

Application No: 19-10-012

Exhibit No.: _____

Witnesses: M. Baumhefner

Application of San Diego Gas & Electric Company (U 902 E) to Extend and Modify the Power Your Drive Pilot Approved by Decision 16-01-045.

Application 19-10-012
(Filed: June 26, 2018)

**REBUTTAL TESTIMONY OF MAX BAUMHEFNER, SPONSORED BY THE
NATURAL RESOURCES DEFENSE COUNCIL, THE COALITION OF CALIFORNIA
UTILITY EMPLOYEES, AND ENEL X NORTH AMERICA INC. ON THE
APPLICATION OF SAN DIEGO GAS & ELECTRIC COMPANY (U 902 E) TO
EXTEND AND MODIFY THE POWER YOUR DRIVE PILOT APPROVED BY
DECISION 16-01-045**

June 19, 2020

MAX BAUMHEFNER
MILES MULLER
Natural Resources Defense Council
111 Sutter Street, 21st Floor
San Francisco, CA 94104

MARC MONBOUQUETTE
Enel X North America, Inc.
846 Bransten Road
San Carlos, CA 94070

RACHAEL KOSS
Adams Broadwell Joseph & Cardozo
601 Gateway Blvd., Suite 1000
South San Francisco, CA 94080
Attorneys for the Coalition of California
Utility Employees

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1 **I. INTRODUCTION AND SUMMARY OF RECOMMENDED MODIFICATIONS**

2 In accordance with the February 6, 2020 “Assigned Commissioner’s Scoping Memo and
3 Ruling,” (Scoping Memo) and April 9th, 2020 Email Ruling Modifying the Procedural Schedule,
4 the Natural Resources Defense Council (NRDC) submits the rebuttal testimony of Max
5 Baumhefner regarding “Application of San Diego Gas & Electric Company (U 902 E) to Extend
6 and Modify the Power Your Drive Pilot Approved by Decision 16-01-045.” The
7 recommendations included in Mr. Baumhefner’s testimony are supported by NRDC, the
8 Coalition of California Utility Employees (CUE), and Enel X North America Inc.

9 In this rebuttal testimony, we respond to the testimony of other parties and highlight
10 common agreement with the recommendations detailed in the opening testimony of Mr.
11 Baumhefner. Several parties independently recommended many of the same modifications, or
12 indicated support for the principles underlying them, underscoring the broad support for these
13 modifications and their importance in ensuring the success of the Power Your Drive Extension
14 Program. Accordingly, with the following modifications recommended in the opening and
15 rebuttal testimony of Mr. Baumhefner, SDG&E’s application should be approved:

- 16 **1. The Default Arrangement for the Rate-to-Host Option Should Be that Price**
17 **Signals Are Passed Through to Drivers**
- 18 **2. The Rate-to-Driver Option Should Not Be Functionally Eliminated or**
19 **Further Undermined**
- 20 **3. The Number of Ports Supported by the Program Should Not Be Reduced**
- 21 **4. The Disadvantaged Community Deployment Target Should Be Increased**
- 22 **5. The Multi-Unit Dwelling Deployment Target Should Be Increased**

23 With those improvements incorporated, SDG&E’s Power Your Drive Extension would better
24 support widespread transportation electrification and help achieve the goals codified in Senate
25 Bill (SB) 350.
26

1 **II. REBUTTAL TESTIMONY**

2 **A. The Commission Should Ensure Price Signals Are Generally Passed Through to**
3 **Drivers and Should Preserve the Rate-to-Driver Option**

4 Ensuring that drivers at participating sites generally see time-variant price signals that
5 encourage them to charge in a manner that supports the electric grid and maximizes fuel cost
6 savings is essential to meet the statutory standard of review and realize the benefits that justify
7 the proposed investment of customer funds.¹ To ensure the Power Your Drive Extension
8 program is providing “improved use of the electric system or improved integration of renewable
9 energy generation” (consistent with SB 350), the Commission should require SDG&E to pass
10 price signals through to drivers by default at all Rate-to-Host sites. This default arrangement
11 would still allow customers to propose alternative arrangements in the load management plans
12 already required by SDG&E’s application, thereby preserving site host flexibility.² This
13 modification would improve the chances the Power Your Drive Extension Program maintains the
14 load-shifting benefits achieved by the Power Your Drive pilot, which would otherwise likely be
15 diminished due to the elimination of the Rate-to-Driver Option at workplaces.

