

Decision 16-01-023 January 14, 2016

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of Southern California Edison Company (U338E) for Approval of its Charge Ready and Market Education Programs.

Application 14-10-014
(Filed October 30, 2014)

**DECISION REGARDING SOUTHERN CALIFORNIA EDISON
COMPANY'S APPLICATION FOR CHARGE READY AND
MARKET EDUCATION PROGRAMS**

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**DECISION REGARDING SOUTHERN CALIFORNIA EDISON
COMPANY'S APPLICATION FOR CHARGE READY
AND MARKET EDUCATION PROGRAMS**

Summary

Today's decision modifies and adopts the terms of the joint party Proposed Settlement regarding Southern California Edison Company's (SCE) application for its Charge Ready and Market Education Programs. SCE is authorized to collect \$22 million in revenue requirement to implement the Phase 1 pilot Charge Ready and complementary Market Education Programs. This decision modifies the Proposed Settlement terms governing the rebate amount, reporting requirements, cost management, regulatory and transition processes, and load management.

This proceeding is closed.

1. Procedural Background

On October 30, 2014, The Southern California Edison Company (SCE) filed Application (A.) 14-10-014, seeking approval of its Charge Ready and Market Education Programs. SCE proposed a two-part program, with Phase 1 consisting of a one-year pilot to deploy up to 1,500 electric vehicle (EV) charging stations and expanded market education and outreach in support of electric transportation. As proposed, Phase 2 includes deployment of up to a total of 30,000 EV charging stations, and broader EV market education and outreach.

On February 2, 2015, the assigned Administrative Law Judge (ALJ) held a prehearing conference. Subsequently, on March 6, 2015, the assigned Commissioner and ALJ issued a Joint Scoping Ruling that identified the issues for Phase 1 of A.14-10-014. A one day evidentiary hearing was held on June 22, 2015.

On July 9, 2015, SCE and other parties filed a motion (Motion) requesting that the Commission adopt a Settlement Agreement Resolving Phase 1 of Southern California Edison Company's (U338E) Application for Approval of its Charge Ready and Market Education Programs (Proposed Settlement).¹ The Motion also requested that the procedural schedule for the filing of briefs following the evidentiary hearing on SCE's underlying application be suspended.² Consistent with Article 12 of the Commission's Rules of Practice and Procedure (Rules), Green Power Institute (GPI) and Shell Energy North America (US) L.P. (Shell Energy) filed responses to the Motion. SCE and CESA filed replies to the responses. On September 14, 2015, the assigned Commissioner and ALJ issued a ruling directing SCE to respond to supplemental questions regarding the Motion, and providing an opportunity for parties to comment. On September 28, 2015, SCE provided its supplemental response. On October 5, 2015, ORA and GPI filed opening comments on the supplemental response. On October 9, 2015 SCE filed reply comments, and on October 12, 2015, GPI filed reply comments.

¹ The settling parties are SCE, American Honda Motor Co., Inc. (American Honda), CALSTART, California Energy Storage Alliance (CESA), ChargePoint, Inc. (ChargePoint), Coalition of California Utility Employees, Energy Defense Fund (EDF), General Motors, LLC, Greenlining Institute, Natural Resource Defense Council (NRDC), NRG Energy, Inc., Office of Ratepayer Advocates (ORA), Plug In America, Sierra Club, The Utility Reform Network (TURN), and Vote Solar (collectively referred to as "Joint Settling Parties" or "Settling Parties").

² SCE's counsel left a voicemail for the ALJ on July 17, 2015 requesting that the upcoming briefing schedule be suspended. In a July 17, 2015 e-mail ruling from the ALJ to the service list, the request of SCE's counsel to suspend the briefing schedule was granted, and the briefing schedule was suspended until further notice.

2. SCE Application

In its application, SCE proposes to implement its Charge Ready and Market Education Programs in two phases: a 12-month pilot deploying 1,500 EV charging stations intended to test key assumptions in Phase 1; and a Phase 2 deployment of a program including up to 30,000 EV charging stations. SCE asks for separate decisions on Phases 1 and 2. SCE requests that the Commission approve an estimated cost of \$22 million for Phase 1 of its Charge Ready and Market Education Programs, including \$18.5 million for the Charge Ready Program and \$3.1 million for the Market Education Program, and that it be allowed to recover these costs from ratepayers.³

SCE proposes that it be authorized to proceed with a one-year pilot to deploy up to 1,500 charging stations and complementary market education and outreach in support of electric transportation in the Phase 1 portion of its application. SCE states that the initial pilot will allow it to test several key assumptions prior to undertaking a full program in Phase 2. Specifically, SCE plans to validate its cost estimates and program incentives, identify and address field deployment issues, and refine its market education strategies.⁴ SCE also intends to form an Advisory Board to review and provide input, guidance, and suggestions on the execution and improvement of the pilot and Phase 2. SCE proposes to conduct market outreach and education in both phases to increase

³ *Prepared Testimony in Support of Southern California Edison Company's Charge Ready Application, Volume 2 – Phase 1 Charge Ready and Market Education Pilot (SCE-01-Vol 2) at 1 – 2.*

⁴ SCE-01-Vol 2 at 2.

customer awareness of EVs, electric charging from the grid, and awareness of the state's carbon reduction and air quality goals.⁵

SCE plans to locate charging stations at locations owned and operated by SCE's non-residential customers (the customer participant or site owner) where drivers typically leave their cars parked for four hours or more, including workplaces, multi-unit dwellings (MUDs), and destination locations. Single-family homes will not be eligible.⁶ SCE proposes to own and maintain the supporting electrical infrastructure and charging outlet, including: 1) utility distribution infrastructure consisting of transformers, utility services, and meters; and 2) customer participant site infrastructure, comprised of panels, conduits and wiring called the "make ready" stub, and associated infrastructure. As proposed by SCE, the customer participant will own and operate the charging station, and be responsible for all related operating costs, including maintenance and electricity usage. SCE proposes to provide rebates to site owners to cover 100% of a pre-determined "base cost."⁷ The base cost will include the cost of the charging station and its installation, based on a request for information (RFI) from prospective suppliers by SCE, and possibly supplemented with additional market research and other third-party studies.⁸

3. Proposed Settlement

The Proposed Settlement is based on and would adopt, with certain modifications, the proposal set forth in SCE's application. As described in the

⁵ SCE-01-Vol 2 at 3.

⁶ SCE-01-Vol 2 at 4.

⁷ SCE-01-Vol 2 at 4 - 5.

⁸ SCE-01-Vol 2 at 9.

Proposed Settlement and the Motion, the Proposed Settlement is based on 13 Guiding Principles that are intended to inform Charge Ready Program implementation, and 13 modifications to SCE's underlying application, which are discussed in detail below.

The Joint Settling Parties also state in the Proposed Settlement that if any proposed decision modifies the Proposed Settlement, and any Settling Party is unwilling to accept the modification, the Settling Parties shall negotiate to achieve a resolution acceptable to all Settling Parties and seek Commission approval for such resolution. According to the Proposed Settlement, a failure to resolve such modification to the satisfaction of the Settling Parties, or to obtain Commission approval of agreed upon changes promptly thereafter, shall entitle any Settling Party to terminate its participation from the Proposed Settlement.

3.1. Settlement Review

In deciding whether the motion for approval of the Phase 1 Settlement Agreement should be granted or not, we are guided by Rule 12.1(d) of the Commission's Rules of Practice and Procedure. That subdivision states: "The Commission will not approve settlements, whether contested or uncontested, unless the settlement is reasonable in light of the whole record, consistent with laws, and in the public interest." In determining whether the Phase 1 Settlement Agreement is reasonable in light of the whole record, consistent with the law, and in the public interest, we first compare the original positions of the parties to the recommended outcomes in the Phase 1 Settlement Agreement.

As discussed in more detail below, based on the record before us we find that, as written, the Proposed Settlement is not reasonable. However, as modified below, the Proposed Settlement is reasonable in light of the whole record, consistent with law, and in the public interest. In reaching this

conclusion, we have examined the positions of the various parties, reviewed and compared the Phase 1 Settlement Agreement to the original positions of the parties, considered the legal arguments raised by the parties, and taken into account the public interest and concern with safety and reliability.

3.2. Guiding Principles

SCE does not propose guiding principles in its application. The Proposed Settlement proposes the following guiding principles:

1. Support the Governor's and California state goals including:
 - a. Achieve installation of grid-integrated infrastructure to support 1 million zero emission vehicles by 2020;
 - b. Accelerate the adoption of 1.5 million zero emission vehicles by 2025; and
 - c. Support clean air and climate change objectives.
2. Support the acceleration of a competitive EV charging market and encourage innovation, while maintaining Market Neutral Customer Engagement.⁹
3. Maintain customer choice.
4. Remove barriers to deploying EV charging.
5. Ensure customer participant site infrastructure is installed and maintained in safe working order.
6. Provide for management of EV load to support the grid in a manner that delivers benefits to SCE customers.
7. Evaluate customer participant strategies that provide EV drivers the opportunity to maximize fuel cost savings relative to conventional transportation fuels.
8. Manage program costs.

⁹ Defined as "a communication between SCE and potential or approved Customer Participants, including communication related to Pilot administration, is neutral and unbiased with respect to vendors and charging stations qualified by SCE for the Program."

9. Provide representative data (e.g., by different market segments, across disadvantaged communities, load management strategies, and pricing models) to allow for meaningful evaluation and comparisons, and to inform Phase 2 and future EV policy.
10. Identify and incorporate best practices for future EV infrastructure deployment.
11. Support SCE’s companywide Diversified Business Enterprise spending goal of 40%.
12. Provide services in line with legislative goals [e.g Senate Bill (SB) 535 (de León, 2013) and SB 1275 (de León, 2014)] to serve disadvantaged communities and increase access to clean transportation.
13. Complement other utility clean energy programs and other non-utility programs, such as those being implemented pursuant to the Charge Ahead California Initiative established by SB 1275, which will build consumer demand for clean energy and clean vehicles.

No parties commented on the proposed guiding principles. We find the guiding principles provide a solid foundation for moving forward with the Charge Ready and Market Education Programs and adopt them here.

3.3. Rebate Amount

The Proposed Settlement is modified so that the rebate levels for charging stations shall be as follows:

Percent of Charging Station Base Cost Rebated (%)

<i>Market Segment</i>	<i>Proposed in Settlement Table IV-1</i>	<i>Adopted Rebates</i>
Multi-Unit Dwellings	100	50
Fleets	75	25
Workplaces	50	25
Destination Centers	25	25

Sites Located in Disadvantaged Communities (all market segments)	100	100
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The Proposed Settlement also provides that ratepayers will fund 100% of the costs for installation of the make ready; we agree that this incentive is in the public interest. Assuming that the make ready accounts for approximately 70% of total EV charging infrastructure installation costs¹⁰ and that the charging station accounts for the remaining 30%, the adopted incentives as shown above correspond to overall EV charging infrastructure funding of approximately 78%, 85%, or 100%, depending on market segment (for the 25%, 50 %, and 100% charging station rebates, respectively).

