

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

**ENERGY DIVISION**

**AGENDA ID# 21868  
RESOLUTION E-5290  
November 2, 2023**

**R E S O L U T I O N**

Resolution E-5290 pertains to Southern California Edison's site prioritization criteria, updated budget, and number of charging ports and sites SCE will target through the Direct Current Fast Charging (DCFC) component of the Charge Ready 2 Make-Ready Expansion program.<sup>1</sup>

**PROPOSED OUTCOME:**

- This Resolution approves, with modifications, Southern California Edison Company's (SCE) plan for site prioritization, budget, and number of charging ports and sites SCE will target for DCFC installations, in compliance with Decision (D.) 20-08-045.

**SAFETY CONSIDERATIONS:**

- There is no incremental impact on safety. SCE must comply with the Safety Requirements Checklist for Transportation Electrification programs that the California Public Utilities Commission adopted in D.18-05-040.

**ESTIMATED COST:**

- This Resolution has no direct cost impact. The California Public Utilities Commission authorized Southern California Edison Company's implementation of the Charge Ready 2 program via D. 20-08-045, and this Resolution does not modify that budget.

By Advice Letter 4433-E and 4433-E-A filed on March 04, 2021 and March 31, 2023.

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<sup>1</sup> D.20-08-045 OP 16

## **SUMMARY**

**This Resolution approves, with modifications, the request from Southern California Edison Company (SCE) to implement a plan for its Charge Ready 2 (CR2) program to establish site prioritization criteria, updated budget allocation, and charging port and site targets for the program's direct current fast charging (DCFC) component.**

On March 31, 2023, SCE filed advice letter (AL) 4433-E-A, amending AL 4433-E filed on March 4, 2021. AL 4433-E, and subsequently AL 4433-E-A, details SCE's site prioritization plan and criteria for CR2, updated budget allocation based on the approved rebate model and program modifications, and description of how many ports and sites SCE will target, pursuant to Decision (D.) 20-08-045 Ordering Paragraphs (OP) 15 and 16.<sup>2</sup>

This Resolution approves, with modifications, the site prioritization plan and criteria for the DCFC component of SCE's CR2 Make-Ready Expansion program, which includes programmatic details related to site selection, an updated rebate model and budget allocation, and charging port targets. This Resolution modifies SCE's multi-unit dwelling (MUD) serving definition, adds conditions to which SCE must adhere if colocating DCFCs with Level 2 chargers at the same site, discusses charger power levels, and directs SCE to work with Energy Division staff to develop data reporting requirements.

## **BACKGROUND**

Southern California Edison Company (SCE) filed supplemental AL 4433-E-A on March 31, 2023, which replaced AL 4433-E, requesting approval for its Charge Ready 2 site prioritization plan and criteria, its updated budget distribution, and charging port and site targets for the program's Direct Current Fast Charging (DCFC) component, pursuant to Order Paragraphs (OP) 15 and 16 of Decision (D.) 20-08-045. The CR2 program, which D.20-08-045 authorized, will deploy approximately 38,000 new electric vehicle (EV) chargers for passenger (light-duty) vehicles at workplaces, multi-unit dwellings (MUD), and public destination centers. SCE will deploy mostly Level 2 (L2) chargers, with the option for Level 1 (L1), and a minimum of 205 DCFC ports. The program is divided into several sub-programs, as described in Table 1 below.

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<sup>2</sup> Pursuant to D.20-08-045 OP 6, SCE combined the AL filing requirements for OP 15 and OP 16.

**Summary of CPUC Decision (D).20-08-045, authorizing SCE’s Charge Ready 2 Program**

*Table 1: Summary of Charge Ready 2 Programs Approved in D.20-08-045*

<b>Program</b>	<b>Budget</b>	<b>Description</b>
Make-Ready Expansion (Level 2 and Level 1)	\$333,000,000	This is an expansion of SCE’s Charge Ready Pilot program and allows SCE to build the make-ready infrastructure to support a total of 22,000 ports <sup>3</sup> of mostly L2 and some L1 chargers. In most cases, site hosts will own the Electric Vehicle Supply Equipment (EVSE). SCE will site these chargers at MUDs, workplaces, and public destination centers. While SCE will build the make-ready, customers participating in this program will receive a rebate for purchasing and owning the EVSE. All site hosts installing L1 or L2 charging through the Make-Ready Expansion program must participate in the Charge Ready Demand Response program. <sup>4</sup>
<b>Program</b>	<b>Budget</b>	<b>Description</b>
Make-Ready Expansion (DCFC)	\$13,975,206	A subset of the Make-Ready Expansion, SCE will offer rebates to a limited number of sites to install DCFCs. At minimum, this program will support the installation of 205 DCFC ports. Site

<sup>3</sup> D.20-08-045, page 56: “In sum, we determine that 22,000 ports, comprised of 10,200 MUD and 12,000 workplace/destination center is a reasonable size and investment for the Make-Ready Expansion program.”

