

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

Application of San Diego Gas & Electric Company  
(U 902-E) for Approval of SB 350 Transportation  
Electrification Proposals.

Application 17-01-020  
(Filed January 20, 2017)

And Related Matters.

Application 17-01-021  
Application 17-01-022

**PREPARED REBUTTAL TESTIMONY OF  
PARINA PARIKH (ERRATA - CLEAN)  
ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY**

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

**September 5, 2017**



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ATTACHMENT A

**PREPARED REBUTTAL TESTIMONY OF  
PARINA PARIKH**

**I. OVERVIEW AND PURPOSE**

As noted in her Rebuttal Testimony, Linda Brown has adopted the original direct testimony of Michael Schneider as her own. Accordingly, I have stepped in to adopt Ms. Brown’s original direct testimony as my own and am now offering rebuttal testimony in her place, as she is now offering rebuttal testimony in place of Mr. Schneider.

The overall purpose of my rebuttal testimony is to describe how SDG&E’s modified Residential Charging Program still meets the Senate Bill (“SB”) 350 statutory requirements and regulatory guidelines set forth in the “Assigned Commissioner’s Ruling Regarding the Filing of the Transportation Electrification Applications Pursuant to Senate Bill 350” (“ACR”) (issued on September 14, 2016 in Rulemaking 13-11-007). My rebuttal testimony also responds to certain contentions in the direct testimony submitted by intervening parties, including those of Chargepoint, The Utility Reform Network (“TURN”) and the Office of Ratepayer Advocates (“ORA”).

**II. BRIEF DESCRIPTION OF MODIFIED RESIDENTIAL CHARGING PROGRAM**

SDG&E agrees to modify its Residential Charging Program to emphasize customer choice, as proposed by the Natural Resources Defense Council (“NRDC”), Coalition of California Utility Employees (“CCUE”), Plug In America, The Greenlining Institute, Sierra Club, Environmental Defense Fund, the Alliance of Automobile Manufacturers, Greenlots, eMeter, a Siemens Business (“Siemens”), and Electric MotorWerks, Inc. (“eMotorWerks”) (collectively, the “Joint Parties”). Key modifications to the program include choice of charging equipment ownership and maintenance, rate design, and greater penetration in disadvantaged communities (“DACs”). Details regarding program modification are discussed in the Rebuttal

1 Testimony of Randy Schimka and the rate design modifications are discussed in the Rebuttal  
2 Testimony of Cynthia Fang. It is important to note that the goals and purpose of the original  
3 Residential Charging Program have not changed due to these modifications.

4 ChargePoint, ORA, and TURN believe that the Residential Charging Program should be  
5 limited to providing a rebate for both the installation and electric vehicle supply equipment  
6 (“EVSE”). As explained below, SDG&E believes this approach is flawed, mainly because a  
7 rebate model does not promote safety, has no proven track record for success, provides an  
8 inferior customer experience, and lacks sufficient Commission oversight. SDG&E also believes  
9 that in order to meaningfully accelerate widespread transportation electrification (“TE”) and  
10 promote grid-integrated charging in accordance with SB 350, a utility turn-key solution must  
11 remain part of SDG&E’s Residential Charging Program.<sup>1</sup> The modified Residential Charging  
12 Program provides flexibility in program design and greater accessibility to low-income  
13 customers, while also continuing to meet the ACR’s regulatory and statutory requirements.

### 14 **III. ACR STATUTORY REQUIREMENTS**

#### 15 **A. The Modified Residential Charging Program Satisfies the Statutory** 16 **Requirements Defined by SB 350 and the ACR**

##### 17 **1. The Modified Residential Charging Program Accelerates Widespread** 18 **TE**

19 The modified Residential Charging Program “will accelerate TE adoption by  
20 incentivizing new drivers with charging infrastructure”.<sup>2</sup> A rebate model will not provide this  
21 same incentive. A rebate model places responsibility on the customer for researching,  
22 purchasing and acquiring the EVSE; researching, hiring and managing an installation contractor;

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<sup>1</sup> See also Joint Parties Testimony at 14:16-17.

<sup>2</sup> SDG&E Direct Testimony (L. Brown/P. Parikh) at 20:3-4.

