

Decision 22-11-040 November 17, 2022

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to
Continue the Development of Rates
and Infrastructure for Vehicle
Electrification.

Rulemaking 18-12-006

**DECISION ON TRANSPORTATION
ELECTRIFICATION POLICY AND INVESTMENT**

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DECISION ON TRANSPORTATION ELECTRIFICATION POLICY AND INVESTMENT

Summary

This decision adopts a long-term transportation electrification policy framework that includes a third-party administered statewide transportation electrification infrastructure rebate program and directs the California electrical corporations, specifically, Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, Liberty Utilities (CalPeco Electric) LLC, Bear Valley Electric Service Inc., and PacifiCorp d/b/a Pacific Power to jointly fund the program and associated activities.

The transportation electrification framework and rebate program further state policy promoting decarbonization and will continue to do so, as the supporting technology and policy mechanisms continue to mature. The adopted program prioritizes investment in low-income, underserved, and tribal communities to ensure participation from customers that lack access to the benefits of transportation electrification.

This decision resolves the transportation electrification framework policy and program design topics that have been under consideration since 2020 and adopts the most important elements of the statewide infrastructure rebate program. Additional program guidelines will be established in a subsequent decision and Advice Letters, as described herein.

This proceeding remains open.

1. Background

In December 2018, the California Public Utilities Commission (Commission) established this proceeding through an Order Instituting Rulemaking (OIR). Following party protests and responses to the OIR, a prehearing conference on March 1, 2019, addressed the potential issues, scope,

and schedule of the proceeding. The assigned Commissioner issued a Scoping Memo and Ruling (Scoping Ruling) on May 2, 2019, setting the issues to be considered throughout this proceeding. Among other things, the Scoping Ruling held that a Transportation Electrification Framework was needed to address a multitude of issues related to transportation electrification (TE) investments made by Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E), Liberty Utilities (CalPeco Electric) LLC (Liberty), Bear Valley Electric Service Inc. (Bear Valley), and PacifiCorp d/b/a Pacific Power (PacifiCorp), collectively referred to as the investor-owned utilities (IOUs).

The Governor and the Legislature have directed state agencies to accelerate TE. The Commission works closely with our sister state agencies on TE policy, program design, and deployment. The California Energy Commission (CEC) studies electric vehicle (EV) charging needs across the state and distributes funding for certain charging use cases. The California Air Resources Board (CARB) regulates vehicles in the state and sets requirements for the transition to zero-emission vehicles (ZEVs). Numerous other public agencies including Air Quality Management Districts, the Governor's Office of Business and Development, and local governments engage in TE planning processes with the Commission, the CEC, and the CARB.

1.1. Draft Transportation Electrification Framework

One of the goals of the instant proceeding is to provide a framework for the Commission to consider utility investments and rates related to ZEVs. As such, the OIR authorized the Commission's Energy Division (ED) staff to develop a framework for utility TE investments moving forward. After months

of stakeholder engagement, on February 3, 2020, an Administrative Law Judge (ALJ) ruling in this proceeding issued a Transportation Electrification Framework proposal (Draft TEF) and requested party comments.¹

Given the number of unique topics within the Draft TEF, the Commission required parties to file comments in stages. Because of the length and technical nature of the Draft TEF, parties requested more time between opening and reply comment rounds, and the ALJ subsequently issued several rulings superseding the procedural schedules previously adopted for commenting on the various chapters of the Draft TEF.²

On March 6, 2020, the following parties filed opening comments on Chapters 2-5 of the Draft TEF: Alliance for Transportation Electrification (ATE), Advanced Energy Economy (AEE), BNSF Railway (BNSF), California Independent System Operator Corporation (CAISO), Public Advocates Office at the California Public Utilities Commission (Cal Advocates), California Transit Association, California Energy Storage Alliance (CESA), ChargePoint, Inc. (ChargePoint), City of Long Beach, California Large Energy Consumers Association (CLECA), Connect California LLC, Environmental Defense Fund (EDF), Electrify America LLC (Electrify America), Enel X North America Inc. (Enel X), Envoy Technologies Inc., Energy Producers and Users Coalition (EPUC), EVgo Services LLC (EVgo), Community Environmental Council/ Green

¹ ALJ's Ruling Adding Staff Proposal for a Draft Transportation Electrification Framework to the Record and Inviting Party Comments (Feb. 3, 2020).

² The docket for this proceeding contains a complete list of rulings modifying the comment schedule for the Draft TEF.

Power Institute (GPI),³ Plug In America, Joint Automakers,⁴ Joint Commenters,⁵ Joint EV Technology Providers,⁶ Joint Parties,⁷ Liberty, PacifiCorp, PG&E, San Diego Association of Governments (SANDAG), Small Business Utility Advocates (SBUA), SCE, SDG&E, Tesla Inc. (Tesla), the Utility Reform Network (TURN), Utility Consumers' Action Network (UCAN), and Vehicle-Grid Integration Council (VGIC).⁸ On April 27, 2020, the following parties filed reply comments on Chapters 2-5 of the Draft TEF: Alliance for Automotive Innovation (Auto Innovators), ATE, BNSF, Cal Advocates, CALSTART, California Hydrogen Business Council, ChargePoint, Center for Sustainable Energy (CSE), Ecology Action,⁹ EDF, Electrify America, Enel X, EVgo, GPI, the Greenlining Institute (Greenlining),¹⁰ Greenlots, Joint CCAs,¹¹ Joint Commenters, Joint Parties,¹² National Diversity Coalition (NDC), Peninsula Clean Energy

³ GPI refers to both Community Environmental Council and Green Power Institute.

⁴ Joint Automakers consist of the Alliance for Automotive Innovation, Ford Motor Company, General Motors LLC, Hyundai Motor Company, and Kia Motors Corporation.

⁵ Joint Commenters consist of Center for Community Action and Environmental Justice, East Yard Communities for Environmental Justice, Sierra Club, Union of Concerned Scientists, and Center for Biological Diversity.

⁶ The Joint EV Technology Providers consist of Greenlots and Siemens eMobility (Siemens).

⁷ Joint Parties here refers to Natural Resources Defense Council (NRDC), Coalition of California Utility Employees (CUE), Greenlots, Enel X, EVBox North America Inc. (EVBox), and Siemens.

⁸ Citations to "Opening Comments on Draft TEF Chapters 2-5" refer to these comments.

⁹ Ecology Action filed these reply comments on May 8, 2020.

¹⁰ Greenlining filed these reply comments on May 6, 2020.

¹¹ Joint CCAs here refers to Marin Clean Energy (MCE), Sonoma Clean Power Authority (SCP), California Choice Energy Authority (CalChoice), Silicon Valley Clean Energy Authority (SVCE), East Bay Community Energy (EBCE), Redwood Coast Energy Authority (RCEA), the City of San José, and Monterey Bay Community Power (MBCP).

¹² Joint Parties here refers to Siemens, NRDC, CUE, Greenlots, and EVBox.

Authority (PCE), PG&E, Sacramento Municipal Utility District (SMUD), SBUA, SCE, SDG&E, Siemens, Silicon Valley Leadership Group (SVLG), Tesla, TURN, UCAN, and VGIC.¹³

On July 14, 2020, the following parties filed opening comments on Chapters 7 and 8 of the Draft TEF: Bear Valley, BNSF,¹⁴ CAISO, Cal Advocates, CALSTART, ChargePoint, City of Long Beach, CUE, EDF, Electrify America, Enel X and Nuvve, EVBox, EVgo, Joint Commenters, Joint Parties,¹⁵ Liberty, NDC, PCE, PG&E, SCE, SDG&E, Tesla, UCAN, and VGIC.¹⁶ On August 7, 2020, the following parties filed reply comments on Chapters 7 and 8 of the Draft TEF: AEE, BNSF, Cal Advocates, ChargePoint, CUE, EDF, Electrify America, Enel X and Nuvve, EVgo, Greenlots, Joint Parties,¹⁷ NDC, PacifiCorp, PG&E, SCE, SDG&E, Tesla, TURN, UCAN, and VGIC.¹⁸

On August 21, 2020, the following parties filed opening comments on Chapters 6 and 11 of the Draft TEF: AEE, BNSF, Cal Advocates, CALSTART, California Association of Small and Multi-Jurisdictional Utilities (CASMU),¹⁹ ChargePoint, Clean Energy Fuels, CSE, EDF, Electrify America, Greenlining, GPI,

¹³ Citations to “Reply Comments on Draft TEF Chapters 2-5” refer to these comments.

¹⁴ BNSF filed these comments on July 7, 2020.

¹⁵ Joint Parties here refers to NRDC, CUE, Plug in America, Auto Innovators, Enel X, Siemens, EVBox, and Auto Innovators.

¹⁶ Citations to “Opening Comments on Draft TEF Chapters 7 and 8” refer to these comments.

¹⁷ Joint Parties here refers to NRDC, CUE, Plug in America, Greenlots, Enel X, Siemens, EVBox, and Auto Innovators.

¹⁸ Citations to “Reply Comments on Draft TEF Chapters 7 and 8” refer to these comments.

¹⁹ CASMU is comprised of Bear Valley, Liberty, and PacifiCorp.

GRID Alternatives (GRID), Joint CCAs,²⁰ Joint Commenters, Joint Parties,²¹ NDC, PG&E, Plug In America, SANDAG, SBUA, SCE, SDG&E, Tesla, TURN, UCAN, and VGIC.²² On September 4, 2020, the following parties filed reply comments on Chapters 6 and 11 of the Draft TEF: AEE, ATE, Cal Advocates, ChargePoint, City and County of San Francisco, Clean Energy Fuels, CLECA, EDF, Electrify America, EVgo, Greenlining, GPI, GRID, Joint CCAs,²³ Joint Commenters, NDC, PG&E, SBUA, SCE, SDG&E, Tesla, TURN, UCAN, and VGIC.²⁴

On September 11, 2020, the following parties filed opening comments on Chapters 9, 10, and 12 of the Draft TEF: AEE, BNSF, Cal Advocates, ChargePoint, CLECA, EDF, Electrify America, EVgo, GPI, Joint CCAs,²⁵ Joint Commenters, Joint Parties,²⁶ Lyft Inc., PacifiCorp, PCE, PG&E, SANDAG, SBUA, SCE, San Diego Airport Parking Company (SDAP), SDG&E, Tesla, TURN, Uber Technologies Inc. (Uber), UCAN, and VGIC.²⁷ On September 25, 2020, the following parties filed opening comments on Chapters 9, 10, and 12 of the Draft TEF: AEE, ATE, BNSF, Cal Advocates, ChargePoint, Clean Energy Fuels,

²⁰ Joint CCAs here refers to PCE, RCEA, EBCE, the City of San José, MCE, SVCE, and SCP.

²¹ Joint Parties here refers to NRDC, CUE, Plug in America, Greenlots, Enel X, Siemens, EVBox, and Auto Innovators.

²² Citations to “Opening Comments on Draft TEF Chapters 6 and 11” refer to these comments.

²³ Joint CCAs here refers to PCE, RCEA, EBCE, the City of San José, MCE, SVCE, SCP, CalChoice, and Clean Power Alliance of Southern California (CPA).

²⁴ Citations to “Reply Comments on Draft TEF Chapters 6 and 11” refer to these comments.

²⁵ Joint CCAs here refers to MCE, SCP, CalChoice, SVCE, EBCE, RCEA, the City of San José, and CPA.

²⁶ Joint Parties here refers to NRDC, CUE, Plug in America, Greenlots, Enel X, Siemens, EVBox, and the Auto Innovators.

²⁷ Citations to “Opening Comments on Draft TEF Chapters 9, 10, and 12” refer to these comments.

CLECA, EDF, GPI, GRID, Joint CCAs,²⁸ NDC, PCE, PG&E, SCE, SDAP, SDG&E, Tesla, TURN, Uber, and UCAN.²⁹

Three workshops held after the issuance of the Draft TEF sought stakeholder feedback on how to move forward with the Draft TEF. On March 23, 2020, a remote workshop addressed topics related to Chapters 3.1, 4, and 5 of the Draft TEF. On April 20, 2020, a remote workshop addressed Chapter 4, and on June 8 and 9, 2020, a remote workshop addressed Chapter 3.4.

On October 13, 2021, the Commission convened an en banc session with other state agencies to discuss the role of ratepayer funding in accelerating TE. To date, the Commission has authorized approximately \$1.8 billion to be invested in various TE programs and pilots. The en banc session encouraged public dialogue regarding the appropriate level of ratepayer investments in TE, including the availability of other funding sources to promote TE and how that level of investment would help California meet its EV adoption goals.

1.2. Utility Investments on the Distribution Side of the Meter and Implementation of Assembly Bill (AB) 841

On September 30, 2020, the Governor signed AB 841 (Stats. 2020, ch. 372). AB 841 directed the utilities and the Commission to establish new rules that authorize each utility to “design and deploy all electrical distribution infrastructure on the utility side of the customer’s meter for all customers installing separately metered infrastructure to support charging stations, other

²⁸ Joint CCAs here refers to MCE, SCP, CalChoice, SVCE, EBCE, RCEA, the City of San José, and CPA.

²⁹ Citations to “Reply Comments on Draft TEF Chapters 9, 10, and 12” refer to these comments.

than those in single-family residences.”³⁰ In February 2021, the IOUs filed Advice Letters to implement the legislation. The Advice Letters requested the establishment of new EV Infrastructure Rules and requested memorandum accounts to track the associated costs. The Commission approved these Advice Letters with modifications in Resolutions (Res.) E-5167 and E-5168.

The EV Infrastructure Rules represent a major policy shift since the issuance of the Draft TEF. Before implementation of AB 841, the Commission approved both utility-side and customer-side TE investments associated with programs through specific, one-off IOU TE applications, and the IOUs tracked the costs for recovery through balancing accounts associated with the individual TE programs. Outside of programs before implementation of AB 841, customers would take service under Rule 16, which would determine the amount of utility-side costs the customer versus ratepayers would pay.

Pursuant to the new EV Infrastructure Rules, the IOUs socialize across all ratepayers the costs of service line extensions and electrical distribution infrastructure for EV charging—for customers other than those in single-family residences. Single-family residences already receive similar treatment under existing permanent exemptions from the Rules 15 and 16, governing customer contributions for new infrastructure.³¹

³⁰ Public Utilities (Pub. Util.) Code Section 740.19(c).

³¹ Residential EV customers in single-family homes have received exemptions from Rule 16 since 2011. Under Rule 16, ratepayers cover costs up to an allowance, but the customer is responsible for other costs, such as construction, trenching, and other expenses. Rule 16 covers fewer costs associated with utility-side service line extensions and electrical distribution infrastructure than the new rules. Decision (D.) 21-12-033 made the interim policy on Common Treatment for Excess PEV Charging the standard Commission policy, pending determination that a new policy is necessary to ensure just and reasonable rates for ratepayers.

Under the new approach, investments associated with EV infrastructure on the utility side of the meter are now part of the IOUs' overall distribution system upgrade plans.³² As defined in AB 841, make-ready infrastructure includes poles, vaults, service drops, transformers, mounting pads, trenching, conduit, wires, cables, meters, other equipment, and associated engineering and civil construction work on the utility side of the meter that enable the installation of an EV charger.³³ The IOUs track all EV Infrastructure Rule costs through their EV Infrastructure Rule Memorandum Accounts and seek recovery of recorded costs through their general rate cases (GRCs). This is intended to allow for more rapid and predictable utility investment in TE infrastructure for EV customers. The Commission continues to review and shape distribution investment plans so that they align with California's electrification goals and do not lead to unreasonable or unnecessary ratepayer costs.

Pursuant to AB 841, the Commission and stakeholders will begin evaluating the effectiveness of the EV Infrastructure Rules in accelerating TE and protecting the interests of ratepayers in 2025. As required by the resolutions, the utilities will report data via the annual EV Cost and Load Report to enable analysis and evaluation of the new EV Infrastructure Rules.³⁴

³² These include ongoing efforts in various venues and proceedings (*e.g.*, Rulemaking (R.) 20-05-003, R.21-06-017, and working groups such as the Joint Agency Steering Committee, which is comprised of the Commission, CARB, CAISO, and CEC, with direct IOU coordination).

³³ Pub. Util. Code Section 740.19(b).

³⁴ As of issuance of this decision, the most recent EV Cost and Load Report is for 2021. PG&E, SCE, and SDG&E, Joint IOU Electric Vehicle Load Research and Charging Infrastructure Cost Report (Mar. 31, 2022), available at: <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M464/K783/464783120.PDF>.

For each utility, the new rules cannot be modified until the completion of its next GRC cycle, with new GRC cycles beginning between 2027 and 2029.³⁵ The Commission may then use the data collected on costs and the effectiveness of the new rules to determine whether to require any customer contributions for costs incurred on the utility side of the meter.

The Commission is undertaking several efforts related to EV infrastructure investments, including ensuring that customers installing EV chargers do not wait in long interconnection queues. In the proceeding to modernize the electric grid for a high distributed energy resources future, the Commission oversees the IOUs' plans to upgrade the distribution grid to meet the new load EV charging will create.³⁶ Additionally, the Commission's Integrated Resource Planning (IRP) proceeding, which focuses on resource procurement, is using load forecasts that include more EV charging demand.³⁷ By doing so, it is incorporating expected EV load into planning for both generation and transmission resources.

Additionally, on May 27, 2022, pursuant to Res. E-5167 and E-5168, SDG&E filed Advice Letter 4011-E,³⁸ containing the joint IOUs' proposed electric vehicle supply equipment (EVSE) service energization timelines. The

³⁵ Pub. Util. Code Section 740.19(c) ("The commission may revise the policy . . . after the completion of the general rate case cycle of the electrical corporation following the one during which the advice letter was filed if a determination is made that a change in the policy is necessary to ensure just and reasonable rates for ratepayers.").

³⁶ R.21-06-017.

³⁷ R.20-05-003.

³⁸ PG&E Advice Letter 6607-E; SCE Advice Letter 4803-E; Bear Valley Advice Letter 444-E; Liberty Advice Letter 192-E; PacifiCorp Advice Letter 685-E.

Advice Letter proposed an average 160-day timeline for all EVSE installed via the IOUs' EV Infrastructure Rules.

The distribution system on the utility side of the meter will require substantial upgrades in the long term to handle significant growth in EV load and to support increased deployment of high-capacity fast chargers. It will be especially important for the system to expand at a pace and in locations that support the medium- and heavy-duty (MDHD) fleet needed to meet California's air quality regulations. The efforts described above are intended to ensure that the IOUs strategically pursue cost-effective upgrade opportunities that do not overload the grid. The IOUs will continue to collaborate with the relevant state agencies including the Commission, the CEC, and CAISO in distribution grid planning to support EV charging.

1.3. Additional Changes Since Issuance of the Draft TEF

Since the issuance of the Draft TEF, the Commission has adopted the following decisions in this proceeding: D.20-09-025, clarifying the status of electric vehicle service providers (EVSPs) as public utilities; D.20-12-027, providing direction for the Low-Carbon Fuel Standard (LCFS) holdback revenue utilization; D.20-12-029, implementing Senate Bill (SB) 676 (Bradford, 2019) and vehicle-grid integration strategies; D.21-07-028, setting near-term priorities for TE investments by the IOUs; D.21-12-030, revising the near-term priority TE Investment decision; D.21-12-033, extending the interim policy on common treatment for excess plug-in EV charging costs; and D.22-08-024, adopting the Plug-in Electric Vehicle Submetering Protocol and EVSE communication protocols.

In addition to the decisions issued in this proceeding since February 2020, the Commission adopted several decisions in specific TE ratesetting proceedings. Decisions authorizing TE investments since the issuance of the Draft TEF include D.20-08-045 – authorizing \$436 million for SCE’s Charge Ready 2 infrastructure and market education programs – and D.21-04-014 – authorizing \$43.5 million for SDG&E’s Power Your Drive Extension program. The Commission also issued Res. E-5175 to clarify EVSE communication requirements and other details related to the EVSE qualification processes for SCE’s Charge Ready 2 program. Related to EV rates, D.21-11-017 required PG&E to offer an optional day-ahead, hourly real-time rate to customers who have enrolled or are eligible to enroll in its existing Business EV Rate, and D.22-08-002 considered a study on the marginal generation capacity costs that PG&E should use when calculating its rates, including its real-time pricing rate.

In September 2020, Governor Newsom issued Executive Order N-79-20 requiring that all new light-duty (LD) vehicle sales be zero emission by 2035 and all new MDHD vehicle sales be zero emission by 2045. As of August 25, 2022, the CARB approved the Advanced Clean Cars II (ACCII) regulation, establishing this target as a compliance requirement for all automakers.³⁹ Pursuant to this same Executive Order and AB 2127 (Ting, 2018), the CEC issued its inaugural Electric Vehicle Charging Infrastructure Assessment, or the AB 2127 Charging Assessment, in July 2021.⁴⁰

³⁹ CARB Resolution 22-12 adopted the Advanced Clean Cars II regulation and amended the CARB ZEV regulation to require an increasing number of ZEVs to support EO N-79-20, which requires all new passenger vehicles sold in California to be zero emission by 2035.

⁴⁰ The CEC will biennially issue updated AB 2127 Charging Assessment reports.

Through the initial AB 2127 Charging Assessment, the CEC estimates that by 2030 California may need up to 1.2 million EV chargers to support an estimated eight million LD EVs and an additional 157,000 chargers to support MDHD EVs.⁴¹ There are currently over 1.2 million LD EVs in California and significantly fewer chargers than the number the CEC identified as potentially needed in 2030.

Additionally, shortly after the Draft TEF was issued, California declared a state of emergency due to the COVID-19 pandemic. Since then, transportation and other social patterns have changed significantly.

As noted, the Commission has authorized more than \$1.8 billion in ratepayer dollars for TE investments to date. This amount does not include the significant utility-side investment we expect to result from the implementation of AB 841 and other necessary utility-side upgrades, and the significant investment from LCFS revenue.⁴² Of the \$1.8 billion that the Commission has authorized, the IOUs have spent approximately \$333 million to date, or approximately 17.5 percent – meaning a significant amount of funding is still available.

In addition to substantial ratepayer investments, billions of dollars in approved federal and state funds will support California’s TE infrastructure. As

⁴¹ CEC AB 2127 Charging Assessment at 31, “An update to the model, EVI-Pro 2, expands infrastructure projections to support nearly 8 million ZEVs by 2030 and incorporates evolving technology and market conditions. This level of ZEV adoption is derived from CARB’s *Draft 2020 Mobile Source Strategy* and is the trajectory needed to achieve the Executive Order N-79-20 target of 100 percent light-duty ZEV sales by 2035.”

⁴² The IOUs’ LCFS funding, while confidential, is estimated to be in the tens of millions of dollars per year range. *See* D.20-12-027 at 7. We cannot accurately predict the amount of ratepayer funding that will support the EV Infrastructure Rules, but we expect the rules to cover an average of 15 to 20 percent of a site’s total installation costs (*i.e.*, utility- and customer-side costs).

a result of the federal Infrastructure Investment and Jobs Act of 2021, for instance, California will receive \$383 million in funding for TE infrastructure. The Act authorizes an additional \$2.5 billion for ZEV infrastructure available in competitive grants nationwide.⁴³

In November 2021, the CEC approved \$1.4 billion for TE and hydrogen vehicle charging infrastructure to be spent over three years, increasing the previous budget by more than six times. California's 2021 Budget Act committed \$3.9 billion towards ZEV acceleration through 2024. The budget included an additional \$6.1 billion one-time expenditure over five years to accelerate the state's transition to ZEVs, with much of the funding dedicated to supporting MDHD fleets and disadvantaged and low-income communities.

With the signing of the federal Inflation Reduction Act in August 2022, an additional \$1.7 billion in tax credits for EV chargers and other alternative fuel equipment will be available for eligible customers beginning January 1, 2023, through the Alternative Fuel Vehicle Refueling Property Credit.⁴⁴

1.4. Staff Proposal

On February 25, 2022, an Assigned Commissioner's Ruling issued and requested comments on the Energy Division Staff Proposal to Establish Transportation Electrification Funding Cycles and Statewide Behind-the-Meter

⁴³ See U.S. Dept. of Energy, Bipartisan Infrastructure Law (Infrastructure Investment and Jobs Act of 2021), <https://afdc.energy.gov/laws/infrastructure-investment-jobs-act>.

⁴⁴ The Alternative Fuel Vehicle Refueling Property Credit is a general business tax credit that offsets 30 percent of the total costs to purchase and install charging equipment, excluding permitting and inspection costs, up to \$100,000 per charger. Eligible customers must be located in a census area where the poverty rate is at least 20 percent or the median family income in the area is equal to or less than 80 percent of the statewide median family income. See U.S. Dept. of Energy, Alternative Fuel Infrastructure Tax Credit, <https://afdc.energy.gov/laws/10513>.

Program (Staff Proposal). The following parties submitted opening comments on the Staff Proposal by the April 25, 2022 deadline: AEE, ATE, Auto Innovators, BNSF, Cal Advocates, California Efficiency + Demand Management Council (CEDMC), ChargePoint, CLECA, CSE, Port of Long Beach, Clean Energy Fuels, EDF, EDF Renewables Inc. (EDF Renewables), Electrify America, EPUC, EVgo, GPI, Greenlining, GRID, Joint CCAs,⁴⁵ Joint Commenters,⁴⁶ Joint Parties,⁴⁷ NDC, Nuvve, PG&E, SBUA, SCE, SDG&E, Tesla, TURN, UCAN, VGIC, and Weave Grid Inc (Weave Grid).⁴⁸ The following parties submitted reply comments on the Staff Proposal by the May 16, 2022 deadline: AEE, Cal Advocates, ChargePoint, CLECA, CSE, EDF, Electrify America, EPUC, EVgo, Fermata Energy LLC

⁴⁵ Joint CCAs here refers to CalChoice, CPA, EBCE, MCE, PCE, RCEA, San Diego Community Power (SDCP), SCP, and San José Clean Energy (SJCE), which is the City of San José's CCA program that the San José Community Energy Department administers.

⁴⁶ Joint Commenters here refers to Center for Community Action and Environmental Justice, East Yard Communities for Environmental Justice, Sierra Club, and Union of Concerned Scientists. Parties included in the Joint Commenters' filings on the Staff Proposal differ from the parties included on the Joint Commenters' earlier filings on the Draft TEF.

⁴⁷ Joint Parties here refers to NRDC, CUE, Ecology Action, Siemens, Shell EV Charging Solutions America (formerly Greenlots), and Enel X. in a census area where the poverty rate is at least 20 percent or the median family income in the area is equal to or less than 80 percent of the statewide median family income. See U.S. Dept. of Energy, Alternative Fuel Infrastructure Tax Credit, <https://afdc.energy.gov/laws/10513>.

⁴⁷ Joint CCAs here refers to CalChoice, CPA, EBCE, MCE, PCE, RCEA, San Diego Community Power (SDCP), SCP, and San José Clean Energy (SJCE), which is the City of San José's CCA program that the San José Community Energy Department administers.

⁴⁷ Joint Commenters here refers to Center for Community Action and Environmental Justice, East Yard Communities for Environmental Justice, Sierra Club, and Union of Concerned Scientists. Parties included in the Joint Commenters' filings on the Staff Proposal differ from the parties included on the Joint Commenters' earlier filings on the Draft TEF.

⁴⁸ Citations to "Opening Comments on Staff Proposal" refer to these comments.

(Fermata), GPI, Greenlining, GRID, Joint CCAs,⁴⁹ Joint Commenters, NDC, Nuvve, PG&E, SCE, SDG&E, TURN, UCAN, VGIC, and Weave Grid.⁵⁰

The Staff Proposal responds to stakeholder comments on the Draft TEF and recent developments in the TE market and proposes a modified approach to TE funding through the remainder of the decade and beyond. The proposal aims to accelerate behind-the-meter (BTM) EV charging deployment to support California's ambitious goals and the CEC's projected EV charger need, while limiting costs to ratepayers, promoting equity, minimizing administrative burden, and maximizing third-party participation. In light of the developments described above, the Staff Proposal does not address investments on the utility side of the meter. In this decision, the Commission addresses both the outstanding issues from the Draft TEF and the Staff Proposal.

2. Issues Before the Commission

Because this proceeding encompasses highly complex and interrelated issues, the scoping memo designates general topic areas with examples of issues that the Commission may address in the proceeding. This decision addresses issues associated with all seven topics included in the scoping memo: (1) issues related to the TEF; (2) cost recovery mechanisms for TE investments; (3) rates for ZEVs and hydrogen-fueled vehicles; (4) vehicle-grid integration; (5) coordination with existing EV programs; (6) safety; and (7) other (*e.g.*, additional policies or issues related to TE that other Commission proceedings do not address).⁵¹ We consider the extensive record in this proceeding in our resolution of the issues.

⁴⁹ Joint CCAs here refers to CalChoice, CPA, EBCE, MCE, PCE, RCEA, SCP, SDCP, and SJCE.

⁵⁰ Citations to "Reply Comments on Staff Proposal" refer to these comments.

⁵¹ Assigned Commissioner's Scoping Memo and Ruling at 2-7 (May 2, 2019).

3. Issues from the Draft TEF Not Included in the Staff Proposal

This section resolves outstanding issues from the Draft TEF not included in the Staff Proposal discussion below.

3.1. Draft TEF Chapter 3: Transportation Electrification Plans

Chapter 3 of the Draft TEF includes recommendations on the Transportation Electrification Plan (TEP) framework.⁵² The Draft TEF recommends that the Commission direct each IOU to develop a ten-year TEP to complete more holistic TE portfolio and grid planning and to create a roadmap for ratepayer-supported TE investment programs moving forward. To create the TEP framework, the Draft TEF recommends that the Commission direct the IOUs to:

1. File and serve ten-year strategic TEPs;
2. Engage in ongoing state energy forecasting efforts and resource planning proceedings and use the most recent TE adoption projections from the CARB's regulatory timelines, the CEC's infrastructure needs assessment, and the IOUs' Integrated Capacity Analysis maps to develop infrastructure targets and proposed budgets in the TEPs;
3. Include specified necessary and relevant information in the TEPs;
4. Submit pilot proposals via Advice Letters;
5. Submit large-scale program proposals via applications in the first quarter of every odd numbered year;
6. Provide full TEP updates every four years; and

⁵² Draft TEF at 16-33.

7. Align TEP updates with any new issues and/or program priorities identified through the five-year TEF update process.

In comments on this chapter of the Draft TEF, parties provide differing views on the TEP framework. UCAN argues the TEPs should include a ten-year forecast of anticipated TE loads and hourly load shapes.⁵³ Tesla urges the Commission to balance the need for near-term TEPs focused on five-year evaluations with a ten-year strategic vision.⁵⁴ ChargePoint claims the ten-year TEP timeline would not allow for accurate program design and budgeting.⁵⁵ Relatedly, SDG&E urges the Commission to adopt a single application for a five-year TE plan and associated funding, with one-off interim applications to fill any market gaps.⁵⁶ PG&E and SCE also argue that the TEPs should cover a five-year instead of ten-year period.⁵⁷

Parties also provide comments on IOU engagement with other forecasting and planning processes needed to develop the TEPs. SCE argues that the TEPs consider state and local policies and regulations that drive EV adoption and the corresponding TE infrastructure needs, including regional air quality plans and regulations, the San Pedro Bay Ports Clean Air Action Plan, the California Sustainable Freight Action Plan, and municipal TE plans.⁵⁸ ChargePoint

⁵³ UCAN Opening Comments on Draft TEF Chapters 2-5 at 7.

⁵⁴ Tesla Reply Comments on Draft TEF Chapters 2-5 at 10.

⁵⁵ ChargePoint Opening Comments on Draft TEF Chapters 2-5 at 7.

⁵⁶ SDG&E Opening Comments on Draft TEF Chapters 2-5 at 15.

⁵⁷ PG&E Opening Comments on Draft TEF Chapters 2-5 at 3; SCE Opening Comments on Draft TEF Chapters 2-5 at 9.

⁵⁸ Opening Comments on Draft TEF Chapters 2-5 at 12.

recommends that the TEPs reflect coordination with Caltrans, the California Green Building Standards (CALGreen) Code, the Division of the State Architect, and the Department of Housing and Community Development.⁵⁹

UCAN supports leveraging the CEC's, CARB's and other state agencies' existing processes.⁶⁰ In addition to state agencies, EVgo proposes that the IOUs consider TE infrastructure deployments directed by the settlement between the Commission and NRG Energy.⁶¹ The Joint Commenters caution against an overly prescriptive TEP process.⁶² Cal Advocates recommends the TEPs incorporate lessons learned from previous TE programs and consider data on costs from other entities, including the national laboratories and other state agencies.⁶³ PG&E suggests that the TEPs should leverage IOU planning processes that account for utility TE infrastructure needs, such as the IRP proceeding, the distribution capacity plans in each IOU's GRC, and the Distribution Resources Plan proceeding.⁶⁴

Additionally, parties present arguments for whether to establish the TEP budget as a cap on an IOU's investments or a forecast of the programmatic costs. The Joint Commenters caution against the creation of cost caps because the TE regulatory and technological terrain is changing too rapidly to justify restricting

⁵⁹ ChargePoint Opening Comments on Draft TEF Chapters 2-5 at 4.

⁶⁰ UCAN Opening Comments on Draft TEF Chapters 2-5 at 7.

⁶¹ EVgo Opening Comments on Draft TEF Chapters 2-5 at 3-4.

⁶² Joint Commenters Opening Comments on Draft TEF Chapters 2-5 at 12.

⁶³ Cal Advocates Opening Comments on Draft TEF Chapters 2-5 at 6.

⁶⁴ PG&E Opening Comments on Draft TEF Chapters 2-5 at 11-12.

investments based on quickly dated assumptions.⁶⁵ SCE recommends the TEPs provide a cost forecast, which would become a cap following Commission authorization.⁶⁶ UCAN supports establishing budgets as a cap and not merely using forecasts.⁶⁷ Conversely, ChargePoint and BNSF recommend establishing budgets based on a forecast of programmatic costs instead of creating a cap.⁶⁸ TURN argues against viewing TEP budgets as a forecast or cap because parties would need to fully vet costs.⁶⁹ The California Transit Association supports TEP budgets reflecting a forecast of programmatic costs, including low-to-high cost projections to account for varying levels of state funding.⁷⁰ Cal Advocates supports establishing budgets through forecasts, which would require the IOUs to make long-term planning decisions while allowing for flexibility as actual costs become more definite.⁷¹ SBUA similarly recommends that budgets be based on forecasts and that the IOUs justify increased spending if needed.⁷²

In this decision, we decline to adopt the TEP framework and the associated proposals. The Staff Proposal takes parties' comments on the proposed TEPs into consideration of its design of the funding cycle framework. Parties persuasively argue that the lengthy planning process envisioned in the TEP proposal would

⁶⁵ Joint Commenters Opening Comments on Draft TEF Chapters 2-5 at 13.

⁶⁶ SCE Opening Comments on Draft TEF Chapters 2-5 at 12.

⁶⁷ UCAN Opening Comments on Draft TEF Chapters 2-5 at 8-9.

⁶⁸ ChargePoint Opening Comments on Draft TEF Chapters 2-5 at 5; BNSF Opening Comments on Draft TEF Chapters 2-5 at 4.

⁶⁹ TURN Opening Comments on Draft TEF Chapters 2-5 at 9.

⁷⁰ California Transit Association Opening Comments on Draft TEF Chapters 2-5 at 4.

⁷¹ Cal Advocates Opening Comments on Draft TEF Chapters 2-5 at 7.

