



Application of San Diego Gas & Electric Company (U 902-E) For Approval of Senate Bill 350 Transportation Electrification Proposals Regarding Medium and Heavy-Duty Electric Vehicles and a Vehicle-To-Grid Pilot

Application No. 18-01-012 (Filed January 22, 2018)

JOINT MOTION OF SETTLING PARTIES FOR COMMISSION ADOPTION OF SETTLEMENT AGREEMENT

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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

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I. INTRODUCTION

Pursuant to Rule 12.1 of the Rules of Practice and Procedure ("Rules") of the California Public Utilities Commission ("Commission"), San Diego Gas & Electric Company ("SDG&E"), Public Advocates Office at the California Public Utilities Commission ("Public Advocates Office"), Natural Resources Defense Council, Environmental Defense Fund, Union of Concerned Scientists, Coalition of California Utility Employees, CALSTART, Small Business Utility Advocates, Electric Motor Werks, Inc., Siemens, ChargePoint, Chanje Energy, Center for Community Action and Environmental Justice, East Yard Communities for Environmental Justice, Plug In America, and Sierra Club (collectively, "Settling Parties") hereby seek approval of their Settlement Agreement, attached hereto as Attachment A. Pursuant to Rule 1.8(d), SDG&E has been authorized to file this Joint Motion on behalf of all the Settling Parties listed on the caption pages. The Settlement Agreement resolves all issues in the scope of the proceeding with respect to SDG&E's Medium-Duty and Heavy-Duty Electric Vehicle Charging

¹ The Office of Ratepayer Advocates was renamed the Public Advocates Office of the Public Utilities Commission pursuant to Senate Bill No. 854, which was signed by the Governor on June 27, 2018 (Chapter 51, Statutes of 2018).

Infrastructure Program ("MD/HD EV Charging Infrastructure Program") and Vehicle to Grid Electric School Bus Pilot ("V2G Pilot") Application ("A.") 18-01-012 (the "Application").

As described in more detail below, the Settlement Agreement will help advance transportation electrification ("TE") in SDG&E's service territory and will promote the goals of Senate Bill ("SB") 350. Accordingly, the Settling Parties respectfully request that the Commission find that the Settlement Agreement is reasonable in light of the whole record, consistent with the law and in the public interest; approve it without modification; and issue a final decision resolving SDG&E's Application.

II. BACKGROUND/PROCEDURAL HISTORY

SDG&E filed A.18-01-012 on January 22, 2018, supported by the prepared testimony of seven witnesses. The Application requested authorization to establish and implement a medium duty/heavy duty (MD/HD) program to support approximately 3,100 Class 2 – Class 8 on-road electric vehicles as well as off-road support vehicles such as forklifts and transport refrigeration units. In addition, the Application included a pilot program to advance vehicle to grid operations. SDG&E requested a total of \$152.3 million in direct costs for both programs.

On February 26, 2018, parties filed protests and responses to the Application, to which SDG&E filed a reply on March 8, 2018. A prehearing conference was held on March 15, 2018, followed by a Scoping Ruling of Assigned Commissioner and Joint Ruling with Administrative Law Judges ("Scoping Ruling") issued on March 30, 2018. The Scoping Ruling set forth a schedule that included intervenor testimony, concurrent rebuttal testimony, and hearings.

Subsequent to the filing of the Application and issuance of the Scoping Ruling, the Commission issued its final decision on the medium-duty and heavy-duty ("MD/HD") applications of Pacific Gas & Electric Company ("PG&E") and Southern California Edison Company ("SCE"). This decision, Decision ("D.") 18-05-040, was effective as of May 31, 2018.

Intervenor testimony on the Application was served on August 17, 2018. Several parties referenced D.18-05-040 in their testimony.

After evaluating intervenor testimony in light of D.18-05-040's findings and conclusions with respect to PG&E's and SCE's MD/HD applications, SDG&E initiated settlement discussions. These discussions focused on program and budget modifications that would bring SDG&E's MD/HD proposals into line with what was decided for PG&E and SCE. Ultimately, SDG&E agreed to materially modify its original MD/HD proposal to a degree where rebuttal testimony and hearings on the original application would not be productive. Accordingly, SDG&E filed a motion to notify the Commission that parties were working towards a settlement and to suspend the proceeding schedule. On September 26, 2018, Administrative Law Judge ("ALJ") Goldberg issued a ruling granting SDG&E's motion and stating that if "settlement is not reached by October 22, 2018, SDG&E and the settling parties have until close of business on Friday October 26, 2018, to file a report on the status of settlement efforts."²

A settlement conference was then noticed pursuant to Rule 12.1(b) and held on October 8, 2018. Following the settlement conference, additional settlement negotiations took place, resulting in the final Settlement Agreement that is the subject of this Motion.

III. STATEMENT OF THE FACTUAL AND LEGAL CONSIDERATIONS ADEQUATE TO ADVISE THE COMMISSION OF THE SCOPE OF THE SETTLEMENT AND OF THE GROUNDS ON WHICH ADOPTION IS URGED

A. Description of Settlement Agreement

The Settlement Agreement covers both the MD/HD EV Charging Infrastructure Program and the V2G Pilot. The MD/HD EV Charging Infrastructure Program will provide EV charging infrastructure to support a range of Class 2 through Class 8 vehicles as well as off-road support

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² E-Mail Ruling Granting San Diego Gas & Electric Company's Motion to Suspend the Procedural Schedule in Application (dated September 26, 2018) at 3.

vehicles such as forklifts and transport refrigeration units. In addition, the program will provide rebates for transit and school bus EVSE, not to exceed 50 percent of the cost of the EVSE. The Settling Parties agreed to modify SDG&E's proposed program to eliminate the utility ownership of the EVSE. Therefore, SDG&E will construct, own, operate and maintain the make-ready infrastructure on the utility side of the meter in all instances, but will not own the EVSE. The Settling Parties also agreed that program costs will be recovered by allocating costs to each customer class on an equal cent per kilowatt hour basis.

The Settling Parties agreed to reduce the program budget from SDG&E's original request, and also to increase the size of the program to accommodate more EVSE installations than originally proposed. This was accomplished by relying on Pacific Gas and Electric Company's (PG&E) site cost estimates adopted in D.18-05-040 instead of the site cost estimates developed by SDG&E. As explained in more detail below in Section A, the Settlement Agreement adopts several other program components from the MD/HD programs approved for PG&E and Southern California Edison Company in D.18-05-040, including, but not limited to, per se reasonableness requirements, the make-ready infrastructure program structure, release of rebates reserved for DACs, and authorization to file a Tier 3 advice letter to request programmatic changes.

The V2G Pilot will utilize ten electric school buses capable of V2G as a distributed energy resource to bid into the California Independent System Operator market. Large-scale deployment of V2G may help integrate renewable generation, assist with the steep evening system ramp, and reduce peak load. SDG&E will install, maintain, and own EV charging infrastructure for this pilot.

1. MD/HD EV Charging Infrastructure Program

The Settlement Agreement terms regarding the MD/HD EV Charging Infrastructure Program are described below and contained within the Settlement Agreement, including Appendices A and B to the Settlement Agreement. The Settling Parties have agreed to a total budget of \$107.4 million (2018 escalated, unloaded dollars) to support a minimum of 3,000 and up to approximately 6,000 MD/HD electric vehicles and the following set of per se reasonable metrics:

- 1. a minimum of 300 make-ready installations are fully contracted for after five years of program deployment and 3,000 additional vehicles are electrified that are directly attributable to the authorized program achieved by site hosts procuring at least two electric vehicles or converting at least two diesel fueled vehicles to electric;
- 2. a <u>minimum of 10 percent</u> of the infrastructure budget serves transit style buses and school buses; transit style buses include all buses operated by transit agencies and buses operated by entities such as universities, colleges, airports, etc.;
- 3. a maximum of 10 percent of the infrastructure budget serves forklifts;
- 4. a <u>minimum of 30 percent</u> of the infrastructure budget results in installations in disadvantaged communities in SDG&E's territory, using SDG&E's service territory DAC definition;
- 5. rebate levels for beach head sectors and customers in disadvantaged communities should be established in consultation with SDG&E's Program Advisory Council;
- 6. rebate levels should not exceed 50 percent of the charger cost; and
- 7. a <u>maximum of 10 percent</u> of the infrastructure budget is spent on program administration.