1 maintaining the facilities and equipment; and coordinating with the utility for rebate logistics.  
2 TURN simply states that a rebate model is “administratively simpler.”<sup>3</sup> While it may be  
3 administratively simpler to write rebate checks, SDG&E believes there is no evidence that  
4 shifting responsibilities to drivers would significantly accelerate TE, incent grid-beneficial  
5 charging or improve safety. The modified Residential Charging Program, on the other hand, is  
6 designed to educate participants throughout the process and help them understand why a L2  
7 EVSE creates more flexibility to meet their charging needs and how it can be used to lower their  
8 “fuel costs” while providing benefits to all customers who use the grid.

9         TURN references four current rebate programs in California run by municipalities and  
10 Community Choice Aggregators that “encourage EV adoption.”<sup>4</sup> However, TURN does not  
11 provide any details regarding the size, impact or effectiveness of these programs. SDG&E asked  
12 for specifics in a data request, but TURN could not provide the details.<sup>5</sup> Moreover, there is no  
13 Commission oversight of these programs and limited data to demonstrate the success of such  
14 programs.

15         SDG&E agrees with parties that participants should provide some financial contribution;  
16 however, the key question is how much.<sup>6</sup> SDG&E does not want participants to cut corners on  
17 installation costs or the safety of equipment to minimize their contribution. The Joint Parties  
18 have proposed a reasonable cap that will accommodate most installations, leaving room for  
19 participant contribution.<sup>7</sup> By way of comparison, it is worth noting that Southern California

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<sup>3</sup> TURN Testimony (Borden) at 10:2-3.

<sup>4</sup> TURN Testimony (Borden) at 16:31-32 and 17:1.

<sup>5</sup> See TURN’s response to SDG&E-TURN-01, Question 3, attached as part of Attachment A.

<sup>6</sup> TURN Testimony (Borden) at 17:8-9.

<sup>7</sup> \$1,425 per household and \$1,500 for DACs, CARE and FERA with a percent of DACs that will have access to a panel upgrade. Joint Parties Testimony at 4:4-13.

1 Edison Company (“SCE”) reported to its Charge Ready Program Advisory Board that customers  
2 have had a hard time finding EVSE close to the rebate amount and often missed the 30-day  
3 deadline to procure an EVSE.<sup>8</sup> The allowances provided in the modified Residential Charging  
4 Program still leverage participant’s contribution, but also reduce barriers for the next generation  
5 of EV drivers that might not fall within the wealthy drivers and early adopters categories  
6 described by TURN.<sup>9</sup>

7 The modified Residential Charging Program provides a flexible approach that can suit a  
8 variety of customer preferences. SDG&E agrees with the Joint Parties that it is important to  
9 keep the option for end-to-end utility ownership where customers prefer it. For example, as the  
10 Joint Parties explained (referring to the current IOU programs: Charge Ready and Power Your  
11 Drive):

12 There is reason to believe the make-ready model may not provide the turn-  
13 key solution needed to address barriers in certain market segments.  
14 Consider that multi-unit dwellings only account for five percent of site-  
15 hosts in Southern California Edison’s (SCE) “Charge Ready” pilot, despite  
16 SCE’s increased outreach to potential site-hosts in that segment. In  
17 contrast, about 30 percent<sup>[10]</sup> of SDG&E’s likely site-hosts in the “Power  
18 Your Drive” pilot, which includes utility ownership of EVSE, are multi-  
19 unit dwellings, suggesting that landlords would prefer for the utility to  
20 own and maintain the charging equipment and do not want to have to  
21 procure their own charging stations<sup>11</sup>

22 To limit the program to a simple rebate check would not reduce barriers, promote widespread TE  
23 or help ensure safe installations.

24 Although certain parties assert that the rebate model is superior, they provide no reliable  
25 data to prove EVSE rebates are successful or able to fulfill SDG&E’s goals of providing an

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<sup>8</sup> Joint Parties Testimony at 14:4-10.

<sup>9</sup> TURN Testimony (Borden) at 3:13-15.

<sup>10</sup> Per Decision 16-01-045 at 134, 40% of Power Your Drive is required to be at MUDs (citation added).

<sup>11</sup> Joint Parties Testimony at 13:14-21 (citation omitted).