⁷² SBUA Opening Comments on Draft TEF Chapters 2-5 at 3.

not adequately account for or best serve the rapidly accelerating TE marketplace. Further, the Commission and its staff currently engage in a number of updated TE planning efforts. Leveraging the existing interagency coordination and planning framework, staff at the Commission, CAISO, CEC, and CARB are working closely to ensure that our processes are planning for the expected growth in EV adoption over the next decade. This work includes, but is not limited to:

1. Recent adoption of the 2021 CEC's Integrated Energy Policy Report (IEPR) demand forecast – the starting point for all generation and infrastructure planning within the CAISO footprint – which reflects higher TE adoption consistent with CARB's ACCII and proposed Advanced Clean Fleets (ACF) regulations;
2. The IRP proceeding's 2021 Preferred System Plan, reflecting the CEC's 2021 IEPR forecast, to the CAISO for study in its 2022-2023 transmission planning process (TPP base case);⁷³
3. The proceeding to modernize the electric grid for a high distributed energy resources future, authorizing the IOUs to use a variation of the CEC's 2021 IEPR forecast to better study the distribution impact of high TE in their respective 2023 Grid Needs Assessments;⁷⁴ and
4. The Commission's new proceeding to advance demand flexibility through electric rates which considers developing dynamic rates available for EV charging that may facilitate broader EV load management and grid support.⁷⁵

⁷³ R.20-05-033.

⁷⁴ R.21-06-017.

⁷⁵ R.22-07-005.

Furthermore, the Commission works to coordinate internal and interagency TE infrastructure planning efforts with IOU planning. Consequently, much of the planning work that the TEP proposal envisioned is underway. While we do not find it necessary to move forward with the TEP planning proposal as initially envisioned, we may find it appropriate to adopt some of the elements of the TEP proposal in the future to leverage these processes and inform IOU TE infrastructure programs, targets, and budgets.

3.2. Draft TEF Chapter 4: IOU Role in Accelerating TE Infrastructure Deployment

Chapter 4 of the Draft TEF includes four recommendations on the role the IOUs should have in deploying TE infrastructure.⁷⁶ The Draft TEF recommends that the Commission direct the IOUs to:

1. Actively engage their subject matter experts in ongoing state agency planning and modeling efforts, including the CARB's Mobile Source Strategy update and the CEC's Infrastructure Deployment Strategy analysis, and summarize TE infrastructure gaps based on state planning processes and other resources;
2. Provide information and participate in the development of a Market Maturity Assessment;
3. Explain in their TEPs each market barrier that each IOU program is intended to address and how the program(s) will address the barrier; and
4. Explain in their TEPs any market barrier(s) that IOU TE programs are not suited to address.

Regarding the first recommendation for the Commission to order the IOUs to engage in ongoing state agency planning and modeling efforts, parties observe

⁷⁶ Draft TEF at 33-42.

that state planning and modeling efforts can provide important information.⁷⁷ However, many parties caution that these efforts are not comprehensive, and therefore many parties argue that the IOUs should account for other information sources, such as input from local governments and transit agencies.⁷⁸ Other parties note that the Commission should refrain from adopting overly prescriptive requirements.⁷⁹

We agree that additional planning and modeling is useful. For example, the CEC's AB 2127 Charging Assessment does not provide sufficient detail on where TE infrastructure is most needed and what role the IOUs should take. Additionally, while the CEC's report pursuant to SB 1000 (Lara, 2018) identifies some gaps in charging infrastructure based on income disparity and location, it does not provide specific detail on where to install charging infrastructure to address these gaps.⁸⁰ The Commission currently engages in a number of processes to coordinate internal and interagency TE infrastructure planning efforts with IOU planning, as discussed above. Although we decline to direct the IOUs to engage in specific efforts, the IOUs should continue to participate in

⁷⁷ See, e.g., BNSF Opening Comments on Draft TEF Chapters 2-5 at 5.

⁷⁸ Joint Commenters Opening Comments on Draft TEF Chapters 2-5 at 17; SCE Opening Comments on Draft TEF Chapters 2-5 at 14; Cal Advocates Opening Comments on Draft TEF Chapters 2-5 at 12; City of Long Beach Opening Comments on Draft TEF Chapters 2-5 at 3; California Transit Association Opening Comments on Draft TEF Chapters 2-5 at 5; ChargePoint Opening Comments on Draft TEF Chapters 2-5 at 17.

⁷⁹ SDG&E Opening Comments on Draft TEF Chapters 2-5 at A-3; TURN Opening Comments on Draft TEF Chapters 2-5 at 12.

⁸⁰ See CEC, California Electric Vehicle Infrastructure Deployment: Senate Bill (SB) 1000 Report (Dec. 2020), available at: <https://efiling.energy.ca.gov/getdocument.aspx?tn=236189>.

processes like those described above to continue to improve upon TE planning efforts.

Second, the Draft TEF recommends that the IOUs participate in the development of a “market maturity assessment,” which would determine the level of market maturity for different TE segments, and the IOUs would use the analysis to evaluate investments to overcome market barriers. Many parties claim that the proposed market maturity assessment would be an overly complex process that would not provide sufficient information to understand the nascent TE market.⁸¹ Other parties caution against using the assessment to justify IOU ownership of EVSE.⁸²

We decline to adopt the market maturity assessment proposal because most, if not all, TE market segments are not yet mature. We agree with parties’ arguments that the proposal is premature because the assessment would require significant modifications and effort to provide an effective and reliable tool. However, the program evaluation described later in this decision may include metrics to analyze market conditions, and these metrics could help to justify adjustments to the adopted rebate program during the Mid-Cycle Assessment, as discussed in more detail later in this decision. Further, although we decline to adopt the market maturity assessment proposal, this decision provides guidance

⁸¹ SCE Opening Comments on Draft TEF Chapters 2-5 at 9;; Tesla Opening Comments on Draft TEF Chapters 2-5 at 6-7; PG&E Opening Comments on Draft TEF Chapters 2-5 at 17; SDG&E Opening Comments on Draft TEF Chapters 2-5 at A-4; AEE Opening Comments on Draft TEF Chapters 2-5 at 13; Greenlots Opening Comments on Draft TEF Chapters 2-5 at 3; SDG&E Reply Comments on Draft TEF Chapters 2-5 at 9; SBUA Reply Comments on Draft TEF Chapters 2-5 at 3-4; ChargePoint Reply Comments on Draft TEF Chapters 2-5 at 11.

⁸² See, e.g., ChargePoint Opening Comments on Draft TEF Chapters 2-5 at 15.

on the appropriate role of the IOUs in deploying TE infrastructure. The discussion in Section 4 of this decision provides that guidance.

We decline to adopt the third and fourth recommendations to include a discussion of market barriers in the IOUs' TEPs. This decision does not adopt the proposed TEP framework, and we therefore find it unnecessary to adopt any requirements concerning the contents of the TEPs.

In comments on this chapter of the Draft TEF, parties also present arguments regarding whether the IOUs' role should include IOU ownership of BTM TE infrastructure. The Joint EV Technology Providers argue "making a declaration on ownership models without testing different business models, such as utility residential BTM ownership, would not only jeopardize the state's ability to achieve its goals, but is also entirely unfounded."⁸³ The Joint CCAs assert "IOU ownership of TE infrastructure should be limited, and IOU investment should generally be focused on the utility side of the meter."⁸⁴ UCAN cautions that IOU ownership of TE infrastructure should be limited.⁸⁵

We take these comments into account in evaluating the Staff Proposal's recommendation that the IOUs should not have the option to own BTM TE infrastructure moving forward. In recent Commission decisions, we are clearly

⁸³ Joint EV Technology Providers Opening Comments on Draft TEF Chapters 2-5 at 10.

⁸⁴ Joint CCAs Reply Comments on Draft TEF Chapters 2-5 at 2.

⁸⁵ UCAN Opening Comments on Draft TEF Chapters 2-5 at 15.

moving away from the IOU-ownership model, concluding that it is often more expensive for ratepayers.⁸⁶

3.3. Draft TEF Chapter 5: Near-Term Priorities

The Draft TEF recommends that the Commission limit consideration of new IOU applications or Advice Letters that address near-term TE barriers and/or regulatory priorities.⁸⁷ The recommendations seek to address any gaps in program offerings prior to 2025, while the Commission evaluates whether to adopt the Draft TEF and TEP framework.

The Commission addressed the Draft TEF's recommendations on near-term TE priorities in D.21-07-028 and D.21-12-030, resolving all issues related to this part of the Draft TEF.⁸⁸ These decisions provided specific guidance to the IOUs on high priority areas for which the IOUs can submit Advice Letter proposals prior to further Commission guidance on the Draft TEF. The decisions also created an expedited application review process for IOU proposals that seek to extend existing or recently completed TE programs. Those decisions did not preclude the IOUs from submitting applications for TE proposals that are not

⁸⁶ See, e.g., D.21-07-028; D.21-04-014; D.20-08-045; SDG&E, Compliance Filing of San Diego Gas & Electric Company (U902E) of Independent Audit Report Pursuant to Decision 21-04-014 (Jan. 31, 2022), available at: <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M445/K599/445599617.PDF>.

⁸⁷ Draft TEF at 58-59.

⁸⁸ D.21-12-030 revises two elements of D.21-07-028: (1) one criterion for the new building investment area and (2) language describing the expedited review process for applications to extend existing TE programs.

within the established near-term priority areas. As of October 2022, only SDG&E had submitted a near-term priority Advice Letter for consideration.⁸⁹

As the Commission adopted D.21-07-028 to provide “guidance to the [IOUs] in the event that they choose to submit proposals for transportation electrification investments prior to [adoption of the TEF],”⁹⁰ and this present decision addresses the TEF, we find it is reasonable to establish a sunset date for the near-term TE priorities pathways and the authorized near-term TE priority funds not yet approved or not currently under Commission review. The IOUs shall file any near-term TE priority applications or Advice Letters no later than May 31, 2023. The IOUs shall not accept customer applications or agreements within any approved near-term TE priority programs after December 31, 2026, unless specifically directed otherwise by the Commission. This corresponds with the end of the current funding cycle and transitional grace period discussed below.

3.4. Draft TEF Chapter 6: Equity

We address equity considerations in Section 4.3.5 of this decision to ensure that the benefits of TE and ratepayer funded investments in EV charging fully reach all segments of the California population, particularly underserved communities.

⁸⁹ SDG&E’s Advice Letter 4021-E, submitted on June 8, 2022, proposes a new near-term TE priority program, Power Your Drive for Communities. The Advice Letter seeks approval of \$20 million over three-years to install a mix of 174 direct current fast chargers (DCFC) and Level 2 EVSE to support charging needs of customers without access to home charging.

⁹⁰ D.21-07-028 at 2.

3.5. Draft TEF Chapter 7: Safety

As part of the Commission's responsibility to assure the safety of all IOU operations, the Safety Policy Statement and the Safety Action Plan seek to improve the safety culture within the Commission and across the industries it regulates.⁹¹ The IOUs and EV charging installers must comply with all local, state, and federal safety requirements. In addition, the TE Safety Checklists seek to better inform the IOUs' compliance requirements regarding safety considerations specifically related to TE programs.⁹² As part of the Commission's further development of safety standards for the TE programs, the Draft TEF evaluates changes to the following safety-related areas: (1) IOU program requirements to ensure consumer and installer safety and (2) workforce training.

3.5.1. Consumer and Installer Safety

The Draft TEF includes four recommendations to improve consumer and installer safety with respect to TE programs. These recommendations consist of direction by the Commission to the IOUs to:

1. Include comprehensive safety rules in their TEPs;
2. Continue to report on safety procedure implementation and best safety practices for various TE program types;
3. Identify one IOU as lead to review existing safety procedures and determine whether revisions are needed prior to the initial TEP filings and each subsequent TEP

⁹¹ California Public Utilities Commission, Safety Policy and Action Plans, <https://www.cpuc.ca.gov/regulatory-services/safety/safety-policy-and-action-plans>.

⁹² California Public Utilities Commission, Safety Requirements Checklist for CPUC-Approved Transportation Electrification Programs, available at: <https://www.cpuc.ca.gov/-/media/cpuc-website/files/legacyfiles/s/6442458882-safety-requirements-checklist-final-draft-.pdf> (for PG&E, SCE, and SDG&E), <https://www.cpuc.ca.gov/-/media/cpuc-website/files/legacyfiles/s/6442462124-safety-requirements-checklist-for-d1809034-final-.docx> (for Bear Valley, Liberty, and PacifiCorp).

- update. The lead IOU should also consider whether to adopt safety procedures to ensure IOU-funded TE infrastructure is safely maintained or decommissioned once the program term has ended; and
4. Consider limited roles for IOU pilot programs to evaluate pre-commercial technologies and associated safety needs.⁹³

Regarding the first recommendation, PCE expresses support for the inclusion of safety requirements “in the context of an IOU’s infrastructure upgrades and TE programs that require connection of new EVSE to the grid.”⁹⁴ However, PCE also clarifies that the TEF should clarify that the safety requirements are not one size fits all and should allow Program Administrators to apply only the relevant sections of the safety requirements in their TEPs.⁹⁵

We decline to adopt a requirement in this decision that the IOUs include comprehensive safety rules in their TEPs. Since this decision will not direct the development of TEPs, this recommendation is no longer relevant.

No party’s comments address the second recommendation for the Commission to direct IOUs to continue to report on safety procedure implementation and best safety practices for various TE program types.

Due to the lack of comment on this recommendation and the general support in comments for the continued use of the current TE Safety Checklists, we find that a change to this procedure is not warranted at this time. The IOUs and Program Administrator should continue to utilize and report on safety procedures, based on the TE Safety Checklists. As part of the Program Handbook

⁹³ Draft TEF at 75.

⁹⁴ PCE Opening Comments on Draft TEF Chapters 7 and 8 at 4.

⁹⁵ *Ibid.*

development process, Mid-Cycle Assessment, and/or program evaluations, the IOUs and Program Administrator should examine whether any modifications to the TE Safety Checklists are needed and propose those to the Commission.

Regarding the third recommendation, Tesla asserts that the current safety standards in the TE Safety Checklists adopted in D.18-01-024 and D.18-05-040 are reasonable and effective for ensuring safety and do not see a need to revise those standards at this time.⁹⁶ Tesla supports a periodic review of the safety requirements in the checklist based on new technology entering the market or feedback under the existing programs, via a transparent stakeholder process.⁹⁷ SDG&E contends that a specific reevaluation of TE-related safety practices is not necessary for TEPs and that the IOUs should determine the necessity of revisions to existing safety rules.⁹⁸

The IOUs also express support for following existing procedures for maintenance and decommissioning of IOU TE infrastructure. SCE argues that TE infrastructure, like non-TE utility infrastructure, is industrial in nature and built to last decades.⁹⁹ PG&E indicates that no new policies or procedures are necessary because PG&E's current safety and asset management standards also apply to TE equipment and facilities as well.¹⁰⁰ Liberty asserts that any contracts

⁹⁶ PG&E Opening Comments on Draft TEF Chapters 7 and 8 at 2; SCE Opening Comments on Draft TEF Chapters 7 and 8 at 2; Bear Valley Opening Comments on Draft TEF Chapters 7 and 8 at 3; Liberty Opening Comments on Draft TEF Chapters 7 and 8 at 1; Tesla Opening Comments on Draft TEF Chapters 7 and 8 at 2.

⁹⁷ Tesla Opening Comments on Draft TEF Chapters 7 and 8 at 2.

⁹⁸ SDG&E Opening Comments on Draft TEF Chapters 7 and 8 at 2.

⁹⁹ SCE Opening Comments on Draft TEF Chapters 7 and 8 at 3.

¹⁰⁰ PG&E Opening Comments on Draft TEF Chapters 7 and 8 at 3.

signed with third parties for TE equipment installed on its system will include maintenance and decommissioning requirements.¹⁰¹

We find that the IOUs should continue to comply with the checklist for all utility-side work. Where applicable, the IOUs and Program Administrator must confirm compliance with the checklist for the Funding Cycle 1 (FC1) program, discussed in detail in Section 4 below, and require that all program participants in FC1 comply with all local codes and receive relevant local and state permits from the Authorities Having Jurisdiction. The Program Handbook development process, described below, shall determine compliance and verification details for these requirements.

Regarding the fourth safety recommendation, both VGIC and PCE support the TEPs including an appropriate role for IOUs to evaluate pre-commercial equipment and identify special safety requirements.¹⁰² However, VGIC recommends that the Commission provide guidance in the TEF to establish a “uniform program and process by which market participants could request to conduct pre-commercial technology demonstrations and evaluations.”¹⁰³ Bear Valley asserts that there is no need for any specific procedures or specific safety rules because EV vendors are relied on to ensure the charging technology complies with all industry standards.¹⁰⁴

¹⁰¹ Liberty Opening Comments on Draft TEF Chapters 7 and 8 at 2.

¹⁰² VGIC Opening Comments on Draft TEF Chapters 7 and 8 at 2; PCE Opening Comments on Draft TEF Chapters 7 and 8 at 4.

¹⁰³ VGIC Opening Comments on Draft TEF Chapters 7 and 8 at 2.

¹⁰⁴ Bear Valley Opening Comments on Draft TEF Chapters 7 and 8 at 3.

We decline to adopt any pilot programs associated with pre-commercial technologies and safety needs. The record does not reflect sufficient need for this type of pilot program.

3.5.2. Workforce Training

To scale up TE and achieve state climate and reliability goals, California needs a well-trained workforce to support its safety requirements. Accordingly, the IOUs must address any workforce training necessary to ensure safe installation of IOU-funded TE infrastructure. If special training is necessary for specific TE programs or technology, the IOUs have an important role to ensure that the appropriate training is available. Additionally, the Commission's Environmental and Social Justice Action Plan adopts an objective to promote high road career paths and economic opportunity for residents of environmental and social justice communities.¹⁰⁵

To achieve these workforce development goals, the Draft TEF recommends that the IOUs should: (1) coordinate with the California Labor & Workforce Development Agency to address workforce development needs and opportunities to create high-quality jobs that support IOU TE programs and (2) evaluate whether any additional installer safety-related training is necessary beyond state licensing requirements.

The IOUs are generally supportive of the workforce development recommendations but present different perspectives on their roles and

¹⁰⁵ California Public Utilities Commission, Environmental and Social Justice Action Plan, <https://www.cpuc.ca.gov/news-and-updates/newsroom/environmental-and-social-justice-action-plan>. The Commission's Environmental and Social Justice Action Plan emphasizes the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of laws, regulations, and policies.

requirements regarding coordination with state agencies. SCE states that coordination with the California Labor & Workforce Development Agency could help the IOUs identify development needs and opportunities to create high-quality jobs that support IOU TE programs.¹⁰⁶ PG&E indicates that the California Labor & Workforce Development Agency, the California Workforce Development Board, and other relevant state/regional workforce development organizations should lead the workforce development efforts.¹⁰⁷ SDG&E calls for flexibility regarding the IOUs' development of their workforces and the omission of an overly prescriptive requirement for IOUs to coordinate with statewide bodies.¹⁰⁸

D.21-07-028 addresses some of the Draft TEF's workforce development recommendations by directing the IOUs to, within all future program applications, further the principles of economic equity and promote access to high quality jobs for residents of underserved communities.¹⁰⁹ Section 4.3.5.6 of this decision expands on the workforce development requirements for FC1.

As to the recommendation for the IOUs to evaluate whether any additional installer safety-related training is necessary beyond state licensing requirements, parties generally agree that ensuring specialized training is important, while differing on the role of the IOU in that process. Both PCE and the Joint Commenters emphasize the importance of the availability of specialized safety workforce training to reduce barriers and ensure that charging infrastructure

¹⁰⁶ SCE Opening Comments on Draft TEF Chapters 7 and 8 at 3.

¹⁰⁷ PG&E Opening Comments on Draft TEF Chapters 7 and 8 at 3-4.

¹⁰⁸ SDG&E Opening Comments on Draft TEF Chapters 7 and 8 at 4-5.

¹⁰⁹ D.21-07-028 at 33-34.

installation occurs within all parts of the IOUs' service territories.¹¹⁰ EVgo recommends specific safety certifications to increase speed of installations.¹¹¹ NDC states that the IOUs should coordinate with community-based organizations (CBOs) in addition to unions to ensure training of electricians from diverse and underserved communities.¹¹² ChargePoint recommends a clear delineation of the responsibilities within the workforce training section, while EDF asserts that the IOUs should not have sole responsibility for workforce development.¹¹³

Because the Commission established near-term workforce training requirements for the IOUs in D.21-07-028, this decision does not address near-term workforce training requirements. However, Section 4.3.5.6 discusses workforce development and safety-related training requirements for the Program Administrator to implement.

3.6. Draft TEF Chapter 8: Technology and Standards

Chapter 8 of the Draft TEF recommends that the IOUs ensure that TE programs include the requisite technology and meet existing standards to ensure TE infrastructure deployment meets state TE goals and is coordinated with other state TE investments.¹¹⁴

¹¹⁰ PCE Opening Comments on Draft TEF Chapters 7 and 8 at 6; Joint Commenters Opening Comments on Draft TEF Chapters 7 and 8 at 2.

¹¹¹ EVgo Opening Comments on Draft TEF Chapters 7 and 8 at 10.

¹¹² NDC Opening Comments on Draft TEF Chapters 7 and 8 at 3.

¹¹³ ChargePoint Opening Comments on Draft TEF Chapters 7 and 8 at 1; EDF Opening Comments on Draft TEF Chapters 7 and 8 at 4.

¹¹⁴ Draft TEF at 77-96.

3.6.1. EVSE Standards

Regarding EVSE standards, the Draft TEF proposes aligning IOU TE infrastructure requirements with minimum requirements of other public agencies. Specifically, the Draft TEF recommends the Commission direct the IOUs to:

1. Establish program requirements that ensure publicly accessible, ratepayer-funded EVSE meet all existing state regulatory requirements; and
2. Require that EVSE funded through their TE programs contain networking capabilities and can implement International Organization for Standardization (ISO) standard 15118 and other communication enabling requirements adopted by the CECCEC.

Parties express differing views on adopting EVSE standards. To ensure accessibility and transparency, Cal Advocates supports requiring all IOU programs to incorporate CARB payment access regulations and consumer information regulations from the California Department of Food and Agriculture's Division of Measurements and Standards, requiring all publicly available EVSE display the unit price of electricity on their face or, in the case of two or more EVSE installed at one location, at a single primary element.¹¹⁵ VGIC cautions that the opportunity cost of requiring all ratepayer-funded EVSE to meet ISO 15118 would be significant.¹¹⁶ EVgo asserts that unintended consequences may result from the inappropriate application of certain technology requirements to use cases with long dwell times.¹¹⁷

¹¹⁵ Cal Advocates Opening Comments on Draft TEF Chapters 7 and 8 at 2.

¹¹⁶ VGIC Opening Comments on Draft TEF Chapters 7 and 8 at 6.

¹¹⁷ EVgo Opening Comments on Draft TEF Chapters 7 and 8 at 2-3.

The Joint Commenters recommend requiring utilization of open communication protocols to: (1) insure against stranded assets; (2) support competition, innovation, and customer choice through customer hardware- and software- switching ability; and (3) ensure ratepayer-funded EVSE is fully interoperable.¹¹⁸ ChargePoint supports use of ISO 15118 and a requirement for ratepayer-funded EVSE to have networking capabilities, while encouraging the Commission to allow global discussions on standard development to continue before prematurely requiring ISO 15118.¹¹⁹ PG&E does not oppose use of ISO 15118 but also recommends exploring other communication protocols.¹²⁰ Tesla cautions against adopting ISO 15118 as the key communication protocol for publicly accessible EVSE deployed through the Commission's or the CEC's TE programs.¹²¹

Over two years have passed since the Commission received comments on the Draft TEF's recommendations regarding EVSE standards. In the meantime, the Commission adopted requirements and the CEC issued recommendations on specific EVSE communication standards.¹²² Most recently, D.22-08-024 adopted the following standards:

1. All alternating current (AC) conductive EVSE deployed on or after July 1, 2023, for LD use cases in ratepayer-funded

¹¹⁸ Joint Commenters Opening Comments on Draft TEF Chapters 7 and 8 at 1-3.

¹¹⁹ ChargePoint Opening Comments on Draft TEF Chapters 7 and 8 at 7-8.

¹²⁰ PG&E Opening Comments on Draft TEF Chapters 7 and 8 at 6.

¹²¹ Tesla Opening Comments on Draft TEF Chapters 7 and 8 at 5.

¹²² See D.21-04-014 (adopting SDG&E's Power Your Drive Extension program); Res. E-5175 (directing SCE to revise its Charge Ready 2 program requirements); CEC, Recommendation for Deployment of ISO 15118-Ready Chargers (Feb. 22, 2022), available at: <https://efiling.energy.ca.gov/GetDocument.aspx?tn=241955>.

- or utility-administered TE infrastructure programs must be equipped with a Society of Automotive Engineers (SAE) J1772 connector;
2. All direct current (DC) conductive EVSE deployed on or after July 1, 2023, for LD use cases in ratepayer-funded or utility-administered TE infrastructure programs must be equipped with a Combined Charging System (CCS) connector;
 3. All ratepayer-funded or utility administered TE programs implemented on or after July 1, 2023, must ensure communications and controls between a network service provider and the EVSE are capable of operating on Open Charge Alliance (OCA) Open Charge Point Protocol (OCPP) 1.6 or later, and similar communication standards may be implemented in addition to OCPP; and
 4. All EVSE deployed on or after July 1, 2023, for ratepayer-funded or utility-administered TE infrastructure programs must be ISO 15118 ready. ISO 15118-ready chargers are equipped with onboard hardware that enable high-level communications with the vehicle using ISO 15118. An ISO 15118-ready charger is capable of, at minimum, the following: (a) powerline carrier based high-level communications as specified in ISO 15118-3; (b) secure management and storage of keys and certificates; (c) Transport Layer Security (TLS) version 1.2, with additional support for TLS 1.3 or subsequent versions recommended to prepare for future updates to the ISO 15118 standard; (d) receiving remote updates to activate or enable ISO to prepare for future updates to the ISO 15118 standard; (e) connecting to a backend network; and (f) selecting the appropriate communication protocol used by the vehicle.¹²³

¹²³ D.22-08-024 at Ordering Paragraph 6.

To ensure interoperability and open standards, these requirements apply to all future ratepayer-funded BTM TE infrastructure programs. We clarify here that the FC1 rebate program adopted in this decision is one such ratepayer-funded BTM TE infrastructure programs.

3.6.2. Cybersecurity

The Draft TEF includes several recommendations related to cybersecurity, including that the IOUs propose cybersecurity standards to implement and identify any gaps in available standards that could cause issues from increased deployment of networked EVSE.¹²⁴

The Commission addressed these issues in D.20-12-029, which directed SCE to propose cybersecurity standards and file a workplan with a cybersecurity gaps analysis.¹²⁵ Pursuant to D.20-12-029, SCE filed Advice Letter 4521-E requesting approval to implement the workplan and proposing a budget. The Commission approved the Advice Letter via a disposition letter on March 30, 2022.

SCE requests that the Commission authorize the implementation of the cybersecurity workplan, approved through Advice Letter 4521-E. SCE also seeks authority to establish a memorandum account to track workplan-related costs for review and recovery.¹²⁶ Based on ED's approval, we authorize SCE to implement the cybersecurity workplan approved in Advice Letter 4521-E, according to the estimated budget specified confidentially in that Advice Letter. With this qualification, we authorize SCE to establish a memorandum account to track and

¹²⁴ Draft TEF at 85-87.

¹²⁵ D.20-12-029 at 62-63, Ordering Paragraph 19.

¹²⁶ SCE Reply Comments on Staff Proposal at 8.

record costs associated with the workplan implementation. SCE should seek reasonableness review for recovery of the recorded expenditures within a GRC.

3.6.3. EVSE Interconnection and Energization

The Draft TEF recommends that the Commission adopt streamlined processes to expedite load-only EV charging installations and to provide transparent timelines and processes to determine whether utility service upgrades are needed to support the installation of EV chargers.¹²⁷ Res. E-5167 and E-5168 address this topic and parties' comments. These resolutions adopt an average service energization timing for the new EV Infrastructure Rules, while acknowledging that additional analysis is necessary to implement timeline requirements.

The resolutions direct the IOUs to: (1) within 180 days of the resolutions' approval, host a public workshop to discuss the barriers to timely energization of TE infrastructure¹²⁸ and (2) within 60 days of hosting the workshop, file a joint Tier 2 Advice Letter to propose an average timeline between 90 to 160 days, identify the processes within the IOUs direct and indirect control, identify processes that are not within the IOUs control, processes for the IOU to improve service energization timing for items within their direct and indirect control, a description of how the IOUs can contribute to improve service energization for responsibilities not in their control, and incorporate the party feedback provided during the public workshop.

¹²⁷ Draft TEF at 95-96.

¹²⁸ The IOUs jointly hosted this workshop on March 31, 2022.

On May 27, 2022, SDG&E filed Advice Letter 4011-E, containing the joint IOUs' EV charging service energization timing proposal. As of the mailing of this decision, the joint IOUs' proposal is under review; however, the Commission recently took steps to streamline the interconnection process for EV charging and improve communication of interconnection timelines between IOUs and their customers.¹²⁹ We acknowledge parties' requests for discourse and continued focus on energization. While we do not direct any specific process in this decision, Energy Division staff may address these issues through future forums and/or workshops, and the Commission may address this topic through other venues.

3.6.4. Submetering

The Draft TEF indicates that the Commission will address submetering for EV charging within this proceeding.¹³⁰

On January 23, 2020, an ALJ Ruling directed the IOUs to jointly develop, with input from parties, and file a submetering protocol. In D.22-08-024, we adopted the Plug-in Electric Vehicle (PEV) Submetering Protocol, which allows a customer to avoid having to install a separate utility meter and instead use a submeter to measure and bill EV charging separately from the customer's primary utility meter. The decision required the IOUs to implement the protocol for customers with PEVs who own their submeters, thereby addressing this section of the Draft TEF.

¹²⁹ Res. 5165-E at Findings of Fact 6-7, Ordering Paragraph 2; D.20-09-035 at Ordering Paragraph 23; Res. E-5172 at App. D.

¹³⁰ Draft TEF at 93-94.

3.6.5. Emerging Technology

The Draft TEF recommends that the Commission consider whether a TE emerging technologies program would be appropriate for IOU administration.¹³¹

In D.20-12-029, the Commission considered comments on this topic in response to the Draft TEF and directed the IOUs to file an Advice Letter to request approval of a Vehicle-Grid Integration Emerging Technology Program with a maximum budget of \$5 million annually for two years, thereby addressing this section of the Draft TEF.¹³² Pursuant to the decision, SCE filed Advice Letter 4610-E on behalf of the joint IOUs, proposing an emerging technologies program. The Commission issued Draft Res. E-5224 to address the request in SCE Advice Letter 4610-E.

3.7. Draft TEF Chapter 9: TE and Customer Rates

Chapter 9 of the Draft TEF includes various recommendations regarding TE and customer rates.

3.8. Electric Vehicle Rate Evolution Plans

The Draft TEF recommends requiring each IOU's TEP to contain an Electric Vehicle Rate Evolution (EVREV) plan, which would include a collaborative, stakeholder guided strategy for improving the customer experience in paying for EV fueling and potentially providing compensation to customers for discharging their EV batteries at times of grid congestion. The Draft TEF proposes that EVREV plan topics include dynamic rates, EV-specific rates, and residential EV rates, along with any other proposed rate design issues.

¹³¹ Draft TEF at 94-96.

¹³² D.20-12-029 at 34-39, Ordering Paragraph 11.

The Draft TEF recommends that the IOUs separately propose EVREV plans or that one lead IOU's TEP contain a joint-IOU plan. The Draft TEF also proposes that the EVREV plans reflect full coordination across the IOUs and feedback from stakeholders.¹³³ Various parties comment on the EVREV proposal.¹³⁴

Several events occurred since the issuance of the EVREV proposal that impact its consideration in this proceeding. On May 25, 2021, ED staff hosted a workshop to discuss ideas for advancing distributed energy resources (DERs) and flexible load management, leveraging new system-wide retail rate reforms, and load modifying demand response (DR) proposals. To identify policy and program ideas that would further the May 2021 proposals, ED staff released the "unified, universal, dynamic, economic" (UNIDE) concept paper, followed by a June 22, 2022 white paper and staff proposal that adopted the term California Flexible Unified Signal for Energy (CalFUSE) for the proposal.¹³⁵ Following the

¹³³ Draft TEF at 106.

¹³⁴ BNSF Comments on Draft TEF Chapters 9, 10, and 12 at 4; PG&E Opening Comments on Draft TEF Chapters 9, 10, and 12 at 3; SBUA Comments on Draft TEF Chapters 9, 10, and 12 at 12; Joint Commenters Comments on Draft TEF Chapters 9, 10 at 3; NRDC Comments on Draft TEF Chapters 9, 10, and 12 at 1-3; SDG&E Comments on Draft TEF Chapters 9, 10, and 12 at 3; SCE Comments on Draft TEF Chapters 9, 10, and 12 at 1-2; UCAN Comments on Draft TEF Chapters 9, 10, and 12 at 9; CLECA Comments on Draft TEF Chapters 9, 10, and 12 at 9; Clean Energy Fuels Reply Comments on Draft TEF Chapters 9, 10, and 12 at 2; GPI Comments on Draft TEF Chapters 9, 10, and 12 at 3; Electrify America Comments on Draft TEF Chapters 9, 10, and 12 at 4; SDAP Comments on Draft TEF Chapters 9, 10, and 12 at 13, 18-19; Tesla Reply Comments on Draft TEF Chapters 9, 10, and 12 at 2; ATE Reply Comments on Draft TEF Chapters 9, 10, and 12 at 2.

¹³⁵ See California Public Utilities Commission, Energy Division, Advanced Strategies for Demand Flexibility Management and Customer DER Compensation (June 22, 2022), available at: <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/demand-response/demand-response-workshops/advanced-der---demand-flexibility-management/ed-white-paper---advanced-strategies-for-demand-flexibility-management.pdf>.

release of this white paper, in July 2022, the Commission opened R.22-07-005 to advance demand flexibility through electric rates – with one of the major objectives of the rulemaking being enablement of widespread TE to meet the state’s climate goals.

We do not find it appropriate to pursue the TEF’s EVREV proposal at this time due to the efforts in R.22-07-005, which aims to achieve many of the same objectives as the EVREV proposal. Therefore, we do not require a proposed scope and schedule of EVREV development as contemplated in the Draft TEF.¹³⁶ However, we reaffirm the vision of EVREV for rates to become technology-neutral in order to promote fairness in electricity pricing and export compensation among various DERs.

The Draft TEF also recommends the initiation of a collaborative process among IOUs and stakeholders to develop EVREVs that explore the various EVREV-related topics in the proposal. The proposal envisages a process that builds off ongoing proceedings and identifies straightforward solutions that can be implemented prior to the submission of EVREVs. The Draft TEF encourages utilization of longer-term strategies flowing from those solutions into the EVREVs. The Draft TEF further recommends that the IOUs propose revised rates as part of regular TEP revisions to align with the EVREV process and plans.

CLECA comments that collaboration is beneficial for developing best practices and consistency for program design, but cautions that each IOU has a different cost of service that must be considered in each IOU’s GRC Phase 2 to set

¹³⁶ Draft TEF at 106.

actual rates.¹³⁷ UCAN indicates that collaboration will help simplify new EV rates and create consistency in rate design.¹³⁸ AEE notes that the unique characteristics of EV drivers charging within its service territory and different charging use cases should be considered.¹³⁹

We agree that a collaborative process between the IOUs and stakeholders is worthwhile. Partly to achieve these aims, we direct creation of a forum on vehicle-grid integration. We describe this forum in more detail below, along with a discussion of specific strategic focus areas, to advance the collaborative process goals outlined in the Draft TEF. Additionally, we decline to adopt the recommendation to require the IOUs to propose revised TE rates due to the opening of R.22-07-022 and recent Commission decisions.¹⁴⁰

The Draft TEF additionally recommends that the Commission direct the IOUs to increase enrollment in residential EV time-of-use (TOU) rates via enhanced education and outreach to maximize grid benefits and customer savings. The Draft TEF proposes requiring customers with home smart chargers to enroll in a separately metered EV rate when submetering is available. Various parties' comments address this recommendation.