If SDG&E is able to achieve these metrics, then its spending up to the authorized budget will be deemed per se reasonable. As described below and in the Settlement Agreement, the funding will become available in two releases, the second of which will be released upon approval of a Tier 2 Advice Letter that shows progress toward certain metrics (the first release is \$84 million; and the second release is \$23.4 million).

a. Budget

The budget in 2018 escalated, unloaded dollars is \$107.4 million, shown in more detail in Appendix A Table 2 to the Settlement Agreement.³ Details related to these total budget figures are as follows:

- Settling Parties used the per site costs found to be reasonable in D.18-05-040 and Appendix C of D.18-05-040 as a basis for SDG&E's budget.
- The original budget request of SDG&E in the Application was \$150.1 million unloaded and un-escalated in 2017 dollars.
- SDG&E's minimum EV deployment requirement remains at approximately 3,000 EVs, consistent with the proposal in the Application. Additional detail regarding vehicle targets is provided in Appendix B.
- The Appendix A budget attached to the Settlement Agreement could support approximately 6,000 EVs if the infrastructure deployment follows the exact vehicle mix and per site budget cost estimates in Appendix A. The target for the program is to deploy 6,000 EVs.
- Consistent with D.18-05-040's treatment of PG&E and SCE, Settling Parties agree to a per se reasonable program deployment requirement (3,000 EVs) and budget authorization (supporting up to 6,068 EVs).

b. Budget Timeline and Per Se Reasonable Metrics

The Settling Parties request that the Commission approve the entire \$107.4 million (2018 dollars unloaded and un-escalated⁴ for Program years 2019 – 2024) budget to be collected from ratepayers. The funds will become available for program implementation according to the

³ The per site cost estimates used to determine the budget are based on PG&E's Application, A.17-01-022, which escalated costs from 2016 dollars to future dollars with assumed implementation in each year from 2018-2022 of the 5-year program. SDG&E's budget is equal to \$107.4 million in 2018 dollars, shown in more detail in Appendix A Table 2 of the Settlement Agreement. This was calculated by deescalating PG&E's per site estimates to 2016 dollars, escalating to 2018 dollars, and applying to SDG&E's program size.

⁴ Overhead loaders are used to allocate undistributed company overhead costs across capital projects and O&M. Overhead costs are those activities and services that are associated with direct costs, such as payroll taxes and pension and benefits, or are costs that cannot be economically direct-charged, such as administrative and general overheads. Cost escalation factors are used to reflect the effect of inflation on SDG&E's costs.

following timeline: (1) upon issuance of a final decision approving the Settlement Agreement, SDG&E is authorized to utilize \$84 million (2018 dollars unloaded and escalated); and (2) the remaining \$23.4 million (2018 dollars unloaded and escalated) may be utilized by SDG&E upon approval of a Tier 2 Advice Letter that shows SDG&E's progress towards certain metrics. The advice letter will include a report on the progress towards the interim per se reasonable metrics based on a proportional share of the final per se reasonable metrics. Interim per se metrics and final per se metrics are shown in Appendix B of the Settlement Agreement. The Tier 2 Advice Letter will include the number of vehicles supported (by type of vehicle), number of installations, and number of chargers per installation. This information will be provided for deployments which are operational as well as locations that are in development. Cost data will be provided for the operational locations, and allocated costs will be provided for locations that are in development.

Settling Parties agree that the interim per se metrics will provide guidance. Achieving the interim per se metrics will not be a pre-requisite to filing an advice letter to request the second tranche of funding. SDG&E will describe in its Advice Letter report how it plans to achieve the final per se reasonableness metrics in Appendix B to the Settlement Agreement with the remainder of the funding.

Settling Parties also agree that progress towards final per se metrics and expenditure of budget may not occur in a linear fashion. EV uptake is expected to accelerate in later years, lessons will be learned in the early years which could drive down costs, and certain expenditures may be front loaded such as marketing, education and outreach.

The total infrastructure budget is \$63.9 million of the \$107.4 million. The share for infrastructure in the first tranche of \$84 million is \$50 million.

In order to avoid a gap in funding, SDG&E may submit the Tier 2 Advice Letter for incremental funds after 66% of the infrastructure budget ("trigger") has been allocated to projects based on commitments from participating customers, which is approximately \$33.0 million of the infrastructure funds.

c. Cost Recovery

Settling Parties agree that costs for the MD/HD EV Charging Infrastructure Program will be recovered from ratepayers through distribution rates and allocated to customer classes on an equal cents per kWh basis, i.e., costs will be allocated to each class based on each class's share of system sales. The equal cents cost allocator is a modification from SDG&E's original proposal to use a distribution cost allocator.

d. Ownership Structure

The MD/HD EV Charging Infrastructure Program ownership structure was modified to align with the make-ready infrastructure programs approved in D.18-05-040. Accordingly, Settling Parties agree that SDG&E will construct, own, operate and maintain the make-ready infrastructure on the utility side of the meter in all instances.

Also, SDG&E will construct, own, operate and maintain the make-ready infrastructure on the customer side of the meter in some instances. That is, the Settling Parties agree that the customer may elect to have SDG&E construct, own, operate and maintain the make-ready on the customer side of the meter. Consistent with Ordering Paragraph ("OP") 39 of D.18-05-040, if the customer chooses ownership, the customer must manage and pay for the installation of the customer-side infrastructure and use state licensed labor for which the utility will provide a rebate of up to 80 percent of the installation costs, treating these costs as an expense for ratemaking purposes, and the customer must commit to operate and maintain the facilities consistent with relevant national, state, and local electrical standards for their site. Customers

must submit their site plans and estimated site construction costs to the utility and state their commitment to operate and maintain the facilities consistent with relevant national, state, and local electrical standards for their site. SDG&E shall provide a rebate to the customer for customer-side infrastructure the customer installs that is the lesser of: (a) 80 percent of customer's actual installation costs or (b) 80 percent of the average utility direct cost for installing the customer-side make-ready infrastructure in the relevant sector. The rebate shall be treated as an expense for ratemaking purposes.

Settling Parties agree that SDG&E will not own the electric vehicle supply equipment ("EVSE") or charging station. SDG&E, or a third-party entity who is designated to qualify eligible EVSEs, will qualify equipment that will be eligible for the program. This process will ensure that certain minimum qualifications are met. There will be an initial qualification period followed by additional opportunities to qualify equipment, as appropriate. Qualifying party (either SDG&E or a third-party entity designated to qualify EVSEs) will review in a timely manner. Program participants will be free to select charging equipment and network services from any qualifying vendor.

e. Program Duration and Vehicle Types

Settling Parties agree that the MD/HD EV Charging Infrastructure Program will have a five year sign up period. Design and construction may extend beyond the fifth year. The Program will support the full range of vehicles addressed in D.18-05-040, including forklifts, truck stop electrification, transport refrigeration units, port cargo trucks, transit buses, school buses, airport ground support equipment, medium-duty vehicles, heavy-duty vehicles, and Class 2 through Class 8 on-road vehicles, which is a broader range of vehicles than SDG&E originally proposed.

f. Construction and Installation

Settling Parties agree that all construction and installation of EVSE make-ready infrastructure and installation of EVSE/chargers that is not performed by employees of SDG&E shall be performed by contractors who are signatory to the International Brotherhood of Electrical Workers ("IBEW") who hold a valid C-10 contractor's license, and electricians must have Electric Vehicle Infrastructure Training Program ("EVITP") certification. All maintenance of EVSE make-ready infrastructure owned by SDG&E that is not performed by employees of SDG&E shall be performed by contractors who are signatory to the IBEW who hold a valid C-10 contractor's license, and electricians must have EVITP certification.

g. Rebates

Settling Parties agree that SDG&E will set rebate levels for transit and school bus EVSE in consultation with its Program Advisory Council ("PAC"). Rebates for transit and school bus EVSE will not be limited to deployments in Disadvantaged Communities ("DAC"). The rebates must not exceed 50 percent of the cost of the EVSE. Rebates may also be offered to participants: (1) who are located in DAC, as defined in D.16-01-045 for SDG&E's service territory; and (2) not on the Fortune 1000 list. SDG&E will work with its PAC to develop further requirements for participants located in DACs to be eligible for EVSE rebates. This will include consideration of treatment of companies on the Fortune 1000 list who allow tenants or other users who are not on the Fortune 1000 list to utilize EVSEs on their premises. The rebates shall not exceed the cost the site host pays for the EVSE after accounting for any other funding sources used for EVSE procurement.

h. Terms Related to DACs

Settling Parties agree that Consistent with OP 41 of D.18-05-040, after the third year of the program, 50 percent of the funds that were reserved for DAC rebates but have not yet been

committed to a deployment may be released if SDG&E has not achieved 60 percent of its target in DAC locations and 80 percent of its target in non-DAC locations. Released means that the DAC EVSE rebates may be used in non-DACs to accelerate MD/HD EV adoption. Any remaining rebate funds that are unallocated after year 4 may be spent as rebates in any location.