3.3.1. Parties' Testimony and Proposed Settlement

In its application SCE proposes to provide a charging station rebate to customer participants at 100% of a pre-determined base cost.¹¹ In contrast, the Proposed Settlement proposes to vary the amount of the charging station rebate, as a percentage of the base cost, by market segment.¹² The Motion explains that the larger rebate proposed for MUDs is intended to address recommendations from ORA and TURN that MUDs should be the focus of the pilot.¹³ If a participating site falls within more than a single market segment, the rebate will

¹⁰ TURN-01 at 20.

¹¹ SCE-01-Vol 2 at 5.

¹² Proposed Settlement at 7.

¹³ Motion at 5.

be based on the dominant market segment. The amount of rebate for each market segment in the Proposed Settlement is:¹⁴

Market Segment	Amount of Charging Station Rebate
Sites Located in Disadvantaged Communities	100% of base cost
Multi-unit Dwellings	100% of base cost
Fleets	75% of base cost
Workplaces	50% of base cost
Destination Centers	25% of base cost

Prior to reaching settlement, parties submitted testimony on various aspects of the application, that sometimes differed from the terms of the Proposed Settlement. In testimony ORA argues that customer participants should have an investment in the charging station and recommends a rebate level of 25% of the base cost. ORA uses SCE's estimated rebate of \$3,900 per charging station to develop a 25% rebate of \$975, which it says is similar in scale to EV charger rebates of \$1,000 offered by the City of Anaheim for Level 2 chargers. ORA claims this level of rebate is also in line with the relative vehicle credit given to EV owners, and points out that the 2015 Nissan LEAF is eligible for a Qualified Plug-In Electric Drive Motor Vehicle Credit comprising approximately 21% of the Nissan LEAF's total cost. ORA also recommends that SCE offer customer participants 15% of the rebate up front, with the remaining 10% provided at the end of the pilot, after demonstrated charging station use.¹⁵

¹⁴ Proposed Settlement at 7.

¹⁵ ORA Prepared Testimony on the Application of Southern California Edison Company (U338E) for Approval of its Charge Ready and Market Education Program (Phase 1) (ORA-1) at 3-2.

TURN opposes rebates and argues that SCE has not determined whether rebates are actually necessary to incentivize customers to purchase charging stations.¹⁶ TURN claims that the site hosts should find enough value in charging to invest some of their own capital, and that if full rebates are available the site hosts will not have an incentive to invest their own capital.¹⁷ TURN proposes that SCE limit ratepayer funding to the make-ready stub, which will still result in a significant subsidy of approximately 70% of the capital costs, pursuant to TURN's calculations utilizing SCE's cost assumptions.¹⁸ TURN also argues that rebates of 100% do not mitigate ratepayer risk, and that the need for rebates can be re-evaluated after Phase 1 if there is little uptake.¹⁹

ChargePoint supports the rebates on claims that the upfront costs are an obstacle to widespread expansion of EV infrastructure at workplaces and MUDs. ChargePoint also claims that, based on its own experience developing and deploying charging stations, site owners are often very motivated to install EV charging and willing to pay for the charging stations, maintenance, and network services, but that the full costs of installation can be daunting.²⁰ In response to other parties' opening testimony, ChargePoint clarifies that it does not support rebates that cover 100% of costs, but does support rebates larger than proposed

¹⁶ *Prepared Direct Testimony of Eric Borden Regarding SCE's Application 14-10-014 for Authority to Build Electric Vehicle Infrastructure, Addressing Risks to Ratepayers, Recommendations to Mitigate Risk, and Cost Effectiveness (TURN-01)* at 19.

¹⁷ TURN-01 at 19 – 20.

¹⁸ TURN-01 at 20.

¹⁹ TURN-01 at 20, footnote (fn) 49.

²⁰ *Prepared Testimony of Colleen C. Quinn Regarding Application of Southern California Edison Company (U 338-E0 for Approval of its Charge Ready and Market Education Programs (ChargePoint-01)* at 4.

by ORA and TURN, however ChargePoint does not specify the appropriate rebate level.²¹ ChargePoint states that in its experience in working with site hosts around the country, the site host takes a more active and engaged role in evaluating the available equipment and services offered by vendors, and assessing site and user needs, when it has a rebate that covers only a portion of the costs, which results in better optimization of charging station usage and infrastructure maintenance.²²

EDF's testimony supports rebates and argues that site hosts will be hesitant to purchase charging stations if they are too costly, but that it is also important for the site host to have a financial stake as a recipient of any ratepayer subsidies beyond the responsibility of operations and maintenance. EDF suggested that after Phase 1 concludes, SCE should evaluate whether giving partial or full rebates to site hosts for charging station purposes is resulting in stations that are used and useful.²³ EDF suggests that rebates be designed on a sliding scale based on need, and that a rebate of at least 50% would strike a balance between ensuring the site host has an interest in the success of the charging station and still providing a high enough incentive to promote charging station purchases.²⁴

GPI supports a 25% cap on the rebate because it believes the current business model for charging station ownership is difficult without some support

²¹ ChargePoint-01 at 2.

²² *Prepared Rebuttal Testimony of Colleen C. Quinn on Behalf of ChargePoint, Inc. Regarding Application of Southern California Edison Company (U 338-E) for Approval of its Charge Ready and Market Education Programs* (ChargePoint-02) at 3.

²³ *Rebuttal Testimony of Environmental Defense Fund* (EDF-02) at 10.

²⁴ EDF-02 at 11.

for installation or other benefits accruing. GPI also stated that a 25% cap appropriately limits ratepayer liability.²⁵

TURN and ChargePoint support charging station rebates up to 100% of the base charging station cost be made available to customer participants located in disadvantaged communities, because they may not have adequate private capital to invest, which could discourage program participation.²⁶ NRDC explains that disadvantaged communities make up 25% of California's population and are essential to meeting California's zero emission vehicle goals.²⁷

Citing studies showing that MUDs are a potential niche since they are underrepresented in the EV market and EV drivers prefer to charge at home, ORA and TURN recommend that the majority of charging stations be installed at MUDs.²⁸ EDF and NRDC claim that charging stations have been traditionally lacking in both MUDs and workplaces, and cite a need for both.²⁹ In particular, NRDC cites the National Research Council's recent conclusion that home charging is a "virtual necessity."³⁰ Moreover, EDF notes that MUD and workplace charging have been identified as underserved and prioritized by the PEV Collaborative (PEVC), and that the CPUC has been directed, per Executive Order B-16-2012, to work with the PEVC to achieve the State's Electric Vehicle

²⁵ *Rebuttal Testimony of Gregory Morris on Southern California Edison Charge Ready and Market Education Programs on Behalf of The Green Power Institute (GPI-2)* at 3 - 4.

²⁶ TURN-01 at 21, ChargePoint-02 at 4.

²⁷ *Opening Testimony of the Natural Resources Defense Council (NRDC-1)* at 12.

²⁸ ORA-1 at 3-3 (fn 33 with references to EPRI 2011, at 1-1), and TURN-01 at 21 - 22.

²⁹ *Rebuttal Testimony of Environmental Defense Fund (EDF-01)* at 14 and NRDC-1 at 5 - 7.

³⁰ *Opening Testimony of the Natural Resources Defense Council (NRDC-1)* at 5-10, fns 9, 10, 22.

adoption and infrastructure goals.³¹ In response to TURN's claims about MUDs, EDF argues that multiple studies have recognized workplace charging as a critical component for ensuring EV use, and that workplace charging is where EVs can have the greatest impact on integrating solar electricity.³²

In rebuttal testimony SCE explains that it proposes a "turn-key approach to design an attractive program, in which the rebate plays an important part to reduce barriers to site hosts."³³ SCE claims that without a rebate, the customer participant will have to pay significant upfront costs out of their own pockets which could limit participation. SCE agrees that customer participants should make an investment and points out that the rebate does not completely absolve customer participants of financial commitment since they must pay for any additional functionalities they request and ongoing operating costs.³⁴

No party argues that customer participants should be allowed to obtain (or combine) rebates in excess of their costs.

3.3.2. Discussion

The rebate issue is critical. Too small a rebate could result in too little participation in the program. Too large a rebate and ratepayers will unnecessarily be funding what the market could provide. While we agree that customer participants should be invested in the infrastructure, we also agree that the upfront costs of charging station installation can be prohibitive.

³¹ *Opening Testimony of the Environmental Defense Fund (EDF-1)* at 13 and 16.

³² EDF-02 at 8 - 9.

³³ *Southern California Edison Company's Charge Ready Application, Rebuttal Testimony (SCE-02)* at 2.

³⁴ *Ibid.*

We find merit in ChargePoint's claim that the site host takes a more active role in evaluating equipment and services and assessing site and user needs when a rebate covers only a portion of the cost. While SCE claims that customer participants are already invested since they assume responsibility for ongoing maintenance and operating costs and costs of any optional charging station functionalities, SCE was unable to state the extent or amount of those costs.³⁵ Further, TURN's estimate that SCE's proposal, before offering a charging station rebate, already covers approximately 70% of the costs of enabling the installation of a charging station, through the "make ready" installation, demonstrates an already significant reduction in upfront costs for customer participants. Based on this evidence, we find that financial involvement from customer participants is warranted.

We agree with EDF and TURN that SCE should use Phase 1 to evaluate whether the rebate levels are appropriate. Because the market is relatively new, it makes sense to test rebates at levels that can change as we collect data about what works.

While the Proposed Settlement suggests rebates of 100% for MUDs to encourage their participation in the program, for the reasons discussed above we do not feel that a 100% rebate is appropriate or in the public interest, except in Disadvantaged Communities, where a 100% rebate is justified in all market segments to provide equitable opportunity and co-benefits for residents pursuant to the Charge Ahead California Initiative (SB 1275).

³⁵ Transcript Vol. 1 at 56, lines 20-28, and at 57, lines 1-11 (hereafter TR Vol. 1, 56:20-28 and 57:1-11).

As to the appropriate level of rebate for customer sites in non-Disadvantaged Communities, we find it in the public interest to approve a rebate incentive in line with existing incentives in order to minimize ratepayer burden. As noted by TURN, further significant incentive is already being provided in the form of the make-ready stub. The ORA recommended rebate of 25% of the base cost for all market segments except those located in disadvantaged communities is a reasonable starting point because it will limit ratepayer costs while still providing a significant upfront incentive.³⁶ With a consistent rebate SCE will be able to evaluate whether and to what degree the rebate level improves the rate of installations across the different market segments. For the foregoing reasons, we adopt this recommendation for all non-residential market segments in Non-Disadvantaged Communities.