ChargePoint cautions against mandatory enrollment in dynamic or TOU rates for all EV use cases, because it claims both tools are limited and do not

¹³⁷ CLECA Opening Comments on Draft TEF Chapters 9, 10, and 12 at 12.

¹³⁸ UCAN Comments on Draft TEF Chapters 9, 10, and 12 at 2.

¹³⁹ AEE Opening Comments on Draft TEF Chapters 9, 10, and 12 at 2.

¹⁴⁰ D.20-12-023 (addressing SDG&E's Electric Vehicle High Power (EV-HP) Charge Rate); D.21-11-017 (addressing PG&E's Optional Day-Ahead Real-Time Rate for Commercial EV Customers); D.22-08-002 (addressing Phase 2 of PG&E's Dynamic, Real-Time, Hourly Pricing Rate).

capture all EV charging use cases.¹⁴¹ EVgo contends that meaningful price signals may not automatically translate into more optimal grid conditions, and highlights that demand for a direct current fast charger (DCFC) is relatively inelastic and already takes place during hours of solar generation without price signals.¹⁴² Tesla recognizes the need to send appropriate price signals to customers to optimize charging with grid needs, but urges the Commission to consider the various use cases.¹⁴³ NRDC agrees that plans should increase enrollment in residential EV TOU rates via enhanced education and outreach to maximize grid benefits and customer savings, but also recommends the establishment of target enrollment levels for IOU EV rates.¹⁴⁴

We find that rate education is an important component of the Commission's TE program goals and should be a key objective of the FC1 program's marketing, education, and outreach component. Section 4.3.4 of this decision addresses rate education.

Finally, the Draft TEF asks whether the Commission should explore using rate design and/or customer bill credits to offset the cost of public charging for customers who do not have access to residential off-peak charging rates. Cal Advocates indicates that it may be necessary to offset the cost of public charging for communities of concern to promote equity.¹⁴⁵ The Joint Commenters assert that the Commission should differentiate between low-income and other

¹⁴¹ ChargePoint Opening Comments on Draft TEF Chapters 9, 10, and 12 at 2.

¹⁴² EVgo Opening Comments on Draft TEF Chapters 9, 10, and 12 at 5.

¹⁴³ Tesla Opening Comments on Draft TEF Chapters 9, 10, and 12 at 4.

¹⁴⁴ NRDC Opening Comments on Draft TEF Chapters 9, 10, and 12 at 3.

¹⁴⁵ Cal Advocates Opening Comments on Draft TEF Chapters 9, 10, and 12 at 5-6.

customers facing a lack of home charging, because low-income customers likely have fewer choices to optimize their needs and preferences than more affluent customers.¹⁴⁶

We agree with both parties and note that portable fuel cards, which decrease the cost of charging for low-income customers who lack access to off-peak charging at home, may be an important solution to promote equity. The CARB provides fuel cards for low-income EV customers as a component of several programs including the Financing Assistance Program, the Clean Vehicle Rebate Project, and Clean Cars 4 All. These programs are not currently available to the majority of Californians and EV fueling costs are a major barrier to EV adoption by low-income customers. We direct that the Mid-Cycle Assessment for FC1, described in Section 4.2.4 of this decision, include consideration of the need for and potential designation of a portion of FC1 funds for fuel cards for low-income customers. It should also examine availability of fuel cards to low-income customers in other programs, including the CARB's offerings, and data on whether fueling costs still pose a barrier to EV adoption by low-income customers.

3.8.1. TE Program Cost Recovery and Allocation

The Draft TEF requests comment on whether IOUs should recover TE program costs through the distribution rate component of the customer's bill. The Draft TEF also proposes to address the allocation factor for TE program costs through Phase 2 of the IOUs' GRCs.

¹⁴⁶ Joint Commenters Opening Comments on Draft TEF Chapters 9, 10, and 12 at 2.

UCAN and Cal Advocates both disagree with recovering TE program costs through distribution rates. They argue for allocation of the costs on an equal cents per kilowatt-hour (kWh) basis through the Public Purpose Program (PPP) surcharge because the TE program serves a broader social interest and its costs are direct subsidies by ratepayers who do not use the charging infrastructure to those who do.¹⁴⁷ UCAN and Cal Advocates assert that the Commission should determine cost recovery through the program's application proceeding because these costs are outside the focus of the GRC. SBUA also opposes recovery of TE program costs through distribution rates and supports recovery through the PPP surcharge.¹⁴⁸ SBUA contends that few, if any, of the TE program's goals are to improve the reliability of the distribution system and the placing of the programs' costs in distribution rates is misaligned with the goals established in legislation.¹⁴⁹ NDC argues that although TE infrastructure deployments are referred to as distribution upgrades, they do not provide distribution benefits to the grid in the traditional sense; therefore, TE program costs should not be recovered through the distribution rates.¹⁵⁰

The Joint Commenters indicate that IOUs should generally recover TE program costs through PPP surcharges but should recover utility-side infrastructure costs through distribution rates.¹⁵¹ ATE generally agrees with the

¹⁴⁷ UCAN Opening Comments on Draft TEF Chapters 9, 10, and 12 at 12; Cal Advocates Opening Comments on Draft TEF Chapters 9, 10, and 12 at 7-8.

¹⁴⁸ SBUA Opening Comments on Draft TEF Chapters 9, 10, and 12 at 13.

¹⁴⁹ *Ibid.*

¹⁵⁰ NDC Reply Comments on Draft TEF Chapters 9, 10, and 12 at 2.

¹⁵¹ Joint Commenters Opening Comments on Draft TEF Chapters 9, 10, and 12 at 2.

proposed mechanism for recovery of TE program costs, but notes there are potential exceptions.¹⁵² ATE indicates that make-ready investments or ownership and operation of charging stations should be recovered through distribution rates because they provide benefits to customers and involve changes to the distribution system. However, ATE emphasizes that the Commission provide special consideration to recovery of costs in environmental and social justice communities where subsidies or rate discounts may be more appropriate.

SCE argues that the Commission's allocation of TE program costs must recognize the various categories of costs contained within a single TE program to equitably allocate these costs.¹⁵³ SCE argues that allocating all TE programs costs through a PPP surcharge increases rates unnecessarily in the rate classes expected to adopt MDHD technologies. However, SCE indicates that 100 percent allocation of costs to distribution rates may place too much of a burden on segments that adopt LD EV technologies. PG&E and CLECA both support the recommendation to recover costs through distribution rates.¹⁵⁴

Concerning the allocation factor, TURN argues that the Commission should decide TE program cost allocation in the TEF rather than relitigating it in each GRC Phase 2 proceeding.¹⁵⁵ TURN asserts that deferring this issue to the GRC Phase 2 proceedings is inconsistent with the TEF's goal to establish a structured process to reduce the time and resources needed to resolve

¹⁵² ATE Reply Comments on Draft TEF Chapters 9, 10, and 12 at 5.

¹⁵³ SCE Reply Comments on Draft TEF Chapters 9, 10, and 12 at 2.

¹⁵⁴ CLECA Opening Comments on Draft TEF Chapters 9, 10, and 12 at 11; PG&E Opening Comments on Draft TEF Chapters 9, 10, and 12 at 6.

¹⁵⁵ TURN Opening Comments on Draft TEF Chapters 9, 10, and 12 at 1-2.

controversial issues that were previously addressed on a case-by-case basis. TURN also notes that the TEF is the appropriate proceeding because other proceedings' participants may not possess adequate expertise with TE programs.¹⁵⁶ PG&E and CLECA both support the recommendation to allocate costs in Phase 2 of the GRCs.¹⁵⁷

We find that moving forward the IOUs should record all BTM TE program costs in either one-way subaccounts within the IOUs' individual TE Balancing Accounts or through separate one-way balancing accounts and recover them through distribution rates. This method of cost recovery is consistent with past TE program decisions, the majority of which require the IOUs to recover costs in either a one-way Balancing Account or one-way subaccount within their TE Balancing Accounts. Additionally, the IOUs recover costs for all existing utility-side and BTM TE programs through distribution rates. The EV Infrastructure Rules also direct cost recovery through distribution rates, with review during the IOUs' GRCs.

Should the adopted amounts exceed actual costs, each IOU shall refund excess funds to customers at the end of its GRC cycle in distribution rates through its next consolidated electric revenue requirement and rate change advice letter, or through another advice letter as approved by the Commission. The IOUs shall not record excess funds in the new one-way balancing account or subaccount. At the end of its GRC cycle, each IOU shall transfer any over-collected balance to its distribution revenue adjustment balancing account as part

¹⁵⁶ *Ibid.*

¹⁵⁷ CLECA Opening Comments on Draft TEF Chapters 9, 10, and 12 at 11; PG&E SCE Opening Comments on Draft TEF Chapters 9, 10, and 12 at 6.

of its annual year-end revenue requirement and rate change consolidated advice letter process for rates effective January 1 of the following year, or through another advice letter process as authorized by the Commission. Each IOU shall include in distribution rates the forecasted revenue requirement approved in this decision, and thus its distribution rates will recover program revenues, which it will record to its corresponding distribution revenue adjustment balancing account.

We also require the IOUs to allocate FC1 program costs and all BTM TE program costs moving forward on an equal cents per kWh basis. This helps ensure that costs are distributed across all customer classes equitably. Further, parties' comments described above do not account for the new EV Infrastructure Rules and, therefore, address both BTM and utility-side costs. As utility-side costs are not included in the program contemplated here, it is even more appropriate to adopt the equal cents per kWh approach.

3.8.2. Alternative Financing

As to the issue of alternative financing, the Draft TEF recommends that the IOUs host a public workshop to discuss their capacity to administer an on-bill financing or tariff-based recovery program as well as the potential structure(s) for such programs.

Several parties' comments address alternative financing. PG&E asserts that the Commission should not adopt any specific alternative financing requirements at this time, while allowing the IOUs to propose alternative financing mechanisms in future TEPs to aid TE deployment cost-effectively

without excessive costs to non-benefiting customers.¹⁵⁸ NDC supports the workshop proposal to explore options to reduce financial barriers to individual EV adopters and relieve ratepayer burdens related to funding the TE program.¹⁵⁹ NRDC also agrees with the workshop proposal, but states that the Commission should revise the language in the TEF to clarify that the IOUs can still come forward with applications proposing these programs if they see sufficient justification and need.¹⁶⁰ Cal Advocates supports the workshop proposal, indicating it would facilitate input from stakeholders on mechanisms that incentivize the greatest amount of TE at the lowest cost to ratepayers.¹⁶¹ TURN supports the concept of on-bill financing and agrees with the workshop proposal to discuss the potential structure of IOU on-bill financing programs.¹⁶²

EDF asserts that exploration of innovative financing mechanisms, particularly for smaller commercial fleets with less access to capital and that operate in low-income communities, is a crucial component to ensure widespread TE. However, EDF expresses disappointment in the delay in approval of an on-bill financing or tariff-based recovery program.¹⁶³ AEE disagrees with delaying approval of an on-bill financing or tariff-based recovery program and argues that the IOUs have the capital and ability to make these

¹⁵⁸ PG&E Opening Comments on Draft TEF Chapters 9, 10, and 12 at 7.

¹⁵⁹ NDC Reply Comments on Draft TEF Chapters 9, 10, and 12 at 4.

¹⁶⁰ NRDC Opening Comments on Draft TEF Chapters 9, 10, and 12 at 13.

¹⁶¹ Cal Advocates Opening Comments on Draft TEF Chapters 9, 10, and 12 at 8.

¹⁶² TURN Reply Comments on Draft TEF Chapters 9, 10, and 12 at 2.

¹⁶³ EDF Reply Comments on Draft TEF Chapters 9, 10, and 12 at 5.

investments now.¹⁶⁴ SBUA argues that the Commission should address alternative financing efforts in R.20-08-022, the proceeding to investigate and design clean energy financing options for electricity and natural gas customers.¹⁶⁵

We decline to take further action on alternative financing programs in this proceeding as we are addressing that topic in R.20-08-022, which focuses on the investigation and design of alternative financing programs for all clean energy technologies. That proceeding addresses outstanding issues that need further discussion, including the IOUs' proposals on TE alternative financing pilots.¹⁶⁶ Our consideration of alternative financing mechanisms for TE in R.20-08-022 ensures consistency in alternative financing program design and efficiently utilizes stakeholders' and the Commission's resources.

3.9. Draft TEF Chapter 10: Partnerships

Chapter 10 of the Draft TEF recommends that the IOUs leverage relationships and complement ratepayer investment with public-private partnerships, collaboration on building code enhancement, regional coordination, and community choice aggregator (CCA) coordination.¹⁶⁷

3.9.1. Public-Private Partnerships

Regarding public-private partnerships, the Draft TEF recommends the Commission direct the IOUs to:

1. Host a roundtable discussion between the vehicle manufactures, EVSPs, and other stakeholders to discuss

¹⁶⁴ AEE Opening Comments on Draft TEF Chapters 9, 10, and 12 at 6.

¹⁶⁵ SBUA Opening Comments on Draft TEF Chapters 9, 10, and 12 at 14.

¹⁶⁶ See R.20-08-022, Assigned Commissioner's Amended Scoping Memo and Ruling at 6 (Nov. 19, 2021).

¹⁶⁷ Draft TEF at 115-35.

potential partnership opportunities and ensure broad, expert input; and

2. To demonstrate in their program applications and pilot Advice Letters that the IOUs have created public-private partnerships that incorporate best practices from national and international models, including cost sharing, market benefits, data sharing, clearly defined goals, outreach, and education, and leveraging grant opportunities.¹⁶⁸

Many parties support an IOU-hosted roundtable discussion and the formation of public-private partnerships.¹⁶⁹ However, other parties caution against mandating the IOUs to form partnerships with industry as it may slow down the process of deploying TE infrastructure.¹⁷⁰

The Staff Proposal provides an updated framework for incorporating industry feedback; therefore, these Draft TEF recommendations are no longer directly applicable. We generally agree with parties that IOU TE programs benefit from industry input. Thus, we direct the IOUs to seek industry feedback in developing the Program Handbook, which is discussed below.

3.9.2. CALGreen Building Code Enhancements

The Draft TEF recommends that the IOUs cooperate with the Building Standards Commission and the other state agencies that develop the California Green Building Standards (CALGreen) Code, which includes a range of green building requirements that apply to new residential and non-residential

¹⁶⁸ *Id.* at 119-20.

¹⁶⁹ See, e.g., ChargePoint Opening Comments on Draft TEF Chapters 9, 10, and 12 at 7; Cal Advocates Opening Comments on Draft TEF Chapters 9, 10, and 12 at 12; Tesla Opening Comments on Draft TEF Chapters 9, 10, and 12 at 7.

¹⁷⁰ See, e.g., Electrify America Opening Comments on Draft TEF Chapters 9, 10, and 12 at 9-10; PG&E Opening Comments on Draft TEF Chapters 9, 10, and 12 at 9; SCE Opening Comments on Draft TEF Chapters 9, 10, and 12 at 8-9.

buildings. The Draft TEF recommends that the IOUs' TEPs address this opportunity to encourage installation of lower-cost TE infrastructure at new buildings.¹⁷¹

NRDC et al. agreed with the goal of promoting installation of lower-cost infrastructure and with the recommendation to have the IOUs cooperate with Building Standards Commission and the other state agencies to develop CALGreen.¹⁷² PG&E argues that the IOUs' Energy Efficiency Business Plans adequately provide funding for these activities.¹⁷³ SCE similarly argues that IOUs' existing Codes and Standards Programs within their Energy Efficiency Portfolios provide sufficient resources to support the CALGreen and the development of building standards related to TE infrastructure.¹⁷⁴

Since the issuance of the Draft TEF, the Commission has advanced these efforts without the existence of the proposed IOU TEPs. We have directed the IOUs to support building code enhancements for any new construction multi-unit dwelling (MUD).¹⁷⁵ Further, in D.21-07-028, we authorized the IOUs to submit proposals to support new construction MUDs that exceed code.

This decision provides no additional funding or guidance to support CALGreen or TE-related codes and standards development because the Energy Efficiency proceeding, and related efforts, already provide funding

¹⁷¹ Draft TEF at 120-126.

¹⁷² NRDC *et al.* Opening Comments on Draft TEF Chapters 9, 10, and 12 at 15.

¹⁷³ PG&E Opening Comments on Draft TEF Chapters 9, 10, and 12 at 12.

¹⁷⁴ SCE Opening Comments on Draft TEF Chapters 9, 10, and 12 at 9.

¹⁷⁵ For example, the SCE Charge Ready 2 program supports EV charging at new construction MUDs by providing rebates for installations that go above the CALGreen code. (D.20-08-045 at 77-81, Ordering Paragraphs 5, 12, 13.)

sources. Further, the consolidated Energy Efficiency applications proceeding considers parties' comments on how codes and standards advocacy programs should expand their scope to address additional clean energy goals, such as TE and decarbonization; therefore, that proceeding will likely address funding for codes and standards work in areas other than energy efficiency (*e.g.*, EV charging, BTM storage, etc.).¹⁷⁶

3.9.3. Regional Coordination

With local governments continuing to develop their own TE plans, the Draft TEF recommends that the IOUs coordinate with municipalities to develop holistic strategies that address unique regional barriers.¹⁷⁷ Specifically, the Draft TEF recommends that the Commission direct the IOUs to:

1. Coordinate with the state's 35 Air Districts and Metropolitan Planning Organizations when developing their TEPs and TE pilots, programs, and rates, where appropriate;
2. Include metrics to show how their TEPs and TE programs provide incremental air quality improvements related to state and federal air quality goals;
3. Refer to the CEC's Infrastructure Deployment Strategy and state, local, and federal air quality management plans in their program applications to identify and design TE programs that address EV charging infrastructure gaps throughout their service territories;
4. Align with and support other available Air District and Metropolitan Planning Organizations grant funding opportunities to design TE programs that can help the state meet federal air quality standards; and

¹⁷⁶ Application 22-02-005 *et al.*

¹⁷⁷ Draft TEF at 126-30.

5. Designate IOU staff time to participate in the regional EV Coordinating Councils within their service territories.

PG&E supports the overarching recommendation for the IOUs to coordinate with the Air Districts and Metropolitan Planning Organizations in developing the TEPs, while cautioning against a prescriptive coordination requirement that would not account for differences in regional needs or political structures.¹⁷⁸ PG&E also claims that due to resource constraints, PG&E might be unable to work with each local government to develop their TE plans.¹⁷⁹ SCE argues against the Commission creating a strict analytical framework with a set of prioritization criteria and, instead, proposes that the IOUs' TEPs demonstrate that proposed programs address the core goal of overcoming barriers to and accelerating EV adoption.¹⁸⁰ SANDAG urges the Commission to prioritize sites that achieve the greatest air quality improvements and greenhouse gas (GHG) emissions reductions in hard-to-reach markets and underserved areas.¹⁸¹

As we are not adopting the proposed TEPs in this decision, some of the Draft TEF's recommendations on this topic are no longer relevant. Instead, we adopt a streamlined approach to regional coordination. The IOUs shall conduct outreach to Air Districts and Metropolitan Planning Organizations in their service territories to inform them of and request their participation in the development of the Program Handbook. These entities can share details on other funding opportunities and help influence program implementation details (*e.g.*,

¹⁷⁸ PG&E Opening Comments on Draft TEF Chapters 9, 10, and 12 at 13.

¹⁷⁹ *Ibid.*

¹⁸⁰ SCE Opening Comments on Draft TEF Chapters 9, 10, and 12 at 10-11.

¹⁸¹ SANDAG Opening Comments on Draft TEF Chapters 9, 10, and 12 at 4.

rebate levels, outreach tactics, etc.). This outreach can help ensure that the FC1 program addresses regional TE plans, leverages additional outreach support from Air Districts and Metropolitan Planning Organizations, leverages funding sources and incentive stacking, and supports the equitable geographic distribution of charging infrastructure.

Regarding the development of air quality improvement metrics, the FC1 program evaluation, discussed in detail below, addresses this topic. Finally, we expect IOUs to participate in regional EV Coordination Councils within their service territories.

3.9.4. Coordination with CCAs

We address coordination with the CCAs in Section 4 below regarding the Staff Proposal.

3.10. Draft TEF Chapter 11: Additional Policy Guidance

Chapter 11 of the Draft TEF provides recommendations on three disparate topics: (1) vehicle-grid integration (VGI); (2) marketing, education, and outreach (ME&O) issues; and (3) the IOUs' LCFS programs.¹⁸²

3.10.1. VGI

To advance VGI and help ensure that the IOUs integrate incremental load from an increasing number of EVs in a manner that provides grid benefits, the Draft TEF recommends the Commission direct the IOUs to:

1. Ensure their TEPs include strategies to meet the requirements of SB 676;
2. Integrate VGI considerations across all relevant business activities;

¹⁸² Draft TEF at 135-49.

3. Address SB 676 definitions and guidance in any applications;
4. Provide consistent reporting on TOU rate and VGI use case implementation among utility program participants including to help track progress toward meeting SB 676 requirements; and
5. Collaborate with ED staff to hold a workshop(s) aligning VGI strategies within the IOUs' TEPs with SB 676 implementation guidance.¹⁸³

Parties offer varying levels of support for the Draft TEF's VGI recommendations. Electrify America asserts that TE should remain the Commission's primary objective, while pursuing VGI flexibly as a second priority.¹⁸⁴ ATE cautions against complicating or delaying the TEF by including VGI goals and requirements.¹⁸⁵ PG&E and SCE request that the Commission not adopt VGI portfolios until parties complete further research and evaluation, including through pilot programs.¹⁸⁶ SCE also recommends that the Commission align VGI implementation by integrating strategies developed by the Joint Agency VGI Working Group¹⁸⁷ convened in 2019 into the TEF.¹⁸⁸ AEE

¹⁸³ Draft TEF at 139-40.

¹⁸⁴ Electrify America Opening Comments on Draft TEF Chapters 6 and 11 at 6; Electrify America Reply Comments on Draft TEF Chapters 6 and 11 at 4-5.

¹⁸⁵ ATE Reply Comments on Draft TEF Chapters 6 and 11 at 7.

¹⁸⁶ PG&E Reply Comments on Draft TEF Chapters 6 and 11 at 2; SCE Reply Comments on Draft TEF Chapters 6 and 11 at 5-6.

¹⁸⁷ Gridworks, Vehicle Grid Integration Working Group, <https://gridworks.org/initiatives/vehicle-grid-integrationwg/>.

¹⁸⁸ SCE Opening Comments on Draft TEF Chapters 6 and 11 at 5.

recommends, and the Joint Commenters support, keeping VGI efforts standalone and not relying on TEF/TEP development to avoid undue delay.¹⁸⁹

EDF argues the IOUs should make progress on VGI before the Commission approves the TEPs, including developing requirements for standards, equity, pilots, resiliency, and submetering.¹⁹⁰ ChargePoint recommends advancing SB 676 implementation in parallel with the TEF.¹⁹¹ GPI requests that the Commission require the IOUs to address SB 676 in their draft TEPs as soon as 2024.¹⁹² UCAN recommends that VGI be the “primary focus” of the IOUs’ TEPs, and consequently the Commission should provide VGI guidance to the utilities prior to the first TEP cycle, pursuant to SB 676.¹⁹³ The Joint Parties assert that the Commission should expeditiously issue a decision directing the IOUs to develop VGI portfolios designed to meet the requirements of SB 676.¹⁹⁴ SDG&E advocates for selecting SB 676-related metrics cautiously, given the nascency of the EV market and the lack of consensus on the costs of VGI use cases.¹⁹⁵ VGIC urges the Commission to issue VGI guidance containing a model VGI portfolio and a directive for the IOUs to implement portfolios beginning in 2021.¹⁹⁶

¹⁸⁹ AEE Opening Comments on Draft TEF Chapters 6 and 11 at 3; Reply Comments on Draft TEF Chapters 6 and 11 at 2-3.

¹⁹⁰ EDF Opening Comments on Draft TEF Chapters 6 and 11 at 10.

¹⁹¹ ChargePoint Opening Comments on Draft TEF Chapters 6 and 11 at 6.

¹⁹² GPI Opening Comments on Draft TEF Chapters 6 and 11 at 4.

¹⁹³ UCAN Opening Comments on Draft TEF Chapters 6 and 11 at 5.

¹⁹⁴ Joint Parties Opening Comments on Draft TEF Chapters 6 and 11 at 9.

¹⁹⁵ SDG&E Opening Comments on Draft TEF Chapters 6 and 11 at 11.

¹⁹⁶ VGIC Opening Comments on Draft TEF Chapters 6 and 11 at 3.

We take these comments into consideration in pursuing VGI strategies. A December 2020 decision adopts a definition of VGI and guidance for the IOUs to address SB 676 requirements in any future applications.¹⁹⁷ In Section 4.3.8.1 of this decision, we provide further guidance and vision to advance VGI efforts beyond D.20-12-029.

3.10.2. ME&O

To establish clear requirements for the IOUs' TE ME&O campaigns, the Draft TEF recommends that the Commission direct the IOUs to:

1. Focus TE-related ME&O efforts on building awareness and participation interest for individual IOU programs;
2. Develop ME&O plans within their TEPs, including focused outreach targeting Environmental and Social Justice communities and collaboration with CBOs, Environmental Justice organizations, and local governments;
3. Propose a single budget and overarching ME&O plans within their TEPs focused on EV rates, EV charging behavior, and the electric grid; and
4. Work with ED staff and stakeholders to develop portfolio-wide and program-specific ME&O targets and metrics.¹⁹⁸

In comments, some parties advocate for the IOUs playing a broad role in ME&O efforts. ATE recommends that the IOUs play a leading role in ME&O efforts.¹⁹⁹ SCE asserts that the IOUs are able to perform broad ME&O coordinated with other ME&O efforts.²⁰⁰ ChargePoint argues for the IOUs playing an active role in educating customers about the benefits of EVs,

¹⁹⁷ D.20-12-029.

¹⁹⁸ Draft TEF at 145-46.

¹⁹⁹ ATE Reply Comments on Draft TEF Chapters 6 and 11 at 9.

²⁰⁰ SCE Opening Comments on Draft TEF Chapters 6 and 11 at 5.

encouraging utilization of EV charging stations, and engaging with prospective site hosts.²⁰¹ The Joint Parties and SDG&E recommend the IOUs leverage their core competencies and customer relationships to play a broad role in ME&O.²⁰² GPI asserts that ME&O efforts are critical to increase charger utilization and recommends the IOUs pursue a collaborative ME&O strategy with CBOs, customers, and EVSPs.²⁰³ EDF and the Joint Commenters recommend the IOUs support efforts to disseminate information about EVs and engage in a collaborative approach to ME&O.²⁰⁴ PG&E asserts that the IOUs should be able to propose program-specific ME&O as well as overarching TE ME&O.²⁰⁵ Plug In America recommends increasing the investment in ME&O and not limiting the IOUs' role.²⁰⁶ CASMU supports the IOUs conducting ME&O rather than providing a budget for a third party to complete the work.²⁰⁷

Other parties, instead, argue for narrowing the IOUs' ME&O role. Cal Advocates urges the Commission not to authorize the IOUs to adopt broad EV awareness programs, arguing that such programs would duplicate existing TE ME&O efforts.²⁰⁸ Clean Energy Fuels recommends restricting utility ME&O

²⁰¹ ChargePoint Opening Comments on Draft TEF Chapters 6 and 11 at 8.

²⁰² Joint Parties Opening Comments on Draft TEF Chapters 6 and 11 at 10; SDG&E Opening Comments on Draft TEF Chapters 6 and 11 at 13-15.

²⁰³ GPI Reply Comments on Draft TEF Chapters 6 and 11 at 4-5.

²⁰⁴ EDF Opening Comments on Draft TEF Chapters 6 and 11 at 14; EDF Reply Comments on Draft TEF Chapters 6 and 11 at 9-10; Joint Commenters Reply Comments on Draft TEF Chapters 6 and 11 at 4.

²⁰⁵ PG&E Opening Comments on Draft TEF Chapters 6 and 11 at 15.

²⁰⁶ Plug In America Opening Comments on Draft TEF Chapters 6 and 11 at 6.

²⁰⁷ CASMU Opening Comments on Draft TEF Chapters 6 and 11 at 4.

²⁰⁸ Cal Advocates Reply Comments on Draft TEF Chapters 6 and 11 at 1-3.

efforts to individual IOU programs and prohibiting the IOUs from using ratepayer funds for general EV marketing.²⁰⁹ Electrify America asserts the IOUs should defer to third parties for broad EV awareness campaigns.²¹⁰

Parties also comment on the need to promote collaboration within ME&O efforts. SBUA recommends the Commission direct the IOUs to engage with small businesses through improved ME&O campaigns because utility TE ME&O activities have generally overlooked small businesses, which constitute the majority of businesses in California and provide roughly half of the state's jobs.²¹¹ SANDAG urges the Commission to encourage the IOUs to develop public-private partnerships to advance ME&O efforts.²¹² VGIC similarly asserts that EVSPs could provide a valuable avenue for direct customer education on rates, programs, and ME&O focused on VGI.²¹³ ChargePoint also recommends that IOU ME&O efforts leverage outreach by EVSPs and vendors to educate customers (*e.g.*, IOUs sponsoring joint webinars with EVSPs and vendors).²¹⁴

Section 4.3.4 of this decision provides direction for ME&O activities, but we make certain findings here based on feedback received on the Draft TEF's ME&O proposal. We agree that ME&O efforts are critical to EV charger utilization and find that post-energization ME&O may help to increase charger utilization rates. We discuss metrics to track ME&O's efficacy in increasing

²⁰⁹ Clean Energy Fuels Opening Comments on Draft TEF Chapters 6 and 11 at 4.

²¹⁰ Electrify America Opening Comments on Draft TEF Chapters 6 and 11 at 8.

²¹¹ SBUA Opening Comments on Draft TEF Chapters 6 and 11 at 8-13.

²¹² SANDAG Opening Comments on Draft TEF Chapters 6 and 11 at 4.

²¹³ VGIC Reply Comments on Draft TEF Chapters 6 and 11 at 9.

²¹⁴ ChargePoint Opening Comments on Draft TEF Chapters 6 and 11 at 8.

charger utilization in the discussion on the FC1 Program Handbook below. In response to several parties' support of narrowing the IOU role on ME&O to ensure ratepayer funds do not duplicate broad EV awareness campaigns, we find that the FC1 program should not replicate statewide efforts promoting EV awareness, including the \$5 million program to promote ZEV awareness funded by the Governor's Office of Business and Economic Development.

We also agree with parties' arguments that public-private partnerships can advance ME&O efforts; therefore, we find that the ME&O performed within the FC1 rebate program would benefit from public-private partnerships. Finally, we agree that small businesses and small fleets have been overlooked in TE ME&O activities, and we therefore find that the FC1 rebate program's ME&O efforts should target small businesses as their participation is needed to achieve California's EV adoption goals.

3.10.3. IOU LCFS Programs

The Draft TEF proposes guidance on how the IOUs would spend the portion of the LCFS credits known as "holdback" credits or funds.

Since the issuance of the Draft TEF, D.20-12-027 authorized the large utilities to spend the holdback funds or credits in accordance with guidance and regulations established by the CARB, as well as additional guidance outlined in that decision. The decision also directed the large utilities to file Tier 2 Advice Letters with plans for the expenditure of these funds. An ED disposition letter approved PG&E's implementation plan on December 24, 2021, and the Commission issued Resolution E-5236 on November 4, 2022, approving SCE's implementation plan with modifications. SDG&E's request is under review.

3.11. Draft TEF Chapter 12: Emerging Transportation Trends

Chapter 12 of the Draft TEF contains recommendations for how the IOUs should approach three emerging transportation sectors: Transportation Network Companies (TNCs), micromobility (*e.g.*, electric bikes and scooters), and autonomous electric vehicles (AEVs).²¹⁵

3.11.1. Transportation Network Companies

The Draft TEF includes several recommendations and questions related to TNCs' role within the Commission's TE activities.²¹⁶ For example, the Draft TEF recommends that if the IOUs propose a program involving TNCs, the IOUs should secure TNC co-funding or substantial fund matching. The Draft TEF further notes the Commission is coordinating with CARB to implement the California Clean Miles Standard pursuant to SB 1014 (Skinner, 2018), which requires TNCs to meet annual GHG emission targets and goals beginning in 2023.²¹⁷ Additionally, the Commission now has an open proceeding to implement the California Clean Miles Standard.²¹⁸

Parties' comments address ED's TNC recommendations and other aspects of the Commission's role related to TNCs and TE. Uber argues that the Commission should wait to take action until CARB finalizes its Clean Miles Standard regulation.²¹⁹ ChargePoint states that rather than establishing a

²¹⁵ Draft TEF at 150.

²¹⁶ Draft TEF at 150-52.

²¹⁷ See CARB, Clean Miles Standard Regulation, <https://ww2.arb.ca.gov/rulemaking/2021/cleanmilesstandard>.

²¹⁸ R.21-11-014.

²¹⁹ Uber Opening Comments on Draft TEF Chapters 9, 10, and 12 at 3.

minimum contribution mechanism, the TEF should support collaboration and coordination between IOUs and TNCs to ensure that IOU TE programs complement and encourage TNC investment in EVs.²²⁰ EDF notes that load associated with increasingly electrifying TNCs will quickly be problematic if not well managed.²²¹ The Joint Parties argue that TNC companies should provide substantial matching or co-funding and be required to share transparent TNC data with the IOUs and their research partners to help inform IOU program design and strategic planning.²²²

We decline to adopt the Draft TEF's recommendations related to TNCs in this decision. We are addressing issues related to TE and TNCs in the proceeding implementing the Clean Miles Standard. We should also note that several of the types of rebates that will be available under the FC1 program, including those for charging at MUDs and for public charging, can fund chargers that will be available to TNC drivers. Therefore, no additional direction on this topic is needed here.

3.11.2. Micromobility

Parties provide limited comments on the Draft TEF's recommendations related to micromobility, such as requiring coordination to determine the grid impact of charging micromobility equipment and ensure equipment charging utilizes the correct electric tariff.²²³ The IOUs caution that they do not have authority over the micromobility companies' charging providers and are not

²²⁰ ChargePoint Opening Comments on Draft TEF Chapters 9, 10, and 12 at 11.

²²¹ EDF Opening Comments on Draft TEF Chapters 9, 10, and 12 at 20.

²²² Joint Parties Opening Comments on Draft TEF Chapters 9, 10, and 12 at 17.

²²³ Draft TEF at 152-56.

responsible for policing or enforcing micromobility companies' actions.²²⁴ Uber generally opposes regulatory action and IOU intervention in the micromobility market, arguing that it is preemptive and will risk chilling the nascent market, interfering with innovation, and confusing the IOUs' near- and mid-term TE efforts.²²⁵

The Commission takes no position on these issues in this decision. The Commission may address matters related to micromobility in a future proceeding.

3.11.3. Autonomous EVs

Few parties provide comments on the Draft TEF's recommendations related to autonomous EVs, including direction for the IOUs to coordinate with the appropriate Commission staff to track autonomous EV deployments and trends and describe how the development and growth of autonomous EVs could impact future TE infrastructure needs.²²⁶ PG&E urges the Commission not to require tracking of autonomous EV deployment and trends.²²⁷ Cal Advocates supports requiring the IOUs to track the progress of autonomous EVs but recommends minimizing IOU-staff time spent on tracking efforts until more considerable progress on technology development and deployment occurs.²²⁸

²²⁴ PG&E Opening Comments on Draft TEF Chapters 9, 10, and 12 at 23; SCE Opening Comments on Draft TEF Chapters 9, 10, and 12 at 14.

²²⁵ Uber Opening Comments on Draft TEF Chapters 9, 10, and 12 at 4.