A minimum of 30% of the infrastructure budget will be allocated to deploy infrastructure located in DACs. In SDG&E's original proposal the target was 40% of (1) infrastructure located in a DAC or (2) infrastructure not located in a DAC that supports vehicles that travel through DACs. A metric to deploy 30% of infrastructure located in DACs will allow for easier tracking than the original proposal. The DAC definition will be consistent with the service territory definition, as approved in D.16-01-045.

i. Load Management Plan

Settling Parties agree that the MD/HD EV Charging Infrastructure Program participants will be required to submit a load management plan detailing a strategy for facilitating charging behavior in a manner that minimizes grid impacts and takes into account periods of high renewable generation on the grid. During development of the load management plan, SDG&E will inform program participants of the benefits of managed charging and general capabilities of networked chargers. SDG&E will provide program participants information on items that they should consider as they create their load management plan. SDG&E will monitor customer load management plans, including the ability to integrate renewable energy and integrate EV load with the electrical grid, to the extent feasible.

j. Per Se Reasonable

Settling Parties agree that consistent with D.18-05-040, OP 31 and OP 32, SDG&E's investments will be considered per se reasonable if certain metrics are met. Specific metrics for SDG&E can be found in Appendix B of the Settlement Agreement.

k. Terms Related to the Program Advisory Council

Settling Parties agree that SDG&E will leverage the participation of a broad and diverse stakeholder advisory PAC in planning and implementing the MD/HD EV Charging Infrastructure Program following its approval by the Commission. SDG&E will solicit PAC participation from representatives from local and state government (including representation from the Energy Division), industry, labor and other stakeholder participants, ratepayer and environmental advocates, and representatives of Disadvantaged Communities.

In addition, Settling Parties agree that with guidance from the PAC, SDG&E will make programmatic changes as needed to the MD/HD EV Charging Infrastructure Program.

Consistent with the provisions of D.18-05-040, if SDG&E identifies any modifications necessary to effectively implement the program, it will propose the modifications via a Tier 2 Advice Letter after reviewing the changes with the PAC.

Settling Parties also agree that consistent with D.18-05-040, OP 2, after consultation with the PAC SDG&E may file a Tier 3 Advice Letter after two years of program implementation to adjust the approved program budgets and metrics used to determine per se reasonableness. At a minimum the Advice Letter must include: (1) a summary of program status to date; (2) a breakdown of utility-side, customer-side, and other costs by sector; (3) a description of the major cost drivers for utility-side and customer-side infrastructure; and (4) an explanation of any site cost caps the utility used to determine customer eligibility for the program or other metrics the utility used to control program costs.

l. Data Collection

Settling Parties agree that SDG&E will collect data and report annually consistent with the provisions of D.18-05-040. The report will include information on EV adoption by various sized businesses participating in the MD/HD EV Infrastructure Program. SDG&E will survey

businesses to collect data on the size of the businesses participating in the Program, customer experience segmented by size of businesses, including for small commercial customers, and lessons learned. Four percent of SDG&E's total budget is allocated to fund a third-party evaluator consistent with D.18-05-040.

m. Education for Small Businesses

Settling Parties agree that 15% of the approved education budget will be dedicated to educating small businesses on the benefits of transportation electrification which may include information on energy use, load management plans and incentive programs for EVs.

n. Rates Workshop

Settling Parties agree that SDG&E will hold an EV rates workshop by the end of November 2018, which has been noticed to all the parties on the service list of A.18-01-012. The workshop will include a discussion on emission reductions, load management as it relates to rates, and time varying rates. After the EV rates workshop, SDG&E will develop a new rate option or new rate options, which considers the importance of time varying rates, that will be submitted to the Commission within six months of final approval of the MD/HD EV Charging Infrastructure Program. In designing the new rate option or rate options, SDG&E will examine how incremental EV load may impact the electric bills of small businesses who adopt EVs and may utilize the new EV rate or rates. SDG&E will assess the rate impact of the new rate option or options on ratepayers.

2. V2G Pilot

The Settling Parties do not propose making significant modifications to the V2G proposal in A.18-01-012.

a. Budget

Settling Parties agree that SDG&E's budget for the V2G Pilot is \$1.7 million, including unloaded and un-escalated direct capital and O&M costs. Due to the pilot nature of the proposal, the approved budget will allow for adjustments within capital and within O&M across line items as the pilot is deployed.

b. Ownership

The EVSE that are part of the V2G Pilot will be owned by SDG&E.

c. Cost Recovery

Settling Parties agree that costs for the V2G Pilot will be recovered from ratepayers through distribution rates and allocated to customer classes on an equal cents per kWh basis, i.e., costs will be allocated to each class based on each class's share of system sales.

d. Alternative Funds to Pay for Electric School Buses

Settling Parties agree that SDG&E will continue to seek funds to pay for the electric school buses, including through the Hybrid and Zero Emission Truck and Bus Voucher Incentive Program, Federal Environmental Protection Agency, California Energy Commission and others.

SDG&E's contribution towards the cost of the buses may be reduced if sufficient funds to pay for the cost of the electric school buses are secured from alternate sources.

SDG&E will require First Priority GreenFleet, the prospective EVSE provider for the V2G Pilot, to submit a revised proposal updating final electric bus costs, data collection and reporting, and other updates in alignment with the Commission's final decision on whether to approve the Settlement Agreement. SDG&E will seek to further reduce costs and seek leveraged funding.

e. Data Collection

Settling Parties agree that data collection and reporting will include monitoring to ensure asset utilization and V2G operation. The data will be analyzed to determine how V2G can be scaled for the electric school bus segment as well as other vehicle segments. Analysis will include how the assets interacted with the California Independent System Operator, wholesale and retail rate implications, energy consumption, duration and frequency of charging, peak electricity demand, energy exported to the grid, the ability of V2G operations to improve load factor, impacts of V2G on the vehicles' batteries and overall costs and benefits. The report will include potential barriers to scaling and barriers to interconnection as well as strategies to overcome barriers.

f. Terms Related to the PAC

With guidance from the PAC, SDG&E will make programmatic changes as needed to the V2G Pilot. Consistent with the provisions of D.18-05-040, if SDG&E identifies any modifications necessary to effectively implement the V2G Pilot, it will propose the modifications via a Tier 2 Advice Letter after reviewing the changes with the PAC.

B. The Settlement Agreement is Reasonable in Light of the Whole Record, Consistent with the Law and in the Public Interest

Numerous Commission decisions have endorsed settlements and express a strong public policy favoring settlement of disputes if they are fair and reasonable in light of the whole record.⁵ This policy supports many worthwhile goals, including not only reducing the expense of litigation and conserving scarce Commission resources, but also allowing parties to reduce the risk that litigation will produce unacceptable results.⁶ This strong public policy favoring

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⁵ See, e.g., D.05-10-041at 47 and D.15-04-006 at 8-9.

⁶ D.14-12-040 at 33-35.

settlements also weighs in favor of the Commission resisting the temptation to alter the results of the negotiation process. As long as a settlement taken as a whole "is reasonable in light of the whole record, consistent with law, and in the public interest" it should be adopted without change.⁷ As shown below, the Settlement Agreement meets this standard.

1. The Settlement Agreement is Reasonable in Light of the Whole Record

Regarding settlement agreements, the whole record "consists of all filed documents, the Settlement and the motion for its adoption." SDG&E's Application and opening testimony, although based on its original proposal, also support the conclusion that the Settlement Agreement is reasonable and in furtherance of California's transportation electrification policy goals. Indeed, from an overall policy and need perspective to reduce air pollutants and GHG emissions from the transportation sector, SDG&E's testimony remains relevant and supportive, even if some of the program details have been changed to match the findings and conclusions in D.18-05-040 and the goals of the various Settling Parties. In addition, the intervenor testimony of several Settling Parties remains supportive of the modified MD/HD EV Infrastructure Program.

