocacy group declines to do so here for [what is](#) simply an extension of the Pilot.¹³³ TURN recommends SDG&E shift some of its MUD funds to publicly accessible sites that can support nearby MUDs while potentially achieving higher utilization.¹³⁴

SDG&E fails to show how its proposed breakdown of MUD and workplace site deployment is reflective of pilot results, considering the utility's success in siting almost 40 percent of sites at MUDs. Authorizing a lower MUD deployment target than what was reached in the Pilot seems counter to the direction the Commission has given in other TE programs or the increased equity focus AB 841 provides. As the Joint Parties state, "to ensure residents of MUDs are able to enjoy the benefits of driving on electricity, SDG&E should adopt an MUD deployment target akin to those the Commission has adopted for comparable utility programs and commensurate with MUD deployment achieved in the pilot."¹³⁵ MUDs continue to be [among](#) the most difficult to reach and underserved customer segment, and so we find it appropriate to impose a 50 percent MUD deployment target.¹³⁶ This is aligned with the spirit of AB 841, which emphasizes an equity focus [in](#) TE investments, as many residents of MUDs are low-income.

¹³¹ Exhibit TURN-1 at 25.

¹³² Exhibit TURN-1 at 25.

¹³³ Exhibit TURN-1 at 26.

¹³⁴ Exhibit TURN-1 at 26.

¹³⁵ Joint Parties Opening Brief at 2.

¹³⁶ Exhibit Cal Advocates-1 at 4-4.

We also note the ongoing uncertainty around employees returning to workplaces during the ongoing COVID-19 pandemic and the possible longer-term changes to workplace charging.

Recognizing both the utilization and construction hurdles SDG&E faced during the Pilot, we do understand the potential difficulty in the utility meeting a 50 percent MUD port deployment. Accordingly, SDG&E may satisfy the MUD 50 percent infrastructure target using “sites serving MUDs.” This additional flexibility, in counting “sites serving MUDs” as MUDs aims to address parking lot constraints and trenching problems identified by SDG&E as reasons for MUD sites failing to qualify for the PYD Pilot. This slightly expansive definition should encourage EV adoption amongst MUD residents even if charging is at a location nearby to serve multiple MUD communities.

Within 90-days of the date of approval of this decision, SDG&E should consult with its PAC to establish criteria for “sites serving MUDs” and file a Tier 2 AL to request approval of the criteria. At a minimum, this AL should consider (1) how the proposed criteria will address the barriers impacting MUD site participation, (2) the distance from a MUD, (3) the available activities to occupy a driver during the charging event, (4) the anticipated charge dwell-time, (5) the relative safety of parking the vehicle at the location for a prolonged charge event.

5.3. Cost Estimates / Per Port Average

An area of contention amongst parties surrounds SDG&E’s costs assumptions for PYD2. SDG&E bases its costs estimates on a per port average of \$21,605. TURN and Cal Advocates recommend an average cost of \$15,000 per port, based on the recent per port average authorized by the Commission for SCE’s Charge Ready 2 program. SDG&E explains that “the costs are the costs... mandating lower cost thresholds does not reduce the actual costs; it either shifts

them to the customer or results in a program where the utility cannot recover its costs. And it is not hard to understand why a company would not want to implement a program guaranteed to lose money.”¹³⁷

SDG&E asserts that its estimated \$21,605 per port figure to implement PYD2 is based on the actual costs to construct over 250 sites through the PYD Pilot and includes *all* estimated cost categories including indirect costs and AFUDC.¹³⁸ SDG&E notes that it presented cost estimates like this in the interests of transparency, so the Commission would have before it all costs in the Program estimate.¹³⁹ The following table shows the Pilot actual per port costs compared to the estimated PYD2 port costs [proposed by SDG&E](#).

Table 3: Pilot actual port costs versus PYD2 estimated port costs:

	Pilot	PYD2
Total Program Cost/Estimate	\$66,317,649	\$43,210,321
<i>Less: Billing System Update</i>	(\$3,935,404)	-
Program Ports	3,040	2,000
Average Per Port Cost	\$21,815 ¹⁴⁰	\$21,605

The above average per port cost excludes ongoing maintenance costs, includes direct costs, and associated non-direct costs. SDG&E’s request of \$43.5M does not include an estimate of contingency and escalation costs.¹⁴¹

Cal Advocates claims that the proposed PYD2 per port cost disregards the actual PYD Pilot data construction direct costs and fails to apply lessons learned

¹³⁷ SDG&E Opening Brief at 60.

¹³⁸ Exhibit SDGE-9 at 4; SDG&E Opening Brief at 60.

¹³⁹ SDG&E Opening Brief at 60 footnote 128.

¹⁴⁰ Total Pilot costs were \$70,253,053 including billing system updates. This adjusted cost per port average does not consider the \$3,935,404 cost for billing system updates.

¹⁴¹ Exhibit SGDE-9 at 2.

to refine and improve the proposed PYD2.¹⁴² They further state that SDG&E relies on unsupported and unrepresentative site and cost assumptions, which taken together substantially overestimate construction direct costs.¹⁴³ Specifically, Cal Advocates claims the PYD2 per port cost estimates are unjustifiably higher because SDG&E bases the PYD2 per port costs on the median number of ports per site in the Pilot. Cal Advocates contends this methodology does not consider Pilot costs at other sized sites, which have lower per post costs on average.¹⁴⁴

TURN contends that the analysis SDG&E relies on in making its per port average, “is misleading in that it omits escalation, contingency and ongoing O&M costs from [PYD2] cost estimate without making any concessions that lowers the cost it expects ratepayers to bear.”¹⁴⁵ TURN notes that while the PYD2 per port costs appear to be \$200 lower than the Pilot per port costs, the estimates do not include contingency and escalation.¹⁴⁶ If contingency and escalation costs were incorporated, which is necessary for an “apples to apples comparison,” then the PYD2 costs are approximately \$26,000 per port, significantly higher than comparable Pilot averages, which TURN identifies as the actual Pilot costs when ongoing O&M costs are included.¹⁴⁷ TURN recommends that SDG&E adhere to a \$15,000 per port average cost, which is between the unit cost of SCE’s Charge Ready pilot and PG&E’s EV Charge Network pilot.¹⁴⁸

¹⁴² Cal Advocates Opening Brief at 3 to 4.

¹⁴³ Cal Advocates Opening Brief at 4.

¹⁴⁴ Cal Advocates Opening Brief at 4.

¹⁴⁵ TURN Reply Brief at 10, citing UCAN Opening Brief at 8.

¹⁴⁶ TURN Reply Brief at 10.

¹⁴⁷ TURN Reply Brief at 10.

¹⁴⁸ SCE’s Charge Ready Pilot achieved a total per port average costs of \$13,754, while PG&E’s EV Charge Network’s actual per port cost averaged \$17,956.

UCAN agrees with TURN's claim that if all ongoing contingency costs are included, PYD2 per port costs are higher than the actual Pilot costs. UCAN argues that SDG&E's PYD2 proposal does not consider the interests of ratepayers nor does it minimize costs and maximize benefits as required by § 740.12.¹⁴⁹ UCAN claims that SDG&E spent much more per port in the PYD Pilot than originally anticipated, and instead of working proactively on ways to decrease costs, SDG&E simply proposes per port costs for PYD2 that are much higher than what was approved in the PYD Pilot.¹⁵⁰

SBUA also raised concerns with SDG&E's proposed cost per port, stating that the "PYD Extension budget is excessive in large part because of the high cost per port and could have an unreasonable impact on rates."¹⁵¹ To limit per port costs, SBUA recommends the Commission authorize SDG&E to cover up to ~~a~~ \$20,000 per port, plus 80 percent of costs above this amount.¹⁵²

¹⁴⁹ Exhibit UCAN-1 at 6.

¹⁵⁰ UCAN Opening Brief at 10.

¹⁵¹ Exhibit SBUA-2 at 6.

¹⁵² Exhibit SBUA-1 at 10.

Though SDG&E contends its cost estimates were developed in the “interests of transparency,” the utility fails to adequately dispute TURN’s \$26,000 per port average calculation, nor do they show the total estimated per port average, since the \$21,605 figure excludes ongoing maintenance costs, and is before contingency and escalation costs are included. SDG&E simply claims TURN’s comparison of Pilot costs to SCE’s Charge Ready program is misleading, overly simplistic, and does not capture the total costs to build-out TE infrastructure.¹⁵³

While we recognize the \$21,605 figure is an average, we are not persuaded that SDG&E’s PYD2 average port costs of \$21,605 aims to maximize ratepayer investment and benefits, as the Commission recently adopted a \$15,000 per port average for SCE’s Charge Ready 2 Make-Ready Expansion Program.¹⁵⁴ For comparison, SCE’s Charge Ready 2 pilot resulted in an average per port cost of \$13,731, while PG&E’s EV Charge Network’s actual per port cost averaged \$17,956.¹⁵⁵

This is not the first time the Commission has wrestled with the ~~costs~~[cost](#) estimates put forward by SDG&E. In D.16-01-045 the Commission explained, “we are concerned with the cost of the [Pilot] as requested in SDG&E’s application...” ultimately authorizing a smaller Pilot with a smaller budget, but ~~is~~[still](#) supportive of California’s emission reductions goals.¹⁵⁶

¹⁵³ SDG&E Reply Brief at 12.

¹⁵⁴ D.20-08-045 at 51 to 55.

¹⁵⁵ Each pilot’s per port average is reflective of L2 chargers.

¹⁵⁶ D.16-01-045 at 99 to 104.

While there was not a per port average [cost cap](#) adopted for the Pilot, the Commission has adopted averages for recently authorized TE programs. Pursuant to § 740.12(b), SDG&E's proposed per port average for PYD2 should be \$15,000, rather than \$21,605. A \$15,000 per port average seeks to minimize overall costs and to maximize emission reduction and charger availability in underserved communities, consistent with § 740.8. Applying a \$15,000 per port average to PYD2, SDG&E should be able to achieve a higher port goal than the original 2,000 ports/200 sites proposed in testimony. SDG&E should work with its PAC to implement the per port average [cost cap](#) along with other programmatic changes to PYD2. [However, we acknowledge the need for some flexibility, and revise the *per se* reasonableness framework set out in the proposed decision to reflect SDG&E's proposed average per port direct costs of \\$18,131.¹⁵⁷ As detailed below, SDG&E may seek recovery for the difference between a baseline of \\$15,000 average per port costs and the actual direct costs per port, up to \\$18,131.](#)

While we decline to set a minimum port installation requirement for SDG&E to achieve based on a lower per port average, as well as some of the other cost measures adopted in the following Sections, [we expect](#) SDG&E ~~should be able~~ to install [significantly](#) more than the 2,000 [ports](#) the utility proposed in testimony.

Considering the per port figure is an average, parties provide the following points on cost-sharing tactics for sites that exceed the \$15,000 per port average.

TURN contends that ratepayer funding should be reduced and that participating sites should cover more of the costs. TURN explains, cost-sharing

¹⁵⁷ [SDGE Opening Comments at 6.](#)

will stretch each ratepayer dollar further, provide for a more equitable structure, and provide sufficient “skin in the game” for site hosts. TURN recommends that no more than 75 percent of total customer-side costs, which include infrastructure and charging stations, should be paid by ratepayers for all workplace sites and no more than 90 percent for MUDs. TURN bases these funding levels on similar programs offered by the Bay Area Air Quality Management District (BAAQMD) and the California Energy Commission (CEC).

SBUA also raises concerns with SDG&E’s proposed funding levels and recommends a different cost-sharing approach. SBUA recommends the Commission limit PYD2 per port costs by implementing a flexible participation payment or rebate that would cover up to \$20,000 per port, plus 80 percent of the costs above that amount, with a soft ratepayer funding cap of \$25,000. SBUA believes this approach could help SDG&E stretch the proposed budget first and supply more customers with EV charging stations, while also aligning the funding levels with those offered by the CEC’s California Electric Vehicle Incentive Program (CALeVIP), which averaged \$8,700 per L2 port as of 2019.

On balance, the Commission adopts a modified version of the intervenors’ recommendations on cost-sharing principles. SDG&E must require all site hosts to share a percentage of the costs when the site costs exceed \$20,000 per port. For workplaces, the site host should bear responsibility for 20 percent of the costs over \$20,000. For MUD and MUD serving sites, the site host should bear responsibility for 10 percent of the costs over \$20,000 per port [up to \\$25,000 per port](#). At all sites, ratepayers should not bear responsibility for costs exceeding \$25,000 per port. SDG&E shareholders [\(or the site host, if they so choose\)](#) must bear the additional costs that exceed \$25,000 per port at an individual site, ~~minus the site host’s cost-sharing requirements.~~ [as agreed between SDG&E and](#)

individual site hosts. To clarify, site hosts are, of course, free to contribute to overall installation costs to whatever extent they choose.

The \$15,000 per port average and cost-sharing recommendations measures ~~ensures~~are intended to ensure the benefits of ratepayer investments are maximized ~~and benefits are shared amongst~~ equitably amongst customers. SDG&E should work with its PAC to implement a deployment strategy to achieve the above per port average and cost-sharing principles.

~~However, we will allow SDG&E the opportunity to seek modifications to the \$15,000 per port average cost after program implementation has begun. No sooner than 12 months into PYD2 implementation, SDG&E may file a Tier 3 advice letter (AL) requesting that the \$15,000 per port average cost be modified. SDG&E's AL must include a detailed explanation, supported by actual PYD2 data, demonstrating why it cannot achieve this per port average, and why a different figure is more appropriate.~~

SDG&E should work with its PAC to implement a deployment strategy to achieve the above per port average cost cap and cost-sharing principles.

5.4. Ownership Models

Under SDG&E's proposal, all EVSEs and customer-side infrastructure at MUD sites will be owned and maintained by the utility.¹⁵⁷¹⁵⁸ For workplaces, site hosts are required to take customer ownership of the EVSE while SDG&E will own and maintain the customer-side infrastructure.¹⁵⁸¹⁵⁹

SDG&E claims that utility ownership of charging stations at MUDs is necessary because MUD site hosts have not expressed interest in owning their own charging stations and prefer a "turnkey" solution where the driver pays the utility for energy and the property manager/owner does not need to deal with

¹⁵⁷¹⁵⁸ Exhibit SDGE-2 at 9; ChargePoint Opening Brief at 8.