1 opportunity to reduce fuel costs and optimize the positive benefits that managed charging can  
2 have on the grid.<sup>12</sup> The modified Residential Charging Program has the potential to be a more  
3 successful platform because it addresses financial and logistical barriers that face EV drivers. As  
4 stated in the Joint Parties’ testimony, “[r]ebate-only programs are also unlikely to provide the  
5 turn-key solution needed to accelerate widespread transportation electrification as required by  
6 SB 350.”<sup>13</sup>

7 **2. The Modified Residential Charging Program Fulfills**  
8 **Findings/Declarations Set Forth in P.U. Code Section 740.12(a)(1)**

9 The modified Residential Charging Program continues to fulfill findings/declarations in  
10 P.U. Code §740.12(a)(1). The modified Residential Charging Program “provides support to the  
11 Charge Ahead California Initiative, facilitates the adoption of EVs, provides access to those in  
12 DACs and increases access to the use of electricity as a transportation fuel by reducing financial  
13 and logistical barriers to grid-integrated L2 charger deployment.”<sup>14</sup>

14 **3. The Modified Residential Charging Program Minimizes Overall Costs**  
15 **and Maximizes Overall Benefits**

16 The modified Residential Charging Program maximizes benefits by providing price  
17 signals that encourage EV drivers to charge in a manner that optimizes usage of the electric grid,  
18 integrates renewable energy and reduces GHG emissions. Allowing SDG&E to use its core  
19 competencies, as operator of its electric system (with the greatest visibility of and control over  
20 circuit and system grid conditions and operations), SDG&E is in the best position to manage EV  
21 charging in a way that optimizes use of the grid for the benefit of all its customers, including

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<sup>12</sup> See TURN Response to SDG&E Data Request SDGE-TURN-01 Question 3; ChargePoint, Inc. Response to SDG&E Data Request SDG&E-ChargePoint-01, Question 5; ORA Response to SDG&E Data Request SDG&E-ORA-01, Question 4.

<sup>13</sup> Joint Parties Testimony at 14:16-17.

<sup>14</sup> SDG&E Direct Testimony (L. Brown/P. Parikh) at 20:13-15.



1 those who do not own an EV. Despite assertions that the program does not fit with the utility's  
2 core competencies,<sup>15</sup> SDG&E has more than a century of experience deploying, operating and  
3 maintaining safe and reliable electric infrastructure.

4 **4. The Modified Residential Charging Program Proposes a Reasonable**  
5 **Cost Recovery Mechanism**

6 The modified Residential Charging Program changes the cost recovery mechanism  
7 addressed in the Direct Testimony of Norma Jasso. Please refer to the Rebuttal Testimony of  
8 Norma Jasso for details regarding these changes, namely the proposal to use a one-way  
9 balancing account to recover costs.

10 **5. The Modified Residential Charging Program Does Not Unfairly**  
11 **Compete with Nonutility Enterprises**

12 ChargePoint states that SDG&E's proposed program is "not designed to stimulate  
13 innovation and competition" and "does not enable consumer options in charging equipment and  
14 services."<sup>16</sup> SDG&E does not agree with this assertion. As stated above, participants in SCE's  
15 Charge Ready Program have had challenges deciding what EVSE to purchase. SDG&E wants to  
16 enable the market and incent competition by qualifying multiple L2 EVSE from multiple  
17 vendors for participants to choose from. The modified Residential Charging Program will  
18 provide choices to participants. SDG&E agrees with ChargePoint that "smart, connected Level 2  
19 chargers" or networked L2 EVSE can provide load management and scheduled charging,  
20 incorporate two-way communication, modulate charging in response to customer preferences,  
21 rates, or real-time signals, and enable participation in demand response programs.<sup>17</sup> Although  
22 some EVSPs have not developed a residential networked L2 EVSE, SDG&E has seen evidence

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<sup>15</sup> ChargePoint Testimony at 18:15-23.

<sup>16</sup> *Id.* at 16:6-8.

<sup>17</sup> *Id.* at 7:4-11.

1 in its Power Your Drive Program (PYD) that the request for proposals (“RFP”) process has  
2 driven competition and innovation in the market as vendors develop new products and  
3 capabilities in order to serve PYD customers. The modified Residential Charging Program has  
4 the potential to increase the market for residential networked L2 EVSEs, helping to ensure that  
5 competitors have the opportunity to secure a share of this nascent market, and to prevent market  
6 domination by a single or few existing providers.