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⁷ Rule 12.1(d) of the Commission's Rules of Practice and Procedure.

⁸ D.15-03-006 at 6

⁹ Prepared Direct Testimony of Linda P. Brown – Chapter 1, January 22, 2018 at LPB-11:1 – LPB-14:3, LPB-16:4 – LPB-17:8 and LPB-19:1 – LPB-20:8 (discussing local air pollution impacts; electric transit and school bus benefits for DACs; fit with the CPUC and IOU competencies and capabilities; support of multiple goals of widespread transportation electrification; safety considerations; and alignment with legislation and regulation).

¹⁰ Opening Testimony of Max Baumhefner, sponsored by NRDC, CUE, Siemens, Greenlots, eMotorWerks, EVBox, Inc., Chanje Energy, Plug In America, and the Sierra Club, August 17, 2018 at 1:10 − 8:1 and 9:25 − 10:9 (discussing the need for widespread electrification of MD/HD vehicles; benefits to utility customers; health benefits in local communities; and particular benefits of electrified school buses); Direct Testimony of James O'Dea on Behalf of Union of Concerned Scientists and Direct Testimony of Deb Niemeier and Ed Avol on Behalf of Center for Community Action and Environmental Justice and East Yard Communities for Environmental Justice, August 17, 2018 at 2:9 − 24:9 (discussing benefits for air quality and climate change offered by MD/HD vehicle electrification); 44:17 − 81:27 (discussing health benefits associated with MD/HD vehicle electrification).

In addition, the Commission should consider the substantial concessions made by the Settling Parties during negotiations. SDG&E made significant concessions by agreeing to modify its original MD/HD EV Infrastructure Program, including changes regarding program budget and utility ownership of the EVSE. The Public Advocates Office, Natural Resources Defense Council, Environmental Defense Fund, Union of Concerned Scientists, Coalition of California Utility Employees, CALSTART, Small Business Utility Advocates, Electric Motor Werks, Inc., Siemens, ChargePoint, Chanje Energy, Center for Community Action and Environmental Justice, East Yard Communities for Environmental Justice, Plug In America, and Sierra Club have all similarly made concessions to their recommendations to achieve the negotiated results in the Settlement Agreement. Accordingly, the Settlement Agreement is reasonable because it represents the collective best efforts and judgments of the Settling Parties that represent a wide range of stakeholder interests. In sum, consistent with Rule 12.1(a), the Settlement Agreement results in "a mutually agreeable outcome to the proceeding."

2. The Settlement Agreement is Consistent with the Law

To determine if a settlement is consistent with the law, the Commission evaluates whether the settlement contravenes a statute or prior Commission decision. Here, the Settlement Agreement is consistent with the law because its terms are consistent with the provisions of the California Public Utilities Code, prior Commission decisions, and other applicable laws. In particular, the Settlement Agreement is consistent with California's climate change laws and policies, which are among the most innovative and aggressive in the nation. SB 350, 12 including California Public Utilities Code ("P.U. Code") §§ 237.5, 740.8 and 740.12 and P.U. Code § 740.3, is among the laws with which the Settlement Agreement is consistent. The

¹¹ D.17-03-005 at 6.

¹² SB 350, Stats. 2015, Ch. 547.

Settlement Agreement is also consistent with the greenhouse gas ("GHG") reduction goals established by Assembly Bill ("AB") 32¹³ and accelerated in SB 32.¹⁴ Finally, the Settlement Agreement is consistent with the recent passage of SB 100¹⁵ and issuance of Executive Order ("EO") B-55-18. EO B-55-18 sets California on a statewide path towards carbon neutrality and net negative emissions. This effort will require significant decarbonization of the transportation sector. SDG&E's MD/HD EV Charging Infrastructure Program directly supports EO B-55-18, as well as state legislation, by lowering the upfront capital costs to adopt electric trucks and buses.

Regarding prior Commission decisions, as noted above, the Settlement Agreement reflects an effort to make its terms consistent with those approved in D.18-05-040 for similar programs initiated by PG&E and SCE. Accordingly, the Settlement Agreement is consistent with D.18-05-040 as well as other Commission decisions approving EV-related programs.

3. The Settlement Agreement is In the Public Interest

As shown above, the Settlement Agreement is consistent with many laws, policies and decisions that by their nature are in the public interest. That is, by advancing transportation electrification development and helping to reduce GHG emissions in the MD/HD sector, the Settlement Agreement helps to meet California's clean air and climate change objectives, improving the lives of all members of the public.

Moreover, the Settlement Agreement was reached after extensive negotiations by parties that were actively engaged in representing a variety of interests and constituents, including ratepayer advocacy groups, environmental groups, the automobile industry, labor,

¹⁴ SB 32, Stats. 2016, Ch. 249.

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¹³ AB 32, Stats. 2006, Ch. 488.

¹⁵ SB 100, Stats. 2018, Ch. 312.

representatives of disadvantaged communities, and EV charging providers. The negotiation process itself, involving such a diverse group of parties, lends credence to the fact that the Settlement Agreement is in the public interest and is the preferred outcome. In particular, the support of Public Advocates Office, the Commission Division responsible for representing ratepayer interests, is strongly indicative of the fact that the Settlement Agreement is reasonable and in the public interest.

IV. CONCLUSION

For all the foregoing reasons, the Commission should find that the Settlement Agreement is reasonable in light of the whole record, consistent with the law, in the public interest, and resolves all outstanding issues in this proceeding with respect to SDG&E's Application.

Respectfully submitted,

/s/ John A. Pacheco

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Attorney for SAN DIEGO GAS & ELECTRIC COMPANY

November 5, 2018

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ATTACHMENT 1

SETTLEMENT AGREEMENT REGARDING SAN DIEGO GAS & ELECTRIC COMPANY'S MEDIUM-DUTY AND HEAVY-DUTY ELECTRIC VEHICLE CHARGING INFRASTRUCTURE PROGRAM AND VEHICLE TO GRID ELECTRIC SCHOOL BUS PILOT APPLICATION, A.18-01-012

SETTLEMENT AGREEMENT REGARDING SAN DIEGO GAS & ELECTRIC COMPANY'S MEDIUM-DUTY AND HEAVY-DUTY ELECTRIC VEHICLE CHARGING INFRASTRUCTURE PROGRAM AND VEHICLE TO GRID ELECTRIC SCHOOL BUS PILOT APPLICATION, A.18-01-012

Pursuant to California Public Utilities Commission's Rules of Practice and Procedure, Article 12, Rule 12.1, San Diego Gas & Electric Company ("SDG&E"), Public Advocates Office of the California Public Utilities Commission, Natural Resources Defense Council, Coalition of California Utility Employees, Union of Concerned Scientists, ChargePoint, Center for Community Action and Environmental Justice, East Yard Communities for Environmental Justice, Electric Motor Werks, Inc., Siemens Digital Grid, Environmental Defense Fund, Small Business Utility Advocates, CALSTART, Sierra Club, Chanje Energy and Plug In America (collectively, together with SDG&E, the "Settling Parties") enter into this settlement agreement ("Settlement Agreement") regarding SDG&E's Medium-Duty and Heavy-Duty Electric Vehicle Charging Infrastructure Program ("MD/HD EV Charging Infrastructure Program") and Vehicle to Grid Electric School Bus Pilot ("V2G Pilot") proposal ("Proposal"), submitted for Commission consideration in Application A.18-01-012 (the "Application"). Except as otherwise identified, citation references in this Settlement Agreement are to the materials filed with or issued by the Commission in connection with the Application.

Settling Parties acknowledge that the positions expressed in this Settlement Agreement were reached after consideration of positions advanced by all Settling Parties regarding the Proposal and declare and mutually agree that the terms and conditions herein are reasonable, consistent with the law, and in the public interest. Accordingly, the Settling Parties shall use their best efforts to obtain Commission approval of this Settlement Agreement and shall jointly request that the Commission adopt this Settlement Agreement in its entirety and without modification.

I. Introduction and Background

SDG&E filed A.18-01-012 on January 22, 2018, supported by the prepared testimony of seven witnesses. SDG&E requested authorization to establish and implement a program to support Class 2 – Class 8 on-road electric vehicles as well as off-road support vehicles such as forklifts and transport refrigeration units. In addition, the Application included a pilot program to advance vehicle to grid operations.