²²⁶ Draft TEF at 156-57.

²²⁷ PG&E Opening Comments on Draft TEF Chapters 9, 10, and 12 at 24.

²²⁸ Cal Advocates Opening Comments on Draft TEF Chapters 9, 10, and 12 at 20.

SANDAG supports allowing the IOUs to file emerging technology feasibility studies and pilots in their TEPs and TE applications.²²⁹

We decline to adopt any requirements related to autonomous EVs in this decision. The Commission's Transportation Licensing and Analysis Branch addresses all issues related to autonomous EVs, including the implementation of the Commission's decision authorizing deployment of autonomous vehicle passenger service in R.12-12-011.²³⁰

4. Staff Proposal

This section discusses and resolves issues presented in the Staff Proposal.

4.1. Staff Proposal Section 3: Proposed Changes to the Draft TEF

With the policy and market landscape having changed significantly since the issuance of the Draft TEF, the Staff Proposal recommends a modified approach to accelerating TE.²³¹ The Staff Proposal only pertains to BTM TE investments because the new EV Infrastructure Rules – constituting a major policy shift since the issuance of the Draft TEF – address utility-side TE investments. Considering parties' comments on the Draft TEF, the IOUs' implementation of Commission-approved programs, additional TE funding allocations, and the state's EV charging needs, the Staff Proposal properly updates the following areas of the Draft TEF, discussed in detail below:

²²⁹ SANDAG Opening Comments on Draft TEF Chapters 9, 10, and 12 at 5.

²³⁰ D.20-11-046.

²³¹ Staff Proposal at 3-5.

timelines, program guidance, rebate structure, budget, scope, implementation process, and administration.²³²

In particular, the Staff Proposal shifts away from the Draft TEF's proposed ten-year TEP planning approach and recommends adopting a funding cycle approach to TE moving forward. The simplified funding cycle structure would establish and reevaluate the nature of and need for ratepayer support of BTM TE activities on a periodic basis.

The Staff Proposal recommends that Funding Cycle 1 (FC1) begin in 2025 to allow for exhaustion of currently approved TE funding. FC1 would consist of a statewide rebate program for BTM make-readies and EVSE, as well as ME&O and TA programs. The FC1 rebate program would provide support to MUDs, MUD-serving public locations, and MDHD sectors. As proposed, Funding Cycle 2 (FC2) would start in 2030, after FC1 completes at the end of 2029, and would be based on an assessment of FC1, and analysis of the policy and market needs.

Prior to the start of FC1, the Staff Proposal recommends that the current array of TE programs, pending applications and ALs, and forthcoming near-term priority proposals be grouped together as Funding Cycle 0 (FC0). This is the culmination of programs and funding opportunities initiated following the passage of SB 350 and as such represents the Commission's initial approach that this proceeding and the Draft TEF sought to evolve beyond.

4.1.1. Improving Administrative Efficiency

To address the current ad hoc approach the IOUs have pursued to address the state's TE needs, the Draft TEF intended to establish a structured ten-year

²³² *Id.* at 5-8.

planning process that would reduce the time and resources needed to resolve controversial issues that were previously addressed on a case-by-case basis. The Draft TEF's goal was to streamline the process and resources needed to establish and review TE funding, avoid inconsistency in program offerings and policy across IOU territories, decrease administrative cost and burden of each IOU administering numerous separate programs, and minimize resources associated with participation in numerous proceedings.

The Draft TEF recommends that the IOUs file ten-year forward-looking TEPs. The Staff Proposal provides a simplified five-year funding cycle approach that would establish and reevaluate the nature of and need for ratepayer support of BTM TE activities on a periodic basis. IOU TE programs that support BTM infrastructure serve as a critical accelerant of TE in the state, but there is a need to move beyond the current piecemeal application and approval processes. We therefore adopt the more nimble and focused funding cycle approach recommended in the Staff Proposal to account for party feedback on the Draft TEF discussed above, updated direction from the Legislature, recent Commission decisions and resolutions, and an evolving TE policy and market landscape.²³³

4.1.2. Role of IOUs

The Staff Proposal asserts that the "IOUs are aware of and executing on their core responsibility to serve as both the infrastructure and fuel providers for one of the most ambitious technological transitions in history and are providing

²³³ See, e.g., AB 841; Res. E-5167; Res. E-5168.

essential customer support in the process.”²³⁴ In comments on the Role of the IOUs within Chapter 4 of the Draft TEF, PG&E argues that “[i]t is important for utilities to provide appropriate broad and targeted support for the TE market within the context of their core capabilities and the roles they play in the wider TE ecosystem. These capabilities include infrastructure, developing appropriate rates for electric fueling, customer education, and programs. . . . PG&E supports the TE market and customers but cannot drive demand for it.”²³⁵

The IOUs are executing their core responsibilities to serve as both the infrastructure and fuel providers to support TE. With the passage of AB 841 and the resulting EV Infrastructure Rules governing recovery of utility costs related utility-side distribution infrastructure investments that support EV charging, the scope and magnitude of the IOUs’ role is clear. We agree with the Staff Proposal that the IOUs’ core role in TE is supporting and enabling the TE market by acting as utility-side infrastructure and fuel providers. This includes providing transparent and current data to state agencies and the public on grid capacity to support TE growth. If the IOUs properly perform their core responsibilities of supporting utility-side infrastructure and serving as fuel providers, they will accelerate TE and customer investment by providing reliable infrastructure, rates, and technical expertise.

Given the immensity and importance of the core IOU responsibilities, the role of IOU ratepayers in subsidizing BTM TE infrastructure requires careful and ongoing consideration. Although indefinite ratepayer support may not be

²³⁴ Staff Proposal at 10.

²³⁵ PG&E Opening Comments on Draft TEF Chapters 2-5 at 8.

warranted, we find merit in authorizing ratepayer funding for TE investments through FC1. The CEC's initial AB 2127 Charging Assessment demonstrates that there is significant need for more charging infrastructure in the near-term, and we find it reasonable to establish a role for ratepayers in supporting this charger buildout in the near-term. While recognizing the significant need for TE investment and the availability of non-ratepayer funding sources, we must act prudently in the context of very significant ratepayer pressures impacting the affordability of utility services. Therefore, additional analysis – provided in part through the FC1 evaluation – and stakeholder feedback is needed before the Commission considers authorizing BTM TE funding beyond FC1.

4.2. Staff Proposal Section 4: Funding Cycle Proposal

4.2.1. Five-Year Funding Cycle Structure

The Staff Proposal includes a proposal for a five-year funding cycle structure for FC1, which will begin January 1, 2025, and end December 31, 2029, to allow for the exhaustion of currently approved TE funding. ED staff intends for the proposed funding cycle structure to provide the Commission and parties a simplified approach to determine the continued need for ratepayer support of BTM TE activities. PG&E and ChargePoint support the five-year funding cycle rather than a ten-year cycle.²³⁶ Electrify America supports the five-year funding cycle, but requests that the Commission clarify that “other policy prerogatives and regulatory requirements and rate designs may be revised within this period.”²³⁷

²³⁶ PG&E Comments on Staff Proposal at 3; ChargePoint Comments on Staff Proposal at 6.

²³⁷ Electrify America Opening Comments on Staff Proposal at 7.

NDC and ATE support the five-year funding cycle provided there is a Mid-Cycle Assessment within FC1 to evaluate the program and refine the rebate program priorities.²³⁸ GPI suggests two different timelines: (1) five-year funding cycles for IOU ratepayer investment and (2) ten-year strategies for meeting TE goals, as described in the Draft TEF via the IOU TE plans or TEPs, updated every five years.²³⁹

We adopt a five-year funding cycle structure, finding it an appropriate period over which to authorize investments in TE to stimulate the market and foster private investment from 2025 through 2029. Our adoption of a five-year funding cycle provides clarity and certainty as to policy and program design that is easy to understand for customers and stakeholders. It will also provide a reasonable timeframe for the periodic evaluation of BTM TE investments. Furthermore, there is widespread support for this funding cycle approach and the five-year time period.

4.2.2. Extension of Current IOU Programs in FC0

The Staff Proposal proposes that FC0 encompasses the current array of programs, pending applications and Advice Letters, and forthcoming near-term priority programs. In other words, FC0 is the culmination of all programs and funding opportunities that were initiated following the passage of SB 350, and as such, represents the Commission's initial approach that this proceeding and the Draft TEF sought to evolve beyond. Together, the portfolio of approved programs to date represents approximately \$1.48 billion of remaining ratepayer

²³⁸ ATE Comments on Staff Proposal at 4; NDC Comments on Staff Proposal at 3.

²³⁹ GPI Opening Comments on Staff Proposal at 5.

funding to be exhausted. The Staff Proposal requests comment as to whether the near-term priorities decision's authority for extension of current IOU programs adequately addresses potential gaps in funding within the remainder of the FC0 timeline.

Several parties agree that the near-term priorities decision's authority is adequate during FC0.²⁴⁰ ATE agrees, but contends that since it is currently unknown if IOU programs in FC0 have sufficient funding to keep up with the need through 2025, the Commission should allow IOUs to use the flexibility mechanisms in the near-term priorities decision for the traditional application pathway and program extensions to 2025.²⁴¹ Joint Commenters generally agree that the current programs and mechanisms are adequate, but request assurances that there are no explicit or implied limits to what the IOUs may request during FC0 given the rapidly changing market.²⁴² NDC also agrees, but emphasizes that it is more likely that the Commission will have to address the issue of unspent funds rather than funding gaps due to the existing substantial amount of unspent funding.²⁴³

Several parties indicate that the Commission should allow the IOUs to propose additional programs and/or pilots during FC1, if merited, to meet

²⁴⁰ SCE Opening Comments on Staff Proposal at 14.

²⁴¹ ATE Opening Comments on Staff Proposal at 3.

²⁴² Joint Commenters Opening Comments on Staff Proposal at 3.

²⁴³ NDC Opening Comments on Staff Proposal at 2.

California's clean transportation goals.²⁴⁴ PG&E contends that IOUs need the ability to expand VGI pilots.²⁴⁵ The Joint Parties and ChargePoint assert that the Commission should allow IOUs to submit complementary programs during FC1 similar to the near-term priority decision's programs.²⁴⁶ The Joint Parties and PG&E indicate that the Commission must approve programs if they are consistent with the criteria set forth in SB 350.²⁴⁷ Several parties advocate for an extension of the near-term priorities decision's framework to FC1.²⁴⁸

We find that the recently adopted near-term priorities decision adequately addresses IOU funding opportunities for the remainder of FC0. We do not find it necessary to extend the near-term priorities decision authorization to allow for Advice Letters and expedited applications through FC1. The near-term priorities decision addresses critical near-term priorities in the period prior to the adoption

²⁴⁴ ChargePoint Opening Comments on Staff Proposal at 4; Weave Grid Opening Comments on Staff Proposal at 5; PG&E Opening Comments on Staff Proposal at 12; SDG&E Opening Comments on Staff Proposal at 12; Fermata Opening Comments on Staff Proposal at 10; EDF Opening Comments on Staff Proposal at 2; Joint Commenters Opening Comments on Staff Proposal at 3; GPI Opening Comments on Staff Proposal at 3.

²⁴⁵ PG&E Opening Comments on Staff Proposal at 5.

²⁴⁶ Joint Parties Opening Comments on Staff Proposal at 2; ChargePoint Opening Comments on Staff Proposal at 5.

²⁴⁷ Joint Parties Opening Comments on Staff Proposal at 5; PG&E Opening Comments on Staff Proposal at 7.

²⁴⁸ Weave Grid Opening Comments on Staff Proposal at 8; PG&E Opening Comments on Staff Proposal at 11; SCE Opening Comments on Staff Proposal at 11.

of further long-term TEF guidance.²⁴⁹ Given that focus, the pathways and guidance authorized in that decision are no longer relevant beyond FC0.

4.2.3. Transition Between FC0 and FC1

The Staff Proposal highlights that the IOUs collectively have approximately \$1.48 billion in unspent Commission-authorized funding, which is nearly five times as much as the IOUs have spent since 2016. As the Commission seeks to have FC1 begin in 2025, which intends to create a simple, statewide approach to ratepayer funded TE investments, the Staff Proposal proposes pathways to wind down FC0 program implementation and requests comment on: (1) how the Commission should structure the transition between FC0 and FC1 and (2) how to deal with any FC0 funding remaining at the beginning of FC1.

Several parties call for the completion or near completion of FC0 programs prior to FC1 programs commencing. NDC argues for the completion of all current FC0 programs prior to FC1 so the data from FC0 program can inform FC1 policies and priorities.²⁵⁰ NDC indicates that such a requirement is necessary to protect ratepayers. NDC contends that each FC0 program should have a specific justification to continue beyond 2025 and be addressed through the

²⁴⁹ D.21-07-028 at 24-25 (“In light of the overwhelming interest of the parties in maintaining flexibility for Electrical Corporation TE investment proposals *before the approval of a TEP*, and the urgent need to meet the state's TE policy goals *by 2025*, this decision clarifies that Electrical Corporations may file three forms of *near-term* requests for TE investments.” (emphasis added)).

²⁵⁰ NDC Opening Comments on Staff Proposal at 2.

authorizing decision.²⁵¹ Cal Advocates asserts that FC1 should start just prior to equivalent FC0 programs exhausting their budgets.²⁵²

ATE supports a grace period to wind down FC0 that provides an overlap in program implementation and spending. ATE calls for the grace period to be at least two years with the IOUs allowed to request a longer transition period depending on the use case.²⁵³ BNSF also supports a two-year grace period, citing the potential for supply chain issues to cause delay.²⁵⁴ GPI recommends a default one-year grace period with the option to submit a request for an additional one-year extension to wind down FC0.²⁵⁵

Several parties support allowing all TE pilots and programs approved in FC0 to run until the approved budgets are exhausted.²⁵⁶ SDG&E asserts that California's TE goals will benefit from some overlap between existing utility FC0 programs and the new FC1 program due to the necessary ramping up period of the rebate program.²⁵⁷ SCE argues that adopting a process that requires SCE to end its TE programs early would essentially be retroactive ratemaking because it would result in changes to a previous Commission decision.²⁵⁸

²⁵¹ *Ibid.*

²⁵² Cal Advocates Opening Comments on Staff Proposal at 7.

²⁵³ ATE Opening Comments on Staff Proposal at 3.

²⁵⁴ BNSF Opening Comments on Staff Proposal at 3.

²⁵⁵ GPI Opening Comments on Staff Proposal at 4.

²⁵⁶ ChargePoint Opening Comments on Staff Proposal at 4-5; PG&E Opening Comments on Staff Proposal at 2; SCE Opening Comments on Staff Proposal at 15; SDG&E Opening Comments on Staff Proposal at 9; EDF Opening Comments on Staff Proposal at 18.

²⁵⁷ SDG&E Opening Comments on Staff Proposal at 10.

²⁵⁸ SCE Opening Comments on Staff Proposal at 16.

The Joint Commenters and the City of Long Beach support rolling over any approved unexpended funding for FC0 programs to FC1.²⁵⁹ Several parties stress that the Commission should avoid the eligibility gaps and start/stop issues that have characterized some previous IOU programs and that a hard stop on program implementation and funding would undermine program continuity and a positive customer experience.²⁶⁰

We agree with the need of an overlap between FC0 and FC1 to allow for a grace period while FC1 ramps up and FC0 programs ramp down. We adopt a default two-year grace period for FC0 to overlap with FC1 in order to allow the IOUs to spend previously authorized FC0 funds – meaning the IOUs shall not accept customer applications or agreements within FC0 programs after December 31, 2026, unless the governing program decision directs another end date. This grace period provides sufficient flexibility to allow for the effective completion of FC0 programs and allocation of the associated funding.

As discussed in Section 3.3 above, D.21-07-028 prevents gaps in program offerings between the issuance of the Draft TEF and a TEF decision. Any near-term priority expedited application or Advice Letter filed after the issuance of this decision shall be filed no later than May 31, 2023, and the IOUs must not accept customer applications or agreements within any approved near-term priority program after December 31, 2026. This deadline does not impact the general authorization to file applications under SB 350.

²⁵⁹ Joint Commenters Opening Comments on Staff Proposal at 2; City of Long Beach Opening Comments on Staff Proposal at 5.

²⁶⁰ ChargePoint Opening Comments on Staff Proposal at 4; PG&E Opening Comments on Staff Proposal at 7; Weave Grid Opening Comments on Staff Proposal at 3.

4.2.4. Mid-Cycle Assessment

The Staff Proposal includes a Mid-Cycle Assessment of the funding allocation to ensure the investments sufficiently serve the market and contribute to state goals.

SCE, ATE, and ChargePoint support a Mid-Cycle Assessment as appropriate.²⁶¹ Several parties contend that a single Mid-Cycle Assessment is inadequate. Cal Advocates supports an annual assessment, while GPI supports an assessment every two years.²⁶² EDF indicates that a Mid-Cycle Assessment should be the minimum interval and is supportive of more frequent assessments.²⁶³ NDC calls for an assessment at the two-year mark and another assessment at the 4.5-year mark.²⁶⁴ Tesla supports two Mid-Cycle Assessments.²⁶⁵ PG&E advocates for including a process to assess and adjust funding.²⁶⁶

We find that a single Mid-Cycle Assessment in 2027, the third year of FC1, is appropriate to ensure flexibility in program implementation, sufficient review of FC1, and confirmation of whether investments are adequately serving the market and contributing to state goals. We also adopt an annual review to allow for program adjustments based on feedback from annual roundtables. This annual adjustment process shall be initiated via Tier 2 Advice Letter following

²⁶¹ SCE Opening Comments on Staff Proposal at 16; ATE Opening Comments on Staff Proposal at 4; ChargePoint Opening Comments on Staff Proposal at 6.

²⁶² Cal Advocates Opening Comments on Staff Proposal at 8; GPI Opening Comments on Staff Proposal at 5.

²⁶³ EDF Opening Comments on Staff Proposal at 17.

²⁶⁴ NDC Opening Comments on Staff Proposal at 4.

²⁶⁵ Tesla Opening Comments on Staff Proposal at 7.

²⁶⁶ PG&E Opening Comments on Staff Proposal at 3.

the roundtable. We find that the combination of these two processes provides sufficient flexibility for the FC1 program, while not overburdening stakeholders, the IOUs, and the Program Administrator.

The Commission will initiate the Mid-Cycle Assessment in Quarter 1 of 2027 to assess the FC1 program. The Commission will issue a ruling with questions for stakeholders regarding any potential necessary modifications to the FC1 program, based on lessons learned from implementation, evaluation results, overall market needs assessment, and the continued role of ratepayer support for BTM infrastructure.

The scope of the Mid-Cycle Assessment will include, but is not limited to, the following issues:

1. Whether to modify the Program Administrator contract, including a partial or full extension until end of 2029;
2. Whether to modify the Program Administrator, including whether to direct ratepayer funds to the CEC for administration;
3. Whether to adjust the allocation of funding among MDHD, LD, and allowable use cases;
4. Whether to authorize the IOUs to collect the remaining 40 percent of the authorized \$1 billion budget if additional funding, based on the criteria established in this decision, is necessary;
5. Whether to modify the IOUs' funding contribution levels and changes to funding contribution methodology;
6. Whether to modify or eliminate any FC1 program elements (*i.e.*, ME&O, Technical Assistance, rebates);
7. Whether to modify the underserved community funding levels based on review of data on underserved community outreach and adoption; and
8. Whether to modify the underserved community requirements, including changes to the allocation – any

underserved community requirement changes should be based on an evaluation of deployment, outreach, and equity data.

We anticipate that any FC1 program modifications resulting from the Mid-Cycle Assessment will take effect in January 2028. The following three key areas of evaluation for the Mid-Cycle Assessment shall help determine whether FC1 should continue beyond the mid-cycle point, and, if so, what modifications are needed:

1. **Program and Process Evaluation** – how well is the Program Administrator implementing the FC1 program?

Based on the findings of the evaluations, assessments, and Commission-led audit, discussed later in this decision, the Commission will assess progress of the FC1 program toward targets adopted in the Program Handbook decision, reasonableness of expenditures, and effectiveness of program design in meeting program objectives.

2. **Market Progress** – how has the market and available funding for EV charging progressed by mid-cycle; has the need for ratepayer funding for BTM changed in any way; and are the identified target customer segments still the appropriate ones for ratepayer funding?

Via funding through the ED-managed evaluation budget, ED staff and technical consultants should carry out at least one study, to be completed by the end of the second program year to assess funding availability and market needs, including but not limited to:

- Assessment of all public funding available to support FC1 target sectors or any new sectors;
- Assessment of the FC1 target sectors along with any new sectors, number of chargers deployed to date based on CEC's AB 2127 charging assessments, planned charger deployments, IEPR projections, and remaining FC0 and FC1 program funding; and

- Additional market performance data available to inform continued ratepayer support for BTM TE infrastructure.
3. **Rate Pressure** – how does the continuation of FC1 impact affordability of rates?

Through the Mid-Cycle Assessment process, ED staff should develop a rate impact assessment based on the impact on rates of all TE related costs – inclusive of FC0 programs, EV Infrastructure Rules, and the ongoing FC1 program – using applicable affordability metrics (*i.e.*, affordability ratio), as discussed in the Commission’s affordability proceeding. D.20-07-032, the Phase I decision in the affordability proceeding,²⁶⁷ sought to “apply the affordability metrics in ratesetting proceedings in as widespread a manner as the current methodology allows.” The subsequent Phase 2 decision, D.22-08-023, further refined the affordability metrics and established a methodology for forecasting future values of the affordability ratio metric for a set of hypothetical essential usage bills, thus allowing for measurement of affordability impacts in future years based on expected rate and bill impacts. As part of the analysis, ED staff should consider the increase in electricity sales TE may create and how that may factor into overall impact on electric rates. The TE affordability assessment should consider market needs and whether there are other sources of funding that would reduce or eliminate the need for ratepayer subsidies of BTM TE infrastructure.

The Commission will use the findings of this process to inform a future decision to determine if the program should be extended for an additional two years, and if so, provide recommendations for improvements.

²⁶⁷ R.18-07-006.

4.2.5. Annual Roundtables

The Staff Proposal further recommends the IOUs and Program Administrator host annual roundtables to review the program's efficacy in addressing equity, with participation from stakeholders, including CBOs, environmental justice organizations, tribal communities, Commission representatives, CCAs, the Disadvantaged Communities Advisory Group, and other stakeholders. Based on party feedback and program data presented during the roundtable, the Staff Proposal recommends the Program Administrator shall propose any necessary modifications to the program to address outstanding equity concerns.

Cal Advocates and UCAN support roundtables, indicating that an annual roundtable involving agencies such as CEC and CARB, stakeholders, CBOs, and the IOUs, will be an essential part of evaluating the program, especially with regard to equity.²⁶⁸ ATE indicates a mid-cycle evaluation during FC1 will be sufficient and appropriate.²⁶⁹ NDC comments that annual reviews with mechanisms to quickly implement program modifications would be beneficial to help measure and achieve the actual public benefits anticipated from the investments.²⁷⁰

Based on party comment, we adopt a single annual roundtable, as opposed to separate data- and equity-focused roundtables. The annual roundtables shall occur in July of each year of FC1 and will be led by the IOUs and the

²⁶⁸ Cal Advocates Opening Comments on Staff Proposal at 17; UCAN Opening Comments on Staff Proposal at 6.

²⁶⁹ ATE Opening Comments on Staff Proposal at 9.

²⁷⁰ NDC Opening Comments on Staff Proposal at 18.

Program Administrator, with ED staff input on the agenda. The scope of the roundtables shall include stakeholder input and review of program data and evaluation results to inform any proposed modifications to the Program Handbook, such as adjustments to the rebate levels and changes to better reach underserved communities. The roundtables should emphasize review of equity considerations. The IOUs shall file a Tier 2 Advice Letter by August 1 of each year of FC1 with the proposed modifications to the Program Handbook, and those modifications shall take effect on January 1 the following year.

4.2.6. Development of FC2 Guidance

The Staff Proposal requests comments as to whether the Commission should define a timeline for development of FC2 guidance at the same time as the adoption of FC1 or wait until a later time.

PG&E supports development of FC2 guidance one year before the end of FC1, while ChargePoint suggests after the FC1 Mid-Cycle Assessment.²⁷¹ NDC stresses the need for evaluation of FC0 and FC1 prior to the development of FC2, which it recommends should occur in the last year of FC1.²⁷² The Joint Commenters assert that development of guidance for FC2 should begin at least 18 months prior to its start.²⁷³ ATE and GPI support adoption of FC2 guidance

²⁷¹ PG&E Opening Comments on Staff Proposal at 3; ChargePoint Opening Comments on Staff Proposal at 5.

²⁷² NDC Opening Comments on Staff Proposal at 3.

²⁷³ Joint Commenters Opening Comments on Staff Proposal at 5.

along with the adoption of FC1, with GPI indicating that this would help avoid any gaps between the programs.²⁷⁴

We find it appropriate to adopt a timeline and process for the development of FC2 guidance. The development of FC2 shall be based on the evaluation of the FC1 program, additional BTM infrastructure needs, and an assessment of the continued role of IOUs in supporting BTM infrastructure. Any FC2 funding should consider findings from program evaluations, market studies and, to the extent feasible, infrastructure planning analyses. The FC2 development process should commence in early 2027 via ruling, which should provide adequate time for an effective process since the initiation of any potential FC2 program would likely commence on January 1, 2030. Following the issuance of a ruling and subsequent party comments, the Commission would issue guidance, if needed, by the end of 2027.

4.2.7. Funding Cycle Timeline

The table below provides a summary of the timelines for the funding cycles.

Event	Date
FC0	Present – December 31, 2024
FC0 Grace Period	January 1, 2025 – December 31, 2026
FC1 Begins	January 1, 2025
FC1 Mid-Cycle Assessment	2027
Development of FC2 Guidance	2027
FC2 Tentatively Begins	January 1, 2030

²⁷⁴ ATE Opening Comments on Staff Proposal at 4; GPI Opening Comments on Staff Proposal at 4.

4.2.8. Supplemental Program/Pilot Applications

Several parties raise the issue of whether the IOUs should be allowed to file additional applications for supplemental and pilot programs during FC1. These parties, including Fermata, PG&E, ChargePoint, Weave Grid, SCE, EDF, and Joint Commenters, support the idea of adding additional application pathways. Other parties, including CLECA, Cal Advocates, EPUC, Clean Energy Fuels, NDC, and TURN, raise affordability concerns with authorizing additional TE funding beyond the FC1 program.

We find that the existing Commission application pathway per SB 350 is sufficient. Any application, including for supplemental programs or pilots, submitted via that pathway will be reviewed in the context of the funding the Commission has authorized to date. Additionally, any application for funding should sufficiently demonstrate that the IOUs are best suited for that role and that it fills a market need that is not otherwise addressed by the FC1 program, any other state agency administered TE programs,²⁷⁵ and any other funding available from local or federal entities. The application should also evaluate the impact of any funding authorized on the affordability of utility services, using the metrics in our affordability decisions.

4.3. Staff Proposal Section 5: FC1 BTM Rebate Program

4.3.1. FC1 Budget

4.3.1.1. Total FC1 Budget

The Staff Proposal proposes a total budget of \$1 billion over five years for FC1 and seeks comments as to the appropriate budget level. A number of parties

²⁷⁵ These TE programs include, but are not limited to, CALeVIP, EnergiIZE, or successor programs, and the potential Clean Cars and Clean Air Ballot Initiative program.

find the proposed \$1 billion budget excessive and premature given ongoing developments in the market and the need to evaluate the performance of the current TE programs.

TURN argues that the budget proposal does not adequately reflect that future state, private, and public commitments could “substantially or completely offset the need for ratepayer expenditures from 2025-2029.”²⁷⁶ TURN recommends a maximum budget of \$500 million over five years or 50 percent of the state’s allocation to the CALeVIP program, whichever is least.²⁷⁷

NDC contends that the budget is excessive due to the large amount of non-ratepayer funds already committed to TE. NDC cites the “inability of the market and IOUs to utilize approved funding expeditiously” as well as ratepayer affordability concerns in recommending a FC1 budget of \$75 million annually or \$375 million over five years.²⁷⁸

Cal Advocates asserts that the budget is unreasonable, and that ratepayer funding should only be used as a last resort, limited to specific areas such as underserved communities.²⁷⁹ Cal Advocates recommends capping the budget at \$100 million for the first year and determining the budgets for subsequent years based on program performance and market needs.²⁸⁰

Several parties argue that the Commission should wait to set the budget. CLECA, UCAN and EPUC all support waiting until a review of the TE program

²⁷⁶ TURN Comments on Staff Proposal at 3.

²⁷⁷ *Id.* at 6.

²⁷⁸ NDC Comments on Staff Proposal at 5.

²⁷⁹ Cal Advocates Comments on Staff Proposal at 8.

²⁸⁰ *Id.* at 4.

costs and benefits before approving such a large level of ratepayer funding.²⁸¹ CLECA and EPUC also argue that all unspent ratepayer funds and other funding sources should be exhausted prior to approval of more ratepayer funds.²⁸²

The Joint Commenters and ChargePoint oppose a delay in funding authorization, with ChargePoint emphasizing that “the slow drawdown of funds to date has reasonable explanations” and that a clear regulatory direction as to TE programs is important.²⁸³ PG&E counters that the Commission should not limit ratepayer funding to a last resort, but rather target it to fill gaps in programs.²⁸⁴ Additionally, Auto Innovators argues for flexibility to adjust funding levels.²⁸⁵

Several parties find the proposed budget level reasonable, ChargePoint, CSE and GPI support the \$1 billion budget.²⁸⁶ CSE acknowledges that private sector funding is increasing but asserts that the maturity of the TE market is still at a point where significant public funding is necessary for California to reach its ambitious TE goals. Additionally, both ChargePoint and CSE call for a mechanism to review and adjust the budget and program design.²⁸⁷

²⁸¹ CLECA Comments on Staff Proposal at 2; EPUC Comments on Staff Proposal at 3; UCAN Comments on Staff Proposal at 5.

²⁸² CLECA Comments on Staff Proposal at 3; EPUC Comments on Staff Proposal at 3.

²⁸³ Joint Commenters Comments on Staff Proposal at 4; ChargePoint Comments on Staff Proposal at 3.

²⁸⁴ PG&E Comments on Staff Proposal at 4.

²⁸⁵ Auto Innovators Opening Comments on Staff Proposal at 17.

²⁸⁶ ChargePoint Comments on Staff Proposal at 8; CSE Comments on Staff Proposal at 2; GPI Comments on Staff Proposal at 5.

²⁸⁷ ChargePoint Comments on Staff Proposal at 8; CSE Comments on Staff Proposal at 2.

Lastly, a number of parties find the proposed level of funding insufficient. Several parties argue that the \$1 billion budget is insufficient to meet the level of needed charging identified in the first CEC AB 2127 Charging Assessment.²⁸⁸ ATE, SCE, AEE, GPI and Joint Commenters support the ability to increase the budget if a mid-cycle review demonstrates that the \$1 billion budget is insufficient to meet the program goals due to decreased outside funding streams or impacts from market and policy developments.²⁸⁹

We adopt the proposed \$1 billion budget for FC1. We find that this level of funding appropriately balances the benefits of increased access to TE and the costs of continued ratepayer investment. It also takes into account the significant investments in TE infrastructure in the recently approved state budget – more than \$10 billion dedicated to ZEVs and ZEV infrastructure over five years. In addition, the federal Infrastructure Investment and Jobs Act of 2021 dedicates almost \$383 million in TE infrastructure to California with another \$2.5 billion for clean vehicle infrastructure available in competitive grants nationwide. Finally, the federal Inflation Reduction Act provides an additional \$1.7 billion in Tax credits for EV chargers and other alternative fuel equipment. The funding structure we adopt provides flexibility to modify the program via the Mid-Cycle Assessment if the market or outside funding levels change in the future.

Of the authorized \$1 billion program budget, the IOUs may only access up to 60 percent of the budget within the first three years. During the Mid-Cycle

²⁸⁸SCE Comments on Staff Proposal at 2; EDF Comments on Staff Proposal at 2; Fermata Comments on Staff Proposal at 10.

²⁸⁹ ATE Comments on Staff Proposal at 5; GPI Comments on Staff Proposal at 2; AEE Comments on Staff Proposal at 13; SCE Comments on Staff Proposal at 2; Joint Commenters Opening Comments on Staff Proposal at 2.

Assessment, the Commission will assess the progress of the BTM program in meeting its objectives and the need for continued ratepayer support for BTM infrastructure given available resources, especially in view of the primary role of ratepayers to fund utility-side infrastructure upgrades. The Commission may modify or terminate the program if ratepayers are unduly burdened. This provides flexibility to determine if the full \$1 billion is reasonable over the five-year period.

In order to accommodate fluctuations in annual spending, such as higher administrative start-up costs in early years and the acceleration of rebate payment as the program progresses, all funding caps are applied towards the total accessible funds. Therefore, the funding caps over the first three years shall be calculated based on their respective percentage of \$600 million in initial funding.

4.3.1.2. Portion of Budget Each IOU Contributes

The Staff Proposal requests comment on what portion of the FC1 budget each IOU should contribute. Several parties comment on this issue. GPI supports a proportional contribution based on service territory population.²⁹⁰ SCE and the Joint Commenters support IOU proportional contributions based on electric sales, as done in other statewide programs.²⁹¹ NDC supports a funding contribution level proportional to the amount of internal combustion engine vehicles in an IOU service territory since the purpose of the TE program is to

²⁹⁰ GPI Comments on Staff Proposal at 6.

²⁹¹ SCE Comments on Staff Proposal at 17; Joint Commenters GPI Comments on Staff Proposal at 2.

transition away from these vehicles, consistent with state policy.²⁹² Auto Innovators support an allocation based on geographic distribution need since the market for EVs is statewide.²⁹³ GPI recommends a review of the allocation based on performance and subsequent changes, if necessary, to optimize the allocation.²⁹⁴

We adopt a funding allocation that is based on each IOU's percentage of electric sales for 2024. We find that this methodology is the most efficient and equitable way to determine each IOUs' budget allocation. Each IOU shall file a Tier 2 Advice Letter within 60 days of this decision to establish a one-way sub-account within their existing TE balancing account or a separate one-way balancing account. Each sub-account or balancing account shall be capped based on the approved FC1 budget and the percentage of electric sales for the IOU in 2024.

4.3.1.3. Funding Amount Dispersed in Each IOU Territory

The Staff Proposal requests comment on whether the funding dispersed in each IOU territory be limited to each IOU's funding contribution to the program. SCE opposes such limitations and asserts that funding should be dispersed on a first-come, first-served basis as managed by the Administrator.²⁹⁵ Several parties support limiting the funding to each IOU's service territory, arguing that it

²⁹² NDC Comments on Staff Proposal at 6.

²⁹³ Auto Innovators Comments on Staff Proposal at 17.

²⁹⁴ GPI Comments on Staff Proposal at 6; NDC Comments on Staff Proposal at 6.

²⁹⁵ SCE Comments on Staff Proposal at 17.

unreasonable and inequitable for ratepayer of one IOU to subsidize ratepayers in a different IOU.²⁹⁶

We find that funding dispersed in each IOU territory must be limited to each IOU's funding contribution to the FC1 Program. Allowing ratepayers of one IOU to fund another IOU's customers' participation in this program would unjustly and unreasonably raise rates without commensurate benefits.

4.3.1.4. Annual Funding Cap

The Staff Proposal requests comment on whether the Commission should place an annual cap on program funding. The Staff Proposal also requests that parties that support an annual cap comment as to: (1) how the unspent funds in each period should be treated and (2) what should happen if the annual funds are fully committed before the end of the annual funding period.