<sup>4</sup> Charge Ready demand response (DR) pilot examines charging behavior targeted toward workplaces, fleets, destination centers, and MUDS, approved in D.17-12-003.

		prioritization for DCFCs is addressed through a separate Tier 3 AL filing, and criteria for siting and rebates, among other programmatic details, will be determined based on proximity to customers needing charging, proximity to MUDs, and proximity to Disadvantaged Communities (DACs) and low-income customers.
Make-Ready Expansion (Own and Operate)	\$16,548,463	A subset of the Make-Ready Expansion, customers at MUDs in Disadvantaged Communities (DAC) can choose between having SCE own and operate the EVSE and make-ready or can own the infrastructure themselves and receive a rebate to cover the cost of maintenance and operation of the EVSE. This program is capped at 2,500 ports within the Make-Ready Expansion program.
New Construction Rebate	\$54,000,000	SCE will provide rebates to developers of new MUD buildings to encourage MUD developers to install operational charging stations during construction. The rebate will only cover an installation that is beyond the local and state building code requirements. The rebate program will target up to approximately 15,400 ports and will provide a rebate of up to \$3,500 per port.
<b>Program</b>	<b>Budget</b>	<b>Description</b>
Marketing, Education, and Outreach	\$15,500,000	The Charge Ready 2 ME&O program includes \$4.8 million to expand SCE's TE Advisory Services program and \$9.7 million for program-specific

<sup>5</sup> D-20-08-015 The TE Advisory Services will serve business customers adopting light-, medium-, or heavy-duty EVs or those providing EV charging services to their constituents (tenants, employees, visitors, customers, or fleets). The TE Advisory Board is comprised of customers and industry stakeholders who provide input, guidance, and suggestions on the execution and ongoing improvement of the CR2 portfolio.

		marketing to drive participation in the infrastructure programs.
Evaluation	\$4,320,000	This budget will go to a third-party evaluator.

Definition of Make-Ready, Site, and Port

Within the CR2 Decision, the definition of “make-ready” is the service connection and supply infrastructure from the distribution circuit to the stub of the EVSE. This can include equipment on the utility-side (e.g., transformer) and customer-side (e.g., electrical panel, conduit, and wiring to the meter). to support EV charging comprised of electrical infrastructure from the distribution to the stub of the EVSE. Make-ready can include equipment on the utility-side (e.g., transformer) and customer-side (e.g., electrical panel, conduit, and wiring) of the meter.<sup>6</sup>

While D.20-08-040 does not explicitly define “port” or “site,” D.18-05-040 did include a definition for both “site” and “charge port.” Specifically, the Decision states that a charge port generally refers to the location where EVSE connector attaches to the vehicle, and that one EVSE may have multiple charge ports. Per this Decision, a site is the location at which charging infrastructure is installed.<sup>7</sup>

Customer-Side Make-Ready as Authorized by D.20-08-045

SCE investments for CR2 programs will be considered per se reasonable, provided at least 15 percent of Make-Ready Expansion ports are under the site host ownership model.<sup>8</sup> Under this structure, SCE offers customers the choice to manage and pay for the installation of the customer-side infrastructure with a rebate of up to 80 percent of installation costs under the Make-Ready Expansion program.<sup>9</sup>

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<sup>6</sup> D.20-08-045, page 16

<sup>7</sup> D.18-05-040, page 7

<sup>8</sup> D.20-08-045 OP 5

<sup>9</sup> D.20-08-045 OP 25

Power Level Requirements as Authorized by D.20-08-045

Under the CR2 Decision and consistent with the Commission's rationale for PG&E's Fast Charge program, SCE is allowed to install make-ready infrastructure to support EVSE of 150kW for its DCFC component of the Make-Ready Expansion program to support higher-powered charging in the future.<sup>10</sup> The higher capacity requirement for make-ready infrastructure accounts for the possibility that the site host may wish to upgrade to higher-powered DCFC(s) in the future. However, SCE is authorized to provide rebates for DCFC capable of charging at 50kW or greater.<sup>11</sup>

Rebate Levels as Authorized by D.20-08-045

The Commission adopts the same rebate structure set in SCE's Charge Ready Phase 1 Pilot. SCE is directed to set rebate levels at 100 percent for DACs, 50 percent for non-DAC MUDs, and 25 percent for all other market segments, including sites on the Fortune 1000 list regardless of DAC status.