¹⁵⁸¹⁵⁹ Exhibit SDGE-2 at 9 to 10; ChargePoint Reply Brief at 8.

maintenance or billing disputes.¹⁵⁹160 When asked during hearings why SDG&E did not propose customer-ownership at MUD sites, witness Schimka provided, “everything I’ve heard from [MUDs] over the last 10 years, I just don’t think that those are costs that [MUDs would] be willing to take on.”¹⁶⁰161 When asked, if those maintenance/billing costs were covered at MUD sites choosing to own the EVSE themselves, Witness Schimka responded that such a structure did not establish ownership or responsibility for the equipment.”¹⁶¹162

Parties contend the utility fails to provide evidence to support the claim that utility ownership is necessary to promote adoption of charging at MUDs. ChargePoint notes, “SDG&E is correct in observing that MUD sites can be more difficult to enroll and construct than workplaces, and that streamlining the enrollment process can help address some of these problems. For some MUD site hosts, the option of utility ownership could address concerns that would otherwise prevent them from participating in PYD2. But for other site hosts, utility ownership of the EVSE may not solve the MUD barriers SDG&E identifies, such as challenging physical layouts, longer approval process, financial constraints, or competing amenity goals.”¹⁶²163 ChargePoint recommends that each of the barriers MUDs face in PYD2 be carefully analyzed to better understand and facilitate MUD participation.

Cal Advocates does not support SDG&E’s proposed ownership model. Cal Advocates argues that SDG&E fails to provide adequate factual support to justify its proposal, and exclusive utility ownership unfairly competes with

¹⁵⁹160 TURN Reply Brief at 17.

¹⁶⁰161 Reporter’s Transcript (RT) at 132.

¹⁶¹162 RT at 133.

¹⁶²163 ChargePoint Opening Brief at 8 to 9.

non-utility enterprises and limits customer choice contrary to § 740.12(a)1)(F).¹⁶³¹⁶⁴

TURN also argues against the proposed ownership model, asserting that SDG&E's claim that no MUD site ~~host~~hosts have been interested in owning the EVSE is purely anecdotal.¹⁶⁴¹⁶⁵ Yet, TURN states that it is fact that utility ownership of charging stations is more costly for ratepayers than a customer ownership model.¹⁶⁵¹⁶⁶ This is because of the additional costs associated with rate basing these capital assets, in addition to the \$5.9M in ongoing operation and maintenance costs for 2021 - 2024.¹⁶⁶¹⁶⁷ TURN also claims utility ownership of the charging infrastructure adds additional costs and risks through stranded assets and anti-competitive impacts.¹⁶⁷¹⁶⁸ TURN recommends giving site-hosts the option to own all of the customer-side infrastructure (including the EVSE and customer-side make-ready) at their site with a ratepayer funded rebate to cover the costs, while requiring SDG&E to target 25 percent of sites for customer ownership.¹⁶⁸¹⁶⁹

When reviewing the different ownership options for MUDs and workplaces, it is unclear why SDG&E requires customer-ownership of the EVSE at workplaces but does not offer this as an option to MUD site hosts. Instead of presenting compelling data or evidence supportive of its proposed ownership model, SDG&E provides anecdotes about what its staff has heard from MUD owners "over the last 10 years." This does not adequately address parties' valid concern that SDG&E's proposed ownership model limits customer choice and

¹⁶³¹⁶⁴ Cal Advocates Reply Brief at 4.

¹⁶⁴¹⁶⁵ TURN Opening Brief at 21.

¹⁶⁵¹⁶⁶ TURN Opening Brief at 21.

¹⁶⁶¹⁶⁷ TURN Opening Brief at 21.

¹⁶⁷¹⁶⁸ TURN Opening Brief at 22-23.

¹⁶⁸¹⁶⁹ TURN Opening Brief at 23.

that utility ownership is not the best option for overcoming barriers that prevent MUDs from choosing to install charging stations.¹⁶⁹¹⁷⁰

Pursuant to § 740.12(b) and consistent with § 740.12(a)(1)(F), we modify SDG&E's PYD2 proposal to offer customer-ownership of the EVSE and customer-side infrastructure at MUDs. We make this modification for a few reasons. First, SDG&E fails to provide evidence to support its proposal that MUDs have no interest in owning the EVSE and that IOU ownership of customer-side infrastructure and EVSE is necessary to overcome known barriers to MUD adoption. Second, because PYD2 is an extension of a pilot, we see the opportunity to collect meaningful data and use cases on what ownership option MUDs select. Third, this recommendation reflects what is currently appropriate for the market, consistent with the approach the Commission recently adopted for Charge Ready 2.¹⁷⁰¹⁷¹ Such a modification aims to provide customers with a choice of ownership, benefit ratepayers by resulting in potential ratepayer savings by eliminating an automatic rate of return on utility owned EVSEs, and will promote market competition to ensure a long-term sustainable TE market. Importantly, providing a rebate to customers for the EVSE and customer-side infrastructure is consistent with SDG&E's argument that cost is the major barrier to MUD adoption of EV charging.

~~Accordingly~~ Due to SDG&E's failure to demonstrate a need for utility ownership of the EVSE at MUDs, we cap limit SDG&E's ownership of the EVSE to no more than 50 percent of only MUD sites in an underserved community. SDG&E should collect data on why ~~a~~ n MUD opts for customer or/ utility ownership, what barriers influenced the decision for a site host to opt for a particular ownership option, and in what ways the ownership options help

¹⁶⁹¹⁷⁰ RT at 134.

¹⁷⁰¹⁷¹ See D.20-08-045 Section 4.5.

overcome barriers to EV adoption. SDG&E should work to ensure this information is included in the data collection and reporting required for PYD2 so that this information can be utilized to plan future TE programs and investments.

SDG&E has also not demonstrated a need to require utility ownership of infrastructure installed on the customer-side of the meter. In testimony, TURN shows the potential ratepayer savings if all site hosts are offered the option to own the infrastructure on the customer-side of the meter.¹⁷¹172 TURN recommends that at least 25 percent of sites adopt this ownership structure to mitigate the potential for stranded assets on the customer-side of the meter.¹⁷²173

In D.18-05-040, the Commission determined infrastructure cost for behind-the-meter (BTM) investments did not need to be capitalized for SDG&E to achieve the objectives of its residential charging program (RCP). In D.20-08-045, the Commission explained ~~by~~that encouraging SCE to target a portion of its program under “site-host ownership,” reduces the capitalization of customer-side infrastructure, because the equipment will be owned by the site-host and not the utility.¹⁷³174 SDG&E fails to show what the increased benefits of utility ownership of all the BTM infrastructure is. Moreover, the utility fails to rebut concerns over higher program costs and stranded assets under its proposed ownership model.

~~At least~~SDG&E should strive to have 50 percent of ~~the MUD~~PYD2 sites ~~installed for PYD2 are required to~~ have uncapitalized BTM infrastructure ~~or, put another way, SDG&E is authorized to.~~ Recognizing that this may be a hard target to achieve for this two-year extension program, SDG&E is required to

¹⁷¹172 Exhibit TURN-1 at 3.

¹⁷²173 Exhibit TURN-1 at 22.

¹⁷³174 See D.20-08-045 at 60 to 61.

have at least 20 percent of PYD2 sites have uncapitalized BTM infrastructure. P
ut another way, SDG&E shall own the customer side make-ready infrastructure
at no more than 50~~80~~ percent of MUD~~PYD2~~ sites ~~for PYD2.~~

~~No sooner than 12 months into PYD2 implementation, SDG&E may file a Tier 3 advice letter (AL) requesting modifications to the 50 percent MUD EVSE customer ownership requirement and/or the 50 percent MUD customer ownership of the make-ready infrastructure. SDG&E's AL must demonstrate why the utility requests to modify these targets, and provide data that shows at a minimum~~As part of SDG&E's reporting and evaluation of PYD2,
the utility must include: (1) the percentage of MUD sites selecting to own the EVSE; (2) the percentage of all sites selecting ownership of the make-ready infrastructure; (3) the total number of customers/number of MUD customers remaining on the PYD2 interest list; (4) the total number of customers on the interest list expressing interest in owning the EVSE and/or customer-side make-ready infrastructure; (5) a detailed explanation of SDG&E's experience with meeting the customer ownership targets; and (6) SDG&E's education and outreach efforts to meet the customer ownership targets; ~~(7) a detailed explanation on why SDG&E believes it will not be able to meet the ownership targets; and (8) proposed new customer ownership targets.~~

We adopt TURN's recommendation¹⁷⁴¹⁷⁵ to create requirements to enhance utilization of charging infrastructure, and require that SDG&E implement the following measures as part of PYD2:

- Prioritize PYD 2 funding for workplaces for site hosts who agree to make the charging stations installed at their sites publicly accessible.

¹⁷⁴¹⁷⁵ Exhibit TURN-1 at 11 and 26.

- For publicly accessible stations, require the installation of signage to notify drivers that the location has charging stations available for public use.
- Encourage site designs that maximize the number of parking spaces served by a port when practical and cost-effective.
- Continue the PYD pilot requirement that the site host agreement include a requirement that site hosts attest that they intend to use the site for at least 5 years and agree to reimburse SDG&E ratepayers for the cost of removing the charging stations if necessary.

5.5. Rebate Levels

SDG&E proposes to provide a flat EVSE rebate of up to \$3,000 per port (not to exceed the purchase price) for workplaces.¹⁷⁵¹⁷⁶ The rebate will be provided after the site is energized. As only customer ownership of the EVSE was proposed for workplace sites, SDG&E did not propose rebate amounts for MUDs.

Parties provided potential cost saving measures in response to SDG&E's proposed rebates. Cal Advocates recommends EVSE rebates of up to \$2,000 and \$1,000 for DAC and non-DAC workplaces, respectively.¹⁷⁶¹⁷⁷ For a hypothetical EVSE cost of \$3,000, this approach would result in host contributions of \$1,000 for DAC workplaces and \$2,000 for non-DAC workplaces, respectively.¹⁷⁷¹⁷⁸ UCAN suggests SDG&E should pay up to 75 percent of EVSE costs, to a maximum of \$3,000 per port (leaving the site host paying \$750 for a \$3,000 EVSE, \$1,000 for a \$4,000 EVSE).¹⁷⁸¹⁷⁹ SBUA recommends, that instead of providing slightly smaller rebates for customer-owned EVSE, SDG&E can couple

¹⁷⁵¹⁷⁶ Exhibit SDGE-2 at 3.

¹⁷⁶¹⁷⁷ Exhibit SBUA-2 at 10.

¹⁷⁷¹⁷⁸ Exhibit SBUA-2 at 10.

¹⁷⁸¹⁷⁹ Exhibit SBUA-2 at 10; referencing UCAN-1 at 30.

participation payment with an effort to prioritize lower-cost workplace sites.¹⁷⁹¹⁸⁰
Under this approach, SDG&E can maximize program impact while retaining flexibility to support higher-cost sites balancing EV adoption, utilization and equity.¹⁸⁰¹⁸¹

TURN recommends SDG&E leverage funding from site hosts, making PYD2 costs more equitable.¹⁸¹¹⁸² TURN contends SDG&E fails to provide any evidence that the \$3,000 per port rebate is necessary to incent customer participation in PYD2.¹⁸²¹⁸³ To support this, TURN discusses the California Energy Commission's (CEC) California Electric Vehicle Infrastructure Project (CALeVIP), in partnership with the San Diego Association of Governments and the San Diego County Air Pollution Control District, which currently includes an regional incentive program in San Diego County. This regional incentive program offers site hosts a rebate of up to \$4,500 for each L2 charger installed, plus an additional \$500 for chargers installed in DACs or Low-Income Communities (LIC), and additional \$1,000 for chargers installed at MUD sites.

Requiring site hosts to contribute a portion of customer-side costs will also lower overall per port costs as it will incentivize selection of more financially viable charger locations while also reducing the overall cost burden to ratepayers. Moreover, this aligns with our cost-sharing directive that site hosts share a percentage of the costs when the site costs exceed \$20,000 per port.¹⁸³¹⁸⁴

For workplaces, the Commission adopts an EVSE rebate that covers 50 percent of the EVSE base costs, up to \$2,000, for workplaces not in an underserved community. Workplaces located in an underserved community

¹⁷⁹¹⁸⁰ Exhibit SBUA-2 at 10 to 11.

¹⁸⁰¹⁸¹ Exhibit SBUA-2 at 10 to 11.

¹⁸¹¹⁸² TURN Reply Brief at 15.

¹⁸²¹⁸³ TURN Reply Brief at 15.

¹⁸³¹⁸⁴ Section 5.3.

should receive a rebate to cover 100 percent of the cost of the EVSE, up to \$2,000. Like our policy set-forth in D.20-08-045 and D.19-08-026, workplaces listed on the Fortune 1000 list ~~but located in an underserved community~~ should be excluded from receiving a rebate to cover the cost of the EVSE.¹⁸⁴¹⁸⁵ These provisions aim to maximize the benefits realized through the PYD2 investments, especially in the communities of greatest need.

For MUDs sites opting to own the EVSE, SDG&E should offer a non-biased rebate that covers the full cost of the EVSE, and the costs of ongoing maintenance and networking fees over the expected life of the equipment. By a non-biased rebate, we mean that the overall costs of customer ownership and operation are roughly comparable to utility ownership and maintenance, as described in Section 5.7 below.