However, for MUDs we recognize the strong need and lack of existing charging infrastructure while at the same time acknowledging the public interest in avoiding 100% rebates. We therefore modify the Proposed Settlement to require a 50% charging station rebate for MUDs in non-Disadvantaged Communities, a greater incentive than that adopted for non-residential customer participants. Assuming a 70-30 cost split between the make-ready and the charging station, this corresponds to approximately 85% overall funding expected for a typical installation.

No party objected to a rebate of 100% for charging stations located in disadvantaged communities. We agree that there is less private capital investment in charging stations in disadvantaged communities. We find the

³⁶ Assuming a 70-30 cost split between the make-ready and charging station, this will equal approximately 78% of the total project costs.

100% rebate level for charging stations located in disadvantaged communities is appropriate, and adopt it here.

We find the adopted rebate levels consistent with the public interest in promoting EV adoption and charging access, while also balancing the need to minimize ratepayer costs per charging station installation. However, in recognition of the fact that other entities may or will be offering incentives to promote EV adoption, we will direct SCE to ensure that in no instance can the rebates offered through the SCE program be combined with other rebates or programs such that more than 100% of the charging station costs are recovered.

We note here that while reducing the rebate, we are still approving the revenue request of up to \$22 million dollars. SCE based its request on cost estimates that included a rebate of 100%. Therefore, the adopted rebate will result in funds not accounted for in the cost estimates. This funding shall be used to deploy additional charging stations, as further discussed in Section 3.7.

In addition, we provide clarification about the designation of the “Dominant Market Segment” for sites that provide parking for mixed use developments, to avoid misrepresentation of future drivers by potential recipients of infrastructure in order to receive higher rebates. The “Dominant” segment shall be determined by identifying the single type of vehicle driver (a resident, fleet operator, employee, or visitor) that would most likely account for the largest share of energy dispensed by the installed charging station. This modification will assist the program in managing costs and in providing the most appropriate incentive level for the typical use case for a given charging station. SCE shall track the sites and infrastructure that are considered mixed-use and provide infrastructure access to multiple market segments.

Additionally, to the extent reasonably feasible, SCE shall track the market

segments of the actual users of the charging stations at an individual site, for all sites, whether intended to be mixed-use or not.

We see no need to adopt ORA's recommendation that only 15% of the rebate be provided upfront, with the remaining 10% at conclusion of the program, as this would defeat the purpose of providing a rebate to offset program costs. Program participation should be monitored and assessed along with all other pilot components, and included in the quarterly reports.

Based on the above, we modify the Proposed Settlement so that the rebate level shall be 25% of the base cost for all non-residential market segments, 50% of the base cost for MUDs, and 100% of the base cost for any charging stations within disadvantaged communities.

3.4. Ratemaking Treatment of the Rebate

SCE proposes in its application that the charging station rebate, at an estimated \$3,900 per charging station, be treated as a regulatory asset and included in rate base.³⁷ This proposal would allow SCE to earn a rate of return on the rebates given the customer participants. The Proposed Settlement instead proposes to treat the rebates as expenses, which will be recovered from customers in the year the expense is incurred.³⁸

SCE does not plan to own, maintain, or operate the charging stations, and explains that such expenses would normally be considered an expense under Generally Accepted Accounting Principles.³⁹ However, SCE argues in testimony that because the "utility's investment in charging stations is necessary for the

³⁷ SCE-01-Vol 2 at 31.

³⁸ Proposed Settlement at 8.

³⁹ SCE-01-Vol 2 at 31.

entire new infrastructure to function, that investment should be recoverable from ratepayers over time, as the benefits of the entire new investment accrue.”⁴⁰ SCE hinges its argument for regulatory asset treatment of rebates on Decision (D.) 14-03-021, where the Commission concluded in the context of mobile home parks that costs for infrastructure not owned by the utility can be treated as a regulatory asset.⁴¹

In its testimony, TURN recommends that the Commission reject SCE’s proposal to rate base such large capital expenditures in the form of rebates as it has no basis in relevant Commission precedent and is generally inconsistent with sound regulatory policy.⁴² TURN argues that in D.14-03-021 the Commission was responding to unique and unusual circumstances and policy issues that are not applicable in this proceeding, and should not be used as precedent.⁴³ TURN explains that in D.14-03-021 the Commission intervened in a situation where a customer class was being denied basic electric service, and subjected to potentially unsafe conditions in some cases, as a result of infrastructure that did not meet utility standards. TURN argues that the instant application differs in that SCE is proposing a pilot that involves voluntary installation of equipment that is not necessary for provision of basic energy services, and SCE has not produced any evidence that prospective site-host owners would not purchase

⁴⁰ SCE-01-Vol 2 at 34.

⁴¹ SCE-01-Vol 2 at 34.

⁴² *Prepared Direct Testimony of Garrick F. Jones Regarding SCE’s Application 14-10-014 for Authority to Build Electric Vehicle Infrastructure, Addressing Rebates for Charging Stations and Regulatory Asset Treatment for Rebate Cost Recovery* (TURN-02) at 4.

⁴³ TURN-02 at 5.

charging stations but for the rebates.⁴⁴ While we disagree with TURN's assertion that charging equipment is not necessary for the provision of basic energy services, we agree with TURN's argument, which is consistent with the Proposed Settlement. As a proponent of the Proposed Settlement, SCE also supports this outcome now. We approve this provision of the Proposed Settlement. Therefore, SCE shall treat the rebates as expenses, to be recovered from ratepayers in the year in which they are incurred.

3.5. Advisory Board

SCE proposes in its application to form an Advisory Board with customers, industry, stakeholders, and representatives from disadvantaged communities. Members of the Advisory Board will review and provide input, guidance, and suggestions on the implementation and improvement of the Charge Ready and Market Education Programs.⁴⁵

The Proposed Settlement adds more specificity to SCE's application, and proposes an Advisory Board that includes representatives from a diverse array of key constituents, including consumer advocates, environmentalists, EV drivers, the automotive industry, disadvantaged communities, labor and EV charging partners, and requires that SCE solicit participation to ensure a balanced representation. SCE agreed not to take any material action regarding program design and implementation without consulting the Advisory Board.⁴⁶

The Advisory Board as described in the Proposed Settlement ensures better input into program decisions by a broader range of stakeholders than

⁴⁴ TURN-02 at 6 - 7.

⁴⁵ SCE-01-Vol 2 at 3 - 4.

⁴⁶ Proposed Settlement at 8.

proposed in the application. We therefore approve this aspect of the Proposed Settlement.

3.6. Reporting

SCE proposes in its application to provide quarterly reports to the Commission's Energy Division and other stakeholders. The reports will evaluate items listed in the pilot objectives, and include updates about progress, achievements, and lessons learned. The status reports might also include recommendations from the Advisory Board that SCE will consider incorporating in Phase 2. At nine months, SCE proposes to provide a pilot report with data which may be used to identify SCE's proposed revisions to the design or costs of Phase 2.⁴⁷

The Proposed Settlement states that SCE will file and serve a pilot report to provide Phase 1 data and recommend any necessary changes to Phase 2 after at least nine months of program implementation and at least 1,000 charging station installations. Additionally, SCE will file quarterly reports and a final report after the pilot has been completed. All reports will be filed with the Commission and served on parties to the proceeding for comment. Finally, SCE will collaborate with the Advisory Board, which shall include the Commission's Energy Division. Energy Division is authorized to modify and approve the load management metrics, content of the pilot report, and criteria for pilot evaluation recommended by the Advisory Board, and informally communicate any such modification or approval via its participation on the Advisory Board. The Proposed Settlement also provides a non-exhaustive list of more detailed data collection and reporting information in an appendix. The appendix specified

⁴⁷ SCE-01-Vol 2 at 19 – 20.

data to be collected for analysis in six categories: operations, education and outreach, customer actions and overall program satisfaction, EV charging load, pricing models, and disadvantaged communities.⁴⁸

ORA agrees that reports should be submitted quarterly. ORA claims that the analysis of data from Phase 1 is a necessary and instrumental step to inform full-scale deployment and recommended specific areas of data collection.⁴⁹ ORA recommends that Phase 1 be extended for six months to gather additional data and ensure sufficient information to facilitate a successful Phase 2.⁵⁰ TURN cautions that the build-out of 1,500 charging stations will take time and expressed concern that insufficient data may exist after only 9 months.⁵¹

We support reporting requirements as a necessary means to evaluate Phase 1. Quarterly reports will allow stakeholders and Commission staff to monitor Phase 1 implementation and any early indications of necessary program modifications, as well as be better prepared for review of any Phase 2 application. We find that reporting requirements in Appendix A of the Proposed Settlement are reasonable and provide a useful baseline of data collection, and shall be implemented as specified in Appendix A. We also identify the need to report data in a manner that ensures that the Commission can conduct an analysis that is interoperable and harmonious with charging deployments across other utility service territories.⁵² Due to the common geospatial nature of SCE's

⁴⁸ Proposed Settlement at 8 – 9, and Appendix A.

⁴⁹ ORA-1 at 2-3.

⁵⁰ ORA-1 at 2-1.

⁵¹ TURN-01 at 16.

⁵² Pub. Util. Code 740.2(e).

Charge Ready Program and San Diego Gas & Electric Company (SDG&E) and Pacific Gas and Electric Company (PG&E) proposals, SCE shall work with the Advisory Board to select a geographic information systems (GIS)-based tool and interface that the public and other utilities can use to track the progress and attributes of the deployment.⁵³ The Commission encourages SCE to use this data to inform their Distribution Resource Planning efforts pursuant to Assembly Bill (AB) 327. In addition, we will require that quarterly reports provide information on the use of the Submetering Protocol to measure energy use associated with non-networked electric vehicle services equipment (EVSE), how vendors are qualified to participate in the programs, which vendors have been qualified and which have not, and any ongoing information on base costs for charging equipment, unless such information is confidential or proprietary. SCE proposes in its application to provide quarterly reports to the Commission's Energy Division and other stakeholders. The reports will evaluate items listed in the pilot objectives, and include updates about progress, achievements, and lessons learned. The status reports might also include recommendations from the Advisory Board that SCE will consider incorporating in Phase 2. At nine months, SCE proposes to provide a pilot report with data which may be used to identify SCE's proposed revisions to the design or costs of Phase 2.⁵⁴

We find it reasonable to require SCE to submit a more detailed report after at least 1,000 charging stations have been deployed, as it will provide transparency to the Commission and stakeholders, and provide analysis on pilot

⁵³ In addition to this public GIS reporting tool, additional requirements may apply to certain facilities pursuant to SB 454.