Numerous parties indicate that there should be no annual cap. Several parties assert that an annual cap could lead to frustration and confusion regarding funding availability, waitlists, and stop/start cycles.²⁹⁷ Other parties emphasize that the budget should be flexible in case annual spends are uneven and levels of spending beyond a cap could increase program impact.²⁹⁸ Several parties also support an annual cost cap, arguing it will ensure ratepayers are not unduly burdened with unnecessary costs and provide stability on rate

²⁹⁶ Cal Advocates Comments on Staff Proposal at 9; ATE Comments on Staff Proposal at 5; NDC Comments on Staff Proposal at 7.

²⁹⁷ ChargePoint Comments on Staff Proposal at 5, 8; CEDMC Comments on Staff Proposal at 3; EDF Reply Comments on Staff Proposal at 3, 10; AEE Comments on Staff Proposal at 5, 13; ATE Comments on Staff Proposal at 5.

²⁹⁸ ChargePoint Comments on Staff Proposal at 3, 5, 8; The Council Comments on Staff Proposal at 3; EDF Reply Comments on Staff Proposal at 3, 10; CSE Comments on Staff Proposal at 2.

increases.²⁹⁹ Cal Advocates asserts that a cost cap will maintain rebate availability for lower income participants, who may be more likely to be later adopters.³⁰⁰

We do not adopt an annual cap on program funding. We find that the imposition of an annual cap would impede overall program effectiveness and that continual access to authorized program funding will lead to better IOU customer experience, consistent infrastructure investment and deployment and overall program administration. The Mid-Cycle Assessment shall determine if additional funds are necessary beyond the initial three years and whether other changes, such as annual caps, are necessary.

4.3.1.5. Administrative Costs Cap

As stated in the Staff Proposal, the goal of a statewide third-party implemented program is to minimize administrative costs and complexity, reduce the number of administrators customers must consider, create consistency across the state, and maximize customer and technology provider participation. To ensure the FC1 Program is able to minimize administrative costs, the Staff Proposal requests comment on the appropriateness of an eight percent cap for program administration.

CSE supports the eight percent cap for program administration as consistent with other statewide incentive programs.³⁰¹ GPI supports the eight percent cap but cautions that the Commission should clarify that programs

²⁹⁹ TURN Opening Comments on Staff Proposal at 8; NDC Opening Comments on Staff Proposal at 7.

³⁰⁰ Cal Advocates Opening Comments on Staff Proposal at 10.

³⁰¹ CSE Opening Comments on Staff Proposal at 3.

costs are not automatically approved and must be justified.³⁰² TURN asserts that the administration cost budget is excessive absent additional context and detail and that responses to request for proposals (RFPs) should address exact amounts.³⁰³ NDC finds that the program administration cap is too high given the large budget for FC1 and the relative simplicity of program administration.³⁰⁴

We find a cap of up to eight percent for administrative costs is reasonable. The eight percent cap on administrative costs shall apply over the total amount authorized for collection (*i.e.*, 60 percent for first three years) to allow for flexibility in program administration. The eight percent cap includes both IOU and Program Administrator administrative expenses, which is consistent with our approach in prior programs that similarly rely on program administrators, including the Self-Generation Incentive Program and the Solar on Multifamily Affordable Housing program. The IOUs and the Program Administrator shall determine the proper allocation of funding between the entities. We expect IOU costs to be minimal as they are responsible for RFP issuance, contract management, program reporting, limited data management, and evaluation. The Commission shall reassess the eight percent administrative funding cap in the Mid-Cycle Assessment to determine if adjustments are necessary.

Additionally, we find it is appropriate to audit the Program Administrator to confirm that spent administrative funds do not exceed the cap. This audit or review shall occur prior to the Mid-Cycle Assessment and be conducted by the Commission's Utility Audit, Risk, and Compliance Division. ED staff, in

³⁰² GPI Opening Comments on Staff Proposal at 7.

³⁰³ TURN Opening Comments on Staff Proposal at 9.

³⁰⁴ NDC Opening Comments on Staff Proposal at 8.

consultation with the Commission's Utility Audit, Risk, and Compliance Division, may request additional audits or broaden the scope of the audit.

**4.3.1.6. ME&O and Technical Assistance
Services Funding Cap**

The Staff Proposal requests comment on the appropriateness of the six percent aggregate cap for ME&O and TE advisory services, or TA.

Several parties find the ME&O and TA caps too low. PG&E claims that ME&O costs will be immense, especially for hard-to-reach and underserved communities and that the ME&O budget should be higher due to need for initial brand-building and multiple marketing strategies.³⁰⁵ SCE and Fermata advocate for expansion of the TA program funding, while the Joint Commenters recommend disaggregating the ME&O and TA budgets.³⁰⁶ GPI and NDC advocate for a ten percent cap for ME&O due to concerns about low utilization rates for chargers as well as difficulty reaching low-income, minority, and other underserved communities.³⁰⁷ CSE recognizes that the six percent cap for ME&O and TA budget caps are somewhat higher than for other programs but asserts that the allocations are reasonable.³⁰⁸

We find merit in the arguments that the budget for both ME&O and TA should be higher, especially to ensure adequate outreach and engagement with and participation from hard-to-reach and underserved communities. Therefore,

³⁰⁵ PG&E Opening Comments on Staff Proposal at 3.

³⁰⁶ SCE Opening Comments on Staff Proposal at 10; Fermata Opening Comments on Staff Proposal at 11; Joint Commenters Opening Comments on Staff Proposal at 2.

³⁰⁷ GPI Opening Comments on Staff Proposal at 7; NDC Opening Comments on Staff Proposal at 8.

³⁰⁸ CSE Opening Comments on Staff Proposal at 3.

we find that ME&O and TA shall each have a budget of up to six percent of the total budget. We shall evaluate these caps in the Mid-Cycle Assessment to determine if adjustments are necessary and if the minimum expenditure requirement for underserved communities, described in Section 4.3.4.1 below, is being met.

4.3.1.7. Program Evaluation

The Staff Proposal recommends a program evaluation budget of two percent of the FC1 program budget, to be split between ED and the IOUs. In addition, it proposes \$3 million for ED staff to manage.

Several parties' comments address the funding proposal. NDC argues for one percent and supports \$3 million for ED evaluation budget, arguing that this figure is consistent with authorized evaluation budgets in recent Commission decisions on SDGE's Power Your Drive 2 and SCE's Charge Ready 2.³⁰⁹ SCE posits that the proposed data collection and program evaluation funding may be excessive because it is difficult to evaluate the full amount allocated to evaluation without additional context regarding need, objectives, and potential duplication of efforts.³¹⁰ PG&E contends that additional detail and justification is needed for the allocation to ED for management. PG&E requests clarification as to what additional evaluation needs ED anticipates and if it is appropriate for funding to be collected through the FC1 program.³¹¹

Due to the potential for changes to the rebate program during the Mid-Cycle Assessment and to ensure adequate technical support is available for

³⁰⁹ NDC Opening Comments on 2022 TE Staff Proposal at 23.

³¹⁰ SCE Opening Comments on Staff Proposal at 23.

³¹¹ PG&E Opening Comments on Staff Proposal at A8.

ED staff up to and throughout FC1, we adopt a slightly modified evaluation budget structure consisting of two separate budgets: (1) IOU managed and (2) ED managed.

For the IOU-managed evaluation budget, we allocate \$3 million for the first three years of the funding cycle and up to \$5 million for the full five years of FC1. The scope of the IOUs' evaluation funding includes: (1) a third-party evaluation of the FC1 program and (2) development and maintenance of program progress reporting and analytical tools under the guidance of ED staff based on findings from the Data Assessment. The third-party evaluation should include, but not be limited to, a general evaluation of cost and progress toward program goals, program process evaluation, and equity and location-specific implementation.

For the ED-managed evaluation budget, we adopt an annual expenditure limit of \$3 million from 2023 through 2029 for technical consulting and support funding, totaling \$21 million. ED staff may carry forward the funds from year to year. The Commission's Executive Director will approve the expenditures and seek reimbursement from PG&E, SCE, and SDG&E. Reimbursement will be sought from these three IOUs on a proportional basis in relationship to their annual retail sales as reported at inception of the contract.

This budget amount is necessary because the level of program reporting requirements and analysis necessary to assess TE program progress, will require technical consultant support. The funding for the ED-managed evaluation budget will be sought pursuant to the California Legislature's Annual Budget Act, which gives the Commission certain specific and limited ongoing

reimbursable expenditure authority.³¹² Prior to exercising such authority, the Commission must issue a decision that identifies the contracting activities that will be undertaken and the costs subject to reimbursement by IOUs.³¹³ This decision serves that purpose.

ED staff anticipate technical support and consulting on tasks including, but not limited to:

1. Program reporting assessment, analysis, and recommendations for process improvement: This task includes supporting ED staff on the Data Assessment filing, discussed below, and developing recommendations to streamline existing reporting processes and create new ones. This task could also include development of reporting templates, processes, and ongoing reporting management.
2. Reporting quality assurance/control (QA/QC) and analytical support: This task includes performing QA/QC analysis of ongoing reporting and troubleshooting reporting issues with the IOUs as well as performing ad hoc analyses of reported accomplishments based on ED staff direction to inform decision making.
3. Electrification planning: This task includes identifying, analyzing, and developing recommendations to inform TE inputs, assumptions, and analytical frameworks for the various planning processes, including but not limited to IRP, Distribution Resource Planning, GRCs, and IEPR demand forecast, as well as expert support and necessary facilitation of stakeholder processes to develop and vet inputs and assumptions needed for infrastructure planning.

³¹² See Budget Act of 2010, Stats. 2010, Ch. 712, Item 8660-001-0462(6).

³¹³ See D.18-02-018 at 147.

4. FC1/Mid-Cycle Assessment/FC2 recommendations: This task includes identifying research needs and carrying out necessary research to inform recommendations for FC1, the Mid-Cycle Assessment, and subsequent guidance for any FC2 funding, including but not limited to market assessment studies, assessment of VGI activities and practices, and additional program evaluations.

ED staff in collaboration with the IOUs and stakeholders should develop and maintain a Research and Evaluation Plan to document the Commission's and the IOUs' research priorities. ED staff should serve the initial Research and Evaluation Plan on the service list of this or a successor proceeding no later than 180 days after executing the contract.

4.3.1.8. Potential Need for Additional Funding in FC1

The Staff Proposal requests comment on how to address a potential need for additional funding in FC1.

Several parties assert that any concern for funding gaps is unwarranted. TURN argues that any gaps in IOU program offerings likely indicate a robust market that has sufficient public and private funding to function independently.³¹⁴ EPUC and NDC stresses that any additional funds beyond existing program funds should be covered by private industry, not ratepayers, and the exhaustion of program funds signals a fulfillment of ratepayer obligation to TE efforts.³¹⁵

³¹⁴ TURN Opening Comments on Staff Proposal at 9.

³¹⁵ EPUC Opening Comments at Opening Comments on Staff Proposal at 5; NDC Opening Comments on Staff Proposal at 9.

SCE suggests a process where IOUs submit a joint Tier 2 Advice Letter or an expedited Tier 3 Advice Letter to request any funding or program revisions needing during FC1.³¹⁶ Cal Advocates opposes any Advice Letter process for increasing funds, arguing that a full review in a rate setting rulemaking proceeding is necessary prior to any funding increases.³¹⁷ ATE proposes an evaluation of funding in the FC1 mid-cycle evaluation and allow IOUs to apply for additional funding at any point during the FC1 if need is demonstrated.³¹⁸ ChargePoint and CSE support a process for fund reallocation, with lower amounts via an Advice Letter process and over 25 percent via an application or petition for modification.³¹⁹

We do not adopt any process to authorize additional funds for FC1. We agree with TURN and NDC that any gaps would indicate a robust market. Furthermore, the IOUs can submit applications to request additional funding if needed, which would provide the appropriate setting to evaluate the request and impact on ratepayers.

4.3.1.9. Ownership of BTM Equipment

The IOUs currently have programs that offer varying degrees of infrastructure ownership. For example, all of the IOUs' LD programs allow the IOU to own up to 100 percent of the BTM make-ready infrastructure, but some also allow IOU ownership of the EVSE for certain customer segments.

³¹⁶ SCE Opening Comments on Staff Proposal at 4.

³¹⁷ Cal Advocates Opening Comments on Staff Proposal at 7.

³¹⁸ ATE Opening Comments on Staff Proposal at 6.

³¹⁹ ChargePoint Opening Comments on Staff Proposal at 8; CSE Opening Comments on Staff Proposal at 2.

Several parties support the move away from IOU ownership of BTM TE charging infrastructure. TURN identifies the move away from unnecessary, costly, and risky utility ownership of BTM charging infrastructure assets toward a rebate structure as “the most important ratepayer protection provided in the proposal.”³²⁰ TURN also asserts that utility ownership of customer-side assets only benefits utility shareholders.³²¹ UCAN reiterates its argument that utility ownership of EVSE stifles competition, is not a cost-effective approach to attain California’s goals and that third-party investment and a rebate structure is a more cost-effective option for ratepayers.³²²

Cal Advocates also supports transition away from IOU ownership of BTM infrastructure, noting that IOU ownership of BTM charging infrastructure “unnecessarily increases rates to all ratepayers, which disproportionately hurts low-income communities because electric rate funded programs are inherently regressive.”³²³ Cal Advocates emphasizes that using concerns regarding underserved communities to argue for utility ownership is misplaced because of programs like the CEC’s proposed \$300 million program for Equitable At-Home Charging is a better way to address that concern. Cal Advocates also disputes the survey data cited by the Joint Commenters, arguing that “IOU ownership of BTM should not be approved without random surveys to obtain charging

³²⁰ TURN Opening Comments on Staff Proposal at 1.

³²¹ *Ibid.*

³²² UCAN Opening Comments on Staff Proposal at 1.

³²³ Cal Advocates Opening Comments on Staff Proposal at 8.

behavior data from EV adopters and potential behavior from those who have not yet adopted EVs.”³²⁴

EVgo supports the move away from IOU ownership, emphasizing that there are many other ways to ensure equitable EVSE deployments, overcome market barriers, and maximize program flexibility, other than IOU ownership.³²⁵ EVgo cites to CEC’s CALeVIP programs as an example.³²⁶

Several parties disagree with the move away from IOU ownership of BTM infrastructure or indicate that the FC1 program should adopt a more flexible ownership model. AEE argues a categorical exclusion of IOU ownership is premature because barriers to EVSE deployment will persist in many areas, including MUDs, if IOUs ownership is not an option.³²⁷ EDF urges the Commission to consider preservation of IOU ownership of charging stations as an option, contending that small businesses or other customers may experience more difficulty transitioning to ZEVs.³²⁸

ATE opposes the complete elimination of IOU ownership for BTM, indicating that even with rebates, there will be situations where private third parties do not come forward to build needed infrastructure, especially in underserved or rural areas.³²⁹ The Joint Parties oppose the change as well contending that “[p]rohibiting participants from choosing their preferred

³²⁴ *Id.* at 7.

³²⁵ EVgo Reply Comments on Staff Proposal at 4.

³²⁶ *Ibid.*

³²⁷ AEE Opening Comments on Staff Proposal at 10.

³²⁸ EDF Opening Comments on Staff Proposal at 7.

³²⁹ ATE Opening Comments on Staff Proposal at 14.

ownership option . . . could have undesirable consequences for underserved markets.”³³⁰

We find it appropriate to eliminate all IOU ownership of BTM infrastructure beginning with FC1. Such a shift in the ownership paradigm allows for technology and construction flexibility, while reducing the cost burden that capitalized IOU expenditures impose on ratepayers.

While we acknowledge the concerns regarding the potential need for flexibility to support low-income, DAC, and small business customers for whom the rebate model may be challenging, we believe there are other ways in which the program can help address these needs while still maintaining the rebate model. Through the Program Handbook development process, the Program Administrator shall provide an option for an up-front rebate. Through the Program Handbook development process, the Commission and stakeholders should additionally explore the feasibility of the following options:

1. Providing bridge loans or any other assistance to mitigate the up-front cost barrier for certain targeted customers beyond solely up-front rebates;
2. Leveraging TA to support small business and underserved community customers, with support for customers establishing their own ongoing maintenance and operations plans/contracts;
3. Exploring public-private partnerships that could help ease the burden of ongoing maintenance and operations of charging stations; and
4. Providing higher levels of rebates for small fleets and businesses, as detailed later in this decision.

³³⁰ Joint Parties Opening Comments on Staff Proposal at 4.

4.3.1.10. Capitalization of BTM Funds

Past TE programs have allowed limited capitalization of BTM equipment costs. However, the Staff Proposal moves away from this approach and proposes eliminating the option for the IOUs to capitalize any BTM equipment costs.

In response, SCE proposes that the Commission still allow capitalization of the statewide BTM rebate program costs, indicating that such treatment would help facilitate the acceleration of TE by distributing incurred costs over a longer period of time and minimizing near-term rate spikes.³³¹ SCE also claims that capitalization would better align the recovery of costs with the long-term benefits provided by the statewide BTM rebate program.³³² Fermata, PG&E, GPI, and ATE support SCE's capitalization proposal.³³³

TURN opposes the capitalization of the BTM rebate costs, arguing that capitalizing costs is significantly more expensive over time and is a primary reason for current high rates.³³⁴ TURN also indicates that there are other tools to ensure that DACs and low-income customers can access electrification.³³⁵ EPUC and NDC also oppose the capitalization proposal.³³⁶

We do not adopt the proposal from SCE to capitalize BTM rebate costs. While expense treatment of the BTM rebate costs may result in somewhat higher

³³¹ SCE Opening Comments on Staff Proposal at 4-5.

³³² *Id.* at 5.

³³³ ATE Opening Comments on Staff Proposal at 15; Fermata Reply Comments on Staff Proposal at 9; GPI Reply Comments on Staff Proposal at 3; PG&E Reply Opening Comments on Staff Proposal at 2.

³³⁴ TURN Opening Comments on Staff Proposal at 4.

³³⁵ TURN Reply Comments on Staff Proposal at 4-6.

³³⁶ EPUC Reply Opening Comments on Staff Proposal at 4; NDC Reply Comments on Staff Proposal at 4.

upfront costs, we agree with TURN that capitalizing these costs will be significantly more expensive for ratepayers over time. This approach is consistent with recent decisions and with our directives in those decisions to limit the amount of utility ownership of BTM infrastructure and thus capitalization of those assets. One of the main objectives of the funding cycle proposal and the FC1 structure is to reduce total costs to ratepayers. Allowing the capitalization of BTM infrastructure costs runs counter to this objective because it unnecessarily adds costs for ratepayers. The Mid-Cycle Assessment shall provide an opportunity to examine, and if needed modify, the program.

4.3.1.11. Use of General Fund

Several parties urge the Commission to consider use of the General Fund for the Program.³³⁷ SCE, SDG&E and Cal Advocates indicate that if the legislature allocated a portion of state's general fund to support the statewide BTM rebate, it would be reasonable for the CEC or CARB to administer those funds.³³⁸ AEE contends that it would be more appropriate to fund a statewide EVSE rebate program, but cites uncertainty as to the sufficiency of funding amounts without a clear understanding of potential EVSE incentive levels.³³⁹

Greater reliance on general fund revenues can reduce pressure on ratepayers, but we cannot adopt any allocation of general funds for the FC1 program budget as such an allocation is outside of the Commission's authority.

³³⁷ SDG&E Opening Comments on Staff Proposal at 5, 8; Cal Advocates Opening Comments on Staff Proposal at 6, PG&E Opening Comments on Staff Proposal at 1; CLECA Opening Comments on Staff Proposal at 5.

³³⁸ SDG&E Opening Comments on Staff Proposal at 8; Cal Advocates Opening Comments on Staff Proposal at 4; SCE Opening Comments on Staff Proposal at 7.

³³⁹ AEE Opening Comments on Staff Proposal at 4.

We note that this decision takes into account the significant amount of state funding for TE. However, we encourage the consideration of alternatives to ratepayer funding for IOU led EV charging infrastructure programs to reduce the burden on ratepayers.

4.3.1.12. Securitization

SCE and PG&E propose that if costs cannot be capitalized that the Commission should authorize the IOUs to securitize those costs.³⁴⁰ SCE argues that it would allow costs to go into rates at a significantly lower amount compared to traditional operations and maintenance. TURN contests SCE's and PG&E's securitization proposal, arguing that while the initial rate impact would be reduced, securitization would result in ratepayers paying more over time due the costs of the transaction and the interest paid.³⁴¹

We decline to adopt the proposal to securitize costs. We agree with TURN that securitization would increase ratepayer costs more over time and therefore is not warranted at this time.

4.3.1.13. New Construction

The Staff Proposal recommends phasing out ratepayer support for new construction programs starting in 2025, as other funding sources or requirements – particularly state budget investments and CALGreen building requirements – will be available to support this area. We resolve this issue in Section 3.8.2. above.

³⁴⁰ SCE Opening Comments on Staff Proposal at 6; PG&E Reply Comments on Staff Proposal at 2.

³⁴¹ TURN Reply Comments on Staff Proposal at 5-6.

4.3.2. FC1 Rebates

The Staff Proposal suggests fixed rebate amounts that are revisited periodically and allow for increased rebates for targeted underserved community customers.

Parties expressed various opinions regarding a rebate program. Cal Advocates recommends a declining rebate program.³⁴² Electrify America argues that a rebate limit may create bias against certain types of chargers and AEE recommends the program have safeguards in place to consider capacity of the chargers, among other considerations.³⁴³ Nuvve proposes a rebate based on fixed percentage of costs.³⁴⁴ In contrast, PG&E, EDF, and GPI support alternatives to a rebate program such as on-bill financing.³⁴⁵

We find that the rebate program provides a suitable solution to accelerating TE infrastructure development. The rebate amount may be fixed for the duration of FC1, assessed via the roundtables, and reevaluated mid-cycle. Rebates may also vary according to certain parameters. A stakeholder process led by the Program Administrator should set the rebate levels.

³⁴² Cal Advocates Opening Comments on Staff Proposal at 11.

³⁴³ Electrify America Opening Comments on Staff Proposal at 11; AEE Opening Comments on TE Staff Proposal at 14.

³⁴⁴ Nuvve Opening Comments to Staff Proposal at 3.

³⁴⁵ PG&E Opening Comments to Staff Proposal at A5; EDF Reply Comments to Staff Proposal at 10; GPI Reply Comments to Staff Proposal at 1-2.

4.3.2.1. Fixed, Variable, and Declining Block Rebates

The Staff Proposal requests stakeholder comment on whether rebates should decline in blocks based on deployment instead of being fixed for the duration of FC1.

Auto Innovators opposes declining block rebates, contending that the technology and market conditions relevant to the Million Solar Roofs program do not translate to deployment of EV charging infrastructure.³⁴⁶ ChargePoint also does not support declining block rebates in FC1 because: (1) demand in the EV charging infrastructure market is below desired levels, (2) customers' response to new EV infrastructure rules is unknown, (3) the costs of BTM make-ready infrastructure are unlikely to decline regardless of demand and (4) declining block rebates place an undue emphasis on costs.³⁴⁷ AEE does not support use of declining block rebates because it claims that EVSE deployment costs are not expected to decrease.³⁴⁸

EDF supports declining block rebates, asserting that programs that use such a structure "generally install more capacity, have greater incentive longevity, and provide more market certainty as compared to programs that have a fixed incentive rate."³⁴⁹ TURN also argues for declining block rebates that decline based on the deployment in each market segment over the course of the

³⁴⁶ Auto Innovators Opening Comments on Staff Proposal at 18.

³⁴⁷ ChargePoint Opening Comments on Staff Proposal at 10.

³⁴⁸ AEE Opening Comments on Staff Proposal at 6.

³⁴⁹ EDF Reply Comments on Staff Proposal at 3.

five-year period due to the rapid development in marketplace.³⁵⁰ TURN indicates that declining block rebate structure for charging infrastructure is not based on expected cost declines in the underlying technology, but on the market's ability to shoulder an increasing amount of costs over time as the FC1 program develops and TE markets mature.³⁵¹ TURN emphasizes that the goal of the program should be to "ramp down customer-side ratepayer funded rebates to zero as quickly as possible, not to provide indefinite subsidies for the markets."³⁵²

NDC supports declining block rebates and emphasizes that any declines should occur on a predetermined schedule to provide simplicity and important market data.³⁵³ Cal Advocates indicates that declining block rates are a reasonable approach and recommends a survey of a representative sample of potential participants to assess their willingness to pay for the equipment.³⁵⁴ Tesla asserts that any timelines for adjusting rebate levels may need to vary by vehicle segments depending on scale and speed of adoption.³⁵⁵

We decline to adopt a declining block structure. We agree that the technology and market conditions that inspired declining incentives for the solar market do not translate to deployment of EV charging infrastructure. It is uncertain at this time that the costs of BTM infrastructure will decline in the same

³⁵⁰ TURN Opening Comments on Staff Proposal at 9.

³⁵¹ *Id.* at 10.

³⁵² *Ibid.*

³⁵³ NDC Opening Comments on Staff Proposal at 5, 11.

³⁵⁴ Cal Advocates Opening Comments on Staff Proposal at 11.

³⁵⁵ Tesla Opening Comments on Staff Proposal at 4.

manner as equipment in the solar sector. Furthermore, we can still achieve an overall phasing out of the incentives over time without this approach. If the Mid-Cycle Assessment finds that a declining block structure would be beneficial, given new information available, then we may modify the program.

4.3.2.2. Stacking Rebates

The Staff Proposal requests stakeholder comment on: (1) whether FC1 program participants should be allowed to stack rebates offered by other agencies and/or programs and (2) if rebate stacking is allowed, what conditions should the Commission impose.

Cal Advocates supports the ability to stack rebates, but calls for safeguards, such as a joint website hosted by the Commission and the CEC centralized customer relationship management website, to prevent overspending.³⁵⁶ AEE also supports rebate stacking and recommends that the Commission identify all potential major sources of complementary program funding to help ensure that rebate stacking does not delay rebate application processing.³⁵⁷

Nuvve supports rebate stacking because it may help make an otherwise unattainable project become attainable.³⁵⁸ GRID asserts that the Commission should allow all necessary project costs to qualify for rebate support provided that the total stacked rebate amount is not greater than the total project cost, including the installation cost.³⁵⁹ Several parties support stacking, but indicate

³⁵⁶ Cal Advocates Opening Comments on Staff Proposal at 12.

³⁵⁷ AEE Opening Comments on Staff Proposal at 13.

³⁵⁸ Nuvve Opening Comments on Staff Proposal at 5.

³⁵⁹ GRID Opening Comments on Staff Proposal at 4.

that the Commission should ensure that the same equipment is not funded twice and that allowed rebates do not exceed costs.³⁶⁰ ATE recommends a requirement that all rebate recipients certify that all funds received through rebates are used to pay for the proposed infrastructure.

We find it appropriate to allow the stacking of rebates, provided that the total received rebates do not exceed 100 percent of the installation and equipment costs. The ability to stack rebates allows for the installation of a broader and larger amount of TE infrastructure, thereby promoting the California's TE goals. A customer's application must include a full disclosure of costs and other rebates that have been received or that are pending. Any stacking must also comply with the other rebate providers' rules and requirements. Lastly, the Program Administrator shall develop a process within the Program Handbook to confirm the total received rebates do not exceed 100 percent of costs, as well as consider a process to claw back rebate amounts that exceed the limit.

4.3.2.3. Determining Appropriate Rebate Levels

The Staff Proposal requests comment on what is the most important information in determining appropriate rebate levels for FC1.

Both the CEDMC and PG&E recommend against setting rebate levels in this decision. The CEDMC indicates that the Commission should determine only guiding principles and goals at this time, while PG&E states that the details of

³⁶⁰ ChargePoint Opening Comments on Staff Proposal at 11; Tesla Opening Comments on Staff Proposal at 5; SCE Opening Comments on Staff Proposal at 18; Auto Innovators Opening Comments on Staff Proposal at 19; NDC Opening Comments on Staff Proposal at 11.

the program design and implementation should be determined through a stakeholder process and finalized in future decisions or processes.³⁶¹

EDF recommends the program focus on small businesses and low-income/DAC customers in order to ensure funds are equitably distributed.³⁶²

The City of Long Beach contends that it is premature to determine whether rebates and the design of rebates should be the sole implementation technique for 2025-29 and that any rebate program should be flexibly designed rather than a one rebate fit all approach.³⁶³

Tesla presents the following areas of importance: (1) identifying average and median EVSE equipment cost as well as cost reduction patterns; (2) assurance to the EVSE market of some level of longer-term certainty of rebate amounts; and (3) identifying power level of EVSE and what customer segment and vehicle type it is intended to serve.³⁶⁴ ChargePoint emphasizes the importance of information as to: (1) total customer cost for deployment, operation and maintenance of EVSE; (2) customer's eligibility for other incentive funding or revenue sources such as DR; and (3) segment-specific needs.³⁶⁵

³⁶¹ PG&E Opening Comments on Staff Proposal at 4; CEDMC Opening Comments Staff Proposal at 3.

³⁶² EDF Opening Comments Staff Proposal at 7.

³⁶³ City of Long Beach Opening Comments Staff Proposal at 6.

³⁶⁴ Tesla Opening Comments Staff Proposal at 3, 5.

³⁶⁵ ChargePoint Opening Comments Staff Proposal at 9.

Cal Advocates stresses the importance of: (1) status of statewide charger installation compared to policy objectives; (2) availability levels of other program rebates in the state; (3) whether current programs are oversubscribed; and (4) avoiding the use of willingness-to-pay data collected through self-report surveys due to bias and non-representative nature of current participants.³⁶⁶

TURN asserts the importance of information on the cost to install infrastructure and charging stations compared with the willingness and ability of private companies, individuals, and the state to absorb those costs rather than ratepayers.³⁶⁷ NDC argues the Commission should consider: (1) the average per port costs for BTM EVSE deployment; (2) the value of the benefits customers will receive; (3) customer willingness and ability to pay; (4) the existence and amount of other subsidies; (5) the need for financial support and air quality improvement at the customer's location; and (6) fair additional incentives to counter historical inequity.³⁶⁸

AEE urges consideration of: (1) the capacity of the EV charger incentivized; (2) the potential for incremental VGI functionality; (3) whether a customer is located in an underserved community; and (4) the expected BTM make-ready costs for different types of customer sites.³⁶⁹ ATE emphasizes the need for a discussion of the process for developing a single rebate as well as the multiple

³⁶⁶ Cal Advocates Opening Comments Staff Proposal at 10.

³⁶⁷ TURN Opening Comments Staff Proposal at 9.

³⁶⁸ NDC Opening Comments Staff Proposal at 10.

³⁶⁹ AEE Opening Comments Staff Proposal at 14.

factors, including traditional costs and ratemaking and policy measures.³⁷⁰ ATE also supports flexibility to allow for either a single rebate or multiple programs.

Auto Innovators indicates that important information is the potential and actual level of EV adoption in the community to be served and the current level of EVSE deployment by EVSPs.³⁷¹ Electrify America asserts the importance of whether a rebate promotes a robust and competitive marketplace, while CSE calls for the use of periodic surveys to assess consumer preferences and behavior to inform the rebate.³⁷²

We do not find it appropriate to set rebate levels at this time for either the LD or MDHD components of the FC1 program. Determination of the appropriate rebate level would benefit from additional stakeholder input and analysis. However, we do adopt guidelines for setting rebate levels to cover a percentage of project costs via the Program Handbook development process discussed below.

4.3.2.3.1. LD Rebates

For LD infrastructure rebates, the following guidelines shall apply in setting rebate levels:

1. Include higher rebates for certain underserved community customers (*i.e.*, MUDs with a majority low-income residents), as described in this decision;
2. Maintain flexibility, including exploring new ideas in promoting participation of small businesses, as defined in

³⁷⁰ ATE Opening Comments Staff Proposal at 7.

³⁷¹ Auto Innovators Opening Comments Staff Proposal at 18.

³⁷² Electrify America Opening Comments Staff Proposal at 7; CSE Opening Comments Staff Proposal at 4.

- the Program Handbook, and underserved community customers;
3. Identify an average or median EVSE and make-ready equipment/installation cost as a “base cost” on which to base rebate levels;
 4. Consider the ability to leverage customers’ and companies’ contributions;
 5. Vary rebate levels based on power capacity (*i.e.*, Level 2 vs. DCFC);
 6. Establish maximum percentage of costs to be covered by the rebate, with higher maximums for certain targeted underserved community customers (*i.e.*, MUDs with a majority low-income residents);
 7. Establish a maximum project cost, if applicable;
 8. Consider the overall program average per port cost;
 9. Consider other programs’ rebate levels, such as CALeVIP and others, and align with other publicly funded rebates to prevent the stacking of rebates to a level above 100 percent of costs;
 10. Consider customers’ eligibility for other incentives;
 11. Differentiate between customer segments (*e.g.*, MUDs and public MUD-serving locations) where appropriate; and
 12. Avoid any BTM TE rebates for Fortune 1000 companies.

Stakeholders should discuss LD rebate levels during a workshop in the Program Handbook development process. Prior to the workshop, the IOUs shall distribute data on incentive levels for past and current IOU TE programs to the service list of this or any successor proceeding. The workshop report addressed below shall reflect the discussion. The workshop should include a presentation of data from FC0 to inform the development of rebate levels. The Program Handbook development process should establish upfront rebates for targeted underserved community customers and design this rebate approach to

reduce customer costs and protect ratepayer investments. The Program Handbook should establish procedures and penalties for non-compliance with the Program Handbook requirements.

Any necessary rebate level adjustments shall occur through the annual roundtable and corresponding Tier 2 Advice Letter process. This includes any specialized rebates/rebate approaches for targeted underserved community customers.

4.3.2.3.2. MDHD Rebates

For MDHD infrastructure rebates, the following guidelines shall apply in setting rebate levels:

1. Higher rebates for customers in DACs and primarily operating in DACs;
2. Creativity in addressing the needs of small fleet customers, potentially providing higher rebates;
3. Consideration of customer's eligibility for other incentive funding;
4. Differentiation between customer segments where appropriate;
5. Ability to leverage customer and private company contributions;
6. Vary rebate levels based on power capacity (*i.e.*, Level 2 vs. DCFC);
7. Consideration of minimum power level thresholds;
8. Consideration of average per port cost;
9. Alignment with other public funded rebates to avoid over-subsidization by ratepayers;
10. Establishment of a maximum percentage of costs to be covered by the rebate, including additional incentives for DAC customers;

11. Identify an average or median EVSE and make-ready equipment/installation cost as a “base cost” on which to base rebate levels, if appropriate;
12. Exclusion of Fortune 1000 companies from receiving rebates; and
13. Establishment of a maximum project cost, if applicable. Stakeholders should also discuss MDHD rebate levels during a workshop during the Program Handbook development process. Any necessary rebate level adjustments shall occur through the annual roundtable and Tier 2 Advice Letter process.

4.3.2.4. Reevaluating Rebate Levels During FC1

The Staff Proposal requests comments concerning whether to fix FC1 rebate levels for the program’s five-year term or whether to periodically reevaluate rebate levels.

CSE cautions against fixing rebate levels for the entire five-year period, indicating that setting rebate level too high or too low could result in funding being exhausted too early or not at all. CSE supports reevaluating rebate levels during the Mid-Cycle Assessment.³⁷³ ATE, ChargePoint, and Auto Innovators also do not support fixing the rebate levels for the entire program term and support reevaluating the rebate levels and adjusting, if necessary, during the Mid-Cycle Assessment.³⁷⁴ Cal Advocates recommends reevaluating the rebate levels annually, while Weave Grid calls for flexible rebate levels.³⁷⁵

³⁷³ CSE Opening Comments on Staff Proposal at 5.

³⁷⁴ ChargePoint Opening Comments on Staff Proposal at 9; ATE Opening Comments on Staff Proposal at 8; Auto Innovators Opening Comments on Staff Proposal at 18.

³⁷⁵ Cal Advocates Opening Comments on Staff Proposal at 12; Weave Grid Opening Comments on Staff Proposal at 6.