In Section 5.4, the Commission outlines the modification that PYD2 allow all customers the option to own the make-ready infrastructure, with a ~~goal~~requirement that ~~50~~20 percent of ~~MUD~~ site hosts select this. The Commission finds it reasonable to authorize SDG&E to provide customers choosing site-host ownership a rebate to cover 100 percent of the customer-side make-ready equipment and installation costs. SDG&E should work with its PAC and outline an approval process for issuing and calculating this rebate. We encourage SDG&E to utilize the same BTM rebate process the utility established for its MD/HD program.¹⁸⁶

5.6. Small Businesses

The Scoping Ruling inquired what size and type of workplaces SDG&E should target for PYD2. With SDG&E ~~proposing~~directed to site ~~75~~up to 50 percent of PYD2 infrastructure at workplaces, understanding outreach efforts

¹⁸⁴¹⁸⁵ D.19-08-026 at 27.

¹⁸⁶ See generally, D.19-08-026.

and how businesses will be targeted is paramount. For reference, Pub. Util. Code § 2800(i) defines “small commercial customer” to mean “any nonresidential customer with a maximum peak demand of less than 50 kilowatts. The commission may establish rules to modify or change the definition of “small commercial customer,” including use of criteria other than a peak demand threshold, if the commission determines that the modification or change will promote participation in proceedings at the commission by organizations representing small businesses, without incorporating large commercial and industrial customers.”

SBUA provides five recommendations specific to the needs of small businesses: (1) educating potential program participants on how to efficiently secure landlord approval, including model terms and practices; (2) providing potential program participants technical assistance in identifying locations to install charging software given site geometry and safety concerns; (3) offering easy-to-use tools to assist small businesses with determining the scale and optimal use of charging infrastructure considering specific business practices; (4) offer or facilitate access to easy-to-use tools to assist small businesses with long-term fleet planning, considering business needs, financing opportunities, and future resale value; and (5) educate small businesses on how to assemble the relevant information for consideration by a small business loan officer. ¹⁸⁵¹⁸⁷

SBUA stresses the importance of including these specific data points and outreach measures for small businesses, both in terms of technical assistance and financing. ¹⁸⁶¹⁸⁸ SBUA explains its recommendations will not only help SDG&E deploy its PYD 2 program, but will help small business customers who generally

¹⁸⁵¹⁸⁷ Exhibit SBUA-2 at 7 to 8.

¹⁸⁶¹⁸⁸ SBUA Reply Brief at 3.

lack a fleet manager or easy-to-use tools for infrastructure procurement.¹⁸⁷¹⁸⁹
SBUA recommends that SDG&E report on the progress and outcomes related to small business outreach and technical assistance to its PAC.¹⁸⁸¹⁹⁰

During cross-examination SDG&E witness Reynolds testified to the utility's commitment to conduct outreach to small and mid-sized customers but failed to identify any specific measures SDG&E is taking to assist their small business customers both during COVID-19 and outside of it.¹⁸⁹¹⁹¹ While we agree that the utility should be thinking about outreach efforts both during the pandemic and outside of it, we are unconvinced that this is the level of attention small businesses should be given in PYD2. With so many small business closures during the midst of the COVID-19 pandemic, outreach efforts and technical and financing assistance tailored to small business needs is necessary. SDG&E should work with its PAC to implement SBUA's recommended outreach to small businesses, including all five recommendations described above. Additionally, given that the § 2800(i) small commercial customer definition may include, but does not consider the specific characteristics of small businesses, SDG&E should consult with SBUA and its PAC to define what constitutes a small business customer for PYD2.

Recognizing the financial constraints many small businesses are facing, and the fact that some small businesses may not fall into an "underserved community," additional financial incentives should be provided for small business workplaces. SDG&E should work with its PAC to design and offer small businesses a rebate to cover 100 percent of the EVSE base costs, up to

¹⁸⁷¹⁸⁹ SBUA Reply Brief at 3.

¹⁸⁸¹⁹⁰ Exhibit SBUA-2 at 8.

¹⁸⁹¹⁹¹ RT at 107 lines 21 to 28.

\$2,000, identical to the rebate SDG&E must offer to workplaces located in underserved communities.

5.7. Rebate for Network Services and Maintenance

In its recent decision ~~in~~ authorizing SCE to offer a utility ownership option for eligible MUD sites in the Charge Ready 2 program, the Commission also approved a rebate covering maintenance and network services for MUD site hosts opting for customer ownership, reasoning that:

Because the value of the package of products and services provided would differ significantly depending on whether they chose utility or site host ownership, we find it reasonable to establish financial parity between ownership options given the directive in [California Public Utilities Code] § 740.12(a)(1)(F).¹⁹⁰¹⁹²

Similarly, in approving the AB 1082/1083 TE pilots, the Commission found it reasonable to authorize a utility ownership option for school sites, but only if the utility offered participants choosing site-host ownership “a rebate that should be equal to the cost of the charger, maintenance, and network fees for L2 and DCFC only.”¹⁹¹¹⁹³ The reasoning was that a rebate was needed to keep the ownership options equivalent and avoid a structure that “discriminates against both participants that prefer the site-host ownership option as well as suppliers (EVSPs) seeking to supply those site-host owners.”¹⁹²¹⁹⁴

ChargePoint notes that if the Commission adopts ~~ana~~ [site-host ownership option](#) for MUDs in PYD2, similar parity rebates as described above should be offered to participants.¹⁹³¹⁹⁵ ChargePoint recommends the rebate cover the EVSE, maintenance and network fees, as was adopted for the Charge Ready 2 and AB

¹⁹⁰¹⁹² D.20-08-045 at 75 to 76.

¹⁹¹¹⁹³ D.19-11-017 at 46.

¹⁹²¹⁹⁴ D.19-11-017 at 46.

¹⁹³¹⁹⁵ ChargePoint Opening Brief at 10.

1082 programs.¹⁹⁴¹⁹⁶ A parity rebate ensures there will not be a built-in bias in favor of utility ownership.¹⁹⁵¹⁹⁷ ChargePoint explains this approach should provide a net benefit since more MUD site hosts may opt to own the EVSEs if their operations and maintenance is covered, avoiding the additional costs associated with rate basing the capital assets.¹⁹⁶¹⁹⁸

UCAN notes, “as long as third-party service providers are able to offer comparable turnkey service to site owners for EVSE installation, which ChargePoint agrees is feasible, it would be inappropriate to mandate utility ownership of EVSE at MUD sites.”¹⁹⁷¹⁹⁹ Cal Advocates recommends the Commission order SDG&E to offer an unbiased option for MUD site hosts to own the EVSE (*i.e.*, offering a rebate to create financial parity between customer and utility ownership).¹⁹⁸²⁰⁰

The Commission analyzed the question of whether utility-ownership of EVSE creates an unequal playing field for non-utility enterprises for the AB 1082/1083 pilots and Charge Ready 2.¹⁹⁹²⁰¹ For the AB 1082/1083 pilots, the Commission determined that ensuring utilities do not unfairly compete with non-utility enterprises is an important objective, especially in the nascent EVSE and EVSP markets and ordered the utilities to offer participants choosing site-host ownership a rebate that should be equal to the cost of the charger, maintenance, and network fees for L2 EVSE.²⁰⁰²⁰² The Commission has yet to review data that proves network service and maintenance rebates create an

¹⁹⁴¹⁹⁶ ChargePoint Opening Brief at 10.

¹⁹⁵¹⁹⁷ ChargePoint Opening Brief at 10.

¹⁹⁶¹⁹⁸ ChargePoint Opening Brief at 10.

¹⁹⁷¹⁹⁹ TURN Reply Brief at 17, citing UCAN Opening Brief at 81.

¹⁹⁸²⁰⁰ Cal Advocates Reply Brief at 5.

¹⁹⁹²⁰¹ See A.18-07-020, et al.

²⁰⁰²⁰² D.19-11-017 at 46.

unequal playing field for non-utility enterprises.²⁰¹²⁰³ To provide an unbiased ownership offer, and truly evaluate whether utility- or site-host ownership is preferable in the MUD sector, SDG&E should work with its PAC to offer participants choosing site-host ownership a rebate that should be equal to the cost of the charging, maintenance, and network fees for L2 EVSE.

Within 90 days of adoption of this decision, SDG&E shall file a Tier 2 AL to set this site-host rebate amount. At a minimum, the advice letter should include: (1) costs for the EVSE, and associated maintenance and network fees; (2) terms for how the rebate will be issued, including frequency of the recurring payment; (3) how the costs will be tracked; (4) how the rebate will be distributed; and (5) feasibility of scaling this rebate system for a larger program.

5.8. Rates

As described in Section 4.3, SDG&E proposes to use the modified VGI rate or an applicable commercial and industrial (C&I) time-of-use (TOU) rate for PYD2.²⁰²²⁰⁴ The modified VGI rate and C&I TOU rates encourage customers to charge their vehicles during periods of high renewable energy generation and avoid periods of high demand on the grid; thereby mitigating impacts to the grid.²⁰³²⁰⁵ SDG&E states these rate options will help support California's ZEV Action Plan Priorities Update by providing drivers an incentive to charge during low-price hours, which will mitigate the need for new generation or transmission

²⁰¹²⁰³ Section 740.12(c) also states: "If market barriers unrelated to the investment made by an electric corporation prevent electric transportation from adequately utilizing available charging infrastructure, the commission shall not permit additional investments in transportation electrification without a reasonable showing that the investments would not result in long-term stranded costs recoverable from ratepayers."

²⁰²²⁰⁴ SDG&E Opening Brief at 36.

²⁰³²⁰⁵ SDG&E Opening Brief at 36 to 37.

and distribution (T&D) assets resulting from the influx of new load from EVs.^{[204206](#)}

Under this proposal, MUD sites will have the option to directly bill drivers on the VGI rate.^{[205207](#)} SDG&E provides that utility ownership of the EVSE is a prerequisite for the Rate-to-Driver billing [option](#), as SDG&E cannot verify the accuracy and therefore bill off an EVSE meter the utility does not own.^{[206208](#)} MUD locations that opt for utility ownership of the EVSE will continue to have a choice between Rate-to-Driver or Rate-to-Host billing options, using the modified VGI rate. MUDs that opt for customer ownership of the EVSE will be on the Rate-to-Host billing option. Unlike the Pilot, PYD2 permits workplaces to choose an applicable time-variant C&I rate to the same ends.^{[207209](#)} For Rate-to-Host sites, including workplace sites where the site host owns the charging stations, the site host will be required to submit a load management plan to SDG&E that outlines charging management and strategy during grid or circuit-constrained periods.^{[208210](#)} SDG&E maintains the VGI rate is an important component of PYD2, because the rate incents EV charging in a manner that helps manage efficient grid operation.^{[209211](#)}

ChargePoint generally supports SDG&E's proposal but cautions that some participants in the PYD Pilot who signed up for the Rate-to-Driver option have had trouble successfully managing their charging in response to a complex dynamic rate.^{[210212](#)} ChargePoint attributes the following to customer confusion:

^{[204206](#)} SDG&E Opening Brief at 36 to 37.

^{[205207](#)} SDG&E Opening Brief at 37.

^{[206208](#)} SDG&E Opening Brief at 37.

^{[207209](#)} SDG&E Opening Brief at 37.

^{[208210](#)} SDG&E Opening Brief at 37 to 38, refers to "circuit-constrained periods" as VGI rate adder days or CPP days.

^{[209211](#)} SDG&E Opening Brief at 35.

^{[210212](#)} ChargePoint Opening Brief at 12 to 13.

*The Rate-to-Driver option provides a complicated set of pricing thresholds to drivers, including full shut-off of PYD chargers if day-ahead prices exceed certain targets. These thresholds are a source of driver confusion and dissatisfaction.*²¹¹²¹³ ChargePoint testifies that drivers experiencing charger shut-off due to exceeded price thresholds, have called ChargePoint's customer service dissatisfied with what they understand to be a failure of the charger instead of intentional utility-imposed shut-off. To alleviate customer confusion, ChargePoint recommends the following: (1) improve the quality of outreach and education regarding the VGI rate and Rate-to-Driver option for both site hosts and resident drivers; and (2) offer MUD site hosts participation in an Automated Load Management (ALM) pilot.²¹²²¹⁴

The Joint Parties arguesargue the benefits of EV charging cannot be realized if the end-use pricing to EV drivers does not reflect the underlying time-of-use rates.²¹³²¹⁵ The Joint Parties provide the following solution, to ensure that the PYD2 is providing "improved use of the electric system or improved integration of renewable energy generation,"²¹⁴²¹⁶ the Commission should require SDG&E to pass price signals through to drivers by default at all Rate-to-Host sites, while preserving site host flexibility by allowing customers to opt out of this arrangement.²¹⁵²¹⁷ This would ensure that a greater number of drivers see price signals that encourage load shifting in line with grid conditions, with drivers at the Rate-to-Driver sites seeing them directly on their own utility bills and drivers at Rate-to-Host sites generally seeing them unless a site host opts out of the default arrangement. This modification would help the PYD

²¹¹²¹³ Exhibit ChargePoint-1 at 13; ChargePoint Opening Brief at 12 to 13.

²¹²²¹⁴ ChargePoint Opening Brief at 12 to 13.

²¹³²¹⁵ Joint Parties Opening Brief at 5 to 6.

²¹⁴²¹⁶ § 740.8(a).

²¹⁵²¹⁷ Joint Parties Opening Brief at 5 to 6; Exhibit SDG&E-2 at RS-4.

Extension Program maintain a greater degree of the load- shifting benefits achieved by the PYD pilot, which would otherwise likely be diminished due to lower enrollment on the Rate-to-Driver Option resulting from the elimination of the option at workplaces.²¹⁶²¹⁸

TURN contends while the VGI rate likely provided load shifting benefits, they are far outweighed by the cost of the program failing to provide equitable benefits to ratepayers.²¹⁷²¹⁹ TURN explains it is unclear whether SDG&E's distribution planning practices allow for distribution system savings even if load is shifted off-peak in response to the price signal.²¹⁸²²⁰ TURN recommends rate and demand response programs be developed that can apply to all sites with charging stations, regardless of utility ownership of EV infrastructure.