Further, the Commission directs that SCE be flexible in moving rebate levels up or down during program implementation to allow for sites to contribute more to installation costs if willing. Should the CR2 program find sufficient demand in the workplace segment, SCE is also directed to reduce subsidies to zero throughout the program.<sup>12</sup>

DCFC Component of CR2 Program as Authorized by D.20-08-045

Decision 20-08-045 made the following requirements with regards to the DCFC component of the CR2 program:

- DCFC is not appropriate for long-dwell time<sup>13</sup> and should not necessarily be colocated with L2 EVSE.
- SCE must propose an updated rebate model that is reflective of the program modifications included in D.20-08-045, including a plan and criteria of how to

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<sup>10</sup> D.20-08-045, CoL 19

<sup>11</sup> D.20-08-045 Section 4.5.8 DCFC

<sup>12</sup> D.20-08-045 Section 4.5.5 Rebate Levels

<sup>13</sup> Longer than two hours

site DCFCs at short-dwell locations, a plan, and criteria for siting 30 percent of DCFCs in DACs, a plan, and criteria for siting 25 percent of ports to serve residents of MUDs.

- SCE must file an updated budget based on the updated rebate model, accounting for rebate levels authorized in this Decision and program modifications outlined above.
- SCE must outline a load management plan for DCFC sites as it may differ from the plan to leverage time-of-use rates and demand response for L2 sites.
- Make-ready infrastructure must be sized to support EVSE of 150 kW even though SCE is authorized to provide rebates for DCFC that may initially only have the capacity of charging levels at a minimum of 50kW.
- SCE must at minimum include data reporting on 1) the number of charging events and their times and duration, 2) load profiles and adherence to off-peak periods, and 3) demand response levels.

#### Advice Letter Requirements

OP 15 of D.20-08-045 directs SCE to file a Tier 3 AL reflecting on the lessons learned to date from the Urban DCFC Clusters Pilot, and at a minimum detail:

- A. A plan and criteria of how to site DCFC ports at short dwell locations to maximize utilization.
- B. A plan and criteria for siting 30 percent of ports in DACs;
- C. A plan and criteria for siting 25 percent of ports to serve residents of MUDs, including definitions for how to define areas that are dense with MUDs;
- D. An assessment of customer-side infrastructure ownership, an assessment of appropriate DCFC power levels, and feedback from community stakeholders on siting locations; and
- E. Input from and a plan for continued collaboration with community-based organizations (CBOs) on siting criteria.

Furthermore, OP 16 directs SCE to, consistent with Section 4.5.8 of D.20-08-045, to include within a Tier 3 AL, “an updated budget based on the updated rebate model and program modifications”. The Decision further directed SCE to describe how many ports and sites SCE will target through the DCFC component of the Make-Ready Expansion program.

Finally, OP 10 of D.20-08-045 directs SCE to annually evaluate infrastructure incentive levels and rebate levels with its TE Advisory Board to ensure the amount is appropriate.

### **Summary of SCE AL 4433-E and AL 4433-E-A**

In response to OP 15 and 16 of D.20-08-045, SCE filed a Tier 3 AL, AL 4433-E on March 4, 2021, and later amended this AL with a supplemental, AL 4433-E-A, on March 31, 2023. The AL and the supplemental made the following proposals:

#### 1. Site Prioritization Criteria

- A. Plan and criteria of how to site DCFCs at short-dwell locations to maximize utilization.

SCE proposes that it will seek to install DCFC through the program at or near short-term dwell locations with expected parking times of two hours or less. SCE will review all CR2 customer make-ready applications and categorize them into short and long dwell locations. SCE will further evaluate short dwell sites for potential DCFC site qualification. Short dwell sites may include but are not limited to mixed-use retail shopping centers, libraries, community centers, and grocery stores.