We find that allowing rebate levels to change annually would provide program flexibility and account for changing market conditions. A yearly assessment of the appropriate rebate level shall occur via the annual roundtables adopted in this decision. Any modification to the rebate level or structure shall occur through the associated Tier 2 Advice Letter process.

4.3.3. FC1 Technical Assistance

4.3.3.1. IOU Administration

The Staff Proposal recommends only one entity be the administrator of each program component, with third-party administrators overseeing the rebate and ME&O components and the IOUs maintaining administration of the technical assistance (TA) portion. The Staff Proposal reasons that providing TA to customers, especially fleets, that are electrifying is a core utility role that the IOUs already perform in some form. The Staff Proposal requests comment on whether the IOUs should directly manage the TA programs, as proposed, or whether the Commission should adopt some other administrative structure.

A number of parties support IOU, rather than third-party, management of the TA programs, asserting that TA is a core utility role that the IOUs are in the best position to manage.³⁷⁶ Auto Innovators specifies that IOUs should manage aspects of the TA programs that relate to interconnection, billing, rates, and utility-managed charging and DR programs.³⁷⁷ Several parties also state that TA

³⁷⁶ ChargePoint Opening Comments on Staff Proposal at 11; SDG&E Opening Comments on Staff Proposal at 10; PG&E Opening Comments on Staff Proposal at 6, 13; SCE Opening Comments on Staff Proposal at 19; ATE Opening Comments on Staff Proposal at 8.

³⁷⁷ Auto Innovators Opening Comments Staff Proposal at 19.

should be available to customers who do not participate in rebate program.³⁷⁸ ChargePoint emphasizes that IOUs providing TA should be held to a strict standard of technology and product neutrality to ensure competitive markets and customer choice.³⁷⁹

Several parties comment that it would be appropriate for EVSPs to have a role in TE along with IOUs, indicating that EVSPs could complement the IOU and Program Administrator functions.³⁸⁰ EDF and ChargePoint contend that DR program administrators and third-party DER providers can also assist with TA due to their technical expertise.³⁸¹ The Joint CCAs assert that CCAs should also be involved in TA, indicating that in many cases, CCAs are already effectively providing TA in support of existing CCA TE programs and filling a gap in the IOUs' TE programs.³⁸² The Joint CCAs also argue that designating the IOUs as the exclusive TA administrator for FC1 incentives may raise anti-competitive concerns and may limit TA services available to some customers due to the constraints on IOU discussion of CCA rates and services with customers.³⁸³

We find it appropriate for the IOUs to maintain administration of TA. The IOUs are best positioned to administer the current scope of the program, and TA is part of their core role. We do not find merit in the Joint CCAs' argument that IOU administration of TA would raise anti-competitive issues because

³⁷⁸ ChargePoint Opening Comments Staff Proposal at 12; PG&E Opening Comments on Staff Proposal at 13; SDG&E Opening Comments on Staff Proposal at 2.

³⁷⁹ ChargePoint Opening Comments on Staff Proposal at 11.

³⁸⁰ *Id.* at 12; NDC Opening Comments on Staff Proposal at 13.

³⁸¹ ChargePoint Opening Comments on Staff Proposal at 12.

³⁸² Joint CCAs Opening Comments on Staff Proposal at 10.

³⁸³ *Id.* at 11.

TA functions involve helping customers with rates. D.12-12-036 indicates that IOU administration of TA would not violate the Code of Conduct for CCAs. That decision includes an exception to marketing limitations for communications that are part of a Commission-authorized program.³⁸⁴ The FC1 TA program clearly falls under the exception because it is a specific program authorized by the Commission. However, the IOUs should coordinate with the CCAs on TA and CCA-specific offerings for their customers (*e.g.*, DR programs).

Additionally, we find that the Joint CCAs have not sufficiently demonstrated the benefits of CCA administration of TA, especially in light of the potential for customer confusion. One of the key objectives of TA is to create an easy-to-understand process for customers seeking to electrify their transportation by providing a single point of contact for the customers through the process of choosing between types of chargers, planning for load management, selecting rates, and energization. While all CCA customers receive distribution service through an IOU, not all IOU customers are also CCA customers. As such, a split CCA- and IOU-administered TA structure would cause confusion for customers when determining with whom they should work. Moreover, it is unclear whether the Commission could award TA funding to individual CCAs without putting the contract out for competitive bid, thus making it possible that TA would be administered by another entity entirely, not the CCAs.

However, we do recognize that that CCAs may be best suited to speak to their customers about their rate structures. Therefore, in the Program Handbook development process, and a workshop discussed below, the IOUs and

³⁸⁴ D.12-12-036 at A1-1 (Code of Conduct and Expedited Complaint Procedure).

stakeholders shall discuss and determine appropriate clear and defined channels of communication between the IOUs' TA efforts and the CCAs in their service territories. This communication should occur in a manner that minimizes confusion for customers.

Additionally, we agree that TA efforts would benefit from the involvement of EVSPs and automated load management (ALM) and DR providers. The Program Handbook development process should determine a clear method for IOU TA engagement with EVSPs and providers of ALM and DR.

4.3.3.2. TA Program Scope

The Staff Proposal recommends TA services, at a minimum, include: (1) basic technical assistance; (2) planning load management and other VGI considerations; (3) help with choosing rates; (4) and support with walking through the IOU energization and/or interconnection process. The Staff Proposal requests comment on whether this proposed scope of the TA programs is appropriate.

Parties generally agree that the proposed scope is appropriate, but some parties recommend additions to the scope.³⁸⁵ SBUA recommends targeted outreach to small businesses.³⁸⁶ PG&E and SCE support the scope, but recommend expansion to include more comprehensive support and advisory services during the planning, installation, and post-deployment stages of

³⁸⁵ ATE Opening Comments on Staff Proposal at 8; Auto Innovators Opening Comments on Staff Proposal at 20; GPI Opening Comments on Staff Proposal at 10; AEE Opening Comments on Staff Proposal at 15.

³⁸⁶ SBUA Opening Comments on Staff Proposal at 19.

customer projects, especially for underserved communities.³⁸⁷ SCE asserts that any TA scope expansion should include enhanced analytical tools and resources for customers as well as sector-based education.³⁸⁸

The Joint CCAs recommend that the scope of TA should expressly target underserved customer segments, and that CCAs have the appropriate resources and expertise to provide it.³⁸⁹ SCE counters that while some CCAs may have experience providing technical support, the IOUs can provide more comprehensive TA and support smaller and less experienced customers.³⁹⁰

We find that the scope of TA services that the Staff Proposal recommends is appropriate, but make several additions based on party comments. TA services shall include, at minimum: (1) basic technical assistance; (2) planning load management and other VGI considerations; (3) help with choosing rates; (4) support with walking through the IOU energization and interconnection process; (5) support and advisory services during planning, installation, and post-deployment; (6) operations post-deployment, like route optimization, load management, and future fleet electrification; and (7) available ALM and DER options to lower deployment costs. In providing TA, the IOUs must adhere to a strict standard of technology and product neutrality to avoid interfering with competitive markets and ensure customer choice. Additionally, TA should be

³⁸⁷ PG&E Opening Comments on Staff Proposal at 14; SCE Opening Comments on Staff Proposal at 9.

³⁸⁸ SCE Opening Comments on Staff Proposal at 10, 19.

³⁸⁹ Joint CCAs Opening Comments on Staff Proposal at 15.

³⁹⁰ SCE Opening Comments on Staff Proposal at 3-5.

available to all IOU customers, including FC0, FC1, and non-program participants, as well as bundled and unbundled customers.

Because additional development of TA and its scope is necessary prior to program launch, we direct the IOUs to host a workshop prior to adoption of the Program Handbook, including, but not limited to, the EVSPs, DR providers, environmental justice organizations, fleet customers, small business, and CCA representatives to better build out the scope of TA. This workshop shall inform the Program Handbook development process, which will adopt a final TA scope. We clarify that EVSPs may submit project applications and interface with the IOU and Program Administrator if authorized to do so by the site host. The Program Handbook development process should examine whether to allow other entities to file project applications on behalf of site hosts. The Program Handbook should provide guidance for the applications, including documentation needed to demonstrate site host authorization.

4.3.4. FC1 Marketing, Education & Outreach

4.3.4.1. Administration

The Staff Proposal requests comments on ME&O administration. While no party recommends specific ME&O administration details beyond coordination with CBOs and CCAs, we find it appropriate to take an approach similar to the Solar on Multifamily Affordable Housing program, which puts the onus on the Program Administrator to develop much of the ME&O program administration.³⁹¹ The Program Handbook development process should establish

³⁹¹ D.17-12-022.

ME&O administration details to allow for additional stakeholder feedback.

Therefore, the Program Administrator shall:

1. Develop and manage the ME&O marketing plan;
2. Develop and manage the program's outreach materials and efforts;
3. Develop a detailed budget that describes the ME&O efforts and directs at least 65 percent of ME&O funds towards ME&O for underserved communities;
4. Work with CBOs, tribal communities, and other stakeholders to reach eligible customers, and to develop material and outreach strategies for underserved communities and other equity targets;
5. Develop ME&O data collection strategies; and
6. Develop and implement any additional efforts needed to ensure the success of the FC1 ME&O efforts.

4.3.4.2. Scope

Several parties provide recommendations regarding the scope of ME&O activities. CSE supports targeted and localized ME&O due to different community needs.³⁹² PG&E recommends the development of an ME&O plan, including a customer engagement strategy, once the statewide rebate program has established goals, objectives, and defined priority communities. PG&E also contends that IOUs are important partners and potential implementers of the statewide rebate program ME&O due their prior experience with other programs.³⁹³ SBUA emphasizes the importance of small business outreach, recommending that IOUs provide targeted, streamlined information on their

³⁹² CSE Opening Comments on Staff Proposal at 5-6.

³⁹³ PG&E Opening Comments on Staff Proposal at 5.

website and through small-business account representatives.³⁹⁴ SBUA recommends a structure similar to existing energy efficiency consultations. GPI emphasizes the need for enhanced post-energization ME&O in underserved communities to drive higher EV adoption.³⁹⁵

We find that the scope of ME&O work should include targeted outreach to: (1) underserved communities; (2) rural communities; (3) small businesses; and (4) tribal communities; and (5) workforce development, job training and placement, and certification organizations. The Program Administrator should leverage the CEC's SB 1000 assessments to best reach customers throughout the IOUs' service territories, including rural regions. The roundtables and Mid-Cycle Assessment should examine the program's progress in reaching rural regions and addressing gaps in the SB 1000 assessments for the charging areas that this program covers.

The scope of the ME&O component should largely focus on acquiring FC1 customers and education on charging from the grid and load management options. Post-energization ME&O should also be included in the scope. Lastly, we agree that more work is necessary to finalize the ME&O scope; therefore, the Program Administrator should include discussion of the ME&O scope at a workshop within the Program Handbook development process.

The annual roundtables should include check-ins on the scope and progress of ME&O to reach targeted customers, garner program participation, effectively educate on load management, and address equity concerns. Any

³⁹⁴ SBUA Opening Comments on Staff Proposal at 18.

³⁹⁵ GPI Opening Comments on Staff Proposal at 2.

necessary modifications shall occur through the annual roundtable and associated Tier 2 Advice Letter process.

4.3.4.3. Consultation with Community-Based Organizations

The Staff Proposal requests comment on requirements for consultation and/or coordination with CBOs. Several parties call for early CBO involvement. GRID advocates for early-stage, paid consultation with CBOs, indicating their participation is critical to remove locally known obstacles.³⁹⁶ PG&E also supports incorporating the CBOs into development and implementation so they can leverage their close relationships with customers to provide efficient and effective ME&O.³⁹⁷ GPI contends that IOUs should be required to consult with the appropriate CBOs at stakeholder meetings during program design and implementation.³⁹⁸

Cal Advocates recommends that the Commission require the third-party ME&O administrator to do interviews and a community needs survey in collaboration with CBOs to understand where to target program activities to provide the most benefit to communities.³⁹⁹ CSE calls for at least 25 percent of the ME&O budget to go to CBOs, indicating that it is consistent with D.21-07-028.⁴⁰⁰ EDF also calls for the participation of CBOs, stating they need to be part of the

³⁹⁶ GRID Opening Comments on Staff Proposal at 5.

³⁹⁷ PG&E Opening Comments on Staff Proposal at 6.

³⁹⁸ GPI Opening Comments on Staff Proposal at 10.

³⁹⁹ Cal Advocates Opening Comments on Staff Proposal at 13.

⁴⁰⁰ CSE Opening Comments on Staff Proposal at 4.

ME&O design and implementation, and the Program Administrator must develop a process to engage the CBOs and integrate their ideas.⁴⁰¹

GPI also contends that CBOs and CCAs should be able to compete for contracts for post-energization ME&O.⁴⁰² NDC stressed the importance of the participation of CBOs in ME&O efforts because they are already integrated into low-income, minority communities and can help design outreach and partner on educational and information events.⁴⁰³ Auto Innovators emphasizes that CBOs are an effective channel to reach customers.⁴⁰⁴ ATE comments that CBOs should be involved in ME&O activities.⁴⁰⁵

We find that CBOs should be a part of the design and implementation of the FC1 program's ME&O component. We agree that their involvement will improve the effectiveness of ME&O efforts due to CBOs' extensive experience working closely with various communities and knowledge of successful outreach practices.

While some of the details of this engagement require further definition through the Program Handbook development process, the IOUs and the Program Administrator should begin engagement with the CBOs immediately after the issuance of this decision. Engagement should, at minimum, involve the following groups: (1) Disadvantaged Community Advisory Group; (2) CBOs that are already integrated into DACs and other underserved communities;

⁴⁰¹ EDF Opening Comments on Staff Proposal at 8.

⁴⁰² GPI Opening Comments on Staff Proposal at 10.

⁴⁰³ NDC Opening Comments on Staff Proposal at 13-14.

⁴⁰⁴ Auto Innovators Opening Comments on Staff Proposal at 20.

⁴⁰⁵ ATE Opening Comments on Staff Proposal at 9.

(3) non-English speaking community groups; (4) youth groups; and (5) workforce development, job training and placement, and certification organizations.

Prior to the adoption of the Program Handbook, the IOUs and Program Administrator should host a discussion at one of the workshops to determine how to effectively engage these groups in an ongoing fashion, including within the annual roundtables. Additionally, the other workshops held prior to the adoption of the Program Handbook should include participation from representatives of all the above listed communities and organizations. We require the Program Administrator to reflect their feedback in the Program Handbook workshop report discussed below to ensure their voices are part of the program development/design process. Following the establishment of the Program Handbook, the Program Administrator should develop a list of CBO and Environmental Justice organizations that the IOUs and Program Administrator can engage for future outreach.

Finally, we encourage the selected Program Administrator to subcontract with CBOs for local ME&O activities, which could include subcontracts to administer portions of the ME&O program on a local level. While we encourage this subcontracting, the Program Handbook development process shall determine any required percentage of budget allocated to local ME&O activities. Additionally, the Program Administrator and Program Handbook development process shall determine, at minimum: (1) roles of subcontractors; (2) the geographic reach of subcontractors; and (3) how the subcontractors will ensure consistent implementation of the ME&O program.

4.3.4.4. Role of CCAs in ME&O

Several parties, including Auto Innovators, GPI, GRID, PG&E, and the Joint CCAs, advocate for direct CCA involvement in developing and administering the ME&O component, with a portion of the ME&O budget allocated to CCAs.⁴⁰⁶ While EDF supports the involvement of a variety of stakeholders, including CCAs, it expresses concern about a focus on the role of CCAs because not all customers are served by a CCA and that a misplaced reliance on CCAs may result in significant gaps in program ME&O.⁴⁰⁷

We find that the involvement of the CCAs in the design of the ME&O component would provide an important benefit to the program due their expertise working with customers and local communities. The CCAs should participate in the workshops and roundtables.

The Program Administrator may subcontract with CCAs, CBOs and other groups with experience working with local communities for local ME&O activities, including subcontracts to administer portions of the ME&O program on a local level. As with local ME&O subcontracting with CBOs, any required percentage of budget allocated to local ME&O activities should be determined through the Program Handbook development process. If there is agreement, the CCAs and IOUs can co-brand ME&O materials.

⁴⁰⁶ GPI Opening Comments on Staff Proposal at 10; Grid Opening Comments on Staff Proposal at 10; Auto Innovators Opening Comments on Staff Proposal at 22; PG&E Opening Comments on Staff Proposal at A6; Joint CCAs Opening Comments on Staff Proposal at 11.

⁴⁰⁷ EDF Opening Comments on Staff Proposal at 7.

4.3.5. FC1 Equity

Since the release of the Draft TEF, the Legislature provided additional direction for TE funding in underserved communities through AB 841.⁴⁰⁸ More recently, the Commission adopted requirements for IOU TE programs to increase funding for customers in underserved communities, requiring that up to 50 percent of all investments be in underserved communities.⁴⁰⁹

The Staff Proposal's revised recommendations concerning equity and underserved communities consider parties' comments on the Draft TEF, as well as goals one, two, five, and nine of the Commission's Environmental and Social Justice Action Plan.⁴¹⁰

This decision prioritizes equity in every aspect of the TE programs it approves. As discussed below, we reserve at least 65 percent of the FC1 budget for underserved communities, along with 65 percent of the ME&O budget. ME&O must include targeted outreach to underserved and rural communities, small businesses, and tribal communities.

We recognize that tribal communities and enrolled members of California Tribes have unique barriers to TE that may require special attention. The Commission is committed to recognizing and respecting the sovereignty of the tribes and encouraging and facilitating their participation in Commission

⁴⁰⁸ Pub. Util. Code Section 740.12 (referencing definition of "underserved communities" in Pub. Util. Code Section 1601).

⁴⁰⁹ D.21-07-028; D.21-04-014; D.12-02-027.

⁴¹⁰ Staff Proposal at 18-20.

programs.⁴¹¹ Tribal communities have reported a lack of current information on TE options, a dearth of charging infrastructure in their communities, and a distrust of government incentive programs.⁴¹²

In sum, the tribal communities are uniquely situated and require creative solutions to achieve meaningful TE adoption. The limitations of the FC1 program may hinder its success in tribal communities. Therefore, we direct the Program Administrator to determine and propose to the Commission a percentage of funding dedicated for tribal communities within the budget established for underserved communities, as part of the Program Handbook development process. The Program Administrator shall consider the unique needs of tribal communities and enrolled members of California Tribes and propose methods to reach these communities effectively, potentially including alternative use cases to provide rebates and higher rebate levels.⁴¹³

We also limit the LD rebates available in FC1 to only MUDs and MUD-serving locations to ensure that these funds are used where they are most needed. Low-income MUDs can qualify for higher LD rebates. Higher rebates are

⁴¹¹ California Public Utilities Commission, Tribal Consultation Policy of the California Public Utilities Commission (April 26, 2018), available at: <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M212/K861/212861685.PDF> (adopted pursuant to Governor Brown’s Executive Order B-10-11, which included direction to state agencies to “permit elected officials and other representatives of tribal governments to provide meaningful input into the development of legislation, regulations, rules, and policies on matters that may affect tribal communities”).

⁴¹² CARB, Low-Income Barriers Study, Part B: Overcoming Barriers to Clean Transportation Access for Low-Income Residents at 91 (Feb. 21, 2018), available at: <https://ww2.arb.ca.gov/resources/documents/carb-barriers-report-final-guidance-document>.

⁴¹³ If alternative use cases are permitted for tribal communities or members, those use cases may also be permitted in the Locally Invested Transportation Equity pilot program.

also available for MDHD customers located in DACs because MDHD electrification is a key measure to improve air quality and DACs, in particular, often suffer from poor air quality. The Locally Invested Transportation Equity pilot program discussed below is available only to low-income customers and small fleets located in DACs to ensure that these customers benefit most from this small, targeted fund for innovative TE rebates. Finally, we direct that that contractors in the FC1 program meet certain provisions including paying workers the prevailing wage, developing training standards, and ensuring workforce diversity.

We are specifying several check-ins to ensure the FC1 program achieves the equity objectives. This decision directs that an annual equity roundtable be held where stakeholders evaluate how well the program is meeting its equity goals. At the mid-point of the FC1 program, the Commission shall conduct a Mid-Cycle Assessment that will review and analyze equity considerations, including: (1) progress on spending and participation in targeted communities; (2) whether a fuel card program for low-income customers should be adopted as part of FC1; and (3) data on various equity metrics, including EV adoption by low-income customers.

4.3.5.1. Light-Duty Customer Types Eligible for Higher Rebates

The Staff Proposal includes recommendations to target certain underserved community customers within the LD segment.⁴¹⁴ Specifically, the Staff Proposal recommends higher rebates for the following customer types:

⁴¹⁴ *Id.* at 19.

MUDs with a majority of “low-income” residents, MUDs located in DACs, and “MUD-serving public locations” that are located in DACs.⁴¹⁵

In comments, some parties express support for authorizing higher LD rebates for the proposed customer types.⁴¹⁶ However, other parties caution against the proposed customer types. TURN argues for, and GRID supports, focusing on people not places and requiring the majority of the residents at a MUD site to have incomes at or below 80 percent of the area median income (AMI) in order to be eligible for higher rebates.⁴¹⁷ Greenlining agrees with providing additional consideration for the proposed customer types, while stressing the importance of ensuring higher rebates benefit low-income residents

⁴¹⁵ Pub. Util. Code Section 1601(e) defines an “underserved community” as a community meeting one of the following criteria:

- (1) Is a “disadvantaged community” as defined by subdivision (g) of Section 75005 of the Public Resources Code.
- (2) Is included within the definition of “low-income communities” as defined by paragraph (2) of subdivision (d) of Section 39713 of Health and Safety Code.
- (3) Is within an area identified as among the most disadvantaged 25 percent in the state according to the California Environmental Protection Agency and based on the most recent California Communities Environmental Health Screening Tool, also known as CalEnviroScreen.
- (4) Is a community in which at least 75 percent of public school students in the project area are eligible to receive free or reduced-price meals under the National School Lunch Program.
- (5) Is a community located on lands belonging to a federally recognized California Indian tribe.

⁴¹⁶ See, e.g., ChargePoint Opening Comments on Staff Proposal at 12; SCE Opening Comments on Staff Proposal at 19; ATE Opening Comments on Staff Proposal at 9.

⁴¹⁷ TURN Opening Comments on Staff Proposal at 13 (referencing work by Greenlining); GRID Reply Comments on Staff Proposal at 2.

and not contribute to potential displacement of low-income residents by providing incentives to luxury MUD rentals and condos.⁴¹⁸

Cal Advocates and Greenlining support reserving a portion of the rebate program budget to serve specific underserved communities targeting people not places.⁴¹⁹ NDC argues for limiting higher rebates to MUDs with a majority of low-income residents, rather than also allowing MUDs located in underserved communities to qualify for higher rebates.⁴²⁰

Other parties support including additional customer types in the proposal. GRID asserts that the proposal is too limiting and that targeted rebates should not exclude the large fraction of low-income customers who reside in single-family homes.⁴²¹ EDF argues that the proposal fails to recognize that rural communities also require consideration and that there is a distinction between small and large businesses – proposing further intervention through ME&O, incentives, and additional TA for these customers.⁴²²

We adopt higher LD rebates for only one customer type in the proposal: MUDs with a majority low-income residents, defined as those customers with incomes at or below 80 percent of the AMI. In response to persuasive arguments from TURN, GRID, Greenlining, Cal Advocates, and NDC, this decision does not authorize higher rebates for all MUDs in DACs and MUD-serving public

⁴¹⁸ Greenlining Opening Comments on Staff Proposal at 2-3.

⁴¹⁹ Greenlining Opening Comments on Staff Proposal at 18-19; Cal Advocates Reply Comments on Staff Proposal at 11.

⁴²⁰ NDC Opening Comments on Staff Proposal at 15.

⁴²¹ GRID Opening Comments on Staff Proposal at 5-7.

⁴²² EDF Opening Comments on Staff Proposal at 9.

locations. Certain sites in DACs may not serve underserved communities or low-income residents, primarily or at all. Providing higher LD rebates only to MUDs with 50 percent or more low-income residents increases accessibility to TE for low-income utility customers. Further, higher rebates should primarily benefit low-income residents and not contribute to potential displacement of low-income residents.

We also agree with the proposed 80 percent of the AMI income threshold because this would better target low-income customers and accounts for income variances across the state. If this requirement is not reasonably administrable, the Program Handbook development process may explore and propose alternative criteria (*e.g.*, California Alternative Rates for Energy/Family Electric Rate Assistance eligibility). Finally, as discussed above, ME&O initiatives should include collaboration with and focus on underserved communities, including DACs, to respond to the unique needs and interests of the communities. We find that through inclusion of MUDs and MUD-serving locations as eligible FC1 recipients, through targeted ME&O in DACs, and through the program's additional spending requirement in underserved communities, discussed below, we sufficiently address this customer segment without providing increased incentives to customers who may not require them.

4.3.5.2. Medium-Duty and Heavy-Duty Customer Types Eligible for Higher Rebates

The Staff Proposal includes a recommendation to authorize higher rebates for certain underserved community customers within the MDHD segment.⁴²³

⁴²³ Staff Proposal at 19.

Specifically, the Staff Proposal recommends customers in DACs receive higher rebates because DACs suffer from poor air quality and the MDHD sectors have a disproportionate effect on air quality.

Several parties support increased MDHD rebates for customers in DACs.⁴²⁴ SBUA recommends adjusting rebate amounts or eligibility criteria for end-use sectors or geographic regions that demonstrate poor cost-effectiveness (e.g., small businesses in underserved communities).⁴²⁵ NDC also supports more targeted support for smaller fleets/small businesses.⁴²⁶ Greenlining cautions against providing additional subsidies to large corporations that operate warehouses, ports, and freight distribution.⁴²⁷

TURN argues there is a lack of evidence demonstrating why MDHD customers, likely comprised of large fleets and medium- and large-sized corporations, located in DACs require additional subsidies relative to customers in non-DACs.⁴²⁸ CSE recommends higher rebates for customers whose vehicles are not only domiciled in DACs but also operate for significant periods in DACs.⁴²⁹ EDF recommends dedicating a certain amount of funding to small fleets operating in DACs.⁴³⁰

⁴²⁴ Cal Advocates Opening Comments on Staff Proposal at 14; ATE Opening Comments on Staff Proposal at 9; GPI Opening Comments on Staff Proposal at 12; Greenlining Reply Comments on Staff Proposal at 5.

⁴²⁵ SBUA Opening Comments on Staff Proposal at 11.

⁴²⁶ NDC Opening Comments on Staff Proposal at 17.

⁴²⁷ Greenlining Opening Comments on Staff Proposal at 3.

⁴²⁸ TURN Opening Comments on Staff Proposal at 14.

⁴²⁹ CSE Opening Comments on Staff Proposal at 7.

⁴³⁰ EDF Opening Comments on Staff Proposal at 12.

We find merit in parties' support of this section of the Staff Proposal. We authorize higher MDHD rebates for customers in DACs because DACs suffer from poor air quality and the MDHD sectors have a disproportionate effect on air quality. Additionally, in light of the unique barriers to TE faced by tribal communities, we will also require that the Program Administrator consider higher MDHD rebates for tribal communities in the Program Handbook development process.

We also adopt certain requirements proposed in parties' comments. In response to Greenlining's arguments, we prohibit Fortune 1000 corporations-operating in DACs or elsewhere—from receiving any FC1 rebates because these large corporations do not require additional TE incentives funded by ratepayers. We also adopt CSE's recommendation to authorize higher rebates for customers whose vehicles are domiciled and operate for significant periods in DACs. The Program Handbook should determine the process for qualifying these customers for rebates, including the amount of time that must be spent travelling in DACs to qualify for higher rebates as well as the specific rebate levels. Finally, we find merit to the claims that small businesses and fleets currently require more targeted and continuous support, which would promote compliance with the CARB Advanced Clean Fleets regulation. Following stakeholder feedback, the Program Handbook shall develop approaches to better target these customers and provide definitions for small fleets and small businesses. At minimum, the definitions shall incorporate the definition of small business contained in Public Utilities Code Section 323.5(a)(2).

4.3.5.3. Minimum Spending in Underserved Communities

AB 841 requires IOU programs to direct a minimum of 35 percent of TE investments towards underserved communities.⁴³¹ The Staff Proposal goes beyond this requirement and recommends allocating at least 50 percent of FC1 funding to underserved communities, which mirrors requirements the Commission adopted for more recent utility TE decisions.⁴³²

Most parties endorse the Staff Proposal's recommendation to dedicate a minimum of 50 percent of FC1 funds to underserved communities.⁴³³ Only GPI argues for a lower amount—35 percent—in order to better balance competing public policy interests of encouraging EV adoption, promoting higher charger utilization, and a focusing on undeserved communities.⁴³⁴ In contrast, Cal Advocates, AEE, CSE, NDC, Greenlining, and TURN recommend at least a 50 percent allocation to support communities affected by both poverty and pollution.⁴³⁵

Instead of the Staff Proposal's 50 percent recommendation, we adopt a minimum FC1 funding allocation of 65 percent for underserved communities. Parties present convincing arguments that the proposed 50 percent requirement

⁴³¹ Pub. Util. Code Section 740.12(b) (citing definition of “underserved communities” in Pub. Util. Code Section 1601).

⁴³² Staff Proposal at 19.

⁴³³ Joint Commenters Opening Comments on Staff Proposal at 10.

⁴³⁴ GPI Opening Comments on Staff Proposal at 12.

⁴³⁵ Cal Advocates Opening Comments on Staff Proposal at 15; AEE Opening Comments on Staff Proposal at 15; CSE Opening Comments on Staff Proposal at 7; NDC Opening Comments on Staff Proposal at 17; Greenlining Opening Comments on Staff Proposal at 4; TURN Opening Comments on Staff Proposal at 12-14.

is the bare minimum the Commission should consider. We are persuaded that this increased allocation better serves the state's EV adoption goals, supports communities confronting greater barriers to EV adoption, and promotes equity, particularly given the extremely low level of EV adoption in underserved communities to date. Further, the 65 percent minimum requirement more effectively advances the goals of the Commission's Environmental and Social Justice Action Plan.

In addition, although tribal communities fall under the definition of "underserved communities" in AB 841, we want to ensure that tribal communities benefit from this program. We direct that during the Program Handbook development process, the Program Administrator propose a set-aside percentage of the 65 percent minimum spending in underserved communities requirement to specifically benefit tribal communities.

4.3.5.4. Annual Equity Roundtable

The Staff Proposal recommends that the IOUs and Program Administrator host an annual equity roundtable to review the progress of the FC1 program in addressing equity considerations.⁴³⁶ Several parties support hosting an annual equity roundtable. Cal Advocates and UCAN assert the roundtable is essential to evaluate the program, especially with regards to equity.⁴³⁷ NDC argues annual reviews, along with a mechanism to quickly implement program modifications, would be beneficial to measure and realize public benefits anticipated from the

⁴³⁶ Staff Proposal at 19.

⁴³⁷ Cal Advocates Opening Comments on Staff Proposal at 17; UCAN Reply Comments on Staff Proposal at 6.

investments.⁴³⁸ ATE, on the other hand, claims a mid-cycle FC1 program evaluation would be sufficient.⁴³⁹

Parties' comments also include proposals to collect data related to equity. Greenlining recommends developing clear equity metrics and publishing deployment and resource data to identify where gaps exist and ensure investments target priority populations.⁴⁴⁰ Greenlining and CSE note the lack of and need for centralized geospatial analysis of the locations of IOU TE investments and infrastructure.⁴⁴¹ Greenlining recommends the program collect equity-related data on land use, zoning, demographic trends and climate data on sea level rise and flood and fire risk in equity process.⁴⁴²

With parties' support, we adopt a requirement that the Program Administrator host an annual roundtable addressing equity. We discuss the requirements for the annual roundtable in Section 4.2.5. The annual review process, coupled with a mechanism to modify certain program elements, promotes equity considerations by allowing the Commission and stakeholders to measure the program's success and make any necessary changes. Instead of the Staff Proposal's recommendation to host a TE data summit and a separate equity roundtable, we consolidate these events into one annual roundtable to account for interrelated topics, such as data on the program's equity components and rebate levels. Because this may result in a combined, multi-day event, the

⁴³⁸ NDC Opening Comments on Staff Proposal at 18.

⁴³⁹ ATE Opening Comments on Staff Proposal at 9.

⁴⁴⁰ Greenlining Opening Comments on Staff Proposal at 9.

⁴⁴¹ *Id.*; CSE Reply Comments on Staff Proposal at 5.

⁴⁴² Greenlining Opening Comments on Staff Proposal at 12.

Program Administrator shall publish agendas in advance to allow stakeholders to participate in specific topics of their choosing. At a minimum, participation in these roundtables shall include CEC, CARB, CBOs, CCAs, ED staff, Disadvantaged Communities Advisory Group,⁴⁴³ environmental justice organizations, EVSPs, IOUs, Low Income Oversight Board, and tribal community representatives.

The purpose of the annual roundtables is to review the progress of FC1 and the effectiveness of program requirements. At the roundtables, the Program Administrator shall present current program requirements, data on progress in achieving targets and rebate deployment, ME&O efforts, and TA activities. The data presented shall include equity metrics such as adoption of EVs by low-income customers, charger availability and operational status in low-income communities, and affordability of rates charged to drivers in low-income communities. While the roundtable is not the proper venue to modify the Program Administrator's contract or key terms of the program (*e.g.*, overall budget, MDHD vs. LD split, prohibition on IOU ownership of BTM charging infrastructure, etc.), this process may result in changes to program elements such as the rebate level, rebate design/delivery, ME&O strategies, customer targeting, or requirements to ensure participation of underserved communities.

The IOUs, in consultation with the Program Administrator, shall jointly file a Tier 2 advice after the roundtable proposing any changes to the program.

⁴⁴³ California Public Utilities Commission, Disadvantaged Communities Advisory Group, <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/infrastructure/disadvantaged-communities/disadvantaged-communities-advisory-group/>.

The Advice Letter shall contain a summary of the discussion at the roundtable. Stakeholders may comment on the Advice Letter filing before the Commission approves any modifications to the program.

4.3.5.5. Additional Equity Measures

The Staff Proposal recommends that the equity program elements work in tandem with ME&O initiatives that focus on reaching underserved communities.⁴⁴⁴ The Staff Proposal further recommends significant collaboration with CBOs – reflected in the early design of the ME&O initiatives – to help the Program Administrator understand the unique needs and interests of local communities.⁴⁴⁵ Further, the Draft TEF and the Staff Proposal recommend incorporating principles from the Commission’s Tribal Consultation Policy into the TE equity efforts and the Program Handbook to ensure engagement with tribal communities.⁴⁴⁶

As discussed above, parties generally support increased outreach to underserved communities. More specifically, NDC urges the Commission to increase the budget for ME&O to include general EV education activities targeting underserved communities.⁴⁴⁷ Greenlining encourages the Commission to create a set-aside program dedicated to DACs with meaningful stakeholder engagement processes.⁴⁴⁸

⁴⁴⁴ Staff Proposal at 19.

⁴⁴⁵ *Ibid.*

⁴⁴⁶ *Ibid.*

⁴⁴⁷ NDC Opening Comments on Staff Proposal at 17.

⁴⁴⁸ Greenlining Reply Comments on Staff Proposal at 3.

Recognizing stakeholder support for comprehensive equity strategies, we adopt the Staff Proposal's recommendations along with a requirement that at least 65 percent of ME&O funds be spent towards underserved communities, mirroring the FC1 funding allocation. Following stakeholder input, the Program Handbook shall propose ME&O initiatives specifically targeting underserved communities. The Program Handbook shall also incorporate principles from the Commission's Tribal Consultation Policy to advance efforts to engage with tribal communities and the Environmental and Social Justice Action Plan. Stakeholders should provide ongoing feedback on the effectiveness of ME&O efforts focused on underserved communities, as described in the roundtable discussion above.