⁵⁴ SCE-01-Vol 2 at 19 - 20.

progress. However, we agree with ORA and TURN that nine months may not be enough to provide adequate data for program evaluation. While ORA suggested an extension to the pilot, it did not provide a reasonable timeframe for the submission of the pilot report with data and suggested program revisions for Phase 2. We determine that 12 months should provide adequate data for pilot evaluation. Therefore, we modify the Proposed Settlement to require that SCE file and serve a pilot report to provide Phase 1 data, and recommend any necessary changes to Phase 2, after at least 12 months of program implementation, and at least 1,000 charging station installations, but in any event, within 24 months of program implementation.

3.7. Cost Recovery and Management

In its application, SCE requests recovery of up to \$22 million in capital expenditures and operations and maintenance (O&M) expenses related to the Phase 1 pilot. SCE proposes establishment of a Charge Ready Program Balancing Account (CRPBA) to provide for recovery of Phase 1 pilot recorded revenue requirements, which include all recorded Phase 1 incremental costs, effective upon a Commission decision in Phase 1. SCE requests that reasonableness review of the CRPBA be limited to review to ensure that all entries to the account are stated correctly and associated with Phase 1 pilot activities as defined and adopted by the Commission.⁵⁵

SCE proposed to include in distribution rates a forecast annual Phase 1 revenue requirement effective January 1 of each year commencing January 1, 2016.⁵⁶ SCE also notes that it will not record any revenue

⁵⁵ SCE-01-Vol 2 at 24 - 25.

⁵⁶ SCE-01-Vol 2 at 26.

requirements related to any Phase 1 pilot expenditures that may exceed the \$22 million cap in the CRPBA.⁵⁷ SCE proposes to transfer the revenue requirement recorded in the CRPBA to the distribution sub-account of SCE's Base Revenue Requirement Balancing Account (BRRBA) each month, which will allow true up of forecast and actual revenue requirements.⁵⁸

SCE proposes that if the Phase 1 pilot direct capital and O&M expenditures for the 12 month period commencing with approval to establish the CRPBA are less than \$22 million, then those expenditures will be deemed to be reasonable and no further after-the-fact review will be required. SCE proposes that the recorded operation of the CRPBA be reviewed by the Commission in SCE's annual Energy Resources Recovery Account (ERRA) review applications, which will ensure that all entries are stated correctly.⁵⁹

SCE provides cost estimates for Phase 1, but notes that charging station installation at commercial sites is not uniform, with unique factors that will affect the costs at each site. SCE states that one of the pilot objectives is to validate assumptions about project implementation costs. Therefore, SCE adds a 35% contingency to all utility-side and customer-side costs. SCE also notes that it will conduct an RFI before setting the base cost of the charging station. While SCE provides a cost estimate for its proposed rebates, the ultimate rebates will depend on the results of the RFI process.⁶⁰

⁵⁷ SCE-01-Vol 2 at 26, footnote 20. SCE also noted that the proposed spending cap excludes all applicable overheads such as AFUDC or corporate overheads, which will be included when recording the revenue requirements in CRPBA.

⁵⁸ SCE-01-Vol 2 at 26.

⁵⁹ SCE-01-Vol 2 at 27.

⁶⁰ SCE-01-Vol 2 at 20 – 21.

In the Proposed Settlement, parties agree that if SCE reaches the \$22 million Phase 1 budget cap without installing at least 1,000 charging stations, SCE must suspend program activities as soon as feasible and file a report with the Commission to examine the pilot's underlying assumptions. At that point, no new projects should commence, although partially constructed projects may be completed as necessary. Any costs in excess of the budget cap should be considered as part of the Phase 2 budget.⁶¹

The Proposed Settlement term for program suspension once SCE reaches its budget cap is not a reasonable way to address excessive costs, because once SCE reaches its authorized budget cap it no longer has the authority to recover any additional expenditure. If SCE only installs a portion of the intended charging stations with its entire authorized budget, it would also be too late at that point to address any problems with the underlying assumptions. As SCE explained, the costs of commercial charging station installation are uncertain, and SCE plans to test cost assumptions in Phase 1. Thus, it is reasonable that the cost estimates upon which the revenue request is based may change. However, SCE included large contingency factors in its cost assumptions to compensate for these uncertainties, which should provide ample protection against cost overruns. Moreover, the reduction in the level of rebates adopted relative to those originally proposed provides additional buffer that makes cost overruns even less likely. There is no need to determine now a mechanism for potential future recording or approval of cost overruns. Therefore, this Proposed Settlement term is rejected.

⁶¹ Proposed Settlement at 9.

Instead, we find that SCE's proposal in its application for recording Phase 1 revenue requirement of up to \$22 million in the CRPBA is reasonable. SCE is authorized to establish the CRPBA, using the standard commercial paper interest rate, for purposes of recording and recovering no more than \$22 million. Revenue requirement recorded in the CRPBA shall be transferred to the BRBBA, which will then be reviewed in SCE's annual ERRRA proceeding to ensure that all entries are correctly stated and attributed to the Charge Ready and Marketing Education Programs as adopted in this decision. However, SCE is on notice that if it submits a Phase 2 application once it has tested its cost assumptions and other pilot goals, the Commission may examine the reasonableness of program expenditures more closely through more detailed compliance criteria or a mechanism other than SCE's ERRRA.

3.8. Regulatory Process and Transition

The Proposed Settlement term is modified so that SCE shall submit an application for Phase 2 with its 12-month and 1,000 station pilot report, if Phase 2 is warranted based on the results of the pilot report.

SCE provides testimony for both Phases 1 and 2 along with its application. In doing so, SCE states that a seamless transition from Phase 1 to Phase 2 is critical in order to avoid confusion among customers and vendors, and to avoid unnecessary expenses that could result from suspending ongoing processes piloted by SCE in preparation for Phase 2. Rather than a new application for Phase 2, SCE proposes the use of pilot reports and revisions to Phase 2 testimony, if deemed necessary based on lessons learned in Phase 1. SCE claims

this will help the Commission reach a prompt decision based on up-to-date information and analyses.⁶²

The Proposed Settlement acknowledges that Phase 1 may extend beyond one year to ensure sufficient data to evaluate the pilot and inform Phase 2. The Proposed Settlement requests that the Commission set a prehearing conference to begin regulatory review of Phase 2 once SCE has filed its pilot report. The Proposed Settlement also requests that Phase 1 continue until the Commission issues a final decision on Phase 2.⁶³

TURN recommends in its testimony that SCE amend and re-file the Phase 2 portion of its testimony after Phase 1 is completed. TURN states that SCE's request for a seamless transition between phases runs counter to its own proposal, since SCE requested that Phase 1 be approved prior to Phase 2. TURN explains that a seamless transition assumes that Phase 2 will be approved, and assumes it will be approved without any major modifications to what is currently proposed, prior to Phase 1 results.⁶⁴ TURN argues that SCE must collect sufficient data to inform Phase 2, and that the parties must have sufficient time to analyze and incorporate any data in their recommendations for Phase 2. TURN claims that a review process that allows SCE and parties the opportunity to refine assumptions and optimize a larger-scale program is the primary benefit of a phased approach.⁶⁵

⁶² SCE-01-Vol 2 at 20.

⁶³ Proposed Settlement at 9.

⁶⁴ TURN-01 at 15 - 16.

⁶⁵ TURN-01 at 16 - 17.

EDF responds that TURN's recommendations would lead to inappropriate delay. Instead, EDF states that Phase 2 should continue without a loss of momentum from Phase 1, and agrees with SCE that the Commission should call for Phase 2 testimony and hearings, if necessary, as soon as SCE files its pilot report and any revisions to its Phase 2 testimony.⁶⁶

GPI also opposes TURN's recommendations, and states that the Commission should use lessons learned from Phase 1 to evaluate the Phase 2 application in a later decision in this proceeding. GPI proposes that SCE could submit a revised application in this proceeding if necessary, but should not be required to re-submit the Phase 2 application.⁶⁷

We agree with SCE that certain efficiencies may exist in moving seamlessly from a pilot to full-scale deployment, and we are sympathetic to parties' calls for rapid movement. However, we cannot abdicate our responsibility as a regulatory agency or relinquish the process needed to adequately review a proposal for Phase 2 deployment. As SCE explains in its testimony, Phase 1 will allow SCE to test several key assumptions underlying its approach prior to full-scale deployment. This application is being approved on the merits of Phase 1, and we cannot assume that Phase 2 has merit without considering the results of Phase 1. As noted by TURN, the benefit of a pilot and phased approach is to enable analysis of the program, and determine whether full-scale deployment is warranted, and in what form. While it may be ideal to move seamlessly from pilot to full-scale deployment, the Commission must be able to

⁶⁶ EDF-02 at 12.

⁶⁷ GPI-2 at 2 - 3.

evaluate the reasonableness of Phase 2, which will largely hinge on the results of Phase 1.

That being said, we do find it reasonable to minimize the regulatory delay to the extent feasible. Thus, as noted above, SCE must submit a pilot report after at least 12 months of program implementation and at least 1,000 charging station installations, but in any event, within 24 months of program implementation. If SCE determines at that time it has data and analysis justifying the benefits of a full-scale deployment of its Charge Ready and Market Education Programs, it may file a new application for additional deployment, including the report as part of its application.

Additionally, SCE based its revenue request on provision of a rebate at 100% of the base cost. Because we are setting the rebate level at 25-50% of the base cost, additional funds should be available that SCE should use to continue deploying charging stations. SCE also included a 35% contingency adder to its cost estimates. This buffer will protect against cost overruns, but may also result in additional funding that, if available, should be used to deploy charging stations beyond the required pilot report after 12 months of program implementation. These additional available funds should contribute to limiting a gap in deployment between Phase 1 and Phase 2, should SCE propose an application for Phase 2 and if the Commission decides to approve such an application.

We therefore modify the Proposed Settlement to require SCE to submit an application for Phase 2, if warranted based on the findings of Phase 1. SCE may file its application with the Phase 1 pilot report. SCE shall also continue implementing its Phase 1 pilot up to the authorized \$22 million cap. To the

extent that testimony for Phase 2 remains the same as that SCE already submitted, it may re-submit that testimony.

We note here that SB 350 (de León) was recently passed by the Legislature. The Commission has an obligation to implement SB 350, parts of which are related to transportation electrification.⁶⁸ While implementation of SB 350 has not yet been determined, parties should be aware that a Phase 2 application will be subject to any decision adopted by this Commission pursuant to SB 350.

3.9. Load Management

As the Proposed Settlement provides, SCE shall provide load management education, evaluate load management strategies, consider load management modifications for a Phase 2 proposal, and create a demand response program within three years of this decision.