SDG&E states that by placing workplaces on the "Rate-to-Host" billing option, the utility cannot accurately capture if drivers are responsive to the dynamic pricing because the rate will be passed from the site-host directly to the driver. SDG&E also states that it cannot offer the "Rate-to-Driver" billing option for sites that are customer-owned because they are unable to test and confirm the metering accuracy of a customer owned EVSE for billing purposes.

In SDG&E's Ninth Semi-Annual Power Your Drive Pilot Report, SDG&E shows that the while the VGI rate component effectively saw 86 percent of charging occurs during off-peak hours, SDG&E's EV TOU rate saw 84 percent of charging occur during these same periods. This information reflects the similar effectiveness of the less complicated EV TOU rates in encouraging beneficial load-shift as the VGI rate. As we modify PYD2 to offer site-host ownership ~~to~~

²¹⁶²¹⁸ Joint Parties Opening Brief at 5 to 6.

²¹⁷²¹⁹ TURN Opening Brief at 34.

²¹⁸²²⁰ TURN Opening Brief at 34.

~~both workplace and~~at MUD sites, SDG&E runs into the same “rate-to-host” rate issue as for workplaces.

Pursuant to § 740.12(b), we modify SDG&E’s PYD2 proposal to ~~default~~provide all customers owning the EVSE ~~onto~~the option to take service on either the applicable EV TOU rate ~~but continue to allow these customers the option to opt into~~or the VGI rate-to-host billing option. ~~Modifying~~We modify SDG&E’s proposal to make the default arrangement at Rate-to-Host sites that site hosts pass underlying time-variant price signals through to drivers, with an option to offer customized pricing. This ensures PYD2 manages EV load to improve the utilization of the electric grid and deliver fuel cost savings, consistent with § 740.8 and § 740.12. ~~Ensuring that drivers~~Drivers at participating sites see time-variant price signals ~~that encourage them~~are more likely to charge in a manner that supports the electric grid and maximizes fuel cost savings ~~is essential to meet the statutory standard of review and realize~~. I ~~his~~ advances the goal of maximizing the benefits ~~that justify the~~of TE investment of customer funds. ²¹⁹²²¹

For all customers ~~selecting the Rate-to-Host billing option, SDG&E should implement rate and demand response programs that can apply to all sites with charging stations, regardless of utility ownership of EV infrastructure.~~ ~~Customers under the rate-to-host~~under the Rate-to-Host option selecting to offer customized pricing to drivers should work with SDG&E to develop a load management strategy, ~~preferable~~preferably one that utilizes smart charging behaviors and technology, to ensure EV ~~charge~~charging load does not negatively impact the electrical grid. As directed in D.20-12-029, SDG&E should file a Tier 2 AL no later than 90 days after approval of this decision, to identify how the

²¹⁹²²¹ § 740.8.

utility will deploy customer-side Automated Load Management (ALM)/Energy Management Systems (EMS) software at the host site where this technology will support EV charging installations at equal or lesser costs than hardware-based electrical capacity to meet the site's EV charging needs.²²⁰²²²

~~SDG&E should clarify~~²²¹Reporting on the PYD2 program will provide information to enable future analysis of whether there are ratepayer benefits in the form of cost savings from sites enrolled in the VGI rate that shift load during peak distribution events based on current distribution planning practices, and if no cost savings are realized, how the utility will modify the rate to achieve the cost savings.

5.9. Electric Vehicle Infrastructure Training Program (EVITP)

SDG&E proposes to use International Brotherhood of Electrical Workers (IBEW)-affiliated contractors and EVITP trained electricians for the installation of the charging equipment (both make-ready infrastructure and EVSE) in the case of SDG&E-owned EVSE. In addition, for workplace locations where the EVSE will be customer- owned, SDG&E will use IBEW-affiliate contractors and EVITP-trained electricians for the installation of the make-ready infrastructure and require customers to use EVITP-trained electricians for the installation of the EVSEs. For maintenance, SDG&E will require EVITP-training for personnel at

²²⁰²²²D.20-12-029 Ordering Paragraph 5 directed SCE, SDB&E, and PG&E shall, each, in all of its future applications for transportation electrification (TE) programs, or rule or tariff to support TE infrastructure installation: identify how it will deploy customer-side Automated Load Management (ALM) at host sites through such programs, rule, and/or tariff where appropriate because this technology will support TE installation at equal or lesser costs than hardware-based electrical capacity while meeting TE charging needs; and describe its standard evaluation criteria to determine host sites where ALM would benefit ratepayers by reducing costs while meeting host site needs for electric vehicle charging.

²²¹~~Such clarification can be made through one of the implementation advice letters detailed in this decision.~~

utility-owned sites, but will not require EVITP training for maintenance of any assets not owned by SDG&E.²²²²²³

Pursuant to the statutory requirements in AB 841, Section 4 of AB 841 shall apply to any work on PYD2. Prior to implementation, SDG&E shall file a Tier 1 Advice Letter with the Commission's Energy Division that explains how the utility will incorporate EVITP requirements in PYD2. At a minimum the advice letter must include: (1) how SDG&E will inform electricians/contractors of EVITP requirements; (2) how SDG&E will confirm electrician/contractor EVITP qualifications; and (3) how SDG&E will ensure installation work performed ~~by an independent electrician/contractor will be performed by a crew holding~~ consistent with applicable AB 841 EVITP certification requirements.

5.10. EVSE Qualification

Under SDG&E's proposal, workplace site hosts will have the option to select Pilot qualified EVSE.²²³²²⁴ At a minimum, the EVSE will meet the criteria established by the Commission in the Safety Requirements Checklist (*see* Section 9).²²⁴²²⁵ SDG&E clarifies the utility may conduct a simplified request for information (RFI) process to qualify EVSE into the program for workplace sites to ensure the equipment meets the Safety Requirements Checklist and may provide a list of qualified equipment to the site host.²²⁵²²⁶

ChargePoint argues that SDG&E's application and testimony is unclear on how it will solicit and qualify providers for PYD2.²²⁶²²⁷ ChargePoint recommends SDG&E develop a Request for Qualifications (RFQ) and list of qualified equipment and service providers should not be discretionary since it

²²²²²³ Exhibit SDGE-2 at 11 to 12; ChargePoint Opening Brief at 10.

²²³²²⁴ Exhibit SDGE-2 at 3 to 4.

²²⁴²²⁵ Exhibit SDGE-2 at 4.

²²⁵²²⁶ Exhibit SDGE-2 at 4.

²²⁶²²⁷ ChargePoint Opening Brief at 4.

has been required in other Commission approved TE programs.²²⁷²²⁸ For example, in Decision 20-08-045, the Commission approved a process for pre-qualification of suppliers and equipment, a description of categorical requirements SCE proposed to apply in the RFQ process, and a requirement that SCE's qualification procedures incorporate a streamlined process to qualify vendors and equipment already approved for Charge Ready if they met the technical requirements for Charge Ready. The Commission further required SCE to describe its qualification process in an advice letter filing. ChargePoint recommends similar requirements be adopted for PYD2.²²⁸²²⁹

In January 2021, in compliance with AB 2127 (Ting, 2018), the CEC issued the *Electric Vehicle Charging Infrastructure Assessment* staff report (AB 2127 staff report).²²⁹²³⁰ The AB 2127 staff report identifies EVSE infrastructure needs to support the state's EV adoption and GHG emission reduction goals. To meet the charging infrastructure needs while ensuring that charging is accessible, equitable, smart, and convenient for all drivers, the CEC recommends prioritizing the installation of EVSEs that have smart charging capabilities and that meet minimum communication protocol standards.

The AB 2127 staff report recommends all charging infrastructure include the capability for smart charging, which ~~is~~ involves reducing the power or shifting the timing of vehicle charging based on electricity pricing, carbon intensity, demand response, or other grid signals while ensuring the driver's range and departure time request are met.²³⁰²³¹ The report includes an example of smart charging in SDG&E's service territory, where a driver who would

²²⁷²²⁸ ChargePoint Opening Brief at 4.

²²⁸²²⁹ ChargePoint Opening Brief at 4 to 5.

²²⁹²³⁰ *Electric Vehicle Charging Infrastructure Assessment report*, available at: <https://efiling.energy.ca.gov/getdocument.aspx?tn=236237>.

²³⁰²³¹ CEC AB 2127 staff report at 50-51

normally plug in at 5:00 p.m. after work could slash electricity costs by more than half by²³¹, shifting all charging to SDG&E's "Super Off-Peak" hour. While drivers can look up local electricity rates and manually set charging timers or plug and unplug their vehicles at the appropriate times, smart charging achieves the same cost savings automatically and consistently.²³¹²³²

Additionally, the CEC's AB 2127 staff report recommends that where possible, state agencies should leverage procurement requirements to accelerate market unification around interoperable communication protocols. CEC recommends that all alternating current (AC) EVSEs be equipped with a Society of Automotive Engineers (SAE) J-1772 connector, be capable of high-level communications using the International Organization for Standards (ISO) 15118 protocol, and be compliant with Open Charge Alliance's Open Charge Point Protocols (OCPP), the latter two are stated to be key protocols that fill two communication gaps critical to achieving convenient, grid-integrated charging.²³²²³³ To ensure the future-proofing of infrastructure installed in PYD2, SDG&E should require the qualification of equipment that is equipped with and SAE J1772 connector, is compliant with OCA OCPP, and has hardware that is remotely upgradable to offer various AC charging features using ISO 15118 high-level communications including, but not limited to, smart charging.

Consistent with the above requirements, SDG&E should administer a transparent process to qualify EVSE eligible for the workplace rebate program.

At a minimum, the EVSE should have²³³²³⁴:

- A connection with a network service provider that is capable of receiving utility Open ADR (IEC 62746-10-1) messages as a Virtual End Node;

²³¹²³² CEC AB 2127 staff report at 51-52.

²³²²³³ CEC AB 2127 staff report at 59.

²³³²³⁴ Exhibit ChargePoint-1 at 13 to 15.

- The capability of being controlled remotely;
- Managed charging capabilities;
- A warranty;
- A maintenance and service plan; and
- Ability to collect, locally store, and communicate data within the EVSE [remotely](#).

Additionally, in an effort to ensure cost transparency within PYD2, SDG&E must include language within qualification agreements to collect EVSP vendor cost data regarding the ongoing networking fee information for utility and customer owned EVSEs. SDG&E should include the networking service costs in the data collection requirements for the PYD2 program evaluation efforts. This information may be shared through the appropriate confidentiality channels if EVSE vendors raise privacy concerns.

ChargePoint notes that managed charging offers multiple benefits to utilities, site hosts, and drivers.²³⁴²³⁵ We agree. SDG&E should encourage site hosts participating in PYD2 to include managed charging as part of their load management plans. The requirement that EVSEs must be capable of connecting to a network service provider to qualify for the PYD2 workplace rebate program ensures that managed charging will be available as a tool for site hosts to [employ load management strategies and/or](#) pass on price signals to drivers. NRDC noted that a small number of Pilot site hosts submitted load management plans under which they did not propose to take any action to communicate price signals to drivers. SDG&E should ~~reject such plans, and~~ require that all [workplace](#) load management plans include some proposed ~~action~~[strategies](#) through which the site hosts can [manage charging in response to price signals and/or](#) pass on price signals to drivers.

²³⁴²³⁵ [Exhibit ChargePoint-1](#) at 13 to 15.

SDG&E must work with its PAC to establish [workplace](#) EVSE qualification criteria, ultimately subject to approval via a Tier 2 AL. SDG&E should conduct a request for qualifications (RFQ) to qualify the equipment and vendors participating in [PYD2: the PYD2 workplace program, including streamlined qualification of equipment and vendors already approved for PYD1](#). Given the short duration of PYD2, SDG&E should have an open, rolling qualification process with qualifications completed at least quarterly. [235236](#)

5.11. Program Advisory Council (PAC)

As outlined in D.16-01-045, SDG&E's PAC will be open to a broad and diverse stakeholder group, including representatives from local government (*i.e.*, San Diego Association of Governments (SANDAG)), state government (including representation from the Energy Division), industry, labor, ratepayer and environmental advocates, and representation from environmental justice groups such as those representing Disadvantaged Communities. [236237](#) As with the Pilot, SDG&E will continue to solicit the participation of a broad and diverse stakeholder advisory group (the "PAC") in planning and implementing PYD2. [237238](#) SDG&E qualifies, it will make programmatic changes as needed during the course of the PYD2 based on PAC input, recognizing that certain changes may require filings with the Commission for approval. [238239](#)

The Pilot is not the first SDG&E program authorized by the Commission to utilize a PAC. SDG&E's MD/HD and AB 1082/1083 programs all utilize the advisory board to implement key program details or discuss programmatic issues. Parties do not raise any concerns regarding SDG&E's proposed PAC for PYD2. We authorize SDG&E to move forward with its proposed PAC make-up

[235236](#) See generally, D.16-12-065.

[236237](#) SDG&E Opening Brief at 29.

[237238](#) SDG&E Opening Brief at 52.

[238239](#) SDG&E Opening Brief at 52.

and look forward to the data and program implementation guidance the PAC will provide. We additionally recognize the fact that programmatic changes will be made on an on-going basis, running concurrent with the PYD2 implementation. We require SDG&E to keep the service list to this proceeding updated on PAC meetings.

5.12. Job Creation

Pub. Util. Code § 740.8 defines “interests” of ratepayers, to mean direct benefits that are specific to ratepayers consistent with several goals, among them the creation of “high-quality jobs or other economic benefits” including in, DACs. In § 740.12(a)(1)(F) the Legislature found widespread TE should create high-quality jobs for Californians, where technologically feasible. Because PYD2 is a ratepayer funded program, benefits must be realized by ratepayers. One of these direct or realized benefits should be the creation of jobs resulting from the investment.

SDG&E contends that, in facilitating TE, PYD2 provides an opportunity for EVSPs to offer to sell to SDG&E, on a competitive basis, equipment and software to implement this program.²³⁹240 SDG&E qualifies that because it is not in the business of making or selling software, the utility is not a direct competitor in this space.²⁴⁰241

As proposed, PYD2 aims to provide high-quality jobs consistent with § 740.12(a)(1)(F). However, the modification that SDG&E open site-host ownership of the EVSE at MUDs adds an additional opportunity for job creation in the EVSP technology market. The 50 percent underserved community target should additionally lead to workforce development by focusing infrastructure in communities that suffer greatest from economic and environmental hardship.