SCE proposes to focus on co-locating DCFCs at sites with L2 ports to reduce utility-side and customer-side make-ready infrastructure costs and increase the availability of charging ports at those sites during the early stages of the program. SCE's AL states it will consider the following primary and secondary criteria for DCFC solicitation and siting including:

- Primary criteria:
  - Project's estimated costs,
  - DAC status,
  - Proximity to the saturation of MUDs, and
  - Ability to meet code compliance.
- Secondary criteria:
  - Potential number of visitors that might frequent the general site location,
  - Number and type of other destination sites within close proximity,
  - Vehicle traffic on adjacent streets,
  - Proximity to existing DCFC stations.



B. Plan and criteria for siting 30 percent of ports in DACs

Per D.20-08-045, SCE proposes a plan and criteria for siting a minimum of 30 percent of DCFC ports at DAC sites and focus on identifying sites with the potential for high DCFC utilizations. Additionally, SCE will perform outreach to high-potential sites it identifies to educate site hosts on the benefits of installing charging. High potential sites will include DAC customers who expressed interest in participating in prior SCE programs but did not due to port minimums or funding challenges. SCE will also perform marketing analysis to develop a high propensity model to identify targeted DAC properties within SCE's territory and conduct ME&O to generate interest, including online tools.

C. Plan and criteria for siting 25 percent of ports to serve MUDs following the MUD-serving definition.

SCE proposes to target siting at least 25 percent of DCFC ports to serve residents of MUDs. SCE defines qualifying MUD-serving sites as being located within a two-mile radius of one or more residential MUDs. SCE states it will attempt to target sites with a higher density of MUDs and determine MUD density using real estate data analytical/database tools. Sites serving MUD residents can span a variety of business types (e.g., retail centers, grocery store lots, other locations providing public access).

SCE proposes to conduct targeted ME&O and may look to colocate DCFC ports with CR2 customers' L2 port installation if SCE determines the site to be a strong candidate for colocation.

D. Input from and a plan for continued collaboration with CBOs on siting criteria and feedback from community stakeholders on siting DCFCs

On December 3, 2020, SCE held a webinar where they received feedback from environmental justice organizations expressing the need to locate DCFCs at sites with the highest potential utilization.

Key pieces of feedback SCE received include:

- The selection process should leverage various variables to provide a more holistic site evaluation process than firm quantitative metrics.

- SCE should ensure DCFC stations are sited at locations that could provide the highest potential utilization.
- Participants agreed that using a two-mile radius that encompasses several MUD locations is appropriate.
- SCE plans to continue collaborating with local CBOs throughout the CR2 program through future PAC meetings and targeted CBO meetings.
- SCE will distribute program materials about CR2 to CBOs, as several local CBOs and government representatives expressed interest in partnering with SCE to perform program participation outreach to their constituents.

E. Assessment of customer ownership of customer-side make-ready infrastructure

Pursuant to D.20-08-045, SCE is directed to offer customers the choice of managing and paying for the installation of the customer-side make-ready infrastructure with a rebate of up to 80 percent of the installation costs, under the Make-Ready Expansion Program.<sup>14</sup> However, SCE anticipates limited interest in a site-host ownership option, as customers would be required to agree to:

- (1) Added responsibility of maintaining and operating customer-side infrastructure for ten years;
- (2) An 80 percent rebate cap for installation costs that can potentially translate into higher costs;
- (3) Lack of experience managing DCFCs which are more complex than L2 ports.

Thus, SCE states that setting and achieving specific adoption rates for this option will be difficult to achieve absent a more compelling customer-facing value proposition.

Since submitting AL 4433-E, SCE reassessed the efficacy of offering DCFC site-host owners the option to own the customer-side make-ready infrastructure and receive a rebate. As such, SCE states within the supplemental AL that it will target most DCFC projects as Customer-Side Make Ready (CSMR), their terminology for this site-host ownership structure, to accommodate at least 205 DCFC ports remaining under the

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<sup>14</sup> D.20-08-045 OP 25

authorized budget. SCE notes infrastructure cost estimates have increased considerably since filing AL 4433-E in March of 2021 and states CSMR is less costly to the program on a per-port basis than the utility ownership option in which SCE funds both the utility and customer-side infrastructure.