On February 26, 2018, parties filed protests and responses to SDG&E's Application, to which SDG&E filed a reply on March 8, 2018. A prehearing conference was held on March 15, 2018, followed by a scoping ruling issued by Commissioner Carla J. Peterman, Administrative Law Judge ("ALJ") Kelly A. Hymes, and ALJ Sasha Goldberg. The scoping ruling set forth a schedule that included intervenor testimony, concurrent rebuttal testimony, and hearings.

After the filing of SDG&E's Application, the Commission issued its final decision on the medium-duty and heavy-duty applications of Pacific Gas & Electric Company ("PG&E") and Southern California Edison Company ("SCE"). The decision, Decision 18-05-040, was effective

as of May 31, 2018.

Intervenor testimony on SDG&E's Application was served on August 17, 2018. Several parties referenced D.18-05-040 in their testimony.

SDG&E filed a motion on September 25, 2018 to notify the Commission that parties were working towards a settlement and to suspend the schedule. The settlement terms materially modified the original application proposal to a degree that rebuttal testimony and hearings on the original application would not be productive. On September 26, 2018, ALJ Goldberg granted SDG&E's motion to suspend the procedural schedule. A settlement conference was noticed and held on October 8, 2018.

Settling Parties acknowledge that SDG&E's Proposal has been thoroughly vetted by a wide variety of parties, including ratepayer advocacy groups, environmental groups, the automobile industry, labor, representatives of disadvantaged communities, and EV charging providers. The Settling Parties, in light of D.18-05-040 and the feedback from interested parties, have agreed to certain important modifications to SDG&E's Proposal. These modifications are consistent with efforts to support widespread transportation electrification pursuant to Senate Bill 350, Senate Bill 32, Assembly Bill 32, the Governor's executive order setting a target of five million zero-emission vehicles in California by 2030, and California's and California agencies' clean air and climate change objectives. The modifications are also consistent with the most recent state policies including the passage of Senate Bill 100 and issuance of Executive Order ("EO") B-55-18. EO B-55-18 sets California on a statewide path towards carbon neutrality and net negative emissions. This will require significant decarbonization of the transportation sector. SDG&E's MD/HD EV Charging Infrastructure Program directly supports EO B-55-18, as well as state legislation, by lowering the upfront capital costs to adopt electric trucks and buses.

II. Definitions

"Application" means SDG&E's Application A.18-01-012 filed with the Commission January 22, 2018.

"Commission" means the California Public Utilities Commission.

"<u>Disadvantaged Communities</u>" means disadvantaged communities as identified by the California Environmental Protection Agency's Enviroscreen 3.0 tool. SDG&E will apply the service territory definition, as approved in D.16-01-045.

"Energy Division" means the Energy Division of the California Public Utilities Commission.

"EV" means an electric vehicle.

"EVSE" means electric vehicle supply equipment; and may be used interchangeably with EV charger or charging station.

"MD/HD EV Charging Infrastructure Program" or "Program" means SDG&E's Medium-Duty

and Heavy-Duty Electric Vehicle Charging Infrastructure Program.

"Program Advisory Council" or "PAC" means the stakeholder advisory council as described in Paragraph III.N. below.

"Proposal" means the MD/HD EV Charging Infrastructure Program and V2G Pilot as filed in A.18-01-012.

"SDG&E" means San Diego Gas & Electric Company, a California regulated public utility.

"Settlement Agreement" means this Settlement Agreement dated as of October 30, 2018 by and among the Settling Parties.

"Settling Parties" means the parties signatory to this Settlement Agreement.

"V2G Pilot" means SDG&E's Vehicle to Grid Electric School Bus Pilot.

III. Settlement Agreement Provisions

In consideration of the mutual obligations, covenants and conditions contained herein, the Settling Parties agree to all of the following terms and conditions as well as the terms set forth in the attached Appendices as a complete and final resolution of all the disputed issues among them in this proceeding relating to the Proposal. Generally, these terms and conditions are consistent with the Commission's findings and conclusions in D.18-05-040.

- A. SDG&E's budget for the Program is \$115.0 million in escalated dollars¹ and includes unloaded² direct capital and operations and maintenance ("O&M") costs. More detail is shown in Appendix A Table 1. All dollar amounts referenced in this Settlement Agreement refer to escalated dollars unless specified otherwise³. The Program budget in 2018 escalated, unloaded dollars is \$107.4 million, shown in more detail in Appendix A Table 2.
 - a. Settling Parties used the per site costs found to be reasonable in D.18-05-040 and Appendix C of D.18-05-040 as a basis for SDG&E's budget.
 - b. The original budget request in A.18-01-012 was \$150.1 million unloaded and unescalated in 2017 dollars.

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¹ The per site cost estimates used to determine the budget are based on Pacific Gas and Electric Company's (PG&E) Application (A.) 17-01-022, which escalated costs from 2016 dollars to future dollars with assumed implementation in each year from 2018-2022 of the 5-year program. SDG&E's budget is equal to \$107.4 million in 2018 dollars, shown in more detail in Appendix A Table 2. This was calculated by de-escalating PG&E's per site estimates to 2016 dollars, escalating to 2018 dollars, and applying to SDG&E's program size.

² Overhead loaders are used to allocate undistributed company overhead costs across capital projects and O&M. Overhead costs are those activities and services that are associated with direct costs, such as payroll taxes and pension and benefits, or are costs that cannot be economically direct-charged, such as administrative and general overheads.

³ Cost escalation factors are used to reflect the effect of inflation on SDG&E's costs.

- c. SDG&E's minimum EV deployment requirement remains at approximately 3,000 EVs, consistent with the proposal in A.18-01-012. Additional detail regarding vehicle targets is provided in Appendix B.
- d. The Appendix A budget included in this Settlement Agreement could support approximately 6,000 EVs if the infrastructure deployment follows the exact vehicle mix and per site budget cost estimates in Appendix A. The target for the Program is to deploy 6,000 EVs.
- e. Consistent with D.18-05-040's treatment of PG&E and SCE, Settling Parties agree to a per se reasonable Program deployment requirement (3,000 EVs) and budget authorization (supporting up to 6,068 EVs).
 - i. PG&E (in accordance with D.18-05-040)
 - 1. Per se reasonable: 6,500
 - 2. D.18-05-040 Appendix C: 12,812
 - ii. SCE (in accordance with D.18-05-040)
 - 1. Per se reasonable: 8,490
 - 2. D.18-05-040 Appendix C: 16,991
- B. Settling Parties request that the Commission approve the entire \$107.4 million (2018 dollars unloaded and un-escalated for Program years 2019 2024) budget to be collected from ratepayers. The funds will become available for Program implementation according to the following timeline: (1) upon issuance of a final decision approving this Settlement Agreement, SDG&E is authorized to utilize \$84 million (2018 dollars unloaded and escalated); and (2) the remaining \$23.4 million (2018 dollars unloaded and escalated) may be utilized by SDG&E upon approval of a Tier 2 Advice Letter that shows SDG&E's progress towards certain metrics. The advice letter will include a report on the progress towards the interim per se reasonable metrics based on a proportional share of the final per se reasonable metrics. Interim per se metrics and final per se metrics are shown in Appendix B. The Tier 2 Advice Letter will include the number of vehicles supported (by type of vehicle), number of installations and number of chargers per installation. This information will be provided for deployments which are operational as well as locations that are in development. Cost data will be provided for the operational locations, and allocated costs will be provided for locations that are in development.
 - a. The interim per se metrics will provide guidance. Achieving the interim per se metrics will not be a pre-requisite to filing an advice letter to request the second tranche of funding. SDG&E will describe in its Advice Letter report how it plans to achieve the final per se reasonableness metrics in Appendix B with the remainder of the funding.
 - b. Progress towards final per se metrics and expenditure of budget may not occur in a linear fashion. EV uptake is expected to accelerate in later years, lessons will be learned in the early years which could drive down costs, and certain expenditures may be front loaded such as marketing, education and outreach.
 - c. The total infrastructure budget is \$63.9 million of the \$107.4 million. The share for infrastructure in the first tranche of \$84 million is \$50 million. Numbers in B(c) are in 2018 dollars unloaded and escalated.
 - d. In order to avoid a gap in funding, SDG&E may submit the Tier 2 Advice Letter for incremental funds after 66% of the infrastructure budget ("trigger") has been

allocated to projects based on commitments from participating customers, which is approximately \$33.0 million of the infrastructure funds. Numbers in B(d) are in 2018 dollars unloaded and escalated.