²³⁹240 SDG&E Opening Brief at 48.

²⁴⁰241 SDG&E Opening Brief at 48.

We encourage SDG&E to take steps to ensure that jobs created in underserved communities are filled by members of such communities.

To better evaluate whether PYD2 is in the interest of ratepayers, a more transparent analysis of the number and type of jobs resulting from this TE investment is warranted consistent with § 740.12(a)(1)(F). SDG&E must include the following information in its semi-annual reports to the Commission: number of jobs created by PYD2, the classifications of the new jobs, training required by those jobs, and average hourly wage and any workforce development or job training offered in association with PYD2. The reporting must include the number of jobs created in underserved communities and their average hourly wage, and the number of such jobs filled by members of underserved c
ommunities, in addition to any contractual jobs with women minority and disabled veteran-owned business enterprise consistent with Commission General Order (GO) 156.

5.13. Permitting

SDG&E claims that local permitting can delay and add costs to deployment for charging infrastructure, in part, due to a lack of consistent treatment from jurisdiction to jurisdiction regarding permitting rules and processes. ²⁴¹²⁴² To reduce permitting costs and increase the rate of installation, SDG&E requests that the Commission expressly retain jurisdiction over standards and regulations for the design and construction of charging stations pursuant to the Commission's regulation of a utility's electric plant under the authority granted in § 761 and § 768 to preempt local jurisdictions from the regulating permitting rule. To qualify as Commission regulated equipment,

²⁴¹²⁴² Exhibit SDG&E 2 at 20

SDG&E request the Commission to consider the EV charging infrastructure owned by SDG&E as an “electric power plant,” per § 217.²⁴²²⁴³

Tesla notes that approving SDG&E’s request might conflict with efforts led by the Governor’s Office of Business and Economic Development (GO-Biz) to track compliance with AB 1236 (Chiu, 2015),²⁴³²⁴⁴ who released the EV Charging Station Permitting Guidebook.²⁴⁴²⁴⁵ ~~TURN~~ [Tesla](#) also suggests that SDG&E’s request might provide an unfair competitive advantage to SDG&E owned EVSEs ~~per~~ [versus](#) non-SDG&E owned EVSEs, which will still need to follow the local permitting process.²⁴⁵²⁴⁶

The Commission shares both of Tesla’s concerns. First, regarding the classification of an EVSE as an “electric power plant,” SDG&E has not demonstrated that the Commission has the sole authority to regulate the permitting and construction requirements for charging infrastructure, which is an authority shared by local municipalities. Further, GO 131(D) states that “[T]he construction of electric distribution (under 50 Kilovolt (kV)) line facilities, or substations with a high side voltage under 50 kV, or substation modification projects which increase the voltage of an existing substation to the voltage for which the substation has been previously rated within the existing substation boundaries, does not require the issuance of a Certificate of Public Convenience and Necessity (CPCN) or permit by this Commission nor discretionary permits or approvals by local governments. However, to ensure safety and compliance with local building standards, the utility must first communicate with, and obtain the input of, local authorities regarding land use matters and obtain any

²⁴²²⁴³ Exhibit SDG&E 2 at 21

²⁴³²⁴⁴ AB 1236 added § 65850.7 to the Government code, and requires a city, county, or city and county, to adopt a streamlined EVSE permitting process.

²⁴⁴²⁴⁵ Tesla Response at 3

²⁴⁵²⁴⁶ Tesla Response at 4.

non-discretionary local permits required for the construction and operation of these projects.”^{[246247](#)}

In D.13-07-048, the Commission determined that “[T]he basic law in California concerning Commission preemption of local regulation has been stated in the California Constitution, as well as in case law. “A city, county, or other public body may not regulate matters over which the Legislature grants regulatory power to the Commission.” (Cal. Const., art. XII, § 8.) Even in areas of local concern, “In any conflict between action by a municipality and a lawful order of the Commission the latter prevails.”^{[247248](#)}

Second, we agree with Tesla’s anticompetitive concerns. If the Commission were to approve SDG&E’s request, the rate of approving an EVSE permit ~~would~~^{may} be quicker for utility owned infrastructure than customer-owned EVSE, potentially factoring into a customer’s EVSE ownership decision. While understanding SDG&E’s goal of improving the efficiency of EVSE permitting approval, Tesla’s concerns are valid and were not resolved by SDG&E.

Accordingly, we deny SDG&E’s request to classify the EV charging infrastructure as an “electric power plant” and instead direct SDG&E to seek local EVSE installation permits from the appropriate jurisdiction.

The Legislature has recently indicated through AB 1236 that EVSE permitting is a local jurisdiction role. Additionally, GO-Biz is leading the efforts to develop the Electric Vehicle Charging Station Permitting Guidebook and the companion Permitting Electric Vehicle Charging Station Scorecard, both of which are intended to assist local jurisdictions improve and speed up their EVSE permitting processes. While we do not believe this role should be preempted by Commission jurisdiction, we do believe that utilities can be an important partner

^{[246247](#)} GO 131-D 2-3.

^{[247248](#)} D.13-07-048 at 6 to 7.

to aid local jurisdictions in their efforts to improve permitting procedures. SDG&E should coordinate with Go-Biz to help ~~a municipality~~[municipalities](#) comply with AB 1236 directives.

5.14. Cost Recovery and Balancing Account

5.14.1. Balancing Account

SDG&E requests authority to establish a two-way balancing account for PYD2 to record revenues and costs, as well as participation payments made throughout the course of PYD2. SDG&E requests a two-way balancing account versus a one-way balancing account, explaining that a two-way balancing account will allow the utility to track actual costs to an amount authorized for recovery by the Commission, ensuring that ratepayers are charged for only actual costs and refunded any overcollections.^{[248](#)[249](#)} To support its balancing account request, SDG&E notes that through the implementing the PYD Pilot and other TE programs, the utility has acquired unprecedented real-world experience in designing, administering, constructing and installing EV infrastructure programs.^{[249](#)[250](#)}

Cal Advocates, TURN, SBUA, UCAN, and NDC all support a one-way balancing account to record PYD2 program costs due to the cost over runs in the PYD Pilot. As TURN and Cal Advocates raise in briefs, a two-way balancing account allows “SDG&E to collect program cost overruns from ratepayers.”^{[250](#)[251](#)} NDC provides, “SDGE has not developed additional cost control measures, and does not even acknowledge the failures of their Pilot program implementation or assumptions, and instead seeks to extend it with minimal modifications. Such behavior must not be rewarded with more latitude and discretion in spending,

^{[248](#)[249](#)} SDG&E Opening Brief at 69 to 70; Exhibit SDGE-6 at 2.

^{[249](#)[250](#)} SDG&E Opening Brief at 6 to 7.

^{[250](#)[251](#)} TURN Reply Brief at 18; Cal Advocates Opening Brief at 8.

but with stronger cost controls and regulation.”²⁵¹²⁵² TURN explains that with a two-way balancing account the utility does not make or lose money due to uncertainties in the scope of work, and ratepayers should not bear the risk of cost overruns.²⁵²²⁵³ TURN explains that the Commission will have difficulty evaluating the actual PYD2 cost to ratepayers ~~is~~, and in turn, if the program is in ratepayers’ interest.²⁵³²⁵⁴

Though a two-way balancing account may have been appropriate for the Pilot, SDG&E fails to rebut the claims of the parties above. Moreover, the utility fails to prove how an identical design is reasonable for PYD2 given the significant cost overruns from the Pilot. SDG&E fails to establish how a two-way balancing account will constrain the utility from tracking costs above its authorized recovery, when SDG&E overspent on the Pilot by more than \$25M over the authorized budget. SDG&E has failed to rebut TURN and NDC’s assertions that such a gross overspend lends itself to ~~more~~_{less} discretion in spending.

Given the 56 percent cost overrun that occurred in the Pilot, it would be imprudent for the Commission to approve the same balancing account structure [here](#). Accordingly, we authorize a one-way balancing account for SDG&E to record revenues, costs and participation payments associated with PYD2. Within 30 days of the date of adoption of this Decision, SDG&E shall file a Tier 2 AL with the Commission’s Energy Division to establish the new one-way Power Your Drive 2 Balancing Account (PYD2BA). SDG&E shall record all capital and direct costs, as well as participation payments made throughout the course of PYD2.

²⁵¹²⁵² TURN Reply Brief at 18; NDC Opening Brief at 8.

²⁵²²⁵³ TURN Reply Brief at 18 to 19.

²⁵³²⁵⁴ TURN Reply Brief at 18 to 19.

5.14.2. Cost Recovery

SDG&E proposes to allocate the entire cost of the PYD 2 program using the distribution cost allocator and collect the costs through each customer

~~classes~~class' distribution rates. ²⁵⁴255

TURN and Cal Advocates contend that SDG&E's proposed cost allocation should be rejected because it disproportionately impacts residential customers whereas TE programs and policies should benefit all Californians. ²⁵⁵256 They argue that in order to ensure all customers pay their fair share for these environmental programs, the costs should be allocated on an equal cents per kilowatt-hour (equal cents) basis to all customer classes and recovered through public purpose program rates as a non-bypassable charge (NBC), or alternatively using an equal ~~center~~cents per kWh cost allocation through distribution rates. ²⁵⁶257

To support this request, Cal Advocates explains why PYD2 is distinct from other utility programs that usually recover costs through distribution rates. ²⁵⁷258 First, the primary purpose of PYD2 is to support the state's GHG and air pollution reduction goals – not customer demand or customer growth. ²⁵⁸259 Second, the type of distribution infrastructure installed in PYD2 provides different benefits than SDG&E's general distribution infrastructure. ²⁵⁹260 Because the majority (99 percent) of PYD2's distribution infrastructure costs are “customer-specific (*e.g.*, customer side meters, trenching, and conduit)” and only

²⁵⁴255 Exhibit SDGE-4 at 1.

²⁵⁵256 TURN Opening Brief at 32.

²⁵⁶257 TURN Opening Brief at 32.

²⁵⁷258 Cal Advocates Opening Brief at 15.

²⁵⁸259 Cal Advocates Opening Brief at 15; In comparison, the distribution allocator reflects the installation or upgrade of SDG&E's distribution infrastructure based on demand profiles and customer growth for each customer class.

²⁵⁹260 Cal Advocates Opening Brief at 16.

serve to connect participating customers' EVSE to the grid, only one percent of PYD2 distribution infrastructure costs may benefit residential and small commercial customers by providing upstream grid capacity.²⁶⁰²⁶¹ This is in contrast to SDG&E's general distribution infrastructure whereby 60 percent of those costs provide benefits to residential and small commercial customers.²⁶¹²⁶² Cal Advocates provides that applying equal cents per kWh allocation would reduce ~~PY~~PYD2's revenue requirement to residential and small commercial customers from approximately \$74M to \$56M.²⁶²²⁶³

The Commission has already authorized over \$1 billion in TE infrastructure programs for the three large investor-owned utilities (SDG&E, PG&E and SCE) and is mindful of the cost impact of TE programs on ratepayers, especially residential customers who are facing extraordinary affordability challenges. Similar to our rationale in D.20-08-045, we are persuaded by the arguments raised by TURN and Cal Advocates that all customers benefit from the infrastructure and emission reduction objectives the PYD2 investment aims to accomplish. Accordingly, cost recovery for PYD2 shall occur through distribution rates and allocated to customer classes on an equal cents per kWh basis to ensure that costs and benefits are shared equitably by all customers.²⁶³²⁶⁴

This decision is not intended to be precedential on this issue of cost allocation. Any subsequent TE infrastructure funding will be subject to the cost allocation authorization made in that proceeding.

²⁶⁰²⁶¹ Exhibit Cal Advocates-1 at 2 to 4.

²⁶¹²⁶² Exhibit Cal Advocates-1 at 2 to 4; Cal Advocates Opening Brief at 16.

²⁶²²⁶³ Exhibit Cal Advocates-1 at 2 to 7; Cal Advocates Opening Brief at 17.

²⁶³²⁶⁴ TURN Opening Brief at 33, citing D.20-08-045 at 107.