7 SDG&E will use the RFP process to qualify L2 EVSE that meets its safety and reliability  
8 standards (i.e., a networked EVSE that is UL or NRTL certified, and includes an internal meter  
9 that meets +/- 1% or better accuracy). SDG&E will also use the RFP process to qualify EVSPs  
10 that meet network, data, customer interface, and maintenance requirements. SDG&E believes  
11 that by creating an easily accessible marketplace for customers, the RFP process encourages  
12 innovation and competition among EVSPs for residential consumers that currently does not  
13 exist.

14 Regarding the services associated with the program, SDG&E plans to use an RFP process  
15 for both the installation and maintenance. This process provides a neutral platform for EVSE  
16 vendors and installation contractors to compete. SDG&E has taken a similar approach in Power  
17 Your Drive, and it has been successful (as discussed in Section IV.A.4. Promotes Safety below).

18 In addition, intervenors focus on the size of the proposed program as a potential unfair  
19 utility advantage. TURN states that the size of the program will make SDG&E the “primary  
20 supplier of EVSE in its territory.”<sup>18</sup> SDG&E has no stated intent on manufacturing the  
21 equipment, developing the software to manage the equipment, or other ancillary services in the  
22 EVSP market. Rather, the goal is to enable the market, incent grid-integrated charging and

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<sup>18</sup> TURN Testimony, 10.

1 facilitate the deployment of residential EVSE. The program will ensure EV drivers have a good  
2 customer experience and encourage L2 EVSE use. This will broaden the market for Level 2  
3 EVSE, and effectively enable the market for networked Level 2 EVSPs in SDG&E’s service  
4 territory.

5 Broadening the market is important to consider as one examines the light-duty vehicle  
6 market and the central role of transportation electrification in helping to meet 2030 and 2050  
7 GHG emission reduction targets. SDG&E’s service territory includes about 3.0 million light-  
8 duty vehicles<sup>19</sup> and to meet our share of statewide GHG emission reduction targets—more than  
9 1.6 million vehicles by 2050 need to be electrified.<sup>20</sup> The modified Residential Charging  
10 Program addresses less than 6% of these vehicles. In essence, the modified Residential Charging  
11 Program will stimulate the market to reach the State’s GHG emissions reduction goals while  
12 simultaneously enabling more robust competition among EVSPs.

13 Whereas the size of the modified Residential Charging Program only impacts a small  
14 percentage of the vehicles needed to be electrified, the capital injection the program provides  
15 acts as a stimulus to all participants in the charging market: hardware and equipment  
16 manufacturers, installers and maintenance providers, hosts, network operators and system  
17 operators. The capital investment from the modified Residential Charging Program will enable  
18 growth and opportunity for these participants and stimulate competition while also providing  
19 benefits to all ratepayers.

20 As reflected in Joint Parties’ testimony, three of the four EVSPs that are parties to this  
21 proceeding agree that customers should have the option of a utility-owned L2 EVSE; in fact,

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<sup>19</sup> Proprietary IHS/Polk Data (2017)

<sup>20</sup> Projections based on CARB Mobile Source Strategy.

1 Siemens and Greenlots “prefer full utility ownership.”<sup>21</sup> Ultimately, SDG&E’s involvement  
2 within the L2 residential charging market is supported by multiple EVSPs as there is  
3 acknowledgement that utility enablement will help grow the market and facilitate healthy  
4 competition.

5 **6. The Modified Residential Charging Program Uses Performance-**  
6 **Based Accountability Measures to Track Progress**

7 The modified Residential Charging Program will be monitored by evaluating meter data  
8 which will provide insight into customer behavior and distribution system impacts. Mr.  
9 Schimka’s Direct Testimony explains the program’s monitoring and evaluation plan, which will  
10 not change (with the exception of the duration for several key metrics) under the modified  
11 Residential Charging Program. At a high level, SDG&E will provide metrics related to actual  
12 operating costs, actual installation costs, annual growth in ZEV by type, and annual growth of  
13 the program by region. A rebate model does not guarantee that SDG&E and the Commission  
14 would have insight over certain metrics.

15 **7. The Modified Residential Charging Program is in the Interest of**  
16 **Ratepayers**

17 The modified Residential Charging Program remains in the interest of ratepayers. Using  
18 Section 740.8 to help define ratepayer interest, SDG&E stated:

19 The residential charging program enables technology and includes a  
20 proposed rate designed to provide price signals to improve the use of the  
21 electric system and integration of renewable energy. In addition, the  
22 residential charging program will reduce air pollution, reduce GHG  
23 emissions and increase the use of alternative fuels.<sup>22</sup>

24 The modified Residential Charging Program assures accountability by providing the  
25 Commission and Program Advisory Council (“PAC”) oversight of the program end-to-end. It

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<sup>21</sup> Joint Parties Testimony at 3:3.