16 In addition to making the pass-through of price signals the default arrangement for the
17 Rate-to-Host option, the Commission should also ensure the load-shifting benefits achieved by
18 the pilot are not *further* imperiled by modifications proposed by parties that would have the
19 effect of functionally eliminating the Rate-to-Driver option or drastically reducing customer
20 enrollment on it. These recommendations, such as fully eliminating or sharply reducing utility
21 ownership at multi-unit dwellings and conducting a managed charging pilot as an alternative to
22 the Rate-to-Driver option, should be carefully scrutinized by the Commission to ensure that the
23 Power Your Drive Extension does not take a step backwards in delivering grid benefits and fuel
24 cost savings.

¹ Public Utilities Code §740.8.

² *Id.*; Prepared Direct Testimony of Randy Schimka on Behalf of San Diego Gas & Electric Company at RS-4. SDG&E originally proposed to require sites on the Rate-to-Host option to submit a load management plan that would address 1) how the charging stations would be operated on days when the modified VGI rate has pricing adders, 2) how the site host intends to charge their drivers, and 3) what rate will be passed on to the drivers.

1 1. Eliminating or Reducing Utility Ownership at MUDs Would Compromise the
2 Realization of Improved Grid Utilization and Fuel Cost Savings

3 While a number of parties have noted their support for the Rate-to-Driver option in
4 opening testimony, others have put forth recommendations that threaten to further water down
5 the Rate-to-Driver option or eliminate it altogether.³ As noted by the Small Business Utility
6 Advocates (SBUA), the elimination of the of the Rate-to-Driver offering at workplaces means
7 that drivers at those sites will not see the “economic signal to avoid charging during periods of
8 high grid utilization,” and this could result in setbacks for better aligning workplace charging
9 with grid conditions.⁴ However, despite the clear detriment that decreased enrollment on the
10 Rate-to-Driver option would have on success in shifting charging to off-peak hours and
11 providing drivers an opportunity to realize fuel cost savings, some parties recommend
12 modifications to utility ownership at multi-unit dwellings (MUDs) which would indirectly
13 exacerbate this problem, without any recognition of the negative consequences for Rate-to-
14 Driver enrollment or detailed justification about how the benefits of the proposed modifications
15 outweigh those costs. Given the concern articulated previously in this proceeding by the Joint
16 Parties, Greenlots, and SBUA that the Rate-to-Driver option has already been excessively
17 circumscribed, we urge the Commission to evaluate these recommendations with explicit
18 consideration given to the negative effects they would have on Rate-to-Driver enrollment and the
19 program’s success in shifting load to off-peak hours.

20 Most concerningly, Utility Consumers’ Action Network (UCAN) recommends
21 completely eliminating utility ownership at MUDs⁵—a recommendation that goes beyond the
22 recommendations by TURN,⁶ the Public Advocates Office,⁷ and ChargePoint⁸ to merely create
23 an option for utility- or customer-ownership at MUDs. Multiple parties have already highlighted
24 the consequences of losing the Rate-to-Driver option as a result of eliminating utility ownership
25 in the workplace segment—with some suggesting modifications for expanding the availability of

³ See e.g., Opening Testimony of Small Business Utility Advocates at 15; Opening Testimony of the Utility Consumers’ Action Network at 27;

⁴ Opening Testimony of Small Business Utility Advocates at 16.

⁵ Opening Testimony of the Utility Consumers’ Action Network at 21, 27.

⁶ Opening Testimony of The Utility Reform Network at 33. TURN supports utility ownership only at low-income MUDs.

⁷ Opening Testimony of the Public Advocates Office,

⁸ Opening Testimony of ChargePoint at 8

1 the Rate-to-Driver option to enable a greater number of drivers to shift their charging to off-peak
2 and super-off-peak hours—and UCAN’s recommendation would only exacerbate and extend
3 those consequences to the rest of the program. In contrast to UCAN’s call to further curtail utility
4 ownership and functionally undermine the Rate-to-Driver Option, SBUA recommends that “at
5 least some utility ownership of EVSE should be maintained during the PYD Extension” at
6 workplace sites.⁹ Similar concerns were noted by Greenlots in its Response to SDG&E’s
7 application, who cautioned the Commission that the loss of the Rate-to-Driver option at
8 workplaces would entail the loss of “deeper fuel cost savings to drivers and load management
9 value to all ratepayers.”¹⁰ We share the concerns expressed by SBUA and Greenlots about
10 ensuring the Rate-to-Driver option is not excessively diminished in the Power Your Drive
11 Extension relative to the Power Your Drive pilot.