SCE proposes in its application that the charging stations must be served on an applicable general service time-of-use (TOU) rate, and that SCE will perform a rate analysis to assist customer participants in selecting the most cost-effective rate based on the anticipated usage of the charging station.

Individual MUD residents may be separately metered and billed directly for

⁶⁸ SB 350 states, in part, that: (b) The commission, in consultation with the State Air Resources Board and the Energy Commission, shall direct electrical corporations to file applications for programs and investments to accelerate widespread transportation electrification to reduce dependence on petroleum, meet air quality standards, achieve the goals set forth in the Charge Ahead California Initiative (Chapter 8.5 (commencing with Section 44258) of Part 5 of Division 26 of the Health and Safety Code), and reduce emissions of greenhouse gases to 40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050. Programs proposed by electrical corporations shall seek to minimize overall costs and maximize overall benefits. The commission shall approve, or modify and approve, programs and investments in transportation electrification, including those that deploy charging infrastructure, via a reasonable cost recovery mechanism, if they are consistent with this section, do not unfairly compete with nonutility enterprises as required under Section 740.3, include performance accountability measures, and are in the interests of ratepayers as defined in Section 740.8.

usage of a charging station on an applicable residential TOU rate if the charging station has been assigned to the resident's exclusive use.⁶⁹ SCE proposes that all customer participants with Level 2 charging stations agree to participate in future demand response programs designed in connection with the Charge Ready Program, and approved by the Commission. SCE states that it plans to solicit feedback from the Advisory Board on the design of potential demand response programs.⁷⁰

NRDC supports SCE's proposal that charging stations be demand response-capable (or connected to an external device that is demand response-capable). NRDC notes that SCE does not intend to require site hosts to pass TOU price signals through to EV drivers or to impose a requirement that electricity prices generally maximize fuel cost savings relative to gasoline. NRDC claims that in order to achieve long-term transportation electrification benefits time-variant rates and effective customer education and outreach are necessary, and explains that SCE's proposal is in contrast to applications for EV charging station infrastructure from PG&E and SDG&E, which both propose that EV drivers will see time-variant price signals.⁷¹ NRDC supports SCE's proposal in the context of the two other applications, stating that adopting all three applications will allow the Commission to test different models to determine whether EV drivers need to see time-variant signals in order to manage EV load and realize fuel cost savings.⁷²

⁶⁹ SCE-01-Vol 2 at 13 - 14.

⁷⁰ SCE-01-Vol 2 at 14.

⁷¹ NRDC-1 at 15.

⁷² NRDC-1 at 16.

EDF explains that EVs can result in a range of environmental and grid benefits, such as responding to ramping needs and assisting in renewable integration. EDF claims that SCE's proposal is missing an adequate dynamic rate component⁷³ and expresses concerns that the TOU rate proposed by SCE will not necessarily result in a price signal to EV drivers to charge at a particular time, which will not result in grid benefits. EDF recommends SCE go beyond requiring Level 2 charging stations be demand response-capable, proposing that SCE require station vendors to charge EV drivers based on a dynamic rate that is visible to EV drivers, such as day-ahead hourly or volumetric rate, or a TOU rate with a critical peak pricing component.⁷⁴ In response to NRDC's testimony, EDF states that SCE's proposal to not require that site hosts pass through TOU price signals to EV drivers is problematic, and suggests SCE do more to ensure managed EV charging.⁷⁵

GPI recommends in its testimony that SCE include rate design as a part of the pilot, using its existing demand response testing as a basis. GPI claims that charging station owners participating in SCE's program could be contractually bound to offer EV drivers a vehicle grid integration rate, and recommends that at least half of station owners in the Charge Ready Program be required to offer a vehicle grid integration rate.⁷⁶

⁷³ EDF-01 at 6 – 7.

⁷⁴ EDF-01 at 22 – 23.

⁷⁵ EDF-02 at 5 – 6.

⁷⁶ *Direct Testimony of Gregory Morris on Southern California Edison Charge Ready and Market Education Programs on Behalf of The Green Power Institute (GPI-1)* at 16 – 17.

SCE in rebuttal testimony explains that pursuant to D.10-07-044, neither the Commission nor the utilities' tariffs have the authority to mandate pricing charged by EV service providers to charging station end-users. SCE states it can only send price signals to its customers, and those customers can then choose their own terms for provision of charging services. SCE also states in rebuttal testimony that many charging stations may not have the functionality needed to pass on a dynamic rate to the end user, that requiring payment from end-users might include more upfront costs that were not estimated in SCE's proposal, that mandating how customer participants operate stations would impose substantial restrictions that don't exist for other charging stations, and that a new Charge Ready Program-specific rate would be time-consuming to develop.⁷⁷ SCE agrees with NRDC that SCE's proposal will provide real-world data to determine whether it results in managed charging, and will provide a different approach than the ones proposed by PG&E and SDG&E.⁷⁸

Load management is not only critical to materializing grid benefits of EV charging, but also necessary to avoid any negative impacts on the grid. EDF and GPI's arguments that a dynamic rate of some sort for EV drivers may be necessary to achieve grid benefits may have merit, but we won't know that for sure until we test various ways to achieve grid benefits available through EV charging in the market segments being offered. There is limited information on the charging behaviors of EV drivers that live in Multi-Unit Dwellings. In addition, we are also particularly concerned about the potential that lessees or residents of Multi-Unit Dwellings are at risk of being "captive" customers that

⁷⁷ SCE-02 at 10.

⁷⁸ SCE-02 at 11.

have a limited ability to choose among alternative EV service or technology providers due to the principal-agency and cost-assignment issues that may exist with their lessors or building managers. We are persuaded by NRDC and SCE's arguments that the Charge Ready Program will provide data for this segment to determine whether the proposed demand response capabilities, TOU pricing for customer participants, and customer education components are enough to incentivize prudent load management.

The Proposed Settlement provides that SCE will educate site hosts about TOU rates and other programs that encourage EV charging in a way that supports the electrical grid, and will evaluate and compare different site host load management strategies, including whether price signals are being passed to the driver. The Proposed Settlement states that SCE will consider program modifications for Phase 2 if there is evidence that load is not being adequately managed to avoid adverse grid impacts from EV charging or customer participants, if EV drivers who charge in a manner that avoids adverse grid impacts are not provided with the opportunity to realize fuel cost savings, or if charging does not leverage available opportunities to integrate renewables. The Proposed Settlement states that SCE agrees to create, or have identified and adopted, a demand response program, as detailed in SCE's application, within three years of the Proposed Settlement being adopted by the Commission, subject to any necessary regulatory approvals.⁷⁹

However, a more direct price signal for EV drivers may be necessary if we are to use EVs to support the grid in a manner that delivers benefits to SCE

⁷⁹ Proposed Settlement at 10.

customers. SCE has pending results from two pilots approved in D.12-04-045, which adopted Demand Response Activities and Budgets for 2012-2014. The first, the Plug-In Electric Vehicle (PEV) Workplace Charging Pilot, intended to “advise and assist SCE in developing future charging strategies, programs, and infrastructure advisory protocols for larger business customers, especially as they relate to promoting SCE’s efforts to support California’s GHG Emissions Reduction Goals and participation in other DR programs.”⁸⁰ The second, the PEV Smart Charging Pilot, intended to “evaluate various PEV-Grid interface architectures and control strategies for commercial and residential applications...in developing future charging strategies, programs and infrastructure.”⁸¹ Leveraging the findings from these two pilots is vital to achieve immediate benefits from the Charge Ready and Market Education Program. The experience from the Workplace and Smart Charging pilots can inform Load Management and pricing strategies for the Fleet, Workplace, and Destination Center segments. Therefore, the Proposed Settlement terms will be further modified to require SCE to convene the Advisory Board to determine how the pilot results affect the vendor and equipment qualification processes, the benchmarking of Load Management and pricing strategies, and the provision of Advisory Services.

Furthermore, we direct SCE to work with the Advisory Board to determine metrics needed to evaluate the effectiveness of the Load Management strategies

⁸⁰ SCE Advice Letter 2746-E, Attachment A at 2.

⁸¹ SCE Advice Letter 2749-E, Attachment A at 2.

in achieving the Guiding Principles of the Settlement.⁸² Energy Division is authorized to modify and approve the Load Management metrics recommended by the Advisory Board, and informally communicate any such modification or approval via its participation on the Advisory Board. EDF suggests metrics that serve as a starting point for measuring the effect of managing the EVs' charging load.⁸³ Further refinements to these metrics were suggested by the Settling Parties in their comments on the proposed decision. We restate and refine the suggested performance metrics here that shall be considered by the Advisory Board in developing a final set of recommended metrics for reviewing and evaluating SCE's Load Management strategy:

- 1) Capacity factors for renewable generators;
- 2) Coincidence of customers' use of Preferred Resources;
- 3) Customer load factor;
- 4) Curtailment of renewable energy;
- 5) Utilization of EVSE;
- 6) Strategic placement of EVSE, and as applicable the associated Distributed Energy Resources, consistent with the system locational benefit considerations of AB 327 and R.14-08-013; and
- 7) Participation in complementary Low-Income Programs for eligible Multi-Family Residential (or Multi-Unit Dwelling) customers.

⁸² Guiding Principles 6, 7, and 1c relate to Load Management in that a site host's strategy should averse grid impacts, realize cost savings, and integrate renewable energy or complement other clean energy programs.

⁸³ EDF-02 at 31.

We recognize that the quantity of charging infrastructure installed under the pilot itself may not result in measurable impacts on all of the factors listed above, and that some factors, such as strategic placement of EVSE, may not be elements of the pilot program design. However, we see value in tracking these trends in order to enable better understanding of potential impacts alluded to in the Guiding Principles as EVSE deployment will increase in the future, and to maintain holistic oversight of SCE's complementary customer programs.

3.10. Disadvantaged Communities

In its application SCE proposes to deploy up to 10% of the charging infrastructure in disadvantaged communities, as defined using the California Environmental Protection Agency's (CalEPA) California Communities Environmental Health Screening Tool (CalEnviroScreen 2.0). SCE bases its proposal on SB 535, which requires that 10% of the Greenhouse Gas Reduction Fund be allocated for projects located within disadvantaged communities. SCE proposes to reduce the minimum requirement from ten to five charging stations per participating site in appropriate circumstances. SCE states it will collaborate with the California Energy Commission, California Air Resources Board (CARB), the South Coast Air Quality Management District, the Southern California Association of Governments, and other regional agencies and beneficiaries of vehicle incentive programs authorized by statutes that favor state investments in disadvantaged communities, to encourage more incentives and state investments in these communities.⁸⁴

⁸⁴ SCE-01-Vol 2 at 7.