- C. Costs for the MD/HD EV Charging Infrastructure Program will be recovered from ratepayers through distribution rates and allocated to customer classes on an equal cents per kWh basis, i.e., costs will be allocated to each class based on each class's share of system sales.
- D. SDG&E's MD/HD EV Charging Infrastructure Program ownership structure has been modified to align with the make-ready infrastructure programs approved in D.18-05-040.
 - a. SDG&E will construct, own, operate and maintain the make-ready infrastructure on the utility side of the meter in all instances.
 - b. SDG&E will construct, own, operate and maintain the make-ready infrastructure on the customer side of the meter in some instances.
 - i. The customer may elect to have SDG&E construct, own, operate and maintain the make-ready on the customer side of the meter.
 - ii. Consistent with Ordering Paragraph 39 of D.18-05-040, SDG&E will allow customers the choice of whether to own, operate, and maintain infrastructure installed behind the customer's meter. If the customer chooses ownership, the customer must manage and pay for the installation of the customer-side infrastructure and use state licensed labor for which the utility will provide a rebate of up to 80 percent of the installation costs, treating these costs as an expense for ratemaking purposes, and the customer must commit to operate and maintain the facilities consistent with relevant national, state, and local electrical standards for their site. The customer must submit its site plans and estimated site construction costs to the utility and state its commitment to operate and maintain the facilities consistent with relevant national, state, and local electrical standards for their site. The utility shall provide a rebate to the customer for customer-side infrastructure the customer installs that is the lesser of: (a) 80 percent of customer's actual installation costs or (b) 80 percent of the average utility direct cost for installing the customer-side make-ready infrastructure in the relevant sector. The rebate shall be treated as an expense for ratemaking purposes.
- E. SDG&E will not own the electric vehicle supply equipment ("EVSE") or charging station. SDG&E, or third-party entity who is designated to qualify eligible EVSEs, will qualify equipment that will be eligible for the Program. This process will ensure that certain minimum qualifications are met. There will be an initial qualification period followed by additional opportunities to qualify equipment, as appropriate. Qualifying party (either SDG&E or third-party entity designated to qualify EVSEs) will review in a timely manner. Program participants will be free to select charging equipment and network services from any qualifying vendor.
- F. The MD/HD EV Charging Infrastructure Program will have a five year sign up period. Design and construction may extend beyond the fifth year. The Program will support the

full range of vehicles addressed in D.18-05-040, including forklifts, truck stop electrification, transport refrigeration units, port cargo trucks, transit buses, school buses, airport ground support equipment, medium-duty vehicles, heavy-duty vehicles, and Class 2 through Class 8 on-road vehicles, which is a broader range of vehicles than SDG&E originally proposed.

- G. All construction and installation of EVSE make-ready infrastructure and installation of EVSE/chargers that is not performed by employees of SDG&E shall be performed by contractors who are signatory to the IBEW who hold a valid C-10 contractor's license, and electricians must have Electric Vehicle Infrastructure Training Program ("EVITP") certification. All maintenance of EVSE make-ready infrastructure owned by SDG&E that is not performed by employees of SDG&E shall be performed by contractors who are signatory to the IBEW who hold a valid C-10 contractor's license, and electricians must have EVITP certification.
- H. SDG&E will set rebate levels for transit and school bus EVSE in consultation with its PAC. Rebates for transit and school bus EVSE will not be limited to deployments in Disadvantaged Communities ("DAC"). The rebates must not exceed 50 percent of the cost of the EVSE. Rebates may also be offered to participants: (1) who are located in DAC, as defined in D.16-01-045 for SDG&E's service territory; and (2) not on the Fortune 1000 list. SDG&E will work with its PAC to develop further requirements for participants located in DACs to be eligible for EVSE rebates. This will include consideration of treatment of companies on the Fortune 1000 list who allow tenants or other users who are not on the Fortune 1000 list to utilize EVSEs on their premises. The rebates shall not exceed the cost the site host pays for the EVSE after accounting for any other funding sources used for EVSE procurement.
- I. Consistent with Ordering Paragraph 41 of D.18-05-040, after the third year of the Program, 50 percent of the funds that were reserved for DAC rebates but have not yet been committed to a deployment may be released if SDG&E has not achieved 60 percent of its target in DAC locations and 80 percent of its target in non-DAC locations. Released means that the DAC EVSE rebates may be used in non-DACs to accelerate MD/HD EV adoption. Any remaining rebate funds that are unallocated after year 4 may be spent as rebates in any location.
- J. A minimum of 30% of the infrastructure budget will be allocated to deploy infrastructure located in DACs. In SDG&E's original proposal the target was 40% of (1) infrastructure located in a DAC or (2) infrastructure not located in a DAC that supports vehicles that travel through DACs. A metric to deploy 30% of infrastructure located in DACs will allow for easier tracking than the original proposal. The DAC definition will be consistent with the service territory definition, as approved in D.16-01-045.
- K. Program participants will be required to submit a load management plan detailing a strategy for facilitating charging behavior in a manner that minimizes grid impacts and takes into account periods of high renewable generation on the grid. During development of the load management plan, SDG&E will inform Program participants of the benefits of

managed charging and general capabilities of networked chargers. SDG&E will provide Program participants information on items that they should consider as they create their load management plan. SDG&E will monitor customer load management plans, including the ability to integrate renewable energy and integrate EV load with the electrical grid, to the extent feasible.

- L. Consistent with D.18-05-040, Ordering Paragraphs 31 and 32, SDG&E's investments will be considered per se reasonable if metrics are met. Specific metrics for SDG&E can be found in Appendix B.
- M. Consistent with D.18-05-040, Ordering Paragraph 2, after consultation with the PAC SDG&E may file a Tier 3 Advice Letter after two years of Program implementation to adjust the approved Program budgets and metrics used to determine per se reasonableness. At a minimum the Advice Letter must include: (1) a summary of Program status to date; (2) a breakdown of utility-side, customer-side, and other costs by sector; (3) a description of the major cost drivers for utility-side and customer-side infrastructure; and (4) an explanation of any site cost caps the utility used to determine customer eligibility for the Program or other metrics the utility used to control Program costs.
- N. SDG&E will leverage the participation of a broad and diverse stakeholder advisory PAC in planning and implementing the MD/HD EV Charging Infrastructure Program following its approval by the Commission. SDG&E will solicit PAC participation from representatives from local and state government (including representation from the Energy Division), industry, labor and other stakeholder participants, ratepayer and environmental advocates, and representatives of Disadvantaged Communities.
- O. With guidance from the PAC, SDG&E will make programmatic changes as needed to the MD/HD EV Charging Infrastructure Program. Consistent with the provisions of D.18-05-040, if SDG&E identifies any modifications necessary to effectively implement the Program, it will propose the modifications via a Tier 2 Advice Letter after reviewing the changes with the PAC.
- P. SDG&E will collect data and report annually consistent with the provisions of D.18-05-040. The report will include information on EV adoption by various sized businesses participating in the MD/HD EV Infrastructure Program. SDG&E will survey businesses to collect data on the size of the businesses participating in the Program, customer experience segmented by size of businesses, including for small commercial customers, and lessons learned. Four percent of SDG&E's total budget is allocated to fund a third-party evaluator consistent with D.18-05-040.
- Q. 15% of the approved education budget will be dedicated to educating small businesses on the benefits of transportation electrification which may include information on energy use, load management plans and incentive programs for EVs.
- R. SDG&E will hold an EV rates workshop by the end of November 2018. The workshop will include a discussion on emission reductions, load management as it relates to rates,

and time varying rates. After the EV rates workshop, SDG&E will develop a new rate option or new rate options, which consider the importance of time varying rates, that will be submitted to the Commission within six months of final approval of the MD/HD EV Charging Infrastructure Program. In designing the new rate option or new rate options, SDG&E will examine how incremental EV load may impact the electric bills of small businesses who adopt EVs and may utilize the new rate option or new options. SDG&E will assess the rate impact of the new rate option or options on ratepayers.

Settling Parties agree to approve SDG&E's V2G Pilot proposed in A.18-01-012.