<sup>22</sup> SDG&E Direct Testimony (L. Brown/P. Parikh) at 24:12-15.

1 further extends such oversight of and insight into vendors and activities through commercial  
2 contractual protections that are absent in a rebate model. A rebate model lacks this type of  
3 transparency and robust Commission oversight.

4 In the modified Residential Charging Program, SDG&E will also be able to educate and  
5 help participants align the benefits to the driver with the benefits to the grid. The modified  
6 Residential Charging Program is not just about providing a L2 EVSE to drivers who might have  
7 range anxiety or want the flexibility to charge their EV faster. It's about preparing for a future  
8 when 100% of the new passenger vehicles sold in California are ZEVs.<sup>23</sup>

9 **8. The Modified Residential Charging Program Avoids Long Term**  
10 **Stranded Costs and Complies with the Provisions of P.U. Code**  
11 **Section 740.12(c)**

12 The probability than an EV owner will purchase another EV in the future is  
13 approximately 92%.<sup>24</sup> Providing standardized networked L2 chargers not only ensures  
14 compatibility with all EVs currently on the market, but ensures that these assets will continue to  
15 be used and useful. A robust RFP process can also help ensure equipment is both backward and  
16 forward compatible (i.e., older model EVs and future EVs can leverage technology),  
17 requirements that will be absent or difficult to enforce if the customer is responsible for  
18 purchasing an EVSE and network services that did not qualify through a competitive process  
19 with well-defined standards.

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<sup>23</sup> ZEV Action Plan, at p. 15, states “Between 2040 and 2050, nearly 100% of new passenger vehicles sold in California must be ZEVs in order to meet the state’s long-term climate goals.” The ZEV Action Plan is available at [https://www.gov.ca.gov/docs/2016\\_ZEV\\_Action\\_Plan.pdf](https://www.gov.ca.gov/docs/2016_ZEV_Action_Plan.pdf).

<sup>24</sup> *10,000 EV Drivers Can't Be Wrong... But They Can Be Different* (2015), <https://cleantechnica.com/2015/08/09/ct-exclusive-interview-10000-ev-drivers-cant-wrong-can-different/>.

1 **IV. ACR REGULATORY GUIDELINES**

2 **A. The Modified Residential Charging Program Meets the ACR’s Regulatory**  
3 **Guidelines**

4 The modified Residential Charging Program continues to align with the regulatory  
5 guidelines, as described below.

6 **1. Fit with the CPUC and IOU Core Competencies and Capabilities**

7 ChargePoint states, “[t]he utilities role should be clearly defined and relate to its core  
8 strengths and competencies.”<sup>25</sup> One of SDG&E’s strengths is customer service. The  
9 disappointing personal experience described in the Joint Parties’ Testimony is one that SDG&E  
10 wants to avoid.<sup>26</sup> The modified Residential Charging Program will provide customers with  
11 choices and flexibility while simplifying the customer experience.

12 SDG&E will also leverage its customer engagement competencies to increase awareness  
13 and provide education for managed EV charging. For example, to illustrate the ease of the utility  
14 turn-key solution SDG&E has created a flow chart (described in the Rebuttal Testimony of Mr.  
15 Schimka) to show how a customer will be led through the decision-making process using three  
16 simple steps. The goal is to create a one stop shop for home charging needs - from a networked  
17 charger, to installation, to rate options.

18 Other core competencies exhibited by SDG&E include management of the grid and  
19 ability to effectively integrate renewables through proper rate design. As articulated by Siemens  
20 in the Joint Parties Testimony, the utility is uniquely situated to provide the full value stack of  
21 benefits.

22 Utility planners can minimize their grid investment requirements if they  
23 know where and when EV charging loads are occurring and how those  
24 loads will grow over time. Utility operators can maintain reliability by

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<sup>25</sup> ChargePoint Testimony at 9:23.

<sup>26</sup> Joint Parties Testimony at pp. 11-12.