5.15. ~~Tranche Funding/Interim Metrics~~

~~SDG&E has not adequately demonstrated efficient use of ratepayer funds in the Pilot or sufficiently explained its cost overruns.²⁶⁴ SDG&E's comments touched on the need for flexibility in program deployment and customer (site host) implementation. The modifications outlined in Section 5 do not unduly curb this flexibility. As addressed in the preceding sections, SDG&E fails to show that PYD2, as proposed, will minimize costs and maximize ratepayer benefits, justifying Commission modification of the utility's proposed charging program. Recognizing, however, the need for flexibility and the potential for changes during this unprecedented time due to the COVID-19 pandemic, we authorize the full direct program costs (\$43.5M) for PYD2 in two tranches. The tranches should be a (50/50) split, providing SDG&E the option to propose changes to the modifications authorized in this decision related to its approved funding.~~

~~SDG&E shall work with its PAC to establish interim PYD2 program metrics whereby the utility can clearly demonstrate it is on track to meet the overall program requirements and transparently show where there is customer demand for the second tranche of PYD2 funding. SDG&E shall file a Tier 1 AL with the Commission's Energy Division within 60 days to establish the interim metrics agreed upon by the PAC. These interim metrics should at minimum, include: (1) minimum number of ports installed through the first tranche of funding; (2) average per port costs (program wide and workplace/MUD), (3) minimum percentage of ports installed at MUDs and sites serving MUDs, (4) minimum percentage of ports sited in underserved communities, (5) minimum percentage of PYD2 MUD customers opting for customer EVSE ownership, and~~

²⁶⁴ ~~NDC Reply Brief at 8.~~

~~(6) minimum percentage of PYD2 customers opting for ownership of the customer side make-ready infrastructure.~~

~~Tranche funding is not a novel approach to TE program investments. For example, in SDG&E's medium and heavy-duty EV application (A.18-01-012) the utility along with 14 settling parties, requested the Commission authorize approximately 80 percent of the budget with the issuance of the decision and then the remaining (\$23.4M) after the filing and disposition of a Tier 2 AL.²⁶⁵ SDG&E and the settling parties adopted interim metrics by which the utility could base its interim program goals on, such as respective minimum installation and DAC targets.²⁶⁶ Furthermore, filing of the Tier 2 advice letter would only occur once 66 percent of the programs authorized infrastructure budget had been committed.²⁶⁷ Similarly, SCE's Charge Ready 1 (pilot) had interim metrics (12 months of program implementation and at least 1,000 ports) that had to be met before SCE could file its Charge Ready 2 application.~~

~~While the program size and budget for SDG&E's medium and heavy-duty program (\$107.4M) is larger than the one we authorize for PYD2 (\$43.5M), we provide details of the tranche funding in D.19-08-026 and D.16-01-023 to act as a guide for SDG&E and its PAC as it works to design PYD2 interim metrics.—~~

~~SDG&E shall file a Tier 2 advice letter to request the second tranche of funding. This advice letter must reflect SDG&E's progress in achieving their agreed-upon interim metrics.—~~

5.15. ~~5.16.~~ Authorized Funding

As discussed throughout the preceding sections, parties raise concerns over SDG&E's proposed balancing account and cost allocation methodology

²⁶⁵ ~~D.19-08-026 at 23-25.—~~

²⁶⁶ ~~D.19-08-026 at 24.—~~

²⁶⁷ ~~D.19-08-026 at 24.—~~

given the \$25M cost overrun from the Pilot. As reference, the below table reflects PYD2's direct program cost estimates by year:²⁶⁸²⁶⁵

Table 4: PYD Extension Program Direct Cost Estimates
(In Millions, 2019\$)

	2021	2022	2023	2024	Total
Capital	4.1	\$20.3	\$10.2	\$0.0	\$34.7
O&M	\$0.3	\$2.8	\$2.6	\$0.0	\$5.7
Total Implementation:	\$4.4	\$23.1	\$12.8	\$0.0	\$40.7
Ongoing O&M	\$0.3	\$0.9	\$1.0	\$1.0	\$3.1
Direct Cost Total:	\$4.7	\$24.0	\$13.8	\$1.0	\$43.5

SDG&E provides that the ongoing O&M amount is intended to carry the program through the next GRC. SDG&E clarifies that the direct cost estimates reflected below includes 10 percent contingency on unescalated direct costs.

Table 5: Total Capital and O&M

(In Millions, includes escalation, overheads AFUDC, and capitalized property tax)

	2021	2022	2023	2024	Total
Capital	\$5.8	\$25.9	\$13.8	\$0.0	\$45.5
O&M	\$0.4	\$3.5	\$3.1	\$0.0	\$7.0
Total Implementation:	\$6.2	\$29.4	\$16.9	\$0.0	\$52.5
Ongoing O&M	\$0.5	\$1.6	\$1.9	\$1.9	\$5.9
Total Request:	\$6.7	\$31.0	\$18.8	\$1.9	\$58.4

SDG&E provides that Table 6 includes a 10 percent contingency on unescalated direct and indirect costs.²⁶⁹²⁶⁶

²⁶⁸²⁶⁵ Exhibit SDGE-3 at 5 to 6.

²⁶⁹²⁶⁶ Exhibit SDGE-3 at 6.

Table 6: Forecasted Revenue Requirement Summary
(In Millions)

	2021	2022	2023	2024	2025	2026-2084	Total
CPUC	\$1.0	\$7.5	\$10.9	\$8.5	\$6.4	\$88.7	\$123.0
FERC	\$0.0	\$0.2	\$0.3	\$0.3	\$0.3	\$1.5	\$2.6
Revenue Requirement	\$1.0	\$7.7	\$11.2	\$8.8	\$6.7	\$90.2	\$125.6

SDG&E provides that the annual revenue requirement amount associated with the return on capital is equal to the amount of capital that is depreciated each year.²⁷⁰²⁶⁷ SDG&E will determine the actual capital and any applicable O&M costs of ~~PY~~PYD2 as it is completed and will calculate the actual revenue requirements associated with those costs for recovery in rates.²⁷¹²⁶⁸

Given the modifications the Commission adopts for PYD2, there will be shifts in the capital and expenses categories. For instance, the modification that ~~50~~20 percent of ~~MUDs opt for customer ownership of sites have~~ customer-side make-ready infrastructure ~~are customer-owned by the customer,~~ in addition to ~~providing customer-l~~imiting utility ownership of the EVSE at ~~only~~ MUDs ~~and workplaces~~~~i~~n underserved communities, removes costs from the capitalization category. We therefore understand the request for fungible funding. However, given the \$25M cost overrun from the Pilot, we are cautious of providing the utility with too much flexibility in recording the costs for PYD2.

Today's decision approves a budget of \$43.5M dollars, fungible across program categories. Recognizing the shift between expense and capitalization categories, as well as ongoing O&M costs, we additionally approve the proposed 10 percent contingency for cost escalations.

²⁷⁰²⁶⁷ Exhibit SDGE-5 at 4.

²⁷¹²⁶⁸ Exhibit SDGE-5 at 5 to 6.

Similar to our TE decisions for the SB 350 Standard Review Projects (D.18-05-040) and SDG&E MD/HD program (D.19-08-026), we adopt the following “*per se* reasonableness metrics.” If SDG&E achieves these requirements, its authorized spending will be deemed reasonable.²⁷²²⁶⁹ Costs incurred for PYD2 up to the authorized level will be considered *per se* reasonable provided: (1) at least 50 percent of sites are in underserved communities; (2) at least 50 percent of sites are at MUDs or sites serving MUDs; (3) at least ~~50~~²⁰ percent of sites ~~at MUDs or sites serving MUDs are customer-owned; (4) at least 50 percent of sites at MUDs or serving MUDs have customer-side make-ready infrastructure owned by the customer; 4) SDG&E owns EVSEs only in MUDs located in underserved communities;~~ and (5) SDG&E does not exceed an average per port cost of \$15,000. ~~Costs above authorized levels will be borne by SDG&E shareholders.~~

In the event that SDG&E meets *per se* reasonableness metrics 1 through 4, its authorized spending will be considered *per se* reasonable provided that at the end of the program period, the average per port cost does not exceed \$15,000. If at the end of the program period, per port average costs exceed \$15,000, SDG&E may seek recovery for the difference between a baseline of \$15,000 average per port costs and the actual direct costs per port, up to \$18,131 per port, through a reasonableness review in a subsequent GRC. If per port costs average more than \$18,131, the costs above \$18,131 are not authorized for recovery.

6. Audit of PYD Pilot Costs

SDG&E bases its cost assumptions for PYD2 on cost information from the Pilot.²⁷³²⁷⁰ While SDG&E attempts to show how different site types and parking lot sizes attribute to the different costs from the Pilot, there remains the

²⁷²²⁶⁹ D.19-08-026 at 23.

²⁷³²⁷⁰ SDG&E Opening Brief at 54 to 55.

outstanding question of how SDG&E spent \$70,253,053 on the Pilot, when the utility was authorized \$45M. The variance of \$25,253,053 from what the utility was authorized in 2016 is concerning.

TURN and UCAN argue that the Commission must better understand why the cost overruns occurred in the Pilot, with TURN recommending an audit of Pilot cost data and related overruns.²⁷⁴²⁷¹ TURN states that SDG&E has not adequately explained why it overspent its authorized funding by ~~55~~56 percent. As the ratepayer advocacy group provided in opening testimony:

The magnitude of SDG&E's cost overruns has not been truly explained by the utility. The fact that SDG&E's costs are so inconsistent with the other utilities has also not been clarified and leaves one to question whether these costs were recorded correctly, and if they were, to what extent they were avoidable. The following facts are worrisome: ratepayers paid at least a portion of consultant fees that may have gone over budget, \$3.6 million of the overrun is due to AFUDC and "loaders," and \$1 million is categorized as "other." These issues also highlight a lack of transparency and granularity regarding why these costs were so much higher than SDG&E's original forecast, which was more consistent with other IOU recorded costs.²⁷⁵²⁷²

TURN comments that there are a large amount of fixed costs for each TE site, that when spread over more ports tend to reduce the per port (unit) costs.²⁷⁶²⁷³

According to TURN, it is not clear why SDG&E's costs do not show the same degree of these economies of scale as SCE's similarly-structured Charge Ready Pilot.²⁷⁷²⁷⁴ In order to evaluate how SDG&E allocated costs for the pilot and how

²⁷⁴²⁷¹ UCAN Reply Brief at 3 to 4.

²⁷⁵²⁷² Exhibit TURN-1 at 21.

²⁷⁶²⁷³ TURN Opening Brief at 8.

²⁷⁷²⁷⁴ TURN Opening Brief at 8.

it managed its program, TURN recommends the Commission order an audit of SDG&E's accounting practices and procedures.^{[278275](#)}

As we addressed in Section 5.3, this is not the first time the Commission has had cost concerns on SDG&E TE proposals. The more than \$25M overspend is concerning. First, it does not lend itself to the cost controls SDG&E purports the ~~pilot~~[Pilot](#) had in place. Second, as TURN shows, the \$25M overspend is indicative of a lack of transparency in SDG&E's cost reporting. And third, while these statements are focused on the Pilot, the fact that SDG&E based PYD2 on lessons learned from the Pilot, makes it even more important for SDG&E to explain ~~these overruns~~.[these overruns](#).

^{[278275](#)} [TURN](#) Opening Brief at 8.

As discussed throughout Section 5, our authorization of PYD2 does not rest on the cost assumptions SDG&E developed from the Pilot. While the TE statutes do not expressly call for a detailed review of TE program costs, such programs shall seek to minimize overall costs and maximize overall benefits.²⁷⁹²⁷⁶ And while SDG&E provides ample testimony to support PYD2, the utility has failed to show accounting practices the utility will implement to ensure an overspend does not occur in the extension.

We adopt TURN's recommendation, and direct SDG&E to hire an independent consultant to conduct a detailed review of the Pilot, to provide a transparent overview of SDG&E's costs and cost containment measures. SDG&E should work with the Commission's Energy Division to design the scope of work for the audit and selecting an independent third-party to perform the audit. At a minimum the audit should address: (1) an identification of the drivers of the cost overruns; (2) a review of SDG&E's accounting practices and procedures for the Pilot; (3) a description of SDG&E's internal Pilot management procedures and oversight; and (4) if necessary, recommendations to lower the costs for PYD2.

~~Given that ratepayers bear the burden of the \$25M overspend from the Pilot, they should not be responsible for funding this audit.~~ While we decline to set a budget for the audit, we direct the full cost be funded by SDG&E shareholders. SDG&E shall file and serve a final audit report on the service list for this proceeding within 120 days of adoption of this decision.²⁸⁰²⁷⁷

7. Data Gathering Requirements

²⁷⁹²⁷⁶ § 740.12(b).

²⁸⁰²⁷⁷ In the event of confidentiality issues, SDG&E can file a redacted version of the audit on the docket card to this proceeding.

SDG&E plans to continue to study and learn from the EV charging infrastructure deployments at workplaces and MUDs after installation.²⁸¹²⁷⁸ Like the SB 350 Priority Review Programs,²⁸²²⁷⁹ SDG&E proposes to collect and periodically report on project data to its PAC and the Commission semi-annually using the latest Energy Division reporting template. In addition, SDG&E also proposes to use the Energy Division's updated final report template to issue a final project report to the PAC and the Commission. SDG&E cautions that due to site host and utility-ownership options, SDG&E may only be able to report on workplace charging data in PYD2 from the aggregated utility meter.²⁸³²⁸⁰

Although SDG&E provided information to its PAC through its semi-annual Pilot reports, TURN found these reports lacked key program information.²⁸⁴²⁸¹ At a minimum TURN recommends the following be assessed during the PYD2 program: (1) more detailed cost tracking, to align with the cost categories included in SCE's Charge Ready 2 workpapers,²⁸⁵²⁸² (2) display site level utilization, as a percentage of maximum charging; (3) track customer charging patterns, where possible, at both the residence and workplace; (4) determine through actual tracking and surveys the percentage of drivers who utilize only workplace charging instead of residential charging; (5) display cost (\$/port) by site and port count, rather than averages or aggregates; (6) explanation of how GHG and other metrics are calculated, and use of reasonable standardized methodologies that reflect likely GHG reductions and gasoline savings; (7) track types of EVs used at PYD2 sites, by model and type, perhaps for a random sample of sites; (8) include EV market research specific to SDG&E

²⁸¹²⁷⁸ Exhibit SDGE-2 at 20.

²⁸²²⁷⁹ See generally, D.18-01-024.

²⁸³²⁸⁰ Exhibit SDGE-2 at 20.

²⁸⁴²⁸¹ Exhibit TURN-1 at 34.

²⁸⁵²⁸² Exhibit TURN-1 at 35 footnote 91.

service territory; and (9) use of a more reasonable “baseline” for load-shift calculations.²⁸⁶²⁸³

SDG&E currently uses a four-month baseline in its reports, which TURN purports is not an accurate methodology to determine the impact of the utility’s VGI rate.²⁸⁷²⁸⁴ TURN recommends rate and demand response programs be developed that can apply to all sites, regardless of utility ownership of EV infrastructure. Furthermore, TURN argues SDG&E should clarify whether there are ratepayer benefits (cost savings) from VGI sites which shift load during peak distribution events.²⁸⁸²⁸⁵

Pub. Util. Code § 740.12(c) requires that before the Commission can authorize “an electrical corporation to collect new program costs related to transportation electrification in customer rates,” the Commission “shall review data concerning current and future electric transportation adoption and charging infrastructure utilization....”²⁸⁹²⁸⁶ Because the Commission is statutorily mandated to review data concerning current and future TE programs and EV adoption, it is essential that data collected through PYD2 provide a complete record of the authorized investment and charging infrastructure deployment. Although SDG&E provided data in its semi-annual reports, and through the course of discovery, we are concerned that TURN found the pilot reports lacked essential information to accurately measure the successes/failures of the Pilot. While we recognize that each service territory and utility is unique, we do not

²⁸⁶²⁸³ Exhibit TURN-1 at 35.