SCE states by focusing on CSMR, they may have additional budgetary flexibility to deemphasize the need to colocate DCFC with L2 chargers. Further, SCE elaborates that CSMR includes two possible rebates--the first for customer procured EVSE; and the second covering the customer-side make-ready for qualifying customers to receive a rebate of up to 80 percent of SCE's estimated construction costs or up to 80 percent of the contractor's incurred costs, whichever is less.

SCE states they will find it difficult to establish specific targets for CSMR adoption due to the complexity of AC/DC infrastructure and high installation costs, with a rebate not fully covering all installation costs as utility ownership models do.

## 2. Updated Rebate Model and Budget Distribution Based on Program Modifications

### A. Assessment of appropriate DCFC power level

SCE will work with participants to understand their DCFC power level needs. SCE will assist customers with considering:

1. Customer's charging objectives;
2. TOU rate fluctuations and demand charge impacts;
3. Manufacturer discounts;
4. DCFC equipment costs;
5. The inability of some commercially available light-duty EVs to accept higher power charging.

SCE proposes to inform participants of the pros and cons of lower and higher DCFC power level charging stations and allow participants to work with SCE subject matter experts to assess appropriate power levels for specific site needs. SCE will offer a single port level rebate for DCFC EVSE and perform the annual evaluation with its PAC. Customer feedback, participation rates, and remaining program funds will determine proposed rebate level adjustments.

### B. EVSE base cost methodology

Within the supplemental AL, and consistent with the methodology approved for L1 and L2 chargers in AL 4413-E, SCE proposes to use the median price approach to determine the base cost. SCE states the median price point within each power level to establish the base cost. SCE argues that this approach will better account for new enhancements, different features that enter the marketplace, and unit pricing adjustments. Based on the median price approach, SCE proposes to set the DCFC EVSE base cost at \$40,200.

C. Rebate amounts

SCE proposes, consistent with the Decision, that the DCFC rebates follow the same rebate structure as L2 ports, with a 100 percent rebate for DACs, 50 percent rebate for MUDs, and 25 percent rebate for all other sectors.

*Table 2: Charging stations Rebate Levels*

Power level	DAC (excluding Fortune 1000)	Multi-Family (non-DAC)	Others (including Fortune 1000)
L1	\$2,200	\$1,100	\$550
L2	\$2,900	\$1,450	\$750
DCFC	\$40,200	\$20,100	\$10,050

Source: AL 4433-E-A Table 2

As SCE acknowledges more exploration on how to appropriately incentivize high-powered charging would be useful, SCE proposes to offer a single rebate for the first year of the program, to gain additional insights regarding the customers' DCFC operational and power level needs. SCE then proposes that it would consider the need for incorporating a tiered rebated structure. Any proposed adjustments will be included in the CR2 annual program report.

D. DCFC updated budget based on program modifications.

SCE expects a \$1.09 million surplus based on the proposed rebate and program modifications included within the supplemental AL. SCE proposes to treat the surplus as a contingency, subject to rebate adjustments as the program matures.

- E. Number of ports and sites SCE will target through the DCFC component of the Make-Ready Expansion program.

The Decision directs SCE to build a minimum of 205 ports and requires a two-port minimum per site, equating to approximately no more than 102 sites. SCE will leverage the new DCFC rebate contingencies and anticipates the program may install an additional 50 ports.

### 3. Lessons Learned from SCE's Urban DCFC Cluster Pilot

SCE found site hosts in the DCFC Urban Cluster Pilot were installing fewer DCFC ports per site than anticipated. Additionally, SCE noted retail outlets had the highest utilization of these sites, and SCE will focus on short-term dwell sites with high pedestrian traffic for the DCFC component of the make-ready expansion. SCE found the most utilized sites have a grocery store, bakery, restaurant, and other retail outlets sharing a parking lot. The pilot program found that DACs and customers near MUDs voiced concerns about low EV adoption and charging station utilization in their neighborhoods. SCE will use these findings to shape outreach strategies and address concerns raised by DACs and customers near MUDs. Key issues SCE raised regarding the pilot were the applicant's lack of experience in operating and maintaining DCFC stations, costs associated with purchasing more than two stations, and a significant loss of parking stalls.

### NOTICE

Notice of SCE's AL 4433-E and AL 4433-E-A were made by publication in the CPUC's Daily Calendar. SCE states that a copy of the AL was mailed and distributed in accordance with Section 4 of General Order 96-B.

### PROTESTS

The AL was not protested.