4.3.5.6. Workforce Development

The Staff Proposal solicits party feedback on potential workforce development requirements related to equity and safety. Specifically, the Staff Proposal asks the following questions:

1. How can the FC1 rebate program ensure workforce development in underserved communities?
2. How can we ensure that this investment includes consideration for residents in these communities to have access to high-road jobs?
3. Beyond the EV Infrastructure Training Program (EVITP), are other workforce development measures necessary?
4. Are any additional workforce requirements needed to ensure safety?⁴⁴⁹

⁴⁴⁹ Staff Proposal at 20, 24.

Additionally, Public Utilities Code Section 740.12(a)(1)(F) states:
“[w]idespread transportation electrification should . . . create high-quality jobs for Californians.”

Parties offer various opinions on this topic. ATE claims that simply providing rebates in underserved communities should result in workforce development.⁴⁵⁰ NDC provides the following recommendations: (1) the Commission should partner with established CBOs focused on job training and employee development in underserved communities; (2) the Program Administrator should establish systems to connect the IOUs, EVSPs, and partner CBOs with job training organizations to hire workers from underserved communities; and (3) require data collection and reporting on the number of residents in underserved communities trained and employed in quality jobs related to the program.⁴⁵¹

Greenlining argues that TE investments are a form of community development that should create high-road jobs for vulnerable communities.⁴⁵² Greenlining cited guidance in its Greenlined Economy Handbook concerning equitable community investment standards.⁴⁵³ GRID recommends adopting requirements similar to the Commission’s Solar on Multifamily Affordable Housing program, which contains job-training requirements and encourages

⁴⁵⁰ ATE Opening Comments on Staff Proposal at 10.

⁴⁵¹ NDC Opening Comments on Staff Proposal at 18.

⁴⁵² Greenlining Opening Comments on Staff Proposal at 23-24.

⁴⁵³ *Id.* (citing Greenlining, Greenlining Economy Guidebook (2020), available at: <https://greenlining.org/wp-content/uploads/2020/09/Greenlined-Economy-Guidebook-2020.pdf>).

local and targeted hiring practices.⁴⁵⁴ GRID also supports coordination with a variety of industry segment and training providers to develop incentives and standards for inclusive workforce development.⁴⁵⁵

We adopt program goals, requirements, and implementation strategies to help ensure TE investments create high-quality jobs, facilitate access to these jobs for targeted populations, and address the need for a skilled, trained, and diverse workforce. As GRID asserted, the Commission's Solar on Multifamily Affordable Housing program provides precedent for workforce training requirements. We adopt a similar approach here – to be finalized with stakeholder input through the development of the Program Handbook.

To ensure high-quality contractor participation in the program and to advance the state's workforce development and economic equity goals, the Program Administrator shall impose the following requirements in the Program Handbook on contractors and their subcontractors who install EVSE and any other electrical infrastructure under this program:

1. All workers under the program are paid the prevailing wage;
2. Contractors and subcontractors have no unresolved Contractors State License Board license citations in the previous five years;
3. Contractors and subcontractors have no unresolved safety violations with California Department of Occupational Health and Safety within the previous five years, nor compliance cases with the California Labor & Workforce Agency;

⁴⁵⁴ GRID Opening Comments on Staff Proposal at 7-8.

⁴⁵⁵ *Ibid.*

4. Contractors and subcontractors have no unresolved Department of Industrial Relations wage claim violations in the previous five years; and
5. All work is done in compliance with relevant safety standards and local, state, and federal laws.

Additionally, the Program Administrator shall develop an FC1 program website for customers to view approved contractors and for prospective and approved contractors to access program information and eligibility requirements. The FC1 program website shall include a searchable list of contractors that allows customers to find approved contractors, including their contact information, all certifications held by the contractor, the services provided, and the geographic reach of the contractor (*i.e.*, zip code/counties served). The website shall also include a page for interested contractors to learn about participation requirements and how to submit an application to become an approved contractor. The application process should be quick and seamless. To provide a grace period to ensure sufficient contractors are on the approved list, customers are not required to use contractors on the approved list within the first six months of the program's launch. After six months, only contractors from the approved contractor list shall be eligible to install EVSE and related infrastructure under the FC1 program. The following are criteria for inclusion on the contractor list:

1. Job Quality: The Program Administrator shall assess and determine whether participating contractors recruit and retain a skilled and trained workforce. The Program Administrator should leverage, at minimum, high-quality workforce education and training guidance consistent with the Commission's Environmental and Social Justice Action Plan to develop these parameters.
2. Job Access: The Program Administrator shall assess and establish targeted hiring goals, and any other measures, to

address job access, increase workforce diversity, and improve the inclusion of “disadvantaged workers”⁴⁵⁶ and other priority population segments and/or regions.

During the Program Handbook development process, the Program Administrator shall ensure sufficient public stakeholder opportunities are available to provide input on the inclusion of additional workforce development and economic equity metrics. In addition, the Program Administrator shall determine the appropriate methods to ensure contractor accountability with the labor, workforce, and contractor standards outlined here. The Program Administrator shall remove contractors from its approved contractor list if they no longer comply with the standards.

4.3.5.7. Locally Invested Transportation Electrification Pilot Program

We authorize funding for a pilot program for innovative equity-based locally or regionally appropriate incentives. The rebate program is an efficient streamlined method to fund TE infrastructure but may miss unique or innovative opportunities. The Locally Invested Transportation Equity (LITE) pilot program would provide an opportunity to test new rebate design approaches that may fill gaps in the statewide rebate program in a creative way. Due to their expertise working with customers and local communities, as well as experience and knowledge of successful outreach practices, we find it appropriate to limit the pilot program to CCAs, CBOs, and other entities demonstrating experience

⁴⁵⁶ See Cal. Workforce Dev. Bd., Putting California on the High Road: A Jobs and Climate Action Plan for 2030 (June 2020), available at: <https://cwdb.ca.gov/wp-content/uploads/sites/43/2020/09/AB-398-Report-Putting-California-on-the-High-Road-ADA-Final.pdf> (defining “disadvantaged workers” as workers who reside in DACs based on CalEnviroScreen 3.0).

working with local communities. These pilot projects will provide the Commission with information to determine potential modifications to the statewide rebate program during the Mid-Cycle Assessment.

The objective of this pilot is to design and implement innovative approaches to rebates to support charging infrastructure for low-income customers,⁴⁵⁷ including tribal members, or small fleets located within DACs (*i.e.*, census tracts in the top 25 percentile in CalEnviroScreen 4.0 on a statewide basis). The pilot should test innovative approaches for equity-focused rebates to potentially scale within the FC1 program. Thus, any pilot should be informed by the design, targeted customers, and guidelines of the FC1 program. The Mid-Cycle Assessment should evaluate any pilots to determine whether to implement the tested approach in the FC1 program. Any pilot should be innovative, and thus not duplicative of previous ratepayer-funded TE programs and pilots or the FC1 program (*e.g.*, rebate, ME&O, or TA funding). Any pilot must comply with all technical requirements the Commission has established for ratepayer funded EVSE.

We find that is appropriate for the IOUs to issue the RFP for the LITE pilot program and contract with any selected entities in order to allow the Program Administrator to focus on the statewide rebate program. We designate SDG&E as the lead IOU to conduct the RFP, coordinate with the other IOUs and ED staff to select shortlisted bidders, and file a Tier 3 Advice Letter describing the shortlisted bidders. We authorize Energy Division staff to approve the shortlisted bids and select approved bids among the shortlisted bids, based on

⁴⁵⁷ Low-income customers are those with incomes at or below 80 percent of the statewide AMI.

compliance with the required criteria. The winning bidders should coordinate contracts directly with the respective IOU(s) for their region, as each IOU shall execute and manage any contracts for pilots in its service territory. Only winning bidders must submit implementation plans and handbooks for their pilot proposals.

The budget of the pilot program will be up to \$25 million total out of the FC1 budget. Individual pilots are capped at \$4 million but can cost less, consistent with the SB 350 Priority Review Programs.⁴⁵⁸ This will allow for at least six individual pilots to test various ways to address the stated equity objectives. Administrative costs associated with the pilots are capped at eight percent of the total pilot program budget, consistent with the FC1 program administrative cost cap. This should include both the contracted entity's administrative costs as well as the IOU's administrative costs. We limit the IOUs' costs for the LITE pilot program to those associated with their role in managing the RFP and subsequent contracts. As with the rest of FC1, any funding spent is limited to the amount of funding the service territory pays (*i.e.*, SDG&E ratepayers cannot fund pilots in PG&E's territory). If a contracted entity spans multiple IOU territories, it will need to account for funding differently in each region.

The pilot(s) should begin no later than the end 2025, concurrent with the FC1 rebate program. Per the process discussed below, this would mean that the RFP and selection process should begin by the end of 2023. As the purpose of these pilots is to identify innovative approaches to equity rebates for FC1, any

⁴⁵⁸ D.18-01-024.

pilot must be limited to an implementation period of up to three years, and the evaluation must occur concurrently with, and conclude no later than the end of, the Mid-Cycle Assessment. ED staff will be responsible for evaluating the pilots and developing recommendations for next steps based on findings.

CCAs, CBOs, and any other entities demonstrating experience working with local communities may apply for pilot program funding and file proposals in response to a competitive solicitation for implementation of a pilot that meets the above stated objective and the criteria outlined below. We require the following guidance and process for selecting pilots at the start of FC1:

1. A competitive RFP process run by the IOUs will identify innovative pilots totaling up to \$25 million that address the stated objective above.
2. Following the RFP, the IOUs should submit the shortlisted pilots to the Commission via Tier 3 Advice Letter. This will ensure that the proposed pilots: (1) meet all criteria identified in this decision, (2) support the objective defined in this decision, (3) establish a process to coordinate with the Program Administrator, and (4) are fairly selected by the IOUs in a competitive process.
3. Within the Advice Letter filing, the IOUs should include an implementation plan and proposed pilot program handbook, which ED staff can leverage to support an evaluation of the pilot. Additionally, the IOUs should propose the establishment of one-way subaccounts to record the cost of the pilots in their TE balancing accounts.
4. Once the Commission authorizes the pilots, the IOU should hold the contract and serve as the point of contact with the selected entity and with the Commission.
5. Adopted pilots will be subject to a Commission-led audit or review, as is the case for the rest of FC1 funding. Contracted pilot administrators should submit quarterly reporting of expenditures and progress towards targets to the Commission.

6. Pilots selected for implementation should meet the following criteria:
- Any entity submitting a proposal for pilot funding must provide previously all available administered TE program evaluation reports and cost data to demonstrate the entity's ability to efficiently and cost-effectively implement a pilot;
 - The pilots' design and objectives must support the objectives established in this decision for ratepayer support of BTM TE infrastructure, as well as the specific objective for this pilot funding outlined above;
 - Pilot proposals should clearly state the objectives of the pilot and how the proposed approach is adequate to meet the objectives;
 - Pilot proposals must include a data reporting plan that aligns with the overall reporting requirements for FC1; ED staff will leverage this reported data in its Mid-Cycle Assessment;
 - Pilots must treat bundled and unbundled customers equally;
 - Proposals must demonstrate that the pilot is designed to: (1) support the neediest regions of the state or (2) target low-income customers⁴⁵⁹ or small fleets located within DACs;
 - Pilots must target the identified priority segments for FC1: MUDs, MUD-serving public locations, and MDHD customers;⁴⁶⁰
 - Pilots should not be redundant with other efforts (*e.g.*, they should not provide rebates that would be available under the larger program, existing programs or

⁴⁵⁹ Customers with incomes at or below 80 percent of statewide AMI.

⁴⁶⁰ Consistent with any exceptions adopted for tribal communities or tribal members.

duplicate ME&O efforts funded through FC1), and they should not be duplicative of each other;

- Pilot proposals must align with the Commission's Environmental and Social Justice Action Plan;
- Approval of these funds should not result in a reduction of funding from other CCA or CBO TE-related programs; and
- Once selected, the pilot administrator shall ensure no duplication of outreach efforts with the Program Administrator.

4.3.6. FC1 Priority Segments/Use Cases

The Staff Proposal contains a more focused approach to prioritizing certain sectors and use cases than the Commission has applied in previous IOU TE programs.⁴⁶¹ The proposed FC1 program focuses on the MDHD sectors and LD charging at MUDs and MUD-serving public locations. With the continued LCFS holdback funding, resiliency funding through other Commission proceedings,⁴⁶² other public EV charging funding, and the forthcoming adoption of new CALGreen requirements, the Staff Proposal recommends phasing out ratepayer funding for TE new construction, TE resiliency, panel upgrades, and workplace charging starting in 2025.

4.3.6.1. Allocation of Funds Between MDHD and LD

The Staff Proposal recommends allocating 70 percent of rebate funding for MDHD charging and 30 percent for LD charging at MUDs and MUD-serving

⁴⁶¹ Staff Proposal at 20-22.

⁴⁶² See D.20-05-051; D.20-06-017; D.20-12-027; D.20-12-029; D.21-01-018.

public locations.⁴⁶³ The Staff Proposal argues that the Commission has approved less funding for the MDHD sectors and that fleet electrification often has higher installation costs and complexity compared to the LD sector. The Staff Proposal further justifies the funding allocation by referencing existing and forthcoming CARB regulations—including Advanced Clean Trucks, Advanced Clean Fleets, and Innovative Clean Transit—which will accelerate adoption of MDHD EVs. Finally, the Staff Proposal emphasizes the need to electrify the MDHD sectors to reduce air pollution disproportionately impacting DACs.

Many parties express support for the Staff Proposal’s recommended allocation, with some suggesting modifications. BNSF argues existing and pending CARB regulations—including some absent from Staff Proposal (*e.g.*, Zero Emission Ports and Commercial Harbor Craft)—necessitate greater support for the MDHD sectors.⁴⁶⁴ The Joint Commenters generally support the proposal but recommend including low- and moderate-income single-family residences as a target LD customer.⁴⁶⁵ Similarly, CSE generally supports the proposal but urged the Commission to revisit the allocation of funding following additional data collection and analysis.⁴⁶⁶ GPI also supports the proposal and recommends reassessing the allocation before the beginning of FC1 and during a Mid-Cycle Assessment.⁴⁶⁷

⁴⁶³ *Id.* at 20-21.

⁴⁶⁴ BNSF Opening Comments on Staff Proposal at 4.

⁴⁶⁵ Joint Commenters Opening Comments on Staff Proposal at 11.

⁴⁶⁶ CSE Opening Comments on Staff Proposal at 9.

⁴⁶⁷ GPI Opening Comments on Staff Proposal at 17.

Other parties propose modifying the Staff Proposal's allocation. EDF Renewables suggests a 50/50 split in funding.⁴⁶⁸ NDC recommends allocating 70 percent of rebates to the LD sector and 30 percent to the MDHD sectors – with residential LD customers receiving at least 50 percent of total rebates – arguing that commercial and industrial customers operating MDHD vehicles profit from air polluting activities, have budgets to replace and upgrade vehicles, and receive brand and fuel cost benefits from fleet electrification.⁴⁶⁹ Cal Advocates asserts the proposal requires additional cost-benefit analysis and justification given data showing operational cost parity between electrified and non-electrified MDHD vehicles.⁴⁷⁰ EVgo urges the Commission to adopt a more nuanced and flexible approach that accounts for the regulatory landscape, vehicle availability, and other funding.⁴⁷¹ AEE recommends allocating funding based on updated EVSE data from the CEC and CARB.⁴⁷² Auto Innovators similarly advocates for flexibility in determining appropriate allocation amounts.⁴⁷³

We adopt the Staff Proposal's recommended allocation of 70 percent of FC1 funding for the MDHD sectors and 30 percent of FC1 funding for the LD sector. Parties present reasonable arguments for increasing the LD allocation;

⁴⁶⁸ EDF Renewables Opening Comments on Staff Proposal at 3.

⁴⁶⁹ NDC Opening Comments on Staff Proposal at 19; NDC Reply Comments on Staff Proposal at 7-8.

⁴⁷⁰ Cal Advocates Opening Comments on Staff Proposal at 18-20; Cal Advocates Reply Comments on Staff Proposal at 13.

⁴⁷¹ EVgo Opening Comments on Staff Proposal at 8.

⁴⁷² AEE Opening Comments on Staff Proposal at 12.

⁴⁷³ Auto Innovators Opening Comments on Staff Proposal at 16.

however, we are more convinced by arguments for increased near-term funding for the MDHD sectors, which have historically received less Commission funding than the LD sector, and which provide greater air quality benefits. The 70 percent allocation for the MDHD sectors supports compliance with CARB regulations that will rapidly accelerate electrification of MDHD fleets.⁴⁷⁴

Additionally, we agree with parties advocating for additional flexibility because data collection and analysis may support a different allocation and circumstances may change over the course of FC1. For example, at the Mid-Cycle Assessment in 2027, analyses may justify additional LD sector funding to support CARB's ACCII and ACC regulations.⁴⁷⁵ Therefore, we shall review the adequacy of the funding allocation during the Mid-Cycle Assessment, with stakeholder input.

4.3.6.2. Eligible LD Sectors

While recommending a larger proportion of funding for the MDHD sectors, the Staff Proposal recognizes a need for near- and medium-term LD-sector funding, especially for MUD residents who face increased barriers to EV adoption.⁴⁷⁶ To increase access to EV charging for MUD residents, the Staff Proposal recommends limiting LD sector rebates to chargers sited at MUDs and public chargers located in areas of high MUD density, or "MUD-serving

⁴⁷⁴ See, e.g., CARB, Advanced Clean Trucks, <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks>; CARB, Advanced Clean Fleets, <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets>; CARB, Innovative Clean Transit: <https://ww2.arb.ca.gov/our-work/programs/innovative-clean-transit>.

⁴⁷⁵ CARB, Advanced Clean Cars II: <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-ii>.

⁴⁷⁶ Staff Proposal at 21.

public locations.” Further, it recommends excluding workplaces because IOU programs have made much more headway with installations at workplaces as compared to MUDs, the CEC’s initial AB 2127 Charging Assessment’s projection of less need throughout the state by 2030 in this segment as compared to MUDs and public charging, and the continued uncertainty around in-person work patterns and workplace charging due to the COVID-19 pandemic.

The Staff Proposal reasons that the projected charging needs identified in the CEC’s AB 2127 Charging Assessment support these eligibility requirements. Finally, the Staff Proposal recommends the Program Handbook determine the definition of MUD-serving public locations, accounting for definitions utilized in SDG&E’s Power Your Drive Extension and SCE’s Charge Ready 2 programs.

Many parties agree with the Staff Proposal’s recommended support of chargers sited at MUDs and MUD-serving public locations.⁴⁷⁷ Other parties disagree and recommend support for other LD-sector chargers (*e.g.*, single-family residences, rideshare, and municipal fleets).⁴⁷⁸ Several parties also emphasize the need to preserve flexibility and account for future market conditions in 2025 and beyond.⁴⁷⁹ NDC asserts the Staff Proposal offers reasonable guidance to identify

⁴⁷⁷ SCE Opening Comments on Staff Proposal at 20; Cal Advocates Opening Comments on Staff Proposal at 20; Joint Commenters Opening Comments on Staff Proposal at 11; NDC Opening Comments on Staff Proposal at 20.

⁴⁷⁸ EDF Renewables Opening Comments on Staff Proposal at 3; EVgo Opening Comments on Staff Proposal at 6; SBUA Opening Comments on Staff Proposal at 5; ChargePoint Reply Comments on Staff Proposal at 7.

⁴⁷⁹ ATE Opening Comments on Staff Proposal at 10; AEE Reply Comments on Staff Proposal at 3; Auto Innovators Opening Comments on Staff Proposal at 21; Joint Commenters Opening Comments on Staff Proposal at 3; CEDMC Opening Comments on Staff Proposal at 2-3.

MUD-serving public locations.⁴⁸⁰ Finally, some parties recommend extending eligibility to workplaces and to workplaces and other public locations.⁴⁸¹

While we understand the need for other LD-sector charger locations that parties mention in comments (*e.g.*, single-family homes and workplaces), we must be prudent with limited ratepayer funding. This is especially true given the increasing role the IOUs have in supporting utility-side TE infrastructure. Thus, we find that MUDs and MUD-serving public locations are most critical to target due to the widespread lack of access to chargers for MUD residents. The CEC's initial AB 2127 Charging Assessment supports this finding.⁴⁸² We also agree that the Program Handbook should adopt a definition of MUD-serving public locations, following stakeholder feedback. In developing the Program Handbook, the Program Administrator and stakeholders should consider the Commission-adopted definition from SDG&E's Power Your Drive Extension program and the pending definition for SCE's Charge Ready 2 program.⁴⁸³ Finally, similar to the funding split, we will revisit the eligibility requirements for LD-sector rebates during the Mid-Cycle Assessment, with stakeholder input.

⁴⁸⁰ NDC Opening Comments on Staff Proposal at 15-16.

⁴⁸¹ ChargePoint Opening Comments on Staff Proposal at 13; EDF Renewables Opening Comments on Staff Proposal at 3; SBUA Opening Comments on Staff Proposal at 6; VGIC Opening Comments on Staff Proposal at 15; SDG&E Opening Comments on Staff Proposal at 7; Fermata Reply Comments on Staff Proposal at 11; Joint Parties Reply Comments on Staff Proposal at 2; AEE Reply Comments on Staff Proposal at 8.

⁴⁸² CEC, Electric Vehicle Charging Infrastructure Assessment – AB 2127, <https://www.energy.ca.gov/programs-and-topics/programs/electric-vehicle-charging-infrastructure-assessment-ab-2127>.

⁴⁸³ D.20-08-045; SDG&E Advice Letter 3809-E.

4.3.6.3. MDHD Definition

The Staff Proposal solicits party feedback on the MDHD definition.⁴⁸⁴ The Joint Commenters support a definition consistent with the Commission's near-term priorities decision.⁴⁸⁵ BNSF recommends the definition encompass all on-road and off-road MDHD vehicles or equipment subject to CARB zero-emissions regulation; on-road vehicles, such as MDHD vans, trucks, and transit vehicles; and off-road vehicles and equipment such as yard trucks, forklifts, side/top picks, cranes, locomotives, transport refrigeration units, and commercial vessels.⁴⁸⁶ SCE cautions against including vehicle weight class in the definition, claiming this would exclude some small-business customers who utilize LD vans or pick-up trucks.⁴⁸⁷ Auto Innovators recommend including vans and small trucks in the definition.⁴⁸⁸

For the FC1 program, we adopt the modified MDHD definition contained in D.20-09-025, which encompasses all EVs having a gross vehicle weight rating of 8,501 pounds or more, while also removing the exception of trains or locomotives, which BNSF identifies are also subject to CARB TE regulations.⁴⁸⁹ We also adopt the following definition of off-road EVs and equipment as including: Locomotives, Construction or Agricultural Equipment, Small

⁴⁸⁴ Staff Proposal at 22.

⁴⁸⁵ Joint Commenters Opening Comments on Staff Proposal at 3.

⁴⁸⁶ BNSF Opening Comments on Staff Proposal at 4.

⁴⁸⁷ SCE Opening Comments on Staff Proposal at 20.

⁴⁸⁸ Auto Innovators Opening Comments on Staff Proposal at 21.

⁴⁸⁹ D.20-09-025 at 9-10 (citing CARB LCFS regulations); BNSF Opening Comments on Staff Proposal at 4.

Off-Road Engines, and Off-Highway Recreational Vehicles.⁴⁹⁰ This broad MDHD definition includes all vehicle categories parties recommend in comments, including off-road MDHD vehicles, vans, transit, yard trucks, forklifts, trains/locomotives, side/top picks, cranes, commercial vessels, and small trucks.

Similar to the funding allocation and eligibility requirements described above, we recognize that future circumstances may warrant modifying or updating the definition. Therefore, in response to stakeholder feedback, the Program Administrator may propose modifications to the MDHD definition through the post-roundtable Tier 2 Advice Letter filings.

4.3.6.4. Prioritizing MDHD Use Cases

The Staff Proposal requests input on whether to prioritize or deprioritize particular MDHD use cases (*e.g.*, quotas for number or rebates supporting transit, forklifts, etc.).⁴⁹¹ ATE cautions against prioritizing particular use cases.⁴⁹² SCE urges the Commission to provide increased rebates to use cases that require more assistance or that fulfill state objectives.⁴⁹³ NDC proposes prioritizing small businesses.⁴⁹⁴ SDG&E supports barring Fortune 1000 corporations from receiving rebates – in order to support equity goals – and ensuring MDHD rebates primarily benefit small fleets that lack the resources needed to electrify.⁴⁹⁵

⁴⁹⁰ D.20-09-025 at 24.

⁴⁹¹ Staff Proposal at 22.

⁴⁹² ATE Opening Comments on Staff Proposal at 11.

⁴⁹³ SCE Opening Comments on Staff Proposal at 20.

⁴⁹⁴ NDC Opening Comments on Staff Proposal at 20.

⁴⁹⁵ SDG&E Opening Comments on Staff Proposal at 8.

Cal Advocates similarly recommends supporting small private entities, instead of corporations that already must transition to zero-emission fleets under the CARB's Advanced Clean Fleets regulation.⁴⁹⁶ Cal Advocates and NDC additionally recommend conducting a cost-benefit analysis to identify pollution reduction opportunities with the lowest ratepayer costs.⁴⁹⁷ Conversely, CSE supports prioritizing use cases subject to emissions reduction programs, such as the CARB's Advanced Clean Fleets and Innovative Clean Transit regulations.⁴⁹⁸

We direct the Program Administrator to prioritize small fleets because, as parties argued, they often lack the resources needed to electrify. The Program Handbook shall define "small fleets" and propose a process to prioritize them. If appropriate, the definition should align with those in the CEC's *Energize*, the CARB's Advanced Clean Fleets regulation, and other relevant MDHD regulations in California (*i.e.*, Drayage Trucks at Seaports and Railyards, Airport Shuttles, Transport Refrigeration Units, and Innovative Clean Transit). As discussed above, we find Fortune 1000 corporations ineligible to participate in the FC1 rebate program.

In creating the Program Handbook, the Program Administrator, IOUs, fleet operators, EVSPs, and other stakeholders should present data and findings from current MDHD programs to determine how the FC1 program can best account for the needs of differing MDHD fleet customers. The Program Administrator may propose program elements to address these needs.

⁴⁹⁶ Cal Advocates Reply Comments on Staff Proposal at 12.

⁴⁹⁷ Cal Advocates Opening Comments on Staff Proposal at 21; NDC Opening Comments on Staff Proposal at 20.

⁴⁹⁸ CSE Opening Comments on Staff Proposal at 10.

We further find that future conditions may justify different use case prioritization. To provide program flexibility, the annual roundtables should serve as a venue for stakeholders to provide input on both the need and potential methods to target specific MDHD use cases. During the Mid-Cycle Assessment, the Program Administrator and parties should evaluate whether fleets supported by FC1 rebates are achieving cost-effective GHG reductions and, if not, how to modify program requirements to target more cost-effective GHG reductions from the MDHD sectors. We authorize the Program Administrator to propose modifications to prioritize or deprioritize MDHD use cases through the pot-roundtable Tier 2 Advice Letters or during the Mid-Cycle Assessment.

4.3.6.5. MDHD Requirement for EV Purchase

The Staff Proposal asks parties whether the FC1 program should include a requirement for MDHD rebate recipients to purchase a certain number of EVs, as the Commission has adopted for existing IOU programs.⁴⁹⁹ SBUA cautions against adopting a purchase mandate for small businesses because separate entities (*e.g.*, suppliers, contractors, customers) may finance, own, and control vehicles, property, and TE infrastructure.⁵⁰⁰ SCE argues that a purchase requirement would not support public or site-hosted commercial vehicle charging, which is a current gap in IOU commercial charging programs.⁵⁰¹ ChargePoint supports a purchase mandate but recommends allowing leased

⁴⁹⁹ Staff Proposal at 22.

⁵⁰⁰ SBUA Opening Comments on Staff Proposal at 9.

⁵⁰¹ SCE Opening Comments on Staff Proposal at 21.

vehicles to fulfill the requirement as well.⁵⁰² In order to ensure ratepayer benefits, NDC proposes requiring the purchase of one MDHD EV for every MDHD charger port installed, with possible exceptions for government agencies and entities that purchase a large number of charger ports and EVs.⁵⁰³ EDF rebuts NDC's proposal by arguing that many businesses have multiple EVs utilize a single charger and that a purchase requirement may effectively prevent small businesses from participating in the program.⁵⁰⁴

We find merit in parties' positions on both sides of the issue. However, to ensure FC1 rebates provide ratepayer benefits by encouraging the purchase and use of EVs, we adopt an MDHD EV purchase requirement. We require a minimum of one EV purchase, lease, or retrofit per charging port rebate. We also agree that there are scenarios that need additional consideration to implement an MDHD EV purchase mandate, including: (1) public or shared-charging ports and (2) small businesses. Therefore, we require the Program Handbook development process to finalize details of the purchase requirement for these contexts, including a possible exemption from the requirement and the process needed to request a waiver.

4.3.7. FC1 Program Administration

4.3.7.1. Administrator Structure

The Staff Proposal asks parties whether one administrator for both the MDHD and LD rebate components is appropriate.

⁵⁰² ChargePoint Opening Comments on Staff Proposal at 14.

⁵⁰³ NDC Opening Comments on Staff Proposal at 20-21.

⁵⁰⁴ EDF Reply Comments on Staff Proposal at 9.

Several parties support one Program Administrator for both MDHD and LD components of the program to ensure simplicity, cost containment and a consistent customer experience.⁵⁰⁵ ATE also supports one Program Administrator but cautions that MDHD may require focused attention by the administrator that will require adequate skills and experience in MDHD expertise.⁵⁰⁶

Other parties support separate program administrators for the MDHD and LD components. SCE contends that separate administrators will result in a more effective and competitive RFP process. SCE also indicates that the differing technology solutions and applications for EVSE between LD and MDHD supports separate administrators because one administrator may not be as “well-equipped in understanding both segments with as deep of expertise from a technical perspective.”⁵⁰⁷ GRID asserts that separate program administrators for the LD, MDHD, and low-income single-family home LD EV charging is appropriate because of the differences in vehicle types and distinct considerations for each component with regard to intended rebate recipients.⁵⁰⁸ SDG&E and PG&E support multiple administrators due to the massive scale of

⁵⁰⁵ Tesla Opening Comments on Staff Proposal at 6; GPI Opening Comments on Staff Proposal at 18; CSE Opening Comments on Staff Proposal at 10; NDC Opening Comments on Staff Proposal at 21.

⁵⁰⁶ ATE Opening Comments on Staff Proposal at 11.

⁵⁰⁷ SCE Opening Comments on Staff Proposal at 21.

⁵⁰⁸ GRID Opening Comments on Staff Proposal at 8.

the FC1 program, arguing that utilizing one administrator would risk the success of the program.⁵⁰⁹

We require a single third-party administrator for both the LD and MDHD components of the program to ensure simplicity and accessibility. All components of FC1, other than the IOU-administered TA programs, shall be administered by one entity resulting in one contract.

While we adopt a single Program Administrator, we do not impose restrictions on the program administration structure, including the Program Administrator's use of subcontractors to provide for flexibility in implementation and technical expertise. This could include subcontracts to separate entities supporting implementation of LD and MDHD rebates and to the CCAs, CBOs, or other entities to administer portions of the ME&O or rebate program on a local level. We further require the IOUs' contract with the selected Program Administrator, and any subcontracts with the Program Administrator, to comply with state contracting requirements, including the Commission's "Conflict of Interest" policies. Finally, we direct the Program Handbook to propose a name for the program that is easily understandable and effectively communicates the program's purpose.

In order to provide clarity regarding the roles of the Program Administrator and the IOUs, we specify their respective roles here. The role of the Program Administrator includes:

⁵⁰⁹ SDG&E Opening Comments on Staff Proposal at 7; PG&E Opening Comments on Staff Proposal at 7.

1. Administer the FC1 program rebate and ME&O;
2. Lead the development of the Program Handbook and implementation to meet the program's requirements and objectives;
3. Develop program and outreach materials, including naming the program;
4. Manage program administration, including application processing and verification, rebate payment, and installation verification;
5. Develop the website;
6. Collect and publicize data;
7. Lead and manage program reporting requirements; and
8. Lead annual roundtables and provide input to the IOUs in developing the annual Tier 2 Advice Letters.

The role of the IOUs includes:

1. Coordinate and cooperate with the Program Administrator as necessary to achieve program objectives;
2. Develop and manage Program Administrator RFP;
3. Execute and manage Program Administrator contract;
4. Manage relevant data collection and program evaluation;
5. Develop and manage LITE pilot program RFP;
6. Execute and manage contract(s) for the LITE pilot program;
7. Administer the TA program; and
8. Administer the ALM rebates, if implemented.

4.3.7.2. Program Advisory Council

The Staff Proposal requests comments on whether to leverage the Program Advisory Council (PAC) to discuss market and technological advances and propose any necessary changes annually. The Staff Proposal requests feedback on whether the PAC is an effective tool to address innovation throughout FC1.

Cal Advocates contends that the PAC is not designed to effectively gather stakeholder input in its current form. Cal Advocates recommends the use of the annual audit and roundtable process to gather this input with other agencies, IOUs, EV and EVSE manufacturers, CBOs, and advocacy groups.⁵¹⁰ NDC requests clarification from the Commission as to what actions the PAC can and should take if the administrator or the IOUs do not appropriately respond to PAC guidance.⁵¹¹ Tesla asserts that leveraging the PAC is appropriate to review any annual market and technological process, but requests clarity as whether the separate PACs will be combined and whether any new entities need to be included in the discussions to ensure sufficient technology and market expertise.⁵¹²

We find it appropriate to utilize the annual roundtables to discuss any programmatic and market developments, as well as potential modifications to the program. The quarterly PAC meetings can end at the conclusion of the FC0 programs.

4.3.7.3. Request for Proposals to Select Program Administrator

On the topic of the process for RFPs to select the Program Administrator, SCE recommends against the IOUs serving as a contracting agent for the Commission because it would: (1) not provide sufficient clarity of roles and responsibilities and (2) create potential unnecessary legal risks and barriers to

⁵¹⁰ Cal Advocates Opening Comments on Staff Proposal at 22.

⁵¹¹ NDC Opening Comments on Staff Proposal at 22.

⁵¹² Tesla Comments on Staff Proposal at 6.

efficient administration.⁵¹³ SCE recommends that the lead IOU issue the RFP, select the third-party administrator, and manage the vendor contract. SDG&E recommends that goals and metrics for the program be proposed as part of the Program Handbook and upon Commission approval, actual design and delivery would be the responsibility of the Program Administrator with ED holding the contract and executing evaluations.⁵¹⁴

We find that it is appropriate for the IOUs to issue the RFP and contract with the selected Program Administrator.⁵¹⁵ However, we authorize ED to select the Program Administrator. The IOUs shall manage the contract with the Program Administrator, with input from ED staff. We designate SCE as the lead IOU to execute the contract. As the Commission must review the Program Administrator's contract, SCE shall file a Tier 2 Advice Letter to request approval of the contract language prior to finalization no later than May 1, 2023.

Further, the IOUs shall structure the initial Program Administrator contract for a three-year period, with the potential but not the guarantee of a two-year extension. The Commission shall have discretion to evaluate the performance of the Program Administrator at the mid-cycle point. At its discretion, the Commission may ask the IOUs to conduct an RFP for a new Program Administrator for the second half of FC1 or allow the initially contracted Program Administrator to continue.

⁵¹³ SCE Opening Comments on Staff Proposal at 8.

⁵¹⁴ SDG&E Opening Comments on Staff Proposal at 8.

⁵¹⁵ This approach is consistent with the Commission's Solar on Multifamily Affordable Housing program.