12 Eliminating utility ownership at MUDs would mean completely wiping the Rate-to-
13 Driver option from the Power Your Drive Extension—along with the grid benefits and fuel cost
14 savings it unlocks. As we noted in opening testimony, average charging costs on the Rate-to-
15 Host option during the pilot were *thirty percent more expensive* than on the Rate-to-Driver
16 option, with drivers on the Rate-to-Driver option paying an average of \$0.18/kWh and drivers at
17 sites taking service on the Rate-to-Host option paying an average of \$0.24/kWh).¹¹ Further,
18 approximately 86 percent of kWh delivered in the pilot occurred during off-peak and super-off-
19 peak hours, and this was largely due to the fact that roughly 80 percent of the sites in the pilot
20 were served on the Rate-to-Driver option.¹² Given SDG&E’s estimate that workplaces will
21 comprise approximately 75 percent of sites in the Power Your Drive Extension and the
22 elimination of the Rate-to-Driver option in that segment, enrollment on the Rate-to-Driver
23 Option is already slated to be diminished to less than a third of what it was in the pilot (assuming
24 SDG&E’s proposal for utility ownership at MUDs is maintained and SDG&E achieves its MUD
25 deployment target of 25%). Accordingly, to avoid undermining the fuel costs savings that

⁹ *Id.* at 18.

¹⁰ Response of Greenlots to SDG&E’s Power Your Drive Extension Application.

¹¹ SDG&E Power Your Drive Eighth Semi-Annual Report at 12. While SDG&E will require site hosts on the “Rate-to-Host” option to submit a load management plan that must be consistent with the program’s guiding principles, including maximizing fuel cost savings, this will likely be insufficient to deliver the fuel cost savings that are the primary motivator EV purchase decisions.

¹² SDG&E Power Your Drive Eighth Semi-Annual Report at 11.

1 motivate EV purchases and to ensure the Power Your Drive Program meets the statutory criteria
2 set forth in Public Utilities Code §740.12, we recommend the Commission reject the proposal to
3 eliminate utility ownership at MUDs.¹³

4 Eliminating ownership at MUDs could also undermine the program’s demonstrated
5 success in reaching this underserved segment. Only three percent of sites in SCE’s “make-ready
6 plus rebate” Charge Ready pilot were MUDs, while over a third of the participating sites in
7 SDG&E’s PYD program were MUDs.¹⁴ Recognizing the advantage of SDG&E’s turnkey
8 solution to increase access in this critical but underserved segment, SCE has incorporated an
9 ownership option in its Charge Ready 2 application that is still pending final commission
10 action.¹⁵ SCE appropriately incorporated a lesson-learned from its sister utility. The Commission
11 should not heed calls to do eliminate one of the keys to SDG&E’s relative success in penetrating
12 the MUD segment. To achieve California’s climate, air quality, and equity goals, we cannot
13 afford to restrict EV ownership to single-family detached homes.

14 2. Substituting a Managed Charging Pilot for the Rate-to-Driver Option Would Be
15 Inappropriate and Would Undermine Ongoing Evaluation Meant to Inform Future
16 Program Design

17 A second proposal that would undermine the realization of the load-shifting benefits
18 achieved by the Power Your Drive pilot is ChargePoint’s recommendation to conduct a managed
19 charging pilot “as an alternative to the Rate-to-Driver option.”¹⁶ While we agree with
20 ChargePoint regarding the benefits of managed charging and the value of exploring managed
21 charging pilots in the near-future, the Power Your Drive Extension is not the appropriate venue
22 for that additional pilot.¹⁷ We understand ChargePoint’s desire for “investigating the use of
23 managed charging,” but swapping a new investigation between the pilot and extension would
24 undermine and confound meaningful evaluation of Power Your Drive program features.¹⁸

¹³ Public Utilities Code §740.12 “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”

¹⁴ SCE Charge Ready Pilot Program Report at 14; SDG&E Power Your Drive Fifth Semi-Annual Report at 1.

¹⁵ See A.18-06-015, SCE Charge Ready 2 Application.

¹⁶ Opening Testimony of ChargePoint at 5.

¹⁷ *Id.* at 14.

¹⁸ Opening Testimony of ChargePoint at 14.