²⁸⁷²⁸⁴ Exhibit TURN-1 at 38 to 39.

²⁸⁸²⁸⁵ Exhibit TURN-1 at 39.

²⁸⁹²⁸⁶ Section 740.12(c) also states: “If market barriers unrelated to the investment made by an electric corporation prevent electric transportation from adequately utilizing available charging infrastructure, the commission shall not permit additional investments in transportation electrification without a reasonable showing that the investments would not result in long-term stranded costs recoverable from ratepayers.”

find the recommendation for SDG&E to align its PYD2 cost categories with SCE's Charge Ready 2 workpapers to be administratively burdensome. Moreover, we are unpersuaded that TURN's data collection recommendations raise to the level of a "speculative improvement"²⁹⁰²⁸⁷ on the PYD2 program. TURN's data gathering recommendations are specific to the data gaps from the Pilot. Adopting these data point categories will help the Commission evaluate EV adoption attributable to the authorized PYD2 investment. This data can additionally be used to inform other state agencies how to size and site EV charging throughout San Diego, and statewide.

Pursuant to § 740.12(b), we modify SDG&E's data gathering requirements to include the above nine criteria, as proposed by TURN. SDG&E must include provisions within the customer agreement and within its agreement with qualified participating vendors for PYD2, including EVSPs regarding giving SDG&E and its contracted evaluator access to data. SDG&E should work with its PAC to implement these data gathering requirements and align such data points with Pilot and PYD2 sites.

8. Evaluation

Pub. Util. Code § 740.12(c) requires the Commission to review data concerning the current and future electric transportation adoption and charging infrastructure utilization prior to authorizing an electrical corporation to collect new program costs related to transportation in customer rates.

In testimony, SDG&E provides it will continue to study and learn from the EV charging infrastructure deployments at workplaces and MUDs after installation.²⁹¹²⁸⁸ Like the SB 350 Priority Review Programs, SDG&E proposes to collect and periodically report on project data to the PAC and the Commission

²⁹⁰²⁸⁷ SDG&E Reply Brief at 3.

²⁹¹²⁸⁸ Exhibit SDGE-2 at 20.

semi-annually using the latest Energy Division reporting template.²⁹²²⁸⁹ In addition, SDG&E also proposes to use the Energy Division's updated final report template to issue a final project report to the PAC and the Commission.²⁹³²⁹⁰

Consistent with previous TE decisions,²⁹⁴²⁹¹ it is essential that the extension program collect and report on data in a meaningful way to enable the Commission and stakeholders to evaluate the effectiveness of the charging program. To assist in this evaluation effort, SDG&E must contract with a neutral third-party to collect data on and evaluate PYD2. SDG&E should conduct a competitive solicitation to select a neutral third-party evaluator to conduct this work and consult with Energy Division regarding the scope of evaluations and deliverables. A neutral third-party evaluator will ensure accurate evaluation of the PYD2 investment. SDG&E must contract with this third-party evaluator within one year of the date of adoption of this decision, to allow the evaluator to identify all data and information that must be collected throughout the program to ensure they can accurately assess progress toward program goals. SDG&E should coordinate the scope of the evaluation with the one currently underway for the SB 350 Priority Review Projects (D.18-01-024).

As part of evaluation efforts, SDG&E should work with its PAC to identify reasons for variance in site utilization levels. Collecting and reviewing this data is necessary to help the Commission evaluate future light-duty charging infrastructure programs. SDG&E should ensure the scope of the third-party evaluation include a study of site-level utilization to understand key drivers of charging utilization.

²⁹²²⁸⁹ Exhibit SDGE-2 at 20.

²⁹³²⁹⁰ Exhibit SDGE-2 at 20.

²⁹⁴²⁹¹ See D.20-08-045 at 116.

SDG&E is authorized three percent of their total direct program costs (3 percent of \$43.5M = \$1.365M) to fund a third-party evaluator for PYD2.²⁹⁵[292](#) Although past TE programs have dedicated four percent of their budgets for evaluation efforts, these programs have been funded by several utilities. In our most recent TE program decision, SCE was authorized \$4.3M (or one percent of the authorized Charge Ready 2 budget) given the overall size of the program. Like our direction in Charge Ready 2, SDG&E should coordinate with the Commission's Energy Division on evaluation metrics, consistent with Section 7 of the instant decision.

9. Safety Considerations

The Commission's focus on ensuring utilities provide safe and reliable service is an overarching focus in the emerging transportation electrification industry. § 740.8 defines the "interests" of ratepayers to mean: direct benefits that are specific to ratepayers consistent with safer, more reliable, or less costly gas or electrical service consistent with § 451. An assigned commissioner's ruling (ACR)²⁹⁶[293](#) directed that SB 350 applications include a plan to ensure worker, customer, and driver safety. The ACR directed that this safety plan be based on the draft safety checklist developed for the SB 350 standard review and priority review transportation electrification projects and contain any additional safety requirements specific to the proposed pilots. Safety and Enforcement Division (SED) staff issued a data request to better understand how the utilities are addressing these objectives. Based on the responses, SED staff developed a draft Safety Requirements Checklist for the TE programs, available on

²⁹⁵[292](#) As a reference, D.18-05-040 adopted four percent of the total budget split amongst SDG&E, PG&E and SCE and D.19-08-026 adopted the same percentage amount, but to be borne exclusively by SDG&E for its MD/HD program.

²⁹⁶[293](#) See ACR issued in R.13-11-007.

www.cpuc.ca.gov/sb350te under the “SB 350 TE Reporting Requirements” section of this page.

The Safety Requirements Checklist is intended to consolidate current standards and requirements in one place and to ensure the utility infrastructure is installed and operated safely and does not adversely affect reliability of electrical service.

No later than 18 months after today’s decision is approved, SDG&E must file a Tier 1 AL with the Commission’s Energy Division describing their compliance efforts. The advice letter must contain an attestation of compliance with these requirements, signed by the Project Manager. SDG&E should outline any efforts that go beyond the Safety Checklist along with an explanation as to why these are appropriate and necessary from a safety perspective. SDG&E should file a final safety attestation, using the same template developed for the priority and standard review transportation electrification projects in D.18-05-040, or an updated checklist, along with its annual report on PYD2.

The Commission will review SDG&E’s compliance with the Safety Requirements Checklist and may conduct inspections or audits to confirm compliance. SDG&E must have all compliance documentation available should the Commission determine an inspection or audit is necessary.

10. Outstanding Procedural Matters

The Commission affirms all rulings made by the assigned Commissioner and assigned ALJ. All motions not previously ruled on are deemed denied.

While not every party’s testimony and briefs are explicitly cited in this decision, each party provided a substantial contribution to the overall outcome and program modifications adopted here. The Commission acknowledges and

appreciates the work of the broad stakeholder participation in this transportation electrification proceeding.

11. Comments on Proposed Decision

The proposed decision of Administrative Law Judge (ALJ) Sasha Goldberg in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code. Comments allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure were filed on _____ by _____ and reply ~~comments were filed on~~ _____ by _____; March 8, 2021 by SDG&E, Cal Advocates, TURN, NDC, UCAN, ChargePoint, Joint Parties, and EDF Renewables. Reply comments were filed on March 15, 2021 by SDG&E, TURN, NDC, UCAN, ChargePoint, Joint Parties and EDF Renewables.

In response to comments, changes have been made throughout the decision to improve clarity. A few changes however, we feel necessary to discuss and highlight below.

Underserved Community Target

In response to comments, we eliminate a pathway for SDG&E to revise its underserved community target. SDG&E is required to place 50 percent of PYD2 sites in underserved communities. Given the expansive criteria defining an underserved community under AB 841, SDG&E should have ample options to site chargers in such communities for PYD2. The requirement that 50 percent of all PYD2 sites be in underserved communities is reflected in corresponding finding of facts and ordering paragraphs. This revision streamlines PYD2 implementation by eliminating an advice letter filing requirement.

Interim Metrics/Tranche Funding

In response to comments, we have revised the proposed decision to eliminate interim metrics at the twelve-month mark to release a second “tranche” of PYD2 funding. In weighing the arguments surrounding the tranche funding and interim metrics, the Commission was persuaded that these provisions overly complicate PYD2’s two-year timeframe. This revision streamlines PYD2 implementation by eliminating two advice letter filing requirements.

Customer Ownership

In response to comments, we modify SDG&E’s customer ownership targets. While these customer ownership targets provide some cost savings, we understand the need for flexibility given the limited duration of this two-year extension program and the current state of infrastructure deployment. Accordingly, SDG&E shall ensure that at least 20 percent of all PYD2 sites have uncapitalized BTM infrastructure. Put another way, SDG&E is authorized to own no more than 80 percent of the customer-side make-readies for PYD2. This target is reflected in the per se reasonableness metrics, and corresponding ordering paragraphs.

Second, on the ownership piece, we modify the requirement of utility ownership of the EVSE, or L2 charger. SDG&E is authorized to own the EVSE only at MUDs located in underserved communities. This modification focuses utility ownership of the EVSE in areas and sites that face the strongest barriers to acquire EV charging. This modification is reflected in the per se reasonableness metrics and corresponding ordering paragraphs.

Per Port Average Cost Cap- In response to comments, the Commission revisited the proposed decision’s \$15,000 per port average. Parties are

overwhelmingly split on what the per port average for PYD2 should be, with SDG&E and the Joint Parties advocating for a higher amount, and the ratepayer advocates supportive of the \$15,000 figure. While today's decision does not modify the \$15,000 per port average cost cap head-on, we provide some flexibility noting SDG&E's proposed \$18,131 direct per port costs. The proposed decision required that SDG&E meet a \$15,000 per port average for its authorized spending to be considered *per se* reasonable. We modify this requirement as follow. In the event that SDG&E meets *per se* reasonableness metrics 1 through 4, its authorized spending will considered *per se* reasonable provided that at the end of the program period, the average per port cost does not exceed \$15,000. If at the end of the program period, per port average costs exceed \$15,000, SDG&E may seek recovery for the difference between a baseline of \$15,000 average per port costs and the actual direct costs per port, up to \$18,131²⁹⁴ per port, through a reasonableness review in a subsequent GRC. If per port costs average more than \$18,131 the costs above \$18,131 are not authorized for recovery. This modification is reflected Section 5.14 and corresponding ordering paragraphs.

12. Categorization and Need for Hearing

In Resolution ALJ 176-3451, the Commission preliminary categorized this proceeding as ratesetting, and preliminarily determined that hearings were necessary. Evidentiary hearings were held virtually November 9, 10, 12 and 13, 2020 utilizing the Commission's WebEx platform.

13. Assignment of Proceeding

Clifford Rechtschaffen is the assigned Commissioner and Sasha Goldberg is the assigned ~~Administrative Law Judge~~ALJ in this proceeding.

²⁹⁴ SDG&E Opening Comments at 6.

Findings of Fact

1. SDG&E implemented the Pilot installing 3,040 utility-owned and operated charge ports at 254 sites.
2. Of the 254 sites, 32 percent are within DACs, exceeding SDG&E's 10 percent target, and 39 percent are at MUDs.
3. From inception to January 31, 2020, SDG&E spent \$70,253,053 on the PYD Pilot, a variance of \$25,253,053 from what the utility was authorized in 2016.
4. SDG&E fails to show how its proposed 10 percent DAC target maximizes ratepayer investments in direct support to areas that need it the most.
5. Applying the underserved community definition in AB 841 to PYD2 is consistent with Executive Order N-79-20's directive that [the](#) Commission accelerate deployment of charging options for ZEVs in low-income or underserved communities.
6. A higher minimum DAC deployment requirement is necessary and consistent with AB 841's directive that [a minimum of](#) 35 percent of the investments be made in underserved communities.
7. Utilizing the underserved community definition provides the opportunity to focus TE investment in 40 percent of SDG&E's lowest income and most polluted communities.
8. Other investor-owned utilities running similar TE programs have been successful in exceeding a 10 percent DAC target.
9. The 50 percent underserved community [deployment](#) requirement is reflective of other equity goals the Commission has adopted for TE programs (e.g., Charge Ready 2).
10. SDG&E may qualify MUDs for purposes of its 50 percent infrastructure target using "sites serving MUDs." This additional flexibility aims to address

parking lot constraints and trenching problems SDG&E found caused MUD sites to not qualify for the PYD pilot.

11. SDG&E fails to establish why an MUD owner would not want the choice to own the EVSE.

12. A 50 percent MUD deployment target not only aligns with the statutory requirements of AB 841 but seeks to maximize ratepayer investments in SDG&E's most polluted and low-income service areas.

13. SDG&E fails to show what the per port average should be, when the \$21,605 figure excludes ongoing maintenance costs, and is before contingency and escalation.

14. SCE's Charge Ready 2 pilot resulted in an average per port cost of \$13,731, while PG&E's EV Charge Network yielded an average per port cost of \$17,956.

15. TURN and SBUA show reasonable cost-sharing recommendations for ~~sites that exceed the \$15,000 per port average~~ all sites. All workplace sites shall pay at least 20 percent of total costs. At MUDs or sites serving MUDs, site hosts should bear responsibility for 10 percent of the costs over \$20,000 per port. Sites that wish to pay more for their site costs in order to qualify for SDG&E's program should not be restricted from doing so.

16. Modifying PYD2 to offer customer-ownership of the EVSE at ~~both~~-MUDs ~~and workplaces~~ provides potential ratepayer savings by eliminating an automatic rate of return on utility-owned EVSE.

17. SDG&E has not demonstrated a need to require utility ownership of infrastructure installed on the customer-side of the meter at all MUD sites.