1 having the same information in near real time, as well as the ability to  
2 either control such charging or accurately predict how EV owners (or their  
3 third-party service providers) will control such charging in response to  
4 price signals. Utility customer engagement and charging management  
5 software can send price or control signals to smart phones and directly to  
6 EVSEs (or third party service providers), as well as allow consumers to  
7 program their charging preferences. Utility meter data management  
8 systems can use the data from chargers to disaggregate consumption – at  
9 the interval level – of EVSEs from the whole house to enable application  
10 of separate tariffs to the home and the EV. Utility billing systems can use  
11 this disaggregated data to calculate bills for EV-only tariffs, incentive  
12 payments for demand reductions during peak times, and other financial  
13 incentives adopted by the Commission. Utility rate designers can use the  
14 data to develop rates that enable EV owners to minimize the cost of  
15 charging by taking advantage of low-cost wholesale rates, especially  
16 during times of abundant wind and solar power. And because these rates  
17 can be EV-only by disaggregating the whole house data, customers can  
18 keep their preferred rate for their other-than-EV consumption. Utility  
19 demand response program operators can use the EV data to bid peak  
20 demand reductions and ancillary services into the CAISO market. The  
21 examples cited above are not exhaustive.<sup>27</sup>

## 22 **2. Multiple Goals of Widespread TE**

23 The modified Residential Charging Program continues to satisfy the multiple objectives  
24 of widespread TE outlined by SB 350, as described in the Direct Testimony of Ms. Brown,  
25 which I am now adopting as my own. How the modified Residential Charging Program meets  
26 these objective remains the same as stated in Section IV.A.2. of Ms. Brown’s Direct  
27 Testimony.<sup>28</sup>

## 28 **3. Alignment with State, Local, and Regional Efforts**

29 The modifications to the Residential Charging program do not change its alignment with  
30 State, Local, and Regional Efforts, as described in Section IV.A. 3. of Ms. Brown’s Direct  
31 Testimony.<sup>29</sup>

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<sup>27</sup> *Id.* at pp. 26-27

<sup>28</sup> SDG&E Direct Testimony (L. Brown/P. Parikh) at 28-30.

<sup>29</sup> *Id.* at p. 32.

1                                   **4. Promotes Safety**

2                   SDG&E’s core business practices revolve around safety. To ensure safety, SDG&E  
3 believes installations should be completed by not only a licensed and certified contractor, but by  
4 IBEW-signatory, Electric Vehicle Infrastructure Training Program (“EVITP”)<sup>30</sup> -trained  
5 contractors. Details of how the modified Residential Charging Program promotes safety are  
6 described in the Rebuttal Testimony of Mr. Schimka.

7                   Even if a rebate qualification included installation from a licensed contractor, whether  
8 union or non-union, without utility oversight of the installation or contractual protections,  
9 SDG&E cannot guarantee safety will be held to the same standards as those imposed by  
10 SDG&E.

11                   SDG&E’s risk management practices are described in the Direct Testimony of Mr.  
12 Schneider:

13                                   SDG&E actively manages risk by incorporating risk management  
14 principles and practices into daily operations and strives to continue  
15 including safety and security risk management as a key aspect of  
16 organizational decision-making processes.<sup>31</sup>

17                   SDG&E’s modified Residential Charging Program proposal will still allow SDG&E to  
18 ensure these safety standards are upheld during installation. SDG&E went through a RFP  
19 process to qualify installation contractors for Power Your Drive, and expects between 5-10  
20 bidders to be approved to work on those projects. As with the RFP process for the EVSE, the  
21 installation contractor qualification process creates a robust market for new work for qualified  
22 electricians.

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<sup>30</sup> Electric Vehicle Infrastructure Training Program, <http://www.evitp.org/>.

<sup>31</sup> SDG&E Direct Testimony (M. Schneider/L. Brown) at 15:14-17.



1                                   **5.     Vehicle-Grid Integration (“VGI”) Communication Standard**

2                                   SDG&E is an active participant in the VGI working group established by the  
3 Commission. EVs and the way EVs are charged and perceived in the market are on the brink of  
4 change. The utilities, car manufacturers, EVSPs, and other industry leaders are working together  
5 in that working group to develop standards and shape how charging will integrate with the grid.  
6 The modified Residential Charging Program will help promote this change by offering a  
7 selection of networked chargers that can enable communication between the EV, the driver, and  
8 the grid.