1 Further, ChargePoint does not advance a justification for why this investigation must be done
2 specifically at the expense of the Rate-to-Driver option, instead of as an alternative to the
3 requirement for submitting a load management plan on the Rate-to-Host option, for example.¹⁹

4 Other venues, such as future utility applications or the Commission’s ongoing
5 Transportation Electrification Framework proceeding would be more appropriate for proposing
6 such pilots. As ChargePoint notes, “SDG&E’s current proposal should be viewed as an extension
7 of its current successful offering” and is scoped to “find a balance between the immediate need
8 to support customers and state policy goals while also waiting for the Commission’s guidance on
9 a new Transportation Electrification Framework.”²⁰ Accordingly, it follows that the Power Your
10 Drive Extension should support the extension of the investigations and experiments being
11 conducted in the Power Your Drive pilot. Inserting additional experiments risks diluting the
12 potential lessons-learned by running too many experiments simultaneously or abandoning some
13 midway. The best way to “carry forward the PYD Pilot’s VGI rate” and “enhance programmatic
14 learnings” would be to retain the Rate-to-Driver option in the Power Your Drive Extension,
15 ensure that drives at Rate-to-Host sites see time-variant price signals as a default (despite the
16 elimination of the ownership option at workplaces) and explore ChargePoint’s managed charging
17 proposal in another proceeding.²¹ While we urge the Commission to reject ChargePoint’s
18 proposal to establish a managed charging pilot as an alternative to the Rate-to-Driver Option in
19 this program, we welcome the opportunity to collaborate with ChargePoint and the Commission
20 in the future on how managed charging pilots could be designed and implemented in future
21 programs..

22 **B. The Scope of the Power Your Drive Extension is Appropriate and Should Not Be**
23 **Reduced**

24 In opening testimony, a few parties recommend reductions to the budget and scope of the
25 Power Your Drive Extension. The Public Advocates Office recommends reducing the budget by
26 around \$6.6 million, but does not recommend explicit reductions to the proposed total number of

¹⁹ *Id.*

²⁰ *Id.* at 12.

²¹ *Id.*

1 ports and reducing the scope of the program.²² UCAN proposes programmatic modifications for
2 reducing per-port costs, but does not suggest explicit reductions to the total budget or reductions
3 in the number of ports supported by the program.²³ TURN recommends reducing the budget by
4 \$42 million (72 percent) and halving the number of stations supported by the program (from
5 2,000 to 1,000).²⁴ Given the need for expanding access to charging infrastructure as
6 expeditiously as possible to enable the achievement of California’s ambitious transportation
7 electrification and climate goals, the Commission should reject TURN’s call to severely reduce
8 the scope of the Power Your Drive Extension and should retain SDG&E’s proposal for
9 supporting 2,000 sites.

10 TURN argues that the Power Your Drive Extension program is overinflated compared to
11 Southern California Edison’s (SCE’s) Charge Ready bridge program, and it attempts to justify
12 this characterization by pointing to the \$22 million budget approved for SCE’s bridge program.²⁵
13 As noted by the Public Advocates Office, SCE’s bridge program was a “continuation which
14 doubles the length of the and budget of the original program.”²⁶ SCE’s Charge Ready pilot
15 budget was \$22 million designed to support 1,500 stations,²⁷ while the bridge program was also
16 approved for \$22 million supporting 1,500 stations.²⁸ SDG&E’s Power Your Drive pilot had an
17 approved budget of \$45 million and was intended to support 3,000 stations,²⁹ while the Power
18 Your Drive Extension has a proposed budget of \$43.5 million meant to support 2,000 stations.
19 Accordingly, SDG&E’s Power Your Drive Extension would closely mirror SCE’s bridge
20 program as a “continuation which doubles the length of the and budget of the original program,”
21 and TURN’s critical comparison seems unsupported. The size and scope of the Power Your
22 Drive Extension is in line with previous bridge programs approved by the Commission, is
23 necessary for putting California on the path to achieving its climate, air quality, and equity goals,

²² Opening Testimony of the Public Advocates Office at 1-7. The Public Advocates Office’s \$6.6 million figure derives from corrections to what they assert are overestimates in SDG&E’s make-ready direct construction costs and engineering design costs, as well as rebate reductions.

²³ Opening Testimony of the Utility Consumers’ Action Network at 30.

²⁴ Opening Testimony of The Utility Reform Network at 2.

²⁵ *Id.* at 7-8.

²⁶ Opening Testimony of the Public Advocates Office at 4-3.

²⁷ Decision 16-01-023 at 2, 59.