The Proposed Settlement states that SCE plans to deploy at least 10% of charging stations in disadvantaged communities as identified by CalEPA's CalEnviroScreen tool. The Proposed Settlement requires SCE to commission a study of consumer demand growth in disadvantaged communities that will inform a significant scale up of deployment in disadvantaged communities in Phase 2. The Proposed Settlement commits SCE to partner with stakeholders to identify site locations and conduct effective education and outreach, and complement and coordinate with federal, state, and locally funded programs that are expected to foster demand for EVs in disadvantaged communities.⁸⁵

In testimony, parties either support the proposed requirements for disadvantaged communities, or are silent on the issue. The additional requirements in the Proposed Settlement will help ensure successful charging station installation by providing stricter deployment requirements, better communication with the communities, and study of consumer demand growth specific to the disadvantaged communities.

The CalEPA and SB 535 identify Disadvantaged Communities as those identified by the CalEnviroScreen tool.⁸⁶ The use of a *State-wide* scope for determining which disadvantaged communities would be eligible for installations poses a challenge to the extent that certain utility territories – as a result of their relative geographic size, local industrial composition, and residents – have relatively few census tracts that are scored within the top quartile by the CalEnviroScreen tool on a state-wide basis. The inclusion of census tracts located within other utility service territories in the definition of

⁸⁵ Proposed Settlement at 10 – 11.

⁸⁶ <http://www.calepa.ca.gov/EnvJustice/GHGInvest/Documents/SB535DesCom.pdf> at 13.

Disadvantaged Communities would have the consequence of excluding from eligibility the census tracts in such utility territories that are disadvantaged when compared to the rest of the service territory, but relatively less disadvantaged when compared to communities elsewhere in the State. For the purposes of this initial pilot program, we find it reasonable to be more inclusive, and select the definition that will enable greater access to charging infrastructure. For these reasons, we find it reasonable to define the eligible disadvantaged communities as the top quartile of census tracts per the CalEnviroScreen scores on either a state-wide or a utility-wide basis – whichever is broader. In addition to ensuring relatively broad pilot eligibility, this approach permits a greater geographic dispersion of Destination Center installations that can improve the public's access to a more expansive network of charging infrastructure, with commensurate potential benefits for EV adoption. In the case of SCE's service territory, more census tracts will qualify using a state-wide basis, which is the basis proposed in the Settlement Agreement. We therefore adopt the definition of Disadvantaged Communities proposed in the Settlement Agreement.

Among qualifying communities, SCE shall complete market analyses to identify and target communities that would most benefit from a given infrastructure expenditure, and consider how to overcome principal agency, cost assignment, and other barriers to installation. Pursuant to Pub. Util. Codes §§ 701.1, 740.2, and 740.3, SCE's analysis should minimize the social costs of transportation energy services by using public data and mapping tools to identify the potential facilities and drivers that face the greatest transportation burden, and have the least fuel efficient and most polluting vehicles.

Second, SCE shall coordinate its Market Education programs with other low-income rate, demand-side management, or distributed generation programs,

and engage local organizations to conduct outreach to the Disadvantaged Communities. In the low-income proceeding (A.14-11-007), SCE and the other IOUs have developed a “single point of contact” design that aims to better serve the multifamily market through integrating demand side program offerings through the provision of technical assistance to interested multifamily property owners and operators. While that proceeding focuses largely on integrating the Energy Savings Assistance Program with the Multifamily Energy Efficiency Program, the Middle Income Direct Install program, the IOU Whole Building Programs, the IOU On-Bill Financing programs, as well as the California Advanced Services Fund and the Department of Community Services and Development’s Low-Income Weatherization Program – we further direct that SCE’s single point of contacts provide technical and educational assistance for the Charge Ready infrastructure program.

Finally, we will require SCE to ensure that the Vendors and service providers it qualifies include those that provide vehicle charging that allows alternative vehicle ownership models (including car sharing) and leveraging lessons from the similar CARB-funded program in Los Angeles.

3.11. Supplier Diversity

SCE states in its application that all goods and services qualification and procurement processes will include women, minority, and disabled veteran business enterprise requirements.⁸⁷

The Proposed Settlement states that SCE plans for the Charge Ready Program to support SCE’s companywide Diversified Business Enterprise (DBE) 40% diverse spending goal. Solicitations and contracts will contain a DBE

⁸⁷ SCE-01-Vol 2 at 7.

subcontracting plan, which requires the bidder/contractor to list its expected annual DBE spend with respect to the pilot, and list any subcontractors it plans to use to achieve its DBE goal. Bidders will be requested to provide proposals in support of SCE's goal of achieving at least a 40% diverse spend.⁸⁸

While we find these terms in the Proposed Settlement reasonable we require quality control assurances. Accordingly, we will modify the terms of the Proposed Settlement and direct that SCE shall require that all contractors involved with the construction, installation, or maintenance of the facilities under the Charge Ready Program are certified by the Department of Energy's Electric Vehicle Infrastructure Training Program.

3.12. Customer Participants and Participating Sites

SCE states that the pilot is open to any eligible applicants that meet the eligibility criteria, that it will first engage directly with customer participants to discuss program eligibility and customer needs, and that it will conduct targeted outreach to business customers that are more likely to participate in the program.⁸⁹ SCE states that customer participants will purchase qualified EV charging stations and pay for their installation directly from qualified providers. SCE will not directly participate in the procurement activities conducted by customer participants.⁹⁰

The Proposed Settlement states that vendors and third party service providers qualified by SCE may market the pilot and submit applications to participate in the pilot in any market segment on behalf of potential customer

⁸⁸ Proposed Settlement at 11.

⁸⁹ SCE-01-Vol 2 at 10.

⁹⁰ SCE-01-Vol 2 at 11.

participants and participating sites. Customer participants may designate a qualified vendor or third party to submit an application for participation in the pilot on the customer participant's behalf, and otherwise act on their behalf for day-to-day activities in connection with deployment of charging stations, provided that SCE will confirm all key decisions directly with the customer participants. This will include a requirement that customer participants prepare, sign, and submit to SCE various forms and documents as part of the deployment process. The Proposed Settlement states that qualified vendors and third parties should have opportunity to contact potential customer participants directly, before and after SCE's contact, and that SCE should not be required to "first engage" with the customer participants or participating sites. SCE states it retains all right to engage with potential customer participants, subject to maintaining Market Neutral Customer Engagement.⁹¹

ChargePoint supports SCE's proposal to allow site hosts to purchase charging stations directly from suppliers, stating that such customer choice will ensure the equipment will suit the site host's needs.⁹²

The issues outlined in the Settlement term are uncontested issues, and we find them reasonable.

3.13. Application Requirements and Process

SCE proposes in its application specific customer eligibility qualification criteria for those seeking to be customer participants, including non-residential

⁹¹ Proposed Settlement at 12.

⁹² ChargePoint-01 at 4.

customer status, site requirements, and certain program commitments.⁹³ SCE proposes that, to be included in the program, EV charging stations must meet a variety of technical standards and energy efficiency recommendations, be listed by a nationally recognized testing laboratory, be demand response-capable, and have certain networking capabilities, as spelled out in SCE's proposed Charge Ready Program Pilot tariff.⁹⁴ Eligible customers will be selected on a variety of factors such as geographic location, grid impacts, and parking composition. Customer participants will select qualified charging stations for installation. Each participating site must install a minimum of ten charging stations, and may install charging stations to serve up to 4% of parking spaces at the site.⁹⁵

ChargePoint suggests in its testimony that the ten station minimum per site may be too restrictive, and that SCE should allow more flexibility, with which GPI agrees in its rebuttal testimony.⁹⁶

The Proposed Settlement states that SCE must process, evaluate, and reply to all applications with Market Neutral Customer Engagement. SCE will track customers that apply for the program, and document key factors that contribute to determining the number of stations approved for deployment at participating sites, and key factors that contribute to rejection of applicants. The Proposed Settlement states that SCE will report and assess this, in its pilot reports, in an

⁹³ SCE-01-Vol 2 at 6. Tariff requirements for eligible customer participants are laid out in the Schedule Charge Ready Program Pilot tariff. (See SCE-01-Vol 2, Appendix B.)

⁹⁴ SCE-01-Vol 2 at 6 – 7.

⁹⁵ SCE-01-Vol 2 at 10. SCE also stated that upon request from a customer participant located in a disadvantaged community, it may reduce the minimum requirement from 10 charging stations to five per participating site. (See SCE-01-Vol 2 at 11, footnote 14.)

⁹⁶ ChargePoint-01 at 5 and GPI-2 at 16.

aggregated fashion to maintain customer confidentiality. SCE may consider refining its eligibility criteria for Phase 2 based on its findings.⁹⁷ The Proposed Settlement provides that SCE shall process, evaluate, and reply to all applications with Market Neutral Customer Engagement and provide an analysis of the applications and eligibility criteria in its pilot reports.

We find these terms reasonable but make the following clarifications. First, SCE must provide the Energy Division and the Advisory Board the final technical standards and energy efficiency recommendations that it will use to determine rebate-eligible EVSE. Second, SCE must also provide justifications for its technical standards and energy efficiency recommendations based on information gained from the vendor qualification processes and/or other publicly-available information. In addition, one of the many assumptions the pilot will test is whether the ten station minimum per site is too restrictive. Analysis of all application and eligibility criteria will be assessed in the pilot reports, and refined for any Phase 2 application as necessary.

3.14. Safety

SCE's application does not discuss safety. The Proposed Settlement states that SCE acknowledges it is responsible for ensuring the customer participant site infrastructure is maintained in a manner that is safe for public and utility employees. Thus, SCE will require that all construction, installation, and maintenance of customer participant site infrastructure that is not performed by employees of SCE will be performed by contractor's signatory to the

⁹⁷ Proposed Settlement at 12.

International Brotherhood of Electrical Workers who hold a valid California C-10 contractor's license.⁹⁸

Safety is an important issue for the Commission, and is included in the scope of the proceeding. The Proposed Settlement term on safety is the only mention of the topic, and is adopted in this decision with the following additional requirement. To ensure that contractors install electric vehicle infrastructure safely, the electricians must receive certification from the Electric Vehicle Infrastructure Training Program (EVITP). The EVITP, which is supported by the U.S. Department of Energy, certifies electricians that have been safely trained to perform EV infrastructure work. The EVITP curriculum is made freely available for use by utility training centers, community colleges, and electrical union training centers.

4. Responses and Replies to the Motion to Adopt the Proposed Settlement

GPI and Shell Energy filed responses opposing the Proposed Settlement and requesting additional modifications to SCE's application. Their requests are denied as discussed below.