## **DISCUSSION**

This section of the Resolution disposes of the issues associated with the planning and criteria for prioritizing DCFC sites and budget modifications of the SCE's DCFC component of the CR2 Make-Ready Expansion program. We find SCE's DCFC proposals reasonable in most aspects. However, this section addresses issues with details provided in SCE's DCFC prioritization and planning and directs modifications to SCE's proposal within AL 4433-E/AL4433-E-A. This section evaluates these issues based on consistency with D.20-08-045.

### **1. Plan and criteria of how to site DCFCs at short-dwell locations to maximize utilization.**

#### **A. Primary and secondary criteria for siting**

To align the benefits of DCFC charging with potential site locations, SCE will seek to site DCFC stations at or near short-term dwell locations where the expected parking time is two hours or less. SCE believes these criteria will provide drivers ample time to complete a charging session and maximize port utilization by increasing charging station availability to more users. Site candidates may include but are not limited to mixed-use retail shopping centers, libraries, community centers, and grocery stores.

We find SCE's proposal to locate DCFCs at short dwell locations of two hours or less to be reasonable as it will provide drivers with ample time to complete a charging session and maximize utilization by mitigating longer than needed stays. Further, this proposal aligns with the direction within D.20-08-045.

Should SCE need to locate DCFCs near short-dwell locations in instances where it may not be feasible to locate DCFCs at short-dwell locations, we find it reasonable that SCE may do so. In this circumstance, siting near short-dwell high utilization areas should occur following the site prioritization criteria approved in this Resolution. SCE must ensure locations and the proximity to and from the charger are convenient to users when unable to locate at short dwell locations.

We direct SCE to collect data to support the evaluation of the effectiveness of locating DCFCs near short-dwell locations and at short-dwell time locations, and the impact of these siting options on charger utilization. SCE shall work directly with Energy Division staff to develop data collection requirements to meet this objective. SCE shall include this data within its CR2 annual program report.

## **B. Co-location**

SCE within AL 4433 proposes to co-locate L2 chargers with DCFC when and where colocation makes sense. SCE argues in that filing that this approach may reduce utility-side and customer-side make-ready infrastructure costs.<sup>15</sup> SCE also states that it will determine if DAC sites that choose to participate in CR2 for L2 installations and select MUD-serving sites would be potential candidates for co-located DCFC ports in the early phase of the site assessment process. However, SCE within the supplemental AL, AL 4433-E-A, clarifies that by focusing on CSMR the program may have additional budgetary flexibility to deemphasize the need to co-locate DCFC with L2 chargers. D.20-08-045 found DCFC more appropriate for short-dwell locations and determined that DCFC should not necessarily be co-located with L2 sites within the DCFC program.<sup>16</sup> Although the Decision does not explicitly prohibit colocation, it does not encourage it. We find that SCE's original proposal, prior to the submittal of the supplemental AL, to co-locate L2 and DCFC is problematic as elements of co-location may compromise the maximization of DCFC utilization. Thus, SCE's strategy within the supplemental to focus on CSMR customers, and deprioritize colocation as a strategy to reduce costs better meets the Decision's directives. Thus, this Resolution approves, SCE's proposed approach to siting proposed in AL 4433-E-A.

As with the option to site DCFC near, rather than at, short-dwell time locations, it is important that SCE collect and report data to support the evaluation of the efficacy of co-locating L2 and DCFC if SCE must do so after implementing other more favorable cost saving strategies. SCE shall work with Energy Division staff to develop data collection requirements to evaluate cost savings, utilization, and other factors related to colocation. SCE shall include this data, if any colocation occurs, within its CR2 annual program report.

## **C. Modifications to MUD-serving criteria**

SCE's AL proposes to define MUD-serving sites as those located within a two-mile radius of one or more residential MUDs. SCE adds that it will attempt to target sites

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<sup>15</sup> AL 4433-E-A p.3

<sup>16</sup> D.20-08-045, p.84

with a higher number of surrounding MUDs to maximize the exposure and potential use of DCFC stations. It will do so using real estate data analytical/database tools. SCE identifies potential MUD-serving sites to span over a variety of business types, including retail centers, grocery stores, and other publicly accessible locations.