18. Requiring site hosts to contribute a portion of customer-side costs will also lower overall per port costs as it will incentivize more economic charger locations while also reducing the overall cost burden to ratepayers.

19. Additional parity should be adopted for small business workplaces.

20.2 The Commission has yet to ~~Not review~~ data showing that network service
0

and maintenance rebates create an unequal playing field for non-utility enterprises.

21. The Rate-to-Driver option provides a complicated set of pricing thresholds to drivers, including full shut-off of PYD chargers if day-ahead prices exceed certain targets.

22. Pricing thresholds are a source of driver confusion and dissatisfaction.

~~23. The benefits of EV charging cannot be realized if the end-use pricing to EV drivers does not reflect the underlying time-of-use rates.~~

~~3~~ 3. ~~24.~~ SDG&E fails to establish the VGI rate component from the pilot provides improved use of the electric system when SDG&E proposes modifications to the very calculation of the rate itself.

~~4~~ 4. ~~25.~~ SDG&E fails to prove how an identical ~~design~~balancing account is reasonable for PYD2 given the significant cost overruns from the pilot.

~~5~~ 5. ~~26.~~ SDG&E fails to establish how a two-way balancing account will constrain the utility from tracking costs above its authorized recovery, when SDG&E overspent on the PYD pilot by more than \$25 million over the authorized budget.

~~6~~ 6. ~~27.~~ In January 2021, in compliance with AB 2127 (Ting, 2018), the CEC issued a draft *Electric Vehicle Charging Infrastructure Assessment* report (AB 2127 staff report).

~~7~~ 7. ~~28~~. SDG&E has not demonstrated that the Commission has the sole authority to regulate the permitting and construction requirements for charging infrastructure.

~~8~~ 8. ~~29~~. Regulation of permitting and construction requirements for charging infrastructure is an authority shared by local municipalities.

~~9~~ 9. ~~30~~. SDG&E should coordinate with Go-Biz to help ~~a municipality~~ municipalities comply with AB 1236 directives.

~~0~~ 0. ~~31~~. The authorization of PYD2 does not rest on the cost assumptions the utility developed from the ~~pilot~~ Pilot.

~~3~~ 1. ~~32~~. An independent audit of the PYD ~~pilot~~ Pilot costs prior to the implementation of PYD2 will help ensure ~~the~~ ratepayer ~~investment~~ investments are not mismanaged for a second time.

Conclusions of Law

1. As the applicant, SDG&E has the burden to demonstrate their proposal is just and reasonable, and that it will effectively and efficiently provide ratepayer benefits.

2. SDG&E should apply the underserved community definition pursuant to AB 841 to PYD2.

3. Increasing SDG&E's equity requirement to siting 50 percent of sites in underserved communities pursuant to AB 841 should provide direct ratepayer benefits to the customers funding PYD2.

4. A \$15,000 per port average cost cap minimizes overall costs and maximizes emission reduction and charger availability in underserved communities, consistent with § 740.8, and should be approved. SDG&E should collaborate with SCE to ensure cost reporting is comparable and the per port average cost cap is properly enforced.

5. Modifying PYD2 to offer customer-ownership of the EVSE at ~~both MUDs and workplaces~~ provides customers with a choice of ownership and potential ratepayer savings consistent with § 740.12(b), and should be approved.

6. To truly evaluate whether utility- or site-host ownership is preferable in the MUD sector, SDG&E should work with its PAC to offer participants choosing site-host ownership a rebate that should be equal to the cost of the charging, maintenance, and network fees for L2 EVSE.

7. EVSE qualifications should align with the CEC AB 2127 staff report to support the state's EV adoption and GHG emission reduction goals.

8. The default arrangement at Rate-to-Host sites that site hosts pass underlying time-variant price signals through to drivers, [with the option to offer customized pricing](#), ensures PYD2 manages EV load to improve the utilization of the electric grid and deliver fuel cost savings, consistent § 740.8 and § 740.12, and should be approved.

9. Section 4 of AB 841 should apply to any [installation](#) work on PYD2.

10. Cost recovery for PYD2 should occur through distribution rates and allocated to customer classes on an equal cents per kWh basis to ensure that costs and benefits are shared equitably by all customers.

11. Ratepayers should not bear responsibility for costs exceeding \$25,000 per port. SDG&E shareholders [or the site host, if they so choose](#), must bear the additional costs that exceed \$25,000 per port at an individual site, minus the site-host's cost-sharing requirements.

12. ~~While the TE statutes do not expressly call for a detailed review of TE program costs, such~~ TE programs should seek to minimize overall costs and maximize overall benefits.

13. ~~Because ratepayers bear the cost of the \$25 million overspend from the Pilot, the~~The audit required by this decision should be funded by SDG&E shareholders.

14. Consistent with § 740.12(a)(1)(F), a more transparent analysis of the number and type of jobs resulting from this TE investment should be completed.

15. All motions not previously ruled on should be deemed denied.

O R D E R

IT IS ORDERED that:

1. San Diego Gas & Electric Company is authorized to implement the Power Your Drive Extension Program pursuant to the modifications detailed in Sections 5 to 5.16 of this decision.

2. San Diego Gas & Electric Company (SDG&E) may combine Advice Letters (AL) filings as required by this decision so long as: (1) the AL tiers are the same; (2) the combination does not result in the late filing of any advice letter(s); and (3) the combined advice letter filing includes all of the requisite information as required for each advice letter. SDG&E must consult with the Commission's Energy Division before combining advice letter filings.

3. Within 30 days of the date of adoption of this decision, San Diego Gas & Electric Company (SDG&E) shall file a Tier 2 Advice Letter with the Commission's Energy Division to establish a new one-way Power Your Drive 2 Balancing Account (PYD2BA) to record revenues, costs associated with SDG&E's Power Your Drive Extension Program, as well as participation payments received from site hosts.

~~4. Within 60 days of the date of adoption of this decision, San Diego Gas & Electric Company (SDG&E) shall file a Tier 1 Advice Letter with the Commission's Energy Division to establish the interim metrics agreed upon by SDG&E's Program Advisory Council (PAC). These interim metrics should, at a minimum, include: (1) minimum number of ports installed through the first tranche of funding; (2) average per port costs (program wide and workplace/multi-unit dwellings (MUDs)); (3) minimum percentage of ports installed at MUDs and sites serving MUDs; (4) minimum percentage of ports sited in underserved communities; (5) minimum percentage of MUD customers opting for customer ownership of the electric vehicle service equipment; and (6) minimum percentage of MUD customers opting for ownership of the customer side make-ready infrastructure.~~

~~5. San Diego Gas & Electric Company (SDG&E) shall file a Tier 2 Advice Letter to request the second tranche of funding. This advice letter must reflect SDG&E's progress in achieving their agreed upon interim metrics, as detailed in Ordering Paragraph 4.~~

4. ~~6.~~ Within 90 days of the date of adoption of this Decision, San Diego Gas & Electric Company (SDG&E) shall file a Tier 2 Advice Letter with the Commission's Energy Division to reflect how SDG&E will develop materials and conduct outreach to deploy charging infrastructure in underserved communities.

5. ~~7.~~ Within 90-days of the date of adoption of this decision, San Diego Gas & Electric Company (SDG&E) must consult with its Program Advisory Council to establish criteria for "sites serving multi-unit dwellings" (MUDs) and file a Tier 2 Advice Letter to request approval of the criteria. At a minimum, this advice letter must consider: (1) how the proposed criteria will address the barriers impacting MUD site participation; (2) the distance from a MUD; (3) the

available activities to occupy a driver during the charging event; (4) the anticipated charge dwell-time; and (5) the relative safety of parking the vehicle at the location for a prolonged charge event.

6 . ~~8.~~ San Diego Gas & Electric Company's (SDG&E) investments for the Power Your Drive Extension Program will be considered *per se* reasonable provided: (1) at least 50 percent of sites are in underserved communities; (2) at least 50 percent of sites are at multi-unit dwellings (MUDs) or serve MUDs; (3) at least ~~50~~²⁰ percent of PYD2 sites ~~at MUDs or serving MUDs are customer-owned;~~ (4) ~~at least 50 percent of sites at MUDs or serving MUDs have u~~ncapitalized customer-side make ~~ready infrastructure owned by the customer;~~ (4) SDG&E only owns EVSE at MUDs in underserved communities; and (5) SDG&E does not exceed an average per port cost of \$15,000. In the event SDG&E meets per se reasonableness metrics 1 through 4, its authorized spending will be considered per se reasonable provided that at the end of the program period, the average per port cost does not exceed \$15,000. If, at the end of the program period, per port average costs exceed \$15,000, SDG&E may seek recovery for the difference between a baseline of \$15,000 average per port costs and the actual direct costs per port, up to \$18,131 per port, through a reasonableness review in the subsequent General Rate Case. If per port costs average more than \$18,131 the costs above \$18,131 are not authorized for recovery.

7 . ~~9.~~ Within 30 days of the date of adoption of this decision, San Diego Gas & Electric Company (SDG&E) must file a Tier 2 Advice Letter to update the rate and bill impacts associated with the authorized investments for the Power Your Drive Extension program, including the full revenue requirement associated with the approved program, by serving this information on the service list to this

proceeding. SDG&E must provide updates to the rate impacts in its semi-annual reports on the Power Your Drive Extension program.

8. ~~10.~~ Within 90 days of the date of adoption of this decision, San Diego Gas & Electric Company (SDG&E) shall contract with an independent third-party to audit SDG&E's Power Your Drive Pilot costs. SDG&E shall work with the Commission's Energy Division to design the scope of work for the audit and select a neutral third-party to conduct the audit. SDG&E shall file a Tier 2 Advice Letter for approval of the third-party auditor and audit scope. At a minimum the audit scope must include: (1) an identification of the drivers of the \$25 million dollar cost overrun; (2) a review of SDG&E's accounting practices and procedures for the Power Your Drive Pilot; (3) a description of SDG&E's internal Power Your Drive Pilot management procedures and oversight; and (4) recommendations based on audit findings to lower the cost estimates for Power Your Drive Extension.

9. ~~11.~~ Within 120 days of adoption of this decision, San Diego Gas & Electric Company (SDG&E), SDG&E shall file and serve a final audit report on the service list for this proceeding.

0. ~~12.~~ San Diego Gas & Electric Company shareholders shall fund the audit on the Power Your Drive Pilot's \$25 million dollar cost overrun.

~~13. — No sooner than twelve months after program implementation, San Diego Gas & Electric Company may file a Tier 3 Advice Letter (AL) requesting that the \$15,000 per port average be modified. At a minimum, the AL must include a detailed explanation of why the per port average should be modified, supported by Power Your Drive Extension program data.~~

~~14. — No sooner than twelve months after program implementation, San Diego Gas & Electric Company (SDG&E) may file a Tier 3 Advice Letter~~

~~requesting modifications to customer ownership requirements outlined in Sections 5.2 and 5.4. SDG&E's advice letter must demonstrate why the utility requests modification of these targets, and provide data that shows: (1) the percentage of multi-unit dwellings (MUDs) sites selecting to own the electric vehicle supply equipment (EVSE); (2) the percentage of all sites selecting ownership of the make-ready infrastructure; (3) the total number of customers/number of MUD customers remaining on the Power Your Drive Extension program's interest list; (4) the total number of customers on the interest list expressing interest in owning the EVSE and/or customer-side make-ready infrastructure; (5) a detailed explanation of SDG&E's experience with meeting the customer ownership targets; (6) SDG&E's education and outreach efforts to meet the customer ownership targets; (7) a detailed explanation of whether, and if so, why SDG&E believes it will not be able to meet the ownership targets; and (8) proposed new customer ownership targets.~~

~~1~~ ~~1. 15.~~ Within 90 days of adoption of this decision, SDG&E shall file a Tier 2 Advice Letter (AL) to set a site-host rebate amount as detailed in Section 5.7. At a minimum, the AL should include: (1) costs for the electric vehicle supply equipment (EVSE) and associated maintenance and network fees; (2) terms for how the rebate will be issued, including frequency of the recurring payment; (3) how the costs will be tracked; (4) how the rebate will be distributed; and (5) feasibility of scaling this rebate system for a larger program.

~~2~~ ~~2. 16.~~ Within 90 days of adoption of this decision, San Diego Gas & Electric Company (SDG&E) shall file a Tier 2 Advice Letter to identify how SDG&E will deploy customer-side Automated Load Management (ALM)/Energy Management Systems (EMS) consistent with Section 5.8.

~~3 3. 17.~~ Prior to implementation, San Diego Gas & Electric Company (SDG&E) shall file a Tier 1 Advice Letter with the Commission's Energy Division that explains how the utility will incorporate Electric Vehicle Infrastructure Training Program (EVITP) requirements into Power Your Drive Extension. At a minimum the advice letter must include: (1) how SDG&E will inform electricians/contractors of EVITP requirements; (2) how SDG&E will confirm electrician/contractor EVITP qualifications; and (3) how SDG&E will ensure installation work performed by an independent electrician/contractor will be performed ~~by a crew holding~~ consistent with AB 841 EVITP certification requirements.

~~4 4. 18.~~ Pursuant to Section 8 of this decision, San Diego Gas & Electric Company shall conduct a competitive solicitation to select a neutral third-party evaluator.

~~5 5. 19.~~ San Diego Gas & Electric Company shall gather data on the Power Your Drive Extension program pursuant to the data gathering requirements detailed in Section 8 of this decision. Pursuant to Section 8, the Commission's Energy Division has authority to develop or amend the data collection template to ensure reporting captures all programmatic and cost elements of the Power Your Drive Extension program.

~~6 6. 20.~~ No later than 18 months after the date of adoption of this decision, San Diego Gas & Electric Company must file a Tier 1 Advice Letter (AL) with the Commission's Energy Division describing their compliance efforts. The AL must contain an attestation of compliance with these requirements, signed by the Project Manager.

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§ ~~8. 21.~~ All motions not previously ruled on in this proceeding are deemed denied.

19. ~~22.~~ Application 19-10-012 is closed.

This order is effective today.

Dated _____, at San Francisco, California

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