4.1. GPI

GPI states it cannot support the Proposed Settlement because it has an insufficient focus on education and outreach. GPI requests that the Commission require that at least 25% of the total budget be devoted to education and outreach, and that half of education and outreach be conducted by Energy Upgrade California.⁹⁹

⁹⁸ Proposed Settlement at 9.

⁹⁹ GPI Comments at 1.

SCE disagrees with GPI's claim that more education and outreach expenditures are necessary at this point. SCE states it intends to invest \$3 million in education and outreach for Phase 1, which it believes is a significant commitment to education and outreach that can be enhanced and improved in Phase 2. SCE does not believe that half of the education and outreach funds should go to Energy Upgrade California, as it is a statewide program and the Charge Ready Program is specific to SCE's service territory. According to SCE, it has specialized knowledge of its own customer base that allows more efficient provision of education and outreach. Further, SCE notes that the administrator of Energy Upgrade California is a party to this proceeding and did not request to administer or implement a portion of the Charge Ready Program.¹⁰⁰ SCE suggested that, to the extent the Commission determines SCE should contract with a third party for education and outreach, such contracts should be developed via a competitive bidding process.¹⁰¹

Regarding the recommendation for third party involvement in education and outreach, GPI recommends that SCE's broad education and outreach activities should be administered by a third party because third parties could likely do a better job at a lower cost than SCE. GPI also raises concerns about competitive neutrality in marketing, as prescribed in D.11-07-029. GPI urges the Commission to include, at minimum, a third-party and community-based organization component to SCE's education and outreach activities.¹⁰² In response to GPI, SCE states in rebuttal testimony that it should perform its own

¹⁰⁰ SCE Reply Comments at 5.

¹⁰¹ SCE Reply Comments at 6.

¹⁰² GPI-1 at 11 - 15.

marketing, education, and outreach, because SCE has in-house customer data and historical knowledge of its own marketing landscape that will allow it to ensure customer awareness and program cost-effectiveness.¹⁰³

Market education and outreach are necessary in order to gain customer participation in the Charge Ready Program, and to develop load management that will result in grid benefits. We agree with SCE \$3 million is ample funding for market education and outreach at this time. GPI did not propose that 25% of pilot funds go to education and outreach in its testimony, so it is unclear why GPI's position has now changed. We agree that SCE has the data and knowledge to successfully provide the necessary market education and outreach to its customers, especially for a pilot program in which part of the objective is to test and refine the market education and outreach strategies. Further, as SCE notes, GPI's recommendation that half of education and outreach funds go to Energy Upgrade California have not been supported by CSE, the implementer of Energy Upgrade California, a party to this proceeding. We find that SCE is in the best position to conduct its own market education and outreach for Phase 1, although this issue may be revisited in review of a Phase 2 application. GPI's concerns about competitive neutrality in marketing are already addressed in the Proposed Settlement term that requires that SCE and its agents apply Market Neutral Customer Engagement to the broad market education campaign, transportation electrification advisory services, and any other educational, advisory, or outreach activity. We encourage SCE to coordinate with other emergent marketing, education, and outreach efforts related to EVs and other

¹⁰³ SCE-02 at 13.

customer programs related to clean energy. SCE shall make recommendations to the Advisory Board that detail how its broad educational and outreach programs will surpass their existing efforts (authorized in D.11-07-029), without duplicating the broad messaging and outreach efforts conducted by the CARB and Energy Commission.

4.2. Shell Energy

Shell Energy claims that the Proposed Settlement fails to address whether, and under what circumstances, an EV charging station owner or operator may select direct access service, and requests that the Commission address whether an EV charging station owner may purchase its energy from a third-party electric service provider.¹⁰⁴ Shell Energy also claims that an EV charging station represents new customer load that should not bear responsibility for SCE's previous energy procurement decisions and should therefore be exempt from the departing costs otherwise imposed on a "departing load" customer via the Power Charge Indifference Adjustment (PCIA) mechanism.¹⁰⁵

In response to Shell Energy, SCE states that all distribution customers are eligible to participate, and that the Proposed Settlement does not limit participation by customers who procure electricity through Direct Access (DA), Community Aggregation, Community Choice Aggregation, or EV Service Providers. SCE claims that there is no lawful way to exempt the DA load from the DA load caps established in Pub. Util. Code § 365.1(b), and that Shell Energy's request to do so should be denied.¹⁰⁶ SCE explains that the PCIA is a

¹⁰⁴ Shell Energy Comments at 1 - 2.

¹⁰⁵ Shell Energy Comments at 3.

¹⁰⁶ SCE Reply Comments at 2 - 3.

non-bypassable charge designed to recover from departing load customer their fair share of the stranded costs of generation resources procured on their behalf prior to departure. SCE claims the exemption from the PCIA, requested by Shell Energy, would saddle remaining bundled service customers with the stranded costs of generation procured on behalf of EV charging load, in contravention of California law and Commission decisions.¹⁰⁷

Shell Energy did not file testimony in this proceeding and only raises these issues in Comments. We agree with SCE that Shell Energy's request to exempt DA load from DA load caps is unlawful. Shell Energy's request for exemption from the PCIA is also unjustified. We find that Shell Energy's response is without merit.

5. Conclusion

Based on the agreements reached in the Phase 1 Settlement Agreement, the original positions of the parties and the various interests that they represent, the settlement represents a negotiated compromise of many different interests. As a result of the settlement, some of the original SCE proposals have not been incorporated into the settlement, and instead various parties have negotiated concessions and compromises on a number of different issues in order to arrive at a settlement that is acceptable to most of the parties to this proceeding.

The agreed-upon outcomes in the Phase 1 Settlement Agreement represent negotiated outcomes that, for the most part, reasonably balance the competing interests of many different parties. With the modifications set forth herein, the Phase 1 program will, among other things, allow for a smooth transition to

¹⁰⁷ SCE Reply Comments at 3.

Phase 2, encourage the growth of EV charging stations, and provide useful assessment information. Based on all of the reasons discussed in today's decision, we conclude that, with the modifications set forth herein, the Phase 1 Settlement Agreement is reasonable in light of the whole record, is consistent with the law, and is in the public interest. Accordingly, the terms contained in the Phase 1 Settlement Agreement are adopted as modified herein.

6. Comments on Proposed Decision

The proposed decision of Commissioner Carla J. Peterman proposes alternative terms to the Proposed Settlement, which are acceptable to the Commission. Pursuant to Rule 12.4 of the Commission's Rules of Practice and Procedure, parties to the Proposed Settlement may provide comments on whether they accept such terms. Parties to the Proposed Settlement shall include comments on the modified Proposed Settlement in the comments allowed on the proposed decision, subject to the provisions of Rule 14.3 of the Commission's Rules of Practice and Procedure.

The proposed decision of Commissioner Carla J. Peterman in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed on January 4, 2016. Comments were received by the Joint Settling Parties (except CESA), GPI, and Shell Energy. All relevant changes adopted in response to these comments are incorporated into the body of this decision.

7. Assignment of Proceeding

Carla J. Peterman is the assigned Commissioner, Darwin E. Farrar is the assigned ALJ, and Karin M. Hieta is the assigned ALJ Pro Tem in this proceeding.

Findings of Fact

1. SCE filed an application for approval of its Charge Ready and Market Education Programs on October 30, 2014, requesting two decisions, with an initial decision on the Phase 1 pilot.
2. SCE and other parties filed a Motion requesting adoption of a Proposed Settlement on July 9, 2015.
3. The upfront costs of charging stations can be prohibitive to their installation.
4. The City of Anaheim offers a rebate of \$1,000 for Level 2 EV chargers.
5. A rebate level of 25% of the base cost for charging station purchase and installation is similar in scale to EV charger rebates offered by the City of Anaheim and in line with the vehicle credit given to EV owners.
6. The Qualified Plug-In Electric Drive Motor Vehicle Credit comprises approximately 21% of the 2015 Nissan Leaf's total cost.
7. Twenty-five percent of SCE's estimated rebate of \$3,900 per charging station is \$975.
8. Under the Charge Ready Program, SCE plans to install and own the Make Ready infrastructure, a part of electric vehicle charging that, in the absence of this program, would be purchased and installed by a customer.
9. Installation and ownership of the EV site infrastructure by SCE represents a significant reduction in upfront costs for customer participants.
10. The EV site infrastructure that SCE proposes to install and own at the customer site makes up approximately 70% of the capital costs of installing EV charging stations.

11. SCE has not quantified the maintenance and operation costs of EV charging stations, or the costs of purchasing optional charging station functionalities.

12. Customer participants located in disadvantaged communities may not have adequate private capital to invest in EV charging stations, which could discourage program participation by customer participants in disadvantaged communities.

13. EV charging is particularly needed in multi-unit dwellings to increase adoption consistent with the Governor's Zero Emission Vehicles Action Plan.

14. SCE does not plan to own, maintain, or operate the charging stations.

15. Treating the charging station rebate as a regulatory asset would allow SCE to earn a rate of return on the rebates provided to customer participants.

16. The cost of rebates for charging stations that SCE will not own, maintain, or operate is considered an expense under Generally Accepted Accounting Principles.

17. SCE adds a 35% contingency to all utility-side and customer-side cost estimates to account for site uncertainties.

18. A detailed report after at least 12 months of program implementation and at least 1,000 charging stations have been deployed, but in any event, within 24 months of program implementation, will provide transparency to the Commission and stakeholders, and provide adequate data for pilot program evaluation.

19. The Phase 1 pilot is intended to test several key assumptions underlying SCE's approach prior to determining whether full program deployment is merited.

20. This agency has a responsibility to review any utility application before it and cannot predetermine the outcome.

21. EVs can result in a range of environmental and grid benefits such as are defined in Pub. Util. Code Sections 740.2, 740.3, and 740.8, and SB 350.

22. SB 535 requires that 10% of the Greenhouse Gas Reduction Fund be allocated to projects located in disadvantaged communities. The Proposed Settlement term to deploy at least 10% of charging stations in disadvantaged communities is uncontested.

23. The appropriate basis for defining disadvantaged communities (service territory or statewide) is the one that allows the broadest eligibility, as that will allow for the most equitable access to incentives.

24. The Proposed Settlement term requiring supplier diversity is uncontested.

25. The Proposed Settlement term allowing SCE-qualified vendor and third party service provider interaction with customer participants is uncontested.

26. The Proposed Settlement term requiring SCE to apply Market Neutral Customer Engagement to its application evaluation, and provide analysis of application and eligibility criteria in its pilot reports, is uncontested.

27. The Proposed Settlement term requiring safety protocols is uncontested.

28. SCE intends to invest \$3 million in education and outreach for Phase 1, which represents a significant commitment to education and outreach that can be enhanced and improved in Phase 2.

29. Energy Upgrade California is a statewide program and the Charge Ready Program is specific to SCE's service territory.