We find SCE's proposal to site DCFCs within a two-mile radius of a MUD as an insufficient criterion for MUD-serving sites. Southern California has a high presence of MUDs within its territory, with most being duplex and triplex.<sup>17</sup>

We find that locating DCFCs within a two-mile radius of a MUD without a unit minimum may affect MUD resident utilization of DCFCs intended to serve MUDs, as a single MUD may consist of a duplex with only two units. Further, the Decision requirement to locate DCFC at a short-dwell location may spill over to SCE's MUD serving target by the possibility of locating a DCFC within a two-mile radius of a duplex.

Instead, we find it more appropriate that SCE includes a six-unit minimum for locating DCFCs within a two-mile radius of a MUD to maximize utilization and more efficiently build out infrastructure. SCE may reach its six-unit minimum criterion should it locate a DCFC within a two-mile radius of MUD combinations, including duplexes, triplexes, or more. Further, we encourage SCE to target areas with higher density of MUDs, leveraging the real estate data analytical/database tools to which SCE cited in its AL.

Therefore, we modify SCE's MUD-serving definition to require SCE to site DCFCs within two-miles of at least six-units of MUD housing, prioritizing higher density of MUDs and MUD units when possible. We clarify that the MUD-serving definition adopted in this Resolution is applicable to SCE's CR2 program only and may be replaced at a later date if the Commission adopts another definition in the future or applicable to a different program.

Finally, in addition to reporting on station utilization across site types and charging station access for MUD residents as required in D.20-08-045,<sup>18</sup> SCE shall work with Energy Division staff to develop data collection requirements to support the evaluation

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<sup>17</sup> 3.2 MUD Building Size, [An-Electric-Vehicle-Charging-Station-Siting-Strategy-for-the-South-Coast \(ucla.edu\)](https://www.ucla.edu/energy/An-Electric-Vehicle-Charging-Station-Siting-Strategy-for-the-South-Coast)

<sup>18</sup> Evaluation D.20-08-045 p.126



of charger utilization associated with proximity to MUDs, the efficacy of the MUD-serving siting definition in actually serving MUD residents, and other factors that may support the evaluation process. SCE shall include this data within the CR2 annual program report.

## **2. Updated rebate model and budget based on program modifications**

SCE states it will offer a single port level rebate for DCFC EVSE during the program's first year and will evaluate rebate levels every year after and perform annual evaluations with its PAC. SCE adds, a single rebate for the first year of the program will assist SCE in gaining additional insights regarding customers' DCFC operational and power level needs. Proposed rebate level adjustments will be based on direct customer feedback, participation rates, and remaining program funds. SCE will consider the need for incorporating a tiered rebate structure and may offer higher incentives to reduce associated costs with procuring higher power DCFC EVSE.

Additionally, as described in the Background section, SCE proposes using the median price point rather than the best value approach it used for the Urban Clusters Pilot program. The proposal includes a rebate equivalent to 100 percent of the base cost for DACs, excluding Fortune 1000 customers; 50 percent for MUDs; and 25 percent for all other sectors, including Fortune 1000 customers.

We approve SCE's proposal to use the median price point to determine the base cost to better allow for new enhancements and different features that enter the marketplaces for DCFC. This proposed base cost methodology may help to future-proof DCFCs installed via the CR2 program. Given the wide range in available models and cost, the median approach will allow for a base cost that is more reflective of the available EVSE options.

## **3. DCFC power levels**

Consistent with the Commission's rationale for PG&E's Fast Charge program, SCE must install make-ready infrastructure to support EVSE of 150kW to support higher-powered charging in the future.<sup>19</sup> Vehicle ranges and thus battery size have increased significantly over the last several years, reflecting a change in charging needs since SCE

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<sup>19</sup> D.20-08-045, p. 85-86 and CoL 19

filed its proposal for CR2 in 2018. While D.20-08-045 allowed SCE to provide rebates for DCFC capable of charging at 50kW or greater, given the developments in the market since 2018 we believe that the 50kW should be interpreted as a floor rather than a ceiling of the allowable DCFC to be installed through this program. This Resolution does not intend to alter the direction provided in D.20-08-045, we however encourage SCE to allow those higher powered chargers to participate in the program.

SCE shall additionally work with Energy Division staff to develop data reporting requirements to support the evaluation of customer's DCFC operational and power-level needs, impact on ratepayers, and any other factors that may support the evaluation. SCE shall report this data in its CR2 annual program report.

### **COMMENTS**

Public Utilities Code section 311(g)(1) provides that this Resolution must be served on all parties and subject to at least 30 days public review. Please note that comments are due 20 days from the mailing date of this Resolution. Section 311(g)(2) provides that this 30-day review period and 20-day comment period may be reduced or waived upon the stipulation of all parties in the proceeding.