- A. The Settling Parties do not propose making significant modifications to the V2G proposal in A.18-01-012.
- B. SDG&E's budget for the V2G Pilot is \$1.7 million, including unloaded and un-escalated direct capital and O&M costs. Due to the pilot nature of the proposal, the approved budget will allow for adjustments within capital and within O&M across line items as the V2G Pilot is deployed.
- C. The EVSE that are part of the V2G Pilot will be owned by SDG&E.
- D. Costs for the V2G Pilot will be recovered from ratepayers through distribution rates and allocated to customer classes on an equal cents per kWh basis, i.e., costs will be allocated to each class based on each class's share of system sales.
- E. SDG&E will continue to seek funds to pay for the electric school buses including through the Hybrid and Zero Emission Truck and Bus Voucher Incentive Program, Federal Environmental Protection Agency, California Energy Commission and others. SDG&E's contribution towards the cost of the buses may be reduced if sufficient funds to pay for the cost of the electric school buses are secured from alternate sources.
- F. SDG&E will require First Priority GreenFleet, the prospective EVSE provider for the V2G Pilot, to submit a revised proposal updating final electric bus costs, data collection and reporting, and other updates in alignment with the Commission's final decision on SDG&E's V2G Pilot. SDG&E will seek to further reduce costs and seek leveraged funding.
- G. Data collection and reporting will include monitoring to ensure asset utilization and V2G operation. The data will be analyzed to determine how V2G can be scaled for the electric school bus segment as well as other vehicle segments. Analysis will include how the assets interacted with the California Independent System Operator, wholesale and retail rate implications, energy consumption, duration and frequency of charging, peak electricity demand, energy exported to the grid, the ability of V2G operations to improve load factor, impacts of V2G on the vehicles' batteries and overall costs and benefits. The report will include potential barriers to scaling and barriers to interconnection as well as strategies to overcome barriers.

H. With guidance from the PAC, SDG&E will make programmatic changes as needed to the V2G Pilot. Consistent with the provisions of D.18-05-040, if SDG&E identifies any modifications necessary to effectively implement the V2G Pilot, it will propose the modifications via a Tier 2 Advice Letter after reviewing the changes with the PAC.

IV. Additional Terms and Conditions

A. Performance

The Settling Parties agree to support and defend this Settlement Agreement, and shall perform diligently, and in good faith, all actions required or implied hereunder, including, but not necessarily limited to, the execution of any other documents required to effectuate the terms of this Settlement Agreement, and the preparation of exhibits for, and presentation of witnesses at, any required hearings to obtain the approval and adoption of this Settlement Agreement by the Commission. No Settling Party will contest in this proceeding, or in any other forum, or in any manner before this Commission, the recommendations contained in this Settlement Agreement. It is understood by the Settling Parties that time is of the essence in obtaining the Commission's approval of this Settlement Agreement and that all will extend their best efforts to ensure its adoption. In this regard, Settling Parties agree that they will not seek or support any measure that would delay immediate Commission consideration and disposition of the motion filed submitting this Settlement Agreement for the Commission's approval.

B. Non-Precedential Effect

This Settlement Agreement is not intended by the Settling Parties to be precedent for any other proceeding, whether pending or instituted in the future. The Settling Parties have assented to the terms of this Settlement Agreement only for the purpose of arriving at the settlement embodied in this Settlement Agreement. Each Settling Party expressly reserves its right to advocate, in other current and future proceedings, or in the event that the Settlement Agreement is rejected by the Commission, positions, principles, assumptions, arguments and methodologies which may be different than those underlying this Settlement Agreement, and the Settling Parties expressly declare that, as provided in Rule 12.5 of the Commission's Rules of Practice and Procedure, this Settlement Agreement should not be considered as a precedent for or against them.

C. Indivisibility, General Provisions

This Settlement Agreement embodies compromises of the Settling Parties' positions in this proceeding. No individual term of this Settlement Agreement is assented to by any Settling Party, except in consideration of the other Settling Parties' agreement with all other terms. Thus, the Settlement Agreement is indivisible and each part interdependent on each and all other parts. Any Settling Party may withdraw from this Settlement Agreement if the Commission modifies, deletes from, or adds to the disposition of the matters settled herein. The Settling Parties agree, however, to negotiate in good faith with regard to any Commission-ordered changes in order to restore the balance of benefits and burdens, and to exercise the right to withdraw only if such negotiations are unsuccessful.

The Settling Parties acknowledge that the positions expressed in the Settlement Agreement were reached after consideration of positions advanced by parties in the proceeding and declare and mutually agree that the terms and conditions herein are reasonable, consistent with the law, and in the public interest. This Settlement Agreement sets forth the entire agreement of the Settling Parties on all of the subject matters addressed herein and may only be modified in writing subscribed by all Settling Parties.

No Settling Party has relied, or presently relies, upon any statement, promise, or representation by any other Settling Party, whether oral or written, except as specifically set forth in this Settlement Agreement.

This Settlement Agreement may be executed in counterparts by the Settling Parties with the same effect as if all Settling Parties had signed one and the same document. All such counterparts shall be deemed to be an original and shall together constitute one and the same Settlement Agreement.

D. Modification of Settlement Agreement

The terms and conditions of this Settlement Agreement may only be modified in writing subscribed to by the Settling Parties.

E. Governing Law

This Settlement Agreement shall be interpreted, governed and construed under the laws of the State of California, including Commission decisions, orders and rulings, as if executed and to be performed wholly within the State of California.

F. Attachments

The Appendices to this Settlement Agreement are part of the agreement of the Settling Parties and are incorporated herein by reference.

G. Non-Waiver

It is understood and agreed that no failure or delay by any Settling Party hereto in exercising any right, power or privilege hereunder shall operate as a waiver hereof, nor shall any single or partial exercise thereof preclude any other or future exercise thereof or the exercise of any other right, power or privilege.

H. Execution

This Settlement Agreement may be executed in counterparts by the Settling Parties with the same effect as if all the Settling Parties had signed one and the same document. All such counterparts shall be deemed to be an original and shall together constitute one and the same Settlement Agreement.

IN WITNESS WHEREOF, the Settling Parties have duly executed this Settlement Agreement by their authorized representatives as of this 30th day of October 2018.

hlabel.	10/3	2018
Michael M. Schneider on behalf of San Diego Gas & Electric Company	Date /	,
Ban Diego Gas & Electric Company		
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Darwin Farrar on behalf of Elizabeth Echols	Date	
on behalf of Public Advocates Office of the California		
Public Utilities Commission		
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Max Baumhefner on behalf of	Date	
Natural Resources Defense Council		
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Rachael Koss on behalf of	Date	
Coalition of California Utility Employees		
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James O'Dea on behalf of Union of Concerned Scientists	Date	

Michael M. Schneider on behalf of	D-4.
San Diego Gas & Electric Company	Date
Um Z	11/5/18
Darwin Farrar on behalf of Elizabeth Echols on behalf of	Date
Public Advocates Office of the California Public Utilities Commission	
Max Baumhefner on behalf of	Date
Natural Resources Defense Council	
Rachael Koss on behalf of	Date
Coalition of California Utility Employees	
James O'Dea on behalf of Union of Concerned Scientists	Date

Michael M. Schneider on behalf of	Date
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Union of Concerned Scientists	

IN WITNESS WHEREOF, the Settling Parties have duly executed this Settlement Agreement by their authorized representatives as of this 30th day of October 2018.

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James O'Dea on behalf of	10/29/2018 Date			
Union of Concerned Scientists				

annexmant 10/29/18 Anne Smart on behalf of ChargePoint Date Sara Gersen on behalf of Center for Community Action and Environmental Justice AND East Yard Communities for Environmental Justice David Schlosberg on behalf of Date Electric Motor Werks, Inc. Chris King on behalf of Date Siemens Digital Grid

Date

Larissa Koehler on behalf of

Environmental Defense Fund

Anne Smart on behalf of ChargePoint	Date
Sara Gersen on behalf of Center for Community Action and Environmental Justice AND East Yard Communities for Environmental Justice	10-26-18 Date
David Schlosberg on behalf of Electric Motor Werks, Inc.	Date
Chris King on behalf of Siemens Digital Grid	Date
Larissa Koehler on behalf of Environmental Defense Fund	Date

Anne Smart on behalf of ChargePoint	Date			
Sara Gersen on behalf of Center for Community Action and Environmental Justice AND East Yard Communities for Environmental Justice	Date			
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Anne Smart on behalf of ChargePoint	Date
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Center for Community Action and Environmental Justice AND	
East Yard Communities for	
Environmental Justice	
David Schlosberg on behalf of Electric Motor Werks, Inc.	Date
Electric Motor werks, inc.	
Clas S. King	
	October 30, 2018
Chris King on behalf of Siemens Digital Grid	Date
Larissa Koehler on behalf of	Date
Environmental Defense Fund	