²⁸ Decision 18-12-006 at 1.

²⁹ Decision 16-01-045 at 172.

1 and should be approved accordingly by the Commission.

2 **C. SDG&E’s Proposed Disadvantaged Community Deployment Target Should Be**
3 **Increased**

4 In opening testimony, multiple parties recommended strengthening the 10 percent
5 disadvantaged community (DAC) deployment target proposed by SDG&E. The Public
6 Advocates Office suggests establishing a 25 percent DAC target using the statewide DAC
7 definition.³⁰ TURN recommends a 33 percent DAC target using the broader territory-wide
8 definition.³¹ Meanwhile the National Diversity Coalition proposes a 60 percent DAC
9 deployment target using the service territory-wide definition or a 30 percent DAC deployment
10 target using the statewide DAC definition.³² We fully agree with the concern noted by these
11 parties that the 10 percent DAC target is “too low given the pilot’s history, statutory goals, and
12 directives for TE programs,” and given the 32percent DAC deployment achieved in the pilot.³³
13 Accordingly, to improve air quality where such improvements are most needed and to increase
14 access to the use of electricity as a transportation fuel in underserved markets, the Commission
15 should strengthen the Power Your Drive Extension’s DAC deployment target and ensure it is
16 commensurate with the level demonstrated achievable by the pilot.

17 As we previously noted in our opening testimony however, and as recognized by the
18 Public Advocates Office, it is important to allow for adjustments if unforeseen barriers frustrate
19 the achievement of an increased DAC target.³⁴ While recommending a 25 percent target using
20 the statewide DAC definition, the Public Advocates Office states that SDG&E should be
21 provided an option to file a Tier 2 advice letter requesting the service-territory definition if the
22 statewide DAC target proves infeasible.³⁵ If the Commission ultimately decides to establish a
23 DAC target using the statewide DAC definition, we would support including a flexibility
24 mechanism like the one recommended by the Public Advocates Office and allowing SDG&E the
25 flexibility to request a change to the broader service-territory definition via an advice letter. In

³⁰ Opening Testimony of the Public Advocates Office at 3-2.

³¹ Opening Testimony of The Utility Reform Network at 31.

³² Opening Testimony of the National Diversity Coalition at 29.

³³ Opening Testimony of the Public Advocates Office at 3-1.

³⁴ *Id.* at 3-2.

³⁵ *Id.* at 3-6.

1 addition to considering flexibility in the form of adjustments to the applicable DAC definition,
2 we urge the Commission to also consider funding reserves that allow SDG&E to shift reserved
3 funds after a predetermined amount of time if SDG&E can adequately demonstrate how
4 implementation challenges prevented the achievement of the target.

5 **III. CONCLUSION**

6 With the modifications recommended in Section I of this rebuttal testimony, SDG&E's
7 Power Your Drive Extension Program would meet the statutory and regulatory criteria and
8 should be approved.

9 Dated: June 19, 2020

Respectfully,

/s/ Max Baumhefner

Max Baumhefner

/s/ Miles Muller

Miles Muller

Natural Resources Defense Council

111 Sutter Street, 21st Floor

San Francisco, California 94104

mbaumhefner@nrdc.org

mmuller@nrdc.org

/s/ Rachael Koss

Rachael Koss

Adams Broadwell Joseph & Cardozo

601 Gateway Blvd., Suite 1000

South San Francisco, CA 94080

Attorneys for the Coalition of California

Utility Employees

rkoss@adamsbroadwell.com

/s/ Marc Monbouquette

Marc Monbouquette

Enel X North America, Inc.

846 Bransten Road

San Carlos, CA 94070

marc.monbouquette@enel.com

1 **Attachment A: Statement of Qualifications for Max Baumhefner**

2 Max Baumhefner is an attorney and expert in clean vehicles and fuels, within the *Climate*
3 *and Clean Energy Program* of the Natural Resources Defense Council (NRDC) based in San
4 Francisco. Since joining NRDC in 2010, his focus has been on policies to accelerate the
5 electrification of the transportation sector and to ensure the efficient integration of electric
6 vehicles into our nation’s utility system. Mr. Baumhefner has testified and presented on energy
7 issues before the California State Legislature, the California Energy Commission, the California
8 Public Utilities Commission, and the California Air Resources Board. He holds a bachelor's
9 degree from Pomona College and a Juris Doctor from Boalt Hall at the University of California,
10 Berkeley.

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