30. CSE, the program administrator of Energy Upgrade California is a party to this proceeding and did not request to administer or implement a portion of the Charge Ready Program.

31. SCE will recover the costs of the program from all SCE's distribution customers. The program does not limit participation by customers who procure electricity through DA, Community Aggregation, Community Choice Aggregation, or EV Service Providers, and all distribution customers are eligible to participate in the Charge Ready Program.

32. The PCIA mechanism is a non-bypassable charge designed to recovery from departing load customer their fair share of the stranded costs of generation resources procured on their behalf prior to departure.

Conclusions of Law

1. The Guiding Principles will inform Charge Ready Program implementation.

2. A rebate provided to customer participants for the purchase and installation of an EV charging station at a level that encourages program participation but also limits unnecessary ratepayer funding is reasonable.

3. The site host will take a more active and engaged role in evaluating the available equipment and services offered by vendors, and assessing site and user needs, when it has a rebate that covers only a portion of the costs, resulting in better optimization of charging station usage and infrastructure maintenance.

4. Customer participants should make some financial contribution toward purchasing and installing EV charging stations.

5. It is reasonable to test rebates at levels that can change as SCE collects and evaluates pilot program data.

6. SCE should use Phase 1 to evaluate whether the adopted rebate levels are appropriate for Phase 2 implementation.

7. Varying the rebate levels for different non-residential market segments does not provide a level playing field to test program participation.

8. It is reasonable to provide a rebate of 25% of the base cost of EV charging stations to customer participants in all non-residential market segments, except for those located in disadvantaged communities where it is reasonable to provide a rebate of 100% of the base cost.

9. It is reasonable to provide a rebate of 50% of the base cost of EV charging stations to customer participants in the multi-unit dwelling market segment, except for those located in disadvantaged communities where it is reasonable to provide a rebate of 100% of the base cost.

10. The Dominant Market Segment for a given site should be determined by identifying the single type of vehicle driver (a resident, fleet operator, employee, or visitor) that would most likely account for the largest share of energy dispensed by the installed charging station.

11. D.14-03-021 approved treatment of costs for infrastructure not owned by the utility as a regulatory asset in the context of mobile home parks. D.14-03-021 was responding to unique and unusual circumstances and policy issues that are not applicable in this proceeding, and cannot be used as precedent.

12. It is reasonable to treat the rebates as an expense in accordance with Generally Accepted Accounting Principles.

13. With the additional responsibilities described herein the Advisory Board described in the Proposed Settlement will ensure better input into program decisions by a broad range of stakeholders.

14. Quarterly reports will allow Commission staff and stakeholders to monitor Phase 1 implementation and any early indications of necessary program modifications, as well as be better prepared for review of any Phase 2 application.

15. The reporting requirements in Appendix A of the Proposed Settlement provide a useful baseline of data collection and are reasonable.

16. There is no need to determine a mechanism for recording or approving cost overruns because the contingency factors included in the cost estimates and reduced rebates adopted in this decision, will provide protection against cost overruns.

17. It is reasonable for SCE to record authorized revenue requirement in a balancing account which can be reviewed in SCE's annual Energy Resource Recovery Account proceeding to ensure that all entries are correctly stated and attributed.

18. It is reasonable that the Commission evaluate Phase 2 based on the results of at least 12 months of Phase 1 program implementation.

19. Load management is critical to materializing grid benefits of EV charging, and necessary to avoid any negative impacts on the grid.

20. For Multi-Unit Dwelling participants, Phase 1 will provide data to determine whether demand response capabilities, time of use pricing for customer participants, and customer education components will incentivize prudent load management.

21. For Fleet, Workplace, and Destination Center participants, load management strategies should be informed by SCE's Demand Response Pilots authorized in D.12-04-045.

22. It is reasonable to require at least 10% of charging stations be deployed in disadvantaged communities, using either a service territory-based or a state-wide definition of the term, whichever is broader. In SCE's service territory, the state-wide definition is the broader of the two.

23. It is reasonable for the Charge Ready Program to support SCE's company-wide Diversified Business Enterprise 40% diverse spending goal.

24. It is reasonable for vendors and third party service providers qualified by SCE to market the pilot and submit applications on behalf of potential customer participants and participating sites.

25. It is reasonable for customer participants to designate a qualified vendor or third party to submit an application for participation in the pilot on the customer participant's behalf, and otherwise act on their behalf for day-to-day activities in connection with deployment of charging stations, provided that SCE will confirm all key decisions directly with customer participants.

26. It is reasonable for qualified vendors and third parties to contact potential customer participants directly, before and after SCE's contact.

27. It is reasonable for SCE to retain all right to engage with potential customer participants subject to maintaining Market Neutral Customer Engagement.

28. It is reasonable for SCE to process, evaluate, and reply to all applications with Market Neutral Customer Engagement, and provide analysis of application and eligibility criteria in its pilot reports.

29. It is reasonable for SCE to implement safety protocols and ensure that the SCE employees and contractors installing electric vehicle infrastructure receive certification from the EVITP.

30. SCE is in the best position to conduct its own market education and outreach for Phase 1.

31. It is not reasonable to require Energy Upgrade California to administer education and outreach on behalf of SCE.

32. SCE has the data and knowledge to successfully provide the necessary market education and outreach to its customers, especially for a pilot program in

which part of the objective is to test and refine the market education and outreach strategies.

33. SCE should coordinate its market education and outreach to multi-unit dwellings in disadvantaged communities with that of its other programs targeting this market segment, and in particular with its single point of contact technical assistance that promotes participation in the Energy Savings Assistance Program, other energy efficiency programs, and telecommunications programs serving low-income customers.

34. Competitive neutrality in marketing is addressed in the Proposed Settlement term that requires that SCE and its agents apply Market Neutral Customer Engagement to the broad market education campaign, transportation electrification advisory services, and any other educational, advisory, or outreach activity.

35. There is no lawful means of exempting Direct Access load generated by the Charge Ready Program from the statutory limits in Pub. Util. Code § 365.1.

36. Exemption from the PCIA mechanism would saddle remaining bundled service customers with the stranded costs of generation procured on behalf of EV charging load, in contravention of California law and Commission decisions.

O R D E R

IT IS ORDERED that:

1. The Southern California Edison Company is authorized to recover the revenue requirements associated with up to \$22 million (2014\$) of capital and operations and maintenance expenditures for implementation of Phase 1 of its Charge Ready and Market Education Programs.

2. The terms in the Settlement filed July 9, 2015, not modified by this decision are adopted as set forth therein.

3. The terms in the Settlement filed July 9, 2015, are modified such that the rebate level shall be 25% of the base cost for all non-residential market segments, 50% of the base cost for Multi-Unit Dwellings, and 100% of the base cost for any charging stations located within disadvantaged communities.

4. The terms in the Settlement filed July 9, 2015, are modified such that Southern California Edison Company shall coordinate its market education and outreach to Multi-Unit Dwellings in disadvantaged communities with its existing single point of contact outreach to the segment.

5. The terms in the Settlement filed July 9, 2015, are modified such that the Southern California Edison Company (SCE) will determine the Dominant Market Segment of installations by identifying the single type of vehicle driver (a resident, fleet operator, employee, or visitor) that would most likely account for the largest share of energy dispensed by the installed charging station, and such that SCE will track and report on the actual types of drivers using each facility, to the extent reasonably feasible.

6. The terms in the Settlement filed July 9, 2015, are modified such that the Southern California Edison Company (SCE) shall file and serve a pilot report to provide Phase 1 data, and recommend any necessary changes to Phase 2, after at least 12 months of program implementation and at least 1,000 charging station installations, but in any event, within 24 months of program implementation. The terms in the Settlement filed July 9, 2015, regarding cost management and program suspension are modified such that SCE is authorized to establish a Charge Ready Balancing Account, using the standard commercial paper rate, to record the authorized revenue requirements associated with up to \$22 million

(2014\$) of capital and operations and maintenance expenditures for its Charge Ready and Market Education Programs. Costs shall be reviewed in SCE's annual Energy Resource Recovery Account application.

7. The Southern California Edison Company shall continue installations under Phase 1 while Phase 2 is under consideration by the Commission, until its authorized Phase 1 budget is expended.

8. The Southern California Edison Company shall file a Tier 1 advice letter to establish the Charge Ready Balancing Account within 60 days of this decision.

9. The terms in the Settlement filed July 9, 2015, are modified so that the Southern California Edison Company (SCE) shall submit an application for Phase 2 with its 12 -24 month Phase 1 report, if Phase 2 is warranted based on the results of the pilot report. SCE shall file a Tier 2 advice letter with its tariff for Schedule Charge Ready Program Pilot, detailing customer eligibility requirements, within 60 days of this decision subject to review by the Energy Division.

10. The Southern California Edison Company shall coordinate its electric vehicle infrastructure market education and outreach to multi-unit dwellings in disadvantaged communities pursuant to this order, with that of its other programs targeting this market segment, and in particular with its single point of contact technical assistance that promotes participation in the Energy Savings Assistance Program, other energy efficiency programs, and telecommunications programs serving low-income customers.

11. The Southern California Edison Company shall ensure that in no instance can the rebates provided for herein be combined with other rebates or programs such that more than 100% of the charging station costs are recovered.

12. The Southern California Edison Company shall work with the Advisory Board to determine metrics needed to evaluate the effectiveness of the Load Management strategies in achieving the Guiding Principles of the Settlement filed July 9, 2015. Energy Division is authorized to modify and approve the Load Management metrics recommended by the Advisory Board, and informally communicate any such modification or approval via its participation on the Advisory Board. The Advisory Board shall consider the following metrics in developing its final set of recommended metrics:

- a) Capacity factors for renewable generators;
- b) Coincidence of customers' use of Preferred Resources;
- c) Customer load factor;
- d) Curtailment of renewable energy;
- e) Utilization of electric vehicle services equipment (EVSE);
- f) Strategic placement of EVSE, and as applicable the associated Distributed Energy Resources, consistent with the system locational benefit considerations of Assembly Bill 327 and Rulemaking 14-08-013; and
- g) Participation in complementary Low-Income Programs for eligible Multi-Family Residential (or Multi-Unit Dwelling) customers.

13. The Southern California Edison Company (SCE) shall ensure that SCE employees and contractors installing electric vehicle infrastructure receive certification from the Electric Vehicle Infrastructure Training Program.

14. Application 14-10-014 is closed.

This order is effective today.

Dated January 14, 2016, at San Francisco, California.

MICHAEL PICKER
President
MICHEL PETER FLORIO
CATHERINE J.K. SANDOVAL
CARLA J. PETERMAN
LIANE M. RANDOLPH
Commissioners

I will file a concurrence.

/s/ MICHAEL PICKER
Commissioner