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Chris King on behalf of Siemens Digital Grid	Date			
Larissa Koehler on behalf of Environmental Defense Fund	10/29/2018 Date			

Minn M. Brakeland	October 30, 2018
James Birkelund on behalf of Small Business Utility Advocates	Date
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Ryan Schuchard on behalf of CALSTART	Date
Joe Halso on behalf of Sierra Club	Date
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James Tong on behalf of Chanje Energy	Date
Katherine Stainken on behalf of	Date

James Birkelund on behalf of	Date
Small Business Utility Advocates	
	October 31, 2018
Ryan Schuchard on behalf of CALSTART	Date
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James Tong on behalf of Chanje Energy	Date
Katherine Stainken on behalf of Plug In America	Date

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Joe Halso on behalf of Sierra Club	Date
James Tong on behalf of Chanje Energy	Date
Katherine Stainken	October 30, 2018
Katherine Stainken on behalf of	Date

Appendix A

Table 1: SDG&E Budget for MD/HD EV Charging Infrastructure Program (in PG&E escalated dollars)

		Est Cost Per Site -	Est Cost Per Site -					
Sector	Est Cost Per Site - Capital	Expense	Total	# of Sites	# of Vehicles	Capital Budget	Expense Budget	Total Budget
Forklifts	131,897	716	132,613	48.0	921.1	6,331,056.0	34,368.0	6,365,424.0
Truck Stop Electrification	98,771	267	99,038	2.4	48.0	237,050.4	640.8	237,691.2
Transport Refrigeration Unit	184,930	609	185,539	42.7	811.7	7,900,209.6	26,016.5	7,926,226.1
Port Cargo Trucks	333,972	593	334,565	2.9	32.6	961,839.4	1,707.8	963,547.2
Transit Bus	340,651	419	341,070	31.6	379.0	10,764,571.6	13,240.4	10,777,812.0
School Bus	146,227	502	146,729	21.6	259.2	3,158,503.2	10,843.2	3,169,346.4
Airport GSE	133,427	487	133,914	9.6	192.0	1,280,899.2	4,675.2	1,285,574.4
MD Vehicles	147,661	435	148,096	192.0	2,304.0	28,350,912.0	83,520.0	28,434,432.0
Other HD Vehicles	340,651	419	341,070	28.8	1,120.3	9,810,748.8	12,067.2	9,822,816.0
Infrastructure Subtotal				379.6	6,068.0	68,795,790.2	187,079.1	68,982,869.3
Program Management						6,898,286.9	-	6,898,286.9
Contingency						6,898,286.9	-	6,898,286.9
Education						-	2,852,091.8	2,852,091.8
Evaluator - 4%							4,409,000.0	4,409,000.0
Data Collection						-	400,000.0	400,000.0
DAC Rebates							8,511,588.0	8,511,588.0
Transit & School Bus Rebates							16,084,235.0	16,084,235.0
Non Infrastructure Subtotal						13,796,573.9	32,256,914.8	46,053,488.7
Program Total						82,592,364.0	32,443,994.0	115,036,358.0

Table 2: SDG&E Budget for MD/HD EV Charging Infrastructure Program (in 2018 dollars – unloaded and un-escalated for Program years 2019 – 2024)

	Est Cost Per Site -	Est Cost Per Site -						
	Capital Re-	Expense Re-	Est Cost Per Site -					
Sector	escalated to 2018	escalated to 2018	Total	# of Sites	# of Vehicles	Capital Budget	Expense Budget	Total Budget
Forklifts	\$125,489	\$680	\$126,169	48.0	921.1	\$6,023,486.5	\$32,628.7	\$6,056,115.2
Truck Stop Electrification	\$93,108	\$253	\$93,361	2.4	48.0	\$223,458.0	\$607.2	\$224,065.3
Transport Refrigeration Unit	\$174,039	\$577	\$174,616	42.7	811.7	\$7,434,935.5	\$24,653.7	\$7,459,589.2
Port Cargo Trucks	\$311,379	\$560	\$311,939	2.9	32.6	\$896,770.9	\$1,614.2	\$898,385.2
Transit Bus	\$310,868	\$393	\$311,261	31.6	379.0	\$9,823,436.5	\$12,405.7	\$9,835,842.3
School Bus	\$136,637	\$474	\$137,111	21.6	259.2	\$2,951,360.5	\$10,232.6	\$2,961,593.0
Airport GSE	\$125,776	\$461	\$126,238	9.6	192.0	\$1,207,452.9	\$4,429.6	\$1,211,882.5
MD Vehicles	\$136,688	\$410	\$137,098	192.0	2,304.0	\$26,244,175.1	\$78,712.2	\$26,322,887.3
Other HD Vehicles	\$310,868	\$393	\$311,261	28.8	1,120.3	\$8,953,005.5	\$11,306.5	\$8,964,311.9
Infrastructure Subtotal				379.6	6,068.0	\$63,758,081.5	\$176,590.4	\$63,934,671.8
Program Management						\$6,393,467.2	\$0.0	\$6,393,467.2
Contingency						\$6,393,467.2	\$0.0	\$6,393,467.2
Education						\$0.0	\$2,695,825.4	\$2,695,825.4
Evaluator - 4%							\$4,409,000.0	\$4,409,000.0
Data Collection						\$0.0	\$400,000.0	\$400,000.0
DAC Rebates							\$8,045,237.2	\$8,045,237.2
Transit & School Bus Rebates							\$15,121,969.2	\$15,121,969.2
Non Infrastructure Subtotal						\$12,786,934.4	\$30,672,031.9	\$43,458,966.2
Program Total			,			\$76,545,015.8	\$30,848,622.2	\$107,393,638.1

Appendix B

SDG&E's Per Se Reasonable Test

Proposed Ordering Paragraph for SDG&E's per se reasonable test:

- 1. a minimum of 300 make-ready installations are fully contracted for after five years of Program deployment and 3,000 additional vehicles are electrified that are directly attributable to the authorized Program achieved by site hosts procuring at least two electric vehicles or converting at least two diesel fueled vehicles to electric;
- 2. a <u>minimum of 10 percent</u> of the infrastructure budget serves transit style buses and school buses; transit style buses include all buses operated by transit agencies and buses operated by entities such as universities, colleges, airports, etc;
- 3. a maximum of 10 percent of the infrastructure budget serves forklifts;
- 4. a <u>minimum of 30 percent</u> of the infrastructure budget results in installations in disadvantaged communities in SDG&E's territory, using SDG&E's service territory DAC definition;
- 5. rebate levels for beach head sectors and customers in disadvantaged communities should be established in consultation with SDG&E's Program Advisory Council;
- 6. rebate levels should not exceed 50 percent of the charger cost; and
- 7. a <u>maximum of 10 percent</u> of the infrastructure budget is spent on Program administration.
- * Regarding item 1, a make-ready installation will be defined as a distinct build out of infrastructure at a given time. If the same location has future EV growth and a new build out is required, then the subsequent deployment of make-ready infrastructure will be incremental towards the per se minimum requirement of make-ready installations.
- ** The above per se reasonable test will be adjusted downward if the full funding is not released beyond the initial \$84 million of funding. SDG&E will file a Tier 2 Advice Letter on this matter if full funding is not achieved.

SDG&E's Interim Per Se Reasonable Test

The remainder of the \$107.4 million budget (\$23.4 million) will be released upon approval of a Tier 2 Advice Letter that shows SDG&E's progress towards the final per se reasonable metrics above as well as the interim metrics listed below. The interim per se metrics will provide guidance. However, achieving the interim per se metrics will not be a pre-requisite to filing an advice letter to request the second tranche of funding. However, SDG&E will not file the Tier 2 Advice letter until approximately \$33.0 million of the infrastructure budget has been committed to projects. All numbers unloaded and escalated in 2018 dollars.

- 1. a minimum of 150 make-ready installations are fully contracted for and 1,500 additional vehicles are expected to be electrified that are directly attributable to the authorized Program achieved by site hosts procuring at least two electric vehicles or converting at least two diesel fueled vehicles to electric;
- 2. a <u>minimum of 30 percent</u> of the infrastructure budget is committed to installations in disadvantaged communities in SDG&E's territory, using SDG&E's service territory DAC definition.