9                                   As the grid-operator, SDG&E is best situated to transform EV charging from today’s  
10 simple pull-in/plug-in charging to a vehicle-to-grid, and a future grid-to-vehicle, model.  
11 SDG&E intends to use this platform to promote technology and markets that can respond to  
12 different grid conditions in the future.

13                                   **6.     Consideration of Utility Incentives and Other Regulatory Mechanisms**

14                                   Programs like the modified Residential Charging Program are necessary to transform a  
15 market and increase EV adoption among the population of vehicles that contribute the most to  
16 GHG emissions. This program is proactive when it comes to grid management. In a future with  
17 more and more EVs, SDG&E wants to enable the “full value stack of EV benefits” described by  
18 Siemens, and provide these values to EV drivers and ratepayers. Once sufficient knowledge is  
19 acquired by SDG&E through program implementation, we can consider future applications  
20 incorporating incentive mechanisms.

1                   **7. Provides Anonymous and Aggregated Data for Evaluation**

2                   The Joint Parties recommended that SDG&E report relevant program metrics five years  
3 after the completion of construction.<sup>32</sup> SDG&E agrees to provide this data.

4                   **8. Cost and Duration**

5                   The modified Residential Charging Program costs and revenue requirement are explained  
6 and itemized in the Rebuttal Testimony of witness Michael Calabrese. SDG&E also provides  
7 clarification of the program duration in the Rebuttal Testimony of witness Randy Schimka.

8                   **9. Program Advisory Council**

9                   As stated in the original proposal, SDG&E intends to solicit the participation of a broad  
10 and diverse stakeholder advisory group as part of the existing PAC in planning and  
11 implementing the SB 350 projects, following approval by the Commission.

12                  This concludes my rebuttal testimony.

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<sup>32</sup> Joint Parties Testimony at 6-7.

1 **V. STATEMENT OF QUALIFICATIONS**

2 My name is Parina Parikh. My business address is 8306 Century Park Court, San Diego,  
3 California 92123. I am employed by SDG&E as the Clean Transportation Business  
4 Development Manager.

5 I have over 10 years of experience working in the energy industry. In my current role, I  
6 oversee all business development, regulatory and legislative efforts for the Clean Transportation  
7 department. Most recently, I led the filing of SDG&E’s transportation electrification proposals  
8 in front of the California Public Utilities Commission, where SDG&E put forth several projects  
9 covering the residential, goods movement and people movement sectors. Prior to joining Clean  
10 Transportation, I oversaw various regulatory case assignments covering electric rate design, net  
11 energy metering, electric vehicles and new business initiatives. Prior to SDG&E, I managed  
12 audit initiatives across the Sempra family of companies along with preparing Sempra’s short  
13 term and long term financial plans. I have a Bachelor of Science Degree in both Economics and  
14 Learning & Organizational Change from Northwestern University.

**ATTACHMENT A**

**RESPONSES TO DATA REQUESTS CITED IN REBUTTAL**

**TURN Response to SDG&E-TURN-01**  
**SDG&E SB 350 TRANSPORTATION ELECTRIFICATION PROPOSALS (A.17-01-020)**  
**Prepared By: Eric Borden**  
**DATE Responses Due: August 24, 2017**

**Question 3**

Borden, Appendix 2: For the 4 CA utility examples provided in Appendix 2, please provide the incremental EVs adopted per year and EVSE installs per year for these programs as compared to the target adoption rate established for these programs.

**TURN Response:**

TURN does not have this information.

**ChargePoint Response to SDG&E-ChargePoint-01**  
**SDG&E SB 350 TRANSPORTATION ELECTRIFICATION PROPOSALS (A.17-01-020)**  
**Prepared By: ChargePoint**  
**DATE Responses Due: August 24, 2017**

**Question 5**

Please provide a list of all residential EV rebate programs ChargePoint is aware of. Please provide the incremental EVs adopted per year and EVSE installs per year for these programs as compared to the target adoption rate established for these programs.