The 30-day review and 20-day comment period for the draft of this Resolution was neither waived nor reduced. Accordingly, this draft Resolution was mailed to parties for comments, and will be placed on the CPUC's agenda no earlier than 30 days from today.

### **FINDINGS**

1. Southern California Edison Company (SCE) filed a Supplemental Advice Letter (AL) 4433-E-A on March 31, 2023, amending AL 4433-E filed on March 4, 2021, requesting approval for its site prioritization plan and criteria and its updated budget and target goals, pursuant to Order Paragraph (OP) 15 and 16 of Decision (D.) 20-08-045, which authorized SCE's Charge Ready 2 program (CR2).
2. The CR2 program will deploy approximately 38,000 new electric vehicle chargers for passenger (light-duty) vehicles at workplaces, multi-unit dwellings (MUDs), and public destination centers. SCE will deploy mostly Level 2 (L2) chargers, with the option for Level 1 (L1), and a minimum of 205 direct current fast charger (DCFC) ports.
3. D.20-08-045 authorized a budget of \$4.3 million to conduct an evaluation on the Charge Ready 2 Infrastructure and Market Education programs.

4. D.20-08-045 found that DCFC is more appropriate for short-dwell time<sup>20</sup> locations and determined that DCFC should not necessarily be co-located with L2 sites within the DCFC program.
5. D.20-08-045 finds DCFC more appropriate for short-dwell time locations, and while it does not explicitly prohibit collocation of L2 and DCFC, it does not encourage it.
6. SCE's proposal for the MUD-serving definition, DCFCs located within a two-mile radius of one or more MUD, is an insufficient criterion.
7. SCE's proposal to use the median price point to determine the base cost, and subsequently the rebate level, would better allow for new enhancements and different features that enter the marketplaces for DCFC, may help future-proof DCFCs deployed through the program, and would better reflect the available charger options as compared to the "best value" approach.
8. D.20-08-045 directed SCE to install make-ready infrastructure to support EVSE of 150kW for its DCFC component of the Make-Ready Expansion program. While SCE is authorized to provide rebates for DCFC capable of charging at 50kW or greater, the higher capacity requirement for the make-ready infrastructure accounts for the possibility that the site host may wish to upgrade to higher-powered charging in the future.

**THEREFORE IT IS ORDERED THAT:**

1. Southern California Edison Company's Advice Letter 4433-E, as amended by Advice Letter 4433-E-A, is approved with the modifications discussed in this Resolution.
2. Southern California Edison Company shall locate direct current fast chargers (DCFC) deployed through the Charge Ready 2 program in short dwell time locations of less than two hours and may locate DCFCs near short-dwell time locations in instances where it may not be feasible to locate DCFCs at short dwell time locations. Any siting at locations near, rather than at, short-dwell time locations should occur following the site prioritization criteria approved in this Resolution.
3. Southern California Edison Company shall prioritize the Customer-Side Make Ready Rebate option as a means for cost saving and shall deprioritize collocation of direct current fast chargers and Level 2 chargers.

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<sup>20</sup> Less than two hours

4. Southern California Edison Company shall, within the Charge Ready 2 program, utilize the multi-unit dwellings (MUD) serving definition to a site that is located within two-miles of at least six units of MUD housing, and shall prioritize sites located within an area of a higher density of MUDs.
5. Southern California Edison Company shall work with Energy Division staff to determine appropriate data gathering requirements as described in this Resolution related to (1) siting at or near short dwell time locations and associated utilization and accessibility; (2) efficacy of co-locating direct current fast chargers (DCFC) and Level 2 chargers, where necessary; (3) insights gained regarding the customer's DCFC operational and power level needs; (4) the effectiveness of the multi-unit dwelling (MUD) serving definition. This data shall be leveraged for use in the program evaluation, and Southern California Edison Company shall report this data within the Charge Ready 2 annual program report.
6. Southern California Edison Company's proposal to use the median price point for its base cost methodology for direct current fast chargers is approved.

This Resolution is effective today.

I certify that the foregoing Resolution was duly introduced, passed, and adopted at a conference of the Public Utilities Commission of the State of California held on November 2, 2023, the following Commissioners voting favorably thereon:

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Rachel Peterson  
Executive Director