**ChargePoint Response:**

ChargePoint's website (<https://www.chargepoint.com/drivers/incentives>) provides a public list of EV rebate and incentive programs by state within the United States. In California, ChargePoint is aware of the following EV incentive programs:

- HOV Lane Access: ZEVs are eligible for Clean Air Vehicle decals to access HOV lanes. The decals are subject to availability.
- Rebate: The Clean Vehicle Rebate Project (CVRP) offers \$2,500 for the purchase or lease of new zero emission vehicles and \$1,500 for plug-in hybrids. Zero-emission motorcycles may receive up to \$900. Rebate eligibility is subject to income caps. Review the CVRP website for more information.
- Discount: Bay Area SunShares is currently partnering with Premier Nissan of San Jose and Nissan of San Francisco to offer discounts, up to \$7,000, on 2017 Nissan Leaf. Nissan is also offering a discount with SunShares, up to \$4,000, when using Nissan financing, 0% for up to 72 months on approved credit. The vehicles also come with 2 years available free charging through Nissan's "No Charge To Charge" program at select stations. Customers can also receive an additional \$1,000 discount if they are employed by a Nissan Vehicle Purchase Program (VPP) qualifying company. Register on SunShares program website to receive a promotional code. The offer expires November 10, 2017.
- Rebate: San Diego Gas & Electric (SDG&E) is offering customers a \$10,000 discount on the purchase of a 2017 Nissan LEAF or any 2017 BMW i3 model. This is in addition to the up to \$10,000 in state cash rebate and federal tax credit incentives. The discount expires September 30, 2017 or while supplies last.
- Rebate: The Pacific Gas & Electric (PG&E) Clean Fuels Rebate program offers a \$500 rebate for owning or leasing an eligible plug-in electric vehicle. This offering is only available to PG&E customers with an active residential electricity account.
- Rebate: The Monterey Bay Air Resources District (MBARD) is offering a rebate for electric vehicles for residents of Monterey, San Benito, and Santa Cruz Counties. Applicants must purchase or lease an eligible new vehicle before applying for a rebate. MBARD is providing \$2,000 rebates for new battery electric vehicles, \$1,000 for new plug-in hybrid electric vehicles, \$500 for new electric motorcycles, \$1,000 for used battery electric vehicles, and \$500 for used plug-in hybrid electric vehicles. Rebates will

be issued starting July 1, 2017. This program is first-come, first-served and rebates are issued pending on availability of funds.

- Rebate: The Southern California Edison (SCE) Clean Fuels Rewards program offers a \$450 rebate for driving a new, used, or leased electric vehicle (battery electric or plug-in hybrid). This offering is only available to SCE customers with an active residential electricity account. If you have multiple eligible EVs in your household, you may receive a rebate for each vehicle if you otherwise qualify.
- Rebate: The San Joaquin Valley Air Pollution Control District Drive Clean Rebate offers a rebate to local residents and businesses for purchasing EVs. The rebate is up to \$3,000 for zero emission vehicles and up to \$2,000 for plug-in hybrids. The local rebate can also be combined with state and federal rebates.
- Rebate: The Northern Sonoma County Air Pollution Control District (NSCAPCD) offers a rebate program for the purchase or lease of an eligible clean vehicle. Rebates include \$3,000 for battery electric and \$2,000 for plug-in hybrid. The District territory includes the northern and coastal regions of Sonoma County, including Healdsburg, Cloverdale, and Guerneville. Download the application and submit via email, mail or fax.

ChargePoint does not have the information requested above regarding incremental EVs adopted per year and EVSE installs per year from any residential EV rebate program.

#### **Question 6**

Regarding the Charge Up L.A! program cited in testimony, what has the adoption rate been for this program? What was the target adoption rate for this program?

#### **ChargePoint Response**

ChargePoint does not have this information.

**ORA Response to SDG&E-ORA-01**  
**SDG&E SB 350 TRANSPORTATION ELECTRIFICATION PROPOSALS (A.17-01-020)**  
**Prepared By: Matthew Yunge**  
**DATE Responses Due: August 24, 2017**

**Question 4**

Please provide examples of all residential EV rebate programs ORA is aware of. Please provide the incremental EVs adopted per year and EVSE installs per year for these programs as compared to the target adoption rate established for these programs.

**ORA Response:**

ORA is aware of the programs listed below.

Sponsoring Entity	Program Name
LADWP	Charge Up L.A.!
Sonoma Clean Power	SCP CleanCharge
Glendale	Glendale Water & Power Charging Station Rebate
Pasadena	Plug-In Electric Vehicle Incentive Program
SMUD	SMUD Residential Charge Electric Incentive Program

ORA does not have information regarding the incremental EVs adopted per year or EVSE installations per year other than the number of rebates provided in the Charge Up L.A.! program, as discussed in Response 5.