The Program Handbook development process shall determine details of the program. The Program Administrator's contract must require establishment of back-end processes, as well as systems and procedures to meet the requirements of the Program Handbook and the objectives of: (1) distributing rebates to the market to maximize deployment of charging infrastructure; (2) maximizing program awareness and program-related customer education; and (3) coordinating with Veloz and other EV awareness campaigns to ensure ratepayer funds do not duplicate broad EV awareness and education.

4.3.8. Other FC1 Implementation Details

4.3.8.1. VGI

4.3.8.1.1. VGI Activities to Date

The Commission has significantly advanced VGI in California since the Draft TEF was issued. Much of this progress has occurred in response to SB 676, which "requires the Commission to establish strategies and quantifiable metrics to maximize the use of feasible and cost-effective EV integration into the electrical grid."⁵¹⁶ In December 2020, the Commission adopted D.20-12-029 to implement SB 676 and designated multiple VGI strategies and guiding principles, including, but not limited to:

1. Reforming retail rates and pursuing dynamic pricing structures;
2. Pursuing VGI pilots and demonstrations;
3. Accelerating the use of EVs for bi-directional non-grid-export power and Public Safety Power Shutoffs;

⁵¹⁶ D.20.12-029 at 2.

4. Reforming interconnection rules to allow for more efficient integration of EVs into the grid;⁵¹⁷
5. Enhancing customer outreach on VGI and ALM through programs and rules; and
6. Adopting enhanced IOU reporting for VGI programs.

Since adopting D.20-12-029, the Commission has pursued these strategies by various means to advance VGI in California. In May 2022, the Commission approved three VGI pilots proposed by PG&E to address various VGI barriers and opportunities.⁵¹⁸

The Commission's proceeding to advance demand flexibility through electric rates – initiated in July 2022 – seeks to “establish demand flexibility policies and modify electric rates,” in order to, among other objectives, “enable widespread electrification of buildings and transportation.”⁵¹⁹ That proceeding serves as a focal point for reforming retail rates and pursuing dynamic pricing structures to facilitate, among other things, greater utilization of EVs as grid assets. That proceeding is also exploring opportunities for EVs to receive export credits, which D.20-12-029 established as a near-term objective to promote VGI.⁵²⁰

In addition to three other EV rates decisions, D.22-08-002 approved a real-time pricing pilot for residential and commercial EV customers in PG&E

⁵¹⁷ *Id.* at 22 (describing this objective as “practically speaking [promoting the] use of EVs to provide bi-directional grid-export power”).

⁵¹⁸ Res. E-5192.

⁵¹⁹ R.22-07-005, Order Instituting Rulemaking to Advance Demand Flexibility Through Electric Rates at 7 (July 14, 2022).

⁵²⁰ D.20-12-029 at 75.

territory with the goal of reducing peak capacity costs.⁵²¹ This pilot followed several other TOU-rate offerings for residential and commercial customers and supported VGI objectives by encouraging off-peak charging.⁵²²

As discussed above, in August 2022, the Commission approved the PEV Submetering Protocol via D.22-08-024, which requires the IOUs to allow customers to use compliant EVSE to separately meter electricity consumption in lieu of installing a separate utility-grade electricity meter. This decision lowered barriers and costs associated with enrollment in EV-specific rates. Critically, D.22-08-024 also adopts EVSE communication protocols. These include the adoption of: (1) SAE J1772 standard connector for all AC-conductive EVSE; (2) CCS standard connector for all DC-conductive EVSE; (3) OCA OCPP 1.6 or later; and (4) ISO 15118. These standards are consistent with those recommended by the CEC.

The use of SAE J1772 and CCS connectors allow for communications between an EV and the EVSE to support vehicle-to-charger communication.

OCPP allows for communication between the utility, charging operators, and site-hosts to provide site hosts and operators greater flexibility, choice, and control over the chargers.⁵²³ OCPP also provides a centralized way for site hosts to connect and communicate with a portfolio of chargers. Adopting OCPP

⁵²¹ See D.20-09-021; D.21-11-017; D.22-03-012.

⁵²² See, e.g., D.19-10-055 (addressing PG&E's Commercial EV Subscription Rate); D.18-05-040 (addressing SCE's EV-specific Demand Charge Holiday Rate); D.18-01-024 (addressing SDG&E limited Public Grid Integration Rate); D.20-12-023 (addressing SDG&E's Electric Vehicle High Power (EV-HP) Rate).

⁵²³ See CEC, Electric Vehicle Charging Infrastructure Assessment – AB 2127, <https://www.energy.ca.gov/programs-and-topics/programs/electric-vehicle-charging-infrastructure-assessment-ab-2127> at 67.

ensures that the EVSE does not become a stranded asset if the EVSP goes out of business by enabling the seamless transition of network management from one EVSP to another.

ISO 15118 provides a standardized method for an EV and the EVSE to communicate information that enables authentication, automatic billing, and bidirectional charging.⁵²⁴ This is a critical step forward as all EVSE will be able to securely exchange charging and customer information for authentication, billing, and charging parameters that allow for smart and bi-directional charging capabilities.

With the approval of D.22-08-024, by July 1, 2023, EVSE procured through TE programs that are either ratepayer funded, including the FC1 program discussed in this decision, or IOU administered (*e.g.*, LCFS holdback fund programs), must meet these standards.

4.3.8.1.2. VGI Strategy

Several parties submit comments regarding VGI strategy. Some parties emphasize the need for the Commission to better articulate a VGI strategy and create milestones in key areas of stakeholder concern, including technology enablement and price signals.⁵²⁵ Auto Innovators encourages the development of an overarching roadmap for the deployment of VGI measures and supporting technologies over the next several years.⁵²⁶ EDF argues there should be clear and comprehensive guidance on various issues, including managed charging, rate

⁵²⁴ *See id.*

⁵²⁵ GPI Opening Comments on Staff Proposal at 10; Fermata Opening Comments on Staff Proposal at 6, 8.

⁵²⁶ Auto Innovators Opening Comments on Staff Proposal at 6.

design, harnessing bidirectional capabilities of vehicles, and communication standards to ensure interoperability.⁵²⁷ ChargePoint, EVgo, and the Joint Parties urge the Commission to continue to pursue the work envisioned by the EVREV Plans in the Draft TEF.⁵²⁸

We recognize the lack of clarity on VGI strategy and the need for this strategy to complement and inform FC1. Therefore, we find it appropriate to establish strategic focus areas for VGI: (1) rates and demand flexibility programs; (2) technology enablement; and (3) planning. We also adopt an annual VGI Forum to explore these strategic focus areas because successfully addressing VGI issues requires the involvement of multiple Commission divisions and state agencies. These actions lay the groundwork for further Commission guidance on VGI policy over the coming years.

For the first strategic focus area concerning rates and demand flexibility programs, parties have rightly noted that rates will be a core component of enabling VGI.⁵²⁹ We agree that the primary venue for enabling customer participation in VGI will occur through proceedings and discussions on rates and demand flexibility programs. We therefore encourage stakeholder engagement in these proceedings. The VGI Forum discussed below will explore current and future approaches to utilizing rates as a core VGI strategy, reflecting the

⁵²⁷ EDF Opening Comments on Staff Proposal at 6.

⁵²⁸ ChargePoint Opening Comments on Staff Proposal at 9; EVgo Opening Comments on Staff Proposal at 2; Joint Parties Opening Comments on Staff Proposal at 4.

⁵²⁹ EVgo Opening Comments on the 2022 Staff Proposal at 2; Joint Parties Opening Comments on the 2022 Staff Proposal at 6; Auto Innovators Opening Comments on the 2022 Staff Proposal at 6, 11, 13; Joint Commenters Reply Comments on the 2022 Staff Proposal at 6; GPI Opening Comments on the 2022 Staff Proposal at 13; EDF Opening Comments on the 2022 Staff Proposal at 6.

Commission's intent to continue EV rate development in dedicated rate and demand flexibility proceedings, such as R.22-07-055. This component of the VGI strategy will build upon the EVREV strategy outlined in the Draft TEF. While we are not requiring the EVREV plan development outlined in the Draft TEF, we will continue to provide leadership on rate strategy via these proceedings and the VGI Forum.

Regarding the second strategic focus area, the IOUs will have a significant role to play in the enablement of VGI technology, including establishing interconnection standards and supporting the development of performance requirements for VGI equipment. The VGI Forum discussed below will explore the appropriate role of the IOUs, recognizing the IOUs are better positioned to enable rather than develop technology to advance VGI. The forum will also investigate whether ratepayer funds should support technology development in limited cases.

For the final strategic focus area of grid planning, the Commission, in conjunction with other state agencies, is currently working across various proceedings and processes to ensure that EV charging demand and VGI potential is properly accounted for in distribution, generation, and transmission system planning. As described earlier in this decision, the Commission and other state agencies are deeply engaged on this topic and are developing new analytical methods and processes to better account for VGI capabilities as technology evolves and becomes more widespread. The VGI Forum described below includes a discussion of these efforts and implications for Commission rates and programs.

The IOUs, in conjunction with ED staff, shall host annual VGI Forums. The primary purpose of the forums shall be to provide an opportunity for strategic

communication, information sharing, and discussion of relevant VGI issues, similar to the 2018 Commission ZEV Rate Design Forum.⁵³⁰ Additionally, the required process shall provide an opportunity to incorporate learnings and developments on VGI into both the FC0 and FC1 programs, as well as other Commission venues (*e.g.*, interconnection, rate design, etc.). The two main topics for the forum will be:

1. Rates and Planning: This topic focuses on the linkages among planning, VGI, rate, and demand flexibility programs and proceedings. The forum should be held as a part of the Commission's Annual Rate Forum and include presentations on progress, gap assessments, and the need for EV-specific rates.
2. Technology Enablement: This focuses on technology enablement, VGI in existing IOU programs and pilots, and the incorporation of new technology developments into FC1. This forum should coordinate with the CEC's VGI staff to showcase recent developments (*e.g.*, emerging technology, ALM, coordination on VGI equipment certification, etc.).

The first of these forums, to be held in 2023, should include further discussion, input, and refinement of the framework to advance VGI strategy included in this decision. Additional areas for discussion could include revisiting the definition of VGI adopted in D.20-12-029, refinement or expansion of the three VGI strategic focus areas, and identification of milestones and deliverables to address high-priority barriers to VGI.

⁵³⁰ California Public Utilities Commission, CPUC ZEV Rate Design Forum, <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/infrastructure/transportation-electrification/electricity-rates-and-cost-of-fueling/cpuc-zev-rate-design-forum>.

Following each VGI Forum, the IOUs shall file a workshop report, which will ensure that the discussions and lessons identified are added to the record of this proceeding or its successor. The IOUs shall also distribute the workshop reports to the service lists for other relevant Commission proceedings. The IOUs shall propose any changes to the FC1 program based on the VGI Forum's discussion and the subsequent workshop reports through the Tier 2 Advice Letter filing following the annual roundtables. Changes could include, for example, incorporation of new technology or modifications to technology requirements. The IOUs may also file separate Tier 2 Advice Letters, where appropriate, to propose any changes to the FC0 programs.

**4.3.8.1.3. VGI, Rates, and Load Management
Directives for the FC1 Program**

The Staff Proposal requests comment as to whether the FC1 program should include any requirements for customers to participate in DR programs or implement other load management tactics.

Many parties express general support for DR and load management requirements. Weave Grid supports tying rebates to DR and load management requirements to increase enrollment and participation in VGI programs.⁵³¹ VGIC recommends providing an upfront incentive to enroll in DR programs.⁵³² GPI and SBUA support the inclusion of incentives to encourage customers to participate in DR and implement other load management practices.⁵³³ SCE and

⁵³¹ Weave Grid Opening Comments on Staff Proposal at 9.

⁵³² VGIC Opening Comments on Staff Proposal at 6, 8.

⁵³³ GPI Opening Comments on Staff Proposal at 19; SBUA Opening Comments on Staff Proposal at 16.

Cal Advocates emphasize that ME&O should focus on educating customers about on the benefits of load management and the IOUs' DR programs.⁵³⁴ VGIC and Fermata assert that the ME&O administrator should present all DR options to participants and the IOUs should provide TA.⁵³⁵

Many parties argue that additional load management requirements are not necessary for FC1. They indicate that different load management strategies are appropriate in different charging applications and that the Commission should preserve customers' options to choose.⁵³⁶ ATE emphasizes that load management requirements are unnecessary since most, if not all, rebates in FC1 will be for MUD applications where load management is difficult.⁵³⁷ CSE asserts that the institution of requirements to participate in such programs could limit participation, particularly in DACs and underserved communities.⁵³⁸ CSE recommends phasing in requirements and providing higher incentives to customers to participate in load management programs. Electrify America encourages the Commission to avoid adoption of mandatory participation in DR programs as a condition of taking service under a commercial tariff approved by the Commission.⁵³⁹

⁵³⁴ SCE Opening Comments on Staff Proposal at 22; Cal Advocates Opening Comments on Staff Proposal at 23.

⁵³⁵ VGIC Opening Comments on Staff Proposal at 6; Fermata Opening Comments on Staff Proposal at 7.

⁵³⁶ Tesla Opening Comments on Staff Proposal at 9; SCE Opening Comments on Staff Proposal at 22; Cal Advocates Opening Comments on Staff Proposal at 23; EVgo Opening Comments on Staff Proposal at 3.

⁵³⁷ ATE Opening Comments on Staff Proposal at 13.

⁵³⁸ CSE Opening Comments on Staff Proposal at 13.

⁵³⁹ Electrify America Opening Comments on Staff Proposal at 11.

We find that a flexible approach is warranted because each customer will have specific constraints and a uniform approach to load management is not appropriate. Furthermore, the rapid evolution of technology and compensation mechanisms necessitates a flexible approach. Therefore, we do not adopt a requirement for FC1 program participants to enroll in any specific DR program or to adopt any specific load management strategy. Customers should have the option to choose based on their mobility needs and use cases. However, we require the IOUs to default all FC1 participants on to applicable time-varying EV-specific rates, with the ability to opt out for another time-varying rate. This is consistent with the requirements of the EV Infrastructure Rules. The IOUs, in conjunction with the CCAs in their service territories, should provide education to each customer on the most beneficial rates.

We also direct the IOUs to work with each customer to develop a load management plan, which the IOU should formally approve. The load management plan could include various options that ensure that charging load is flexible and responsive to price signals. As part of the load management plan development process, each IOU should work with customers to educate and provide guidance on various options for VGI and load management, including but not limited to enrollment in DR programs and deployment of ALM. This guidance should be competitively neutral and should not endorse any provider or technology. The Program Handbook should determine the requirements for the load management plans following discussion at one of the associated workshops.

4.3.8.1.4. Rebates for ALM in FC1

The role of ALM, requirements and potential incentives for ALM, and implementation details have been a key focus of this proceeding. In response to

the Staff Proposal, many parties present arguments regarding ALM and its implementation within FC1.

While many parties support encouraging ALM and DR, most agree that the Commission should not require ALM or DR because they may not be the right option for all use cases. EDF Renewables supports requiring ALM if it creates cost savings for a site.⁵⁴⁰ Weave Grid supports ALM but argues the Commission should not require participation for all use cases.⁵⁴¹ VGIC maintains that ALM should always remain an optional strategy for customers.⁵⁴² VGIC and Fermata recommend offering an incremental incentive to host sites that voluntarily choose ALM that is linked to customer- and utility-side cost savings.⁵⁴³ SCE and ChargePoint suggest requiring that funded hardware be ALM capable.⁵⁴⁴

We find it appropriate to establish a clear path to rigorously consider and decide whether to implement an incremental rebate for customers who choose to deploy ALM. First, to reduce ambiguity, we provide a definition of ALM for use throughout FC1: ALM refers to energy management systems that are deployed at a particular location to reduce aggregate EV charging load with the objective of reducing or eliminating the need for electrical capacity upgrades on the utility

⁵⁴⁰ EDF Renewables Opening Comments on Staff Proposal at 6.

⁵⁴¹ Weave Grid Opening Comments on Staff Proposal at 9.

⁵⁴² VGIC Opening Comments on Staff Proposal at 10.

⁵⁴³ VGIC Opening Comments on Staff Proposal at 9, 12; Fermata Opening Comments on Staff Proposal at 7.

⁵⁴⁴ SCE Opening Comments on Staff Proposal at 12; ChargePoint Opening Comments on Staff Proposal at 15.

and/or customer side of the meter.⁵⁴⁵ Unless otherwise specified in other contexts (*e.g.*, rates, rules, etc.), this definition of ALM should apply.

Furthermore, it is important to develop a broader understanding of the costs and benefits of ALM to support a potential incentive design prior to large-scale deployment of an incentive. If a rebate amount is too low, it may not facilitate any additional ALM installations, but if it is too generous, it could result in misallocation of resources. Therefore, we require a study to assess ALM strategies and product offerings, barriers, equity impacts, and costs to determine whether rebates are necessary to incentivize ALM deployment, as well as how to best design potential rebates given outstanding implementation issues. Additionally, the study shall assess the IOUs' ALM education activities in deploying the EV Infrastructure Rules to provide insights on the current deployment of ALM. The study shall inform the appropriate structure of potential ALM rebates.

To complete this work, ED staff will manage an ALM study utilizing the technical consultant budget discussed above. Following the completion of this study at the end of Q1 2024, the Commission will issue the study along with staff recommendations on whether to pursue ALM rebates in the FC1 program via a ruling to allow for stakeholder comment. If ED staff recommends the Commission adopt ALM rebates, the ruling should also include recommendations for how to structure and implement the rebate program.

⁵⁴⁵ While D.20-12-029 refers to ALM as "software-based technology to manage EV charging load, also known as EV Energy Management Systems or load management," we find that this definition is overly broad and could be construed to mean any software that enables load flexibility (*e.g.*, original equipment manufacturer applications used to schedule EV charging).

If the Commission approves ALM rebates, the IOUs shall implement the rebates as part of their TA programs, as this is closely tied to the IOUs' role in educating customers under the EV Infrastructure Rules and load management plans. The FC1 infrastructure rebate budget shall provide funding for any ALM rebates, and we clarify that the funding shall not come out of the TA budget. The IOUs shall work with the Program Administrator to facilitate a streamlined, combined application process and rebate payment.

**4.3.8.1.5. Outstanding Issues from
D.20-12-029 Regarding ALM**

D.20-12-029 ordered the IOUs to take specific actions to integrate consideration of ALM into all TE applications and "any future tariff or rule filed by a large electrical corporation for service line and/or distribution line upgrades to support transportation electrification."⁵⁴⁶ These actions include:

identify[ing] how it will deploy customer-side [ALM] at host sites through such programs, rule, and/or tariff where appropriate because this technology will support TE installation at equal or lesser costs than hardware-based electrical capacity while meeting TE charging needs; and describe[ing] its standard evaluation criteria to determine host sites where ALM would benefit ratepayers by reducing costs while meeting host site needs for electric vehicle charging.⁵⁴⁷

As discussed above, we continue to support ALM as an optional load management strategy for customers and require education on ALM both as part

⁵⁴⁶ D.20-12-029 at 28.

⁵⁴⁷ D.20-12-029 at 79. This decision also directed ED staff to host a workshop to explore the referenced "standard evaluation criteria." This workshop was held on January 29, 2021. Following this workshop, ED staff declined to recommend additional guidance to the IOUs on standard evaluation criteria.

of the EV Infrastructure Rules and as part of the FC1 TA requirements. We further find that the above ALM requirements in D.20-12-029 are overly broad and create unnecessary ambiguity given the new funding cycle structure and the potential impact on future EV rate design.⁵⁴⁸ In order to reduce ambiguity and to emphasize the importance of ensuring that IOU education on ALM includes thorough consideration of EV drivers' mobility needs, we modify Ordering Paragraphs 5 and 6 in D.20-12-029 as follows:

5. Southern California Edison Company, San Diego Gas & Electric Company, and Pacific Gas and Electric Company shall, each, in any future transportation electrification (TE) programs to support TE infrastructure installation identify how it will educate customers on how Automated Load Management technology may support TE installation at equal or lesser costs than hardware-based electrical capacity while meeting host site and electric vehicle drivers' charging and mobility needs.
6. Southern California Edison Company, San Diego Gas & Electric Company, and Pacific Gas and Electric Company shall each evaluate customer acceptance once Automated Load Management is installed at a host site as part of a ratepayer-funded transportation electrification program.

**4.3.8.2. Aligning EVSE Qualification Process
with the CEC's Process—LD and MDHD**

The Staff Proposal requests comment on whether the Commission should align the qualification process for LD and MDHD EVSE with the CEC's process to reduce administrative burden and to harmonize program requirements.

⁵⁴⁸ D.20-12-029 indicated that "future Commission decisions may adopt additional VGI strategies or modify those adopted in this decision." D.20-12-029 at 6.

Parties generally support aligning the qualification process.⁵⁴⁹ Tesla also agrees, but indicates that any process should take into account new block grants the CEC is developing.⁵⁵⁰ SCE supports alignment and suggests using the Electric Power Research Institute's EVSE Qualification Working Group.⁵⁵¹ NDC supports alignment with the CEC process, but indicates that review and revision of qualifications is necessary as the market and technology develops to ensure that previously qualified EVSE continue to meet evolving standards.⁵⁵² GRID agrees recommends that the Commission should align its processes for public LD EVSE with those of other relevant CEC and Commission programs to ensure that customers can integrate solar PV and EVSE in a streamlined fashion.⁵⁵³

We find that alignment of the Commission's EVSE qualification process for LD and MDHD EVSE with the CEC's process is warranted for administrative efficiency and to harmonize program requirements. The product list should additionally aim to align with other state and federal charging requirements, where appropriate. The Program Administrator shall manage the approved product list and ensure that the list is accessible through the program website.

The IOUs should qualify EVSE on a rolling basis and automatically add equipment to the product list if it meets all of the technical requirements. These technical requirements should also be accessible through the program website

⁵⁴⁹ ChargePoint Opening Comments on Staff Proposal at 15; Auto Innovators Opening Comments on Staff Proposal at 22.

⁵⁵⁰ Tesla Opening Comments on Staff Proposal at 8.

⁵⁵¹ SCE Opening Comments on Staff Proposal at 21.

⁵⁵² NDC Opening Comments on Staff Proposal at 22.

⁵⁵³ GRID Opening Comments on Staff Proposal at 9.

and updated as changes to the requirements occur. The Program Handbook development process shall determine the initial technical requirements and must, at minimum, comply with the EVSE requirements adopted in D.22-08-024. Stakeholders should review the technical requirements at each annual roundtable and propose any necessary modifications.

4.3.8.3. EVSE and Technical Requirements

The Staff Proposal requests comment on whether the FC1 program should implement any other EVSE and technical requirements. SCE asserts that the Commission should require that EVSE are maintained for a set number of years and mandate the sharing of certain customer data with the IOUs. SCE recommends determining any requirements during Program Handbook development process.⁵⁵⁴

CSE supports requirements for rebate recipients to install EV infrastructure that is standardized, interoperable, and accessible. CSE's recommended requirements include standardized charging connectors, open standard communication protocols, and compliance with accessibility and payment requirements instituted under CARB's EVSE Standards regulation. CSE also supports a requirement that participants share data regarding charger utilization and uptime.⁵⁵⁵ ChargePoint and Joint Commenters argue for requiring all EVSE to be networked, DR capable, and capable of performing load management. Electrify America does not support data collection requirements,

⁵⁵⁴ SCE Opening Comments on Staff Proposal at 22-23.

⁵⁵⁵ CSE Opening Comments on Staff Proposal at 13.

expressing concern for the potential for such requirements to allow access to commercially sensitive information.⁵⁵⁶

We find that the adoption of some minimum EVSE requirements is necessary to ensure the effectiveness of the FC1 program. Therefore, we shall adopt minimum EVSE technical and data sharing requirements. The minimum EVSE technical requirements are:

1. A minimum EVSE maintenance period of eight years;
2. The uptime reliability must be consistent with the CEC and any relevant laws, including AB 2061 (Ting, 2022), for all ratepayer-funded EVSE in FC1;⁵⁵⁷
3. Consistent with D.22-08-024, all EVSE shall be interoperable, utilizing standardized charging connectors and open standard communication protocols, and should comply with accessibility and payment requirements per CARB's EVSE Standards regulation;
4. All EVSE funded through FC1 shall be networked and DR capable; and
5. All public MUD-serving EVSE shall be available to the public 24 hours per day, seven days a week.

The minimum EVSE data sharing requirements are:

1. EVSPs shall share uptime and utilization data;
2. For public and MUD charging, EVSPs shall share the price charged to customers;
3. EVSPs shall share, confidentially if needed, the cost of networking and maintenance packages they offer to customers; and

⁵⁵⁶ Electrify America Opening Comments on Staff Proposal at 12.

⁵⁵⁷ AB 2061 (Ting, 2022) includes possible development of reliability/uptime requirements.

4. EVSPs shall provide the number and location of shared private chargers they have deployed or manage with the Commission and the CEC, upon request.

The EVSPs must share the data, confidentially if needed, with the Program Administrator and the Commission—but not with the IOUs. The Program Handbook shall describe the process for confidential data transfer and the level of detail and aggregation of data.

These EVSE technical and data sharing requirements are the minimum requirements and only apply to FC1 EVSP vendors and customers receiving ratepayer funds. The data will assist the Commission in understanding the total cost of ownership for the transition to electrified transportation and will inform the design of future incentives and educational materials. The Program Handbook may include additional requirements.

4.3.8.4. Ensuring Program Flexibility

The Staff Proposal requests comments on how the Commission should ensure that the FC1 program has sufficient flexibility to account for new technology and/or business models that may develop over the next several years.

Tesla supports an annual technology and cost review by either an independent third party or the Program Administrator, with an opportunity for stakeholder feedback.⁵⁵⁸ PG&E and SDG&E support a mid-cycle review to identify where modifications are needed.⁵⁵⁹ ATE recommends a review prior to the start of FC1 and a FC1 mid-cycle review. ATE also emphasizes that the IOUs

⁵⁵⁸ Tesla Opening Comments on Staff Proposal at 9-10.

⁵⁵⁹ PG&E Opening Comments on Staff Proposal at A7; SDG&E Opening Comments on Staff Proposal at 11.

should be able to make filings during FC0, as needed, to account for new technology or business models.⁵⁶⁰

The Joint Commenters generally support the modification process within the proposal, request clarity on the venue for discussion.⁵⁶¹ The Joint Commenters also indicate a need for general flexibility that would allow the IOUs to act outside of the FC1 program in response to targeted TE needs. GPI supports the proposal to leverage existing PAC meetings to host an annual or biennial roundtable discussion to identify program modifications.⁵⁶² NDC comments that TA programs should be continually updated in order to help customers evaluate different technologies.⁵⁶³

We acknowledge the need for program flexibility and adopt annual roundtables and the Mid-Cycle Assessment to allow stakeholders the opportunity to flag any concerns with the implementation of the FC1 program. The roundtable process is described above. The roundtables and corresponding Advice Letter filing can resolve minor issues through edits to the Program Handbook. The Mid-Cycle Assessment shall address larger modifications to the program.

4.3.9. Targets

Several parties comment that the Commission should set targets to ensure IOUs are making measurable progress. Auto Innovators asserts that metrics and a scorecard are needed to ensure steady and timely process on the IOUs'

⁵⁶⁰ ATE Opening Comments on Staff Proposal at 13.

⁵⁶¹ Joint Commenters Opening Comments on Staff Proposal at 11-12.

⁵⁶² GPI Opening Comments on Staff Proposal at 21.

⁵⁶³ NDC Opening Comments on Staff Proposal at 23.

TE initiatives. Auto Innovators encourages the Commission to set targets for each metric as a basis to assess the IOUs' performance of their core responsibilities such as distribution upgrades, implementing ratepayer funded programs, and developing EV rates and DR programs.⁵⁶⁴ EDF also stresses the importance of target and metrics in ensuring: (1) EVs are successfully integrated into the grid and (2) IOUs are making measurable progress.⁵⁶⁵ UCAN and GPI stress the importance of appropriate metrics and targets.⁵⁶⁶

We agree that program targets can improve program implementation and performance. Therefore, we establish a target development process and provide a list of minimum target categories for FC1. The Program Handbook development process shall include a workshop to address the development of targets, which the Program Handbook should adopt.

At a minimum, program targets shall address: (1) equity; (2) LD ports; and (3) MDHD vehicles electrified. To address equity, we would set targets for LD and MDHD programs in reaching target equity groups, including DACs and low-income customers. The LD ports category would set a minimum number of MUD and MUD-serving ports for the FC1 program to support, based on the rebate level established via the Program Handbook development process. The MDHD vehicles electrified category would set targets for a minimum number of vehicles electrified as a result of the MDHD program, based on the rebate level established via the Program Handbook development process and an assumption

⁵⁶⁴ Auto Innovators Opening Comments on Staff Proposal at 14.

⁵⁶⁵ EDF Opening Comments on Staff Proposal at 3.

⁵⁶⁶ UCAN Opening Comments on Staff Proposal at 2; GPI Opening Comments on Staff Proposal at 12.

of the minimum number of ports the program will fund. Sub-targets or program tracking metrics by vehicle type or fleet size may be established for the MDHD vehicles electrified category, as appropriate. We may approve final targets in the decision adopting the Program Handbook. We may consider modifications to the adopted targets as part of the Mid-Cycle Assessment.

4.3.10. Program Handbook Development Process

Several parties provide comments regarding the process for the development of the Program Handbook. The Joint Commenters request clarification that stakeholders can provide written input to the stakeholder process led by the third-party administrator as well as after any workshop that informs the Program Handbook.⁵⁶⁷ EDF supports the development of the Program Handbook by stakeholders.⁵⁶⁸ Tesla recommends delaying the development of the Program Handbook to “ensure it meets the needs of future equipment and customers in 2025 rather than being designed solely based on the current state of EVSE technology and deployment.”⁵⁶⁹

TURN emphasizes that additional procedural vehicles, including workshops and party comments, are necessary to develop aspects of the Program Handbook.⁵⁷⁰ SCE indicates that the timeline for the submission of the Tier 3 Advice Letter with the Program Handbook does not provide sufficient time for

⁵⁶⁷ Joint Commenters Opening Comments on Staff Proposal at 7.

⁵⁶⁸ EDF Opening Comments on Staff Proposal at 17.

⁵⁶⁹ Tesla Opening Comments on Staff Proposal at 7.

⁵⁷⁰ TURN Opening Comments on Staff Proposal at 12.

appropriate stakeholder engagement and requests an extension of the submittal date to Q2 2023.⁵⁷¹

As part of the Program Handbook development process, the Program Administrator and IOUs shall host a series of workshops. At a minimum, these workshops should cover the following topics: (1) TA scope; (2) TA engagement with EVSPs and ALM/DR providers; (3) establishment of clear communication channels with CCAs for TA; (4) load management plans; (5) ME&O; (6) CBO engagement in ME&O; (7) rebate levels; (8) establishment of an upfront rebate; (9) support for small fleets and small businesses; (10) effective support and outreach for underserved communities; (11) technical requirements; and (12) targets. The workshops can cover multiple topics as deemed appropriate.

By January 15, 2024, and no later than 60 days following the final workshop, the Program Administrator jointly with the IOUs shall serve on the service list of this or any successor proceeding, a draft Program Handbook and a workshop report covering all of the workshops held as part of the Program Handbook development process.

The Program Handbook development process will determine numerous significant details for the program, so an Advice Letter process is not appropriate. Following the submittal of the workshop report and the draft Program Handbook, the assigned ALJ may issue a ruling requesting comment on both documents. The Commission may subsequently adopt the Program Handbook, with any modifications.

⁵⁷¹ SCE Opening Comments on Staff Proposal at 13.

The Program Handbook shall contain three main sections: (1) Rebate Program Rulebook; (2) Implementation Plan; and (3) Technical Assistance Rulebook. Through the annual roundtables and associated Tier 2 Advice Letter filings, we may adjust the Rebate Program Rulebook section of the Program Handbook. Additionally, through the Mid-Cycle Assessment and subsequent Commission decision, we may further adjust sections of the Program Handbook.

To ensure that the Program Handbook includes an appropriate scope of issues, we adopt the following minimum scope list for the Program Handbook.

1. Rebate Program Rulebook

- Rebate guiding principles
- Procedures and penalties for non-compliance with the Program Handbook requirements
- Program targets
- EVSE operating requirements (*e.g.*, minimum of 10 years)
- Reporting requirements and reporting formats
- TE Reporting Dictionary (*i.e.*, common definitions for of all data fields)
- High-level ME&O objectives, scope, and budget
- Subcontracting rules
- Guidelines and rules for roundtables
- EVSP data sharing requirements
- Definition of MUD-serving

- Portion of underserved communities funding for tribal communities and any associated requirements⁵⁷²
- MDHD definition
- MUD definition
- Small fleet and small business definitions

2. Implementation Plan

- Rebate levels and delivery methods, including upfront rebates and potential bridge loans or other assistance to mitigate up-front cost barriers for targeted customers
- Customer application procedures
- Applicant requirements and application procedures
- Requirements for applicant documentation
- Program budget that includes line items for rebates, ME&O, subcontracts, administrative activities, etc.
- Contractor and electrician requirements
- Vendor requirements
- ME&O marketing plan
- CBO engagement plan
- List of key CBO and environmental justice organization partners
- Targeted approach for rebates to tribal communities
- Modified MDHD requirements for customers installing public/shared MDHD charging
- Modified MDHD requirements for small business, for whom responsibility for financing, ownership, vehicle operations, property, etc. may belong to different entities

⁵⁷² Including unique use cases or exceptions proposed for tribal communities and members.

- EVSE technical requirements
 - Customer troubleshooting procedures
 - TE Safety Checklist requirements
3. Technical Assistance Rulebook
- Scope of IOUs' TA programs
 - Joint requirements and processes for speaking with customers about TA
 - Defined channels of communication between each IOU's TA and each CCA in their territory
 - Established practices for how to work directly with each CCA in an IOU's territory in discussing rates and directing customers to a CCA when necessary
 - Defined channels of communication between each IOU's TA and the Program Administrator
 - Guidelines for how the IOUs' TA programs should engage with the private market of EVSPs and DR providers
 - Details and requirements for customer load management plans
 - Load management and VGI targets/metrics

The Program Administrator shall be responsible for the Rebate Program Rulebook and the Implementation Plan. The Rebate Program Rulebook shall contain information about the rebate and ME&O programs, customer rules, and program delivery rules. This is the practical information that the Program Administrator will use to implement the FC1 program.

The Implementation Plan shall describe how the Rebate Program Rulebook is implemented from a regulatory perspective, including contracting administrative details, information on targets, budget, and all program requirements. This section shall also establish the requirements for

documentation, including site verification forms, permits, and utility design submittals during the application process, as well as construction progress forms and final permits after funds have been reserved will be determined. These documentation requirements should be aligned with CALeVIP 2.0 requirements where appropriate. The Implementation Plan section shall provide background and an explanation of the program design.

The IOUs shall be responsible for the Technical Assistance Rulebook. It shall cover the program rules for the IOUs' implementation of the TA programs and shall serve as a guide for how the IOUs interact with each other, with the CCAs in their territory, and with the Program Administrator.

4.3.11. Data Assessment

Parties' comments on the Staff Proposal address whether to require a data audit. To avoid confusion with other audits directed in this decision, we refer to this activity as the Data Assessment.

UCAN and Cal Advocates support the proposal for a data assessment, indicating that it could help assess all information reported by the IOUs and identify any gaps in data reporting.⁵⁷³ UCAN also emphasizes the importance of collecting charging load data. The Joint Commenters assert that the IOUs should report where and with what frequency data is made available.⁵⁷⁴ The Joint Commenters also support an annual data summit. CSE generally supports an

⁵⁷³ UCAN Opening Comments on Staff Proposal at 8; Cal Advocates Opening Comments on Staff Proposal at 23.

⁵⁷⁴ Joint Commenters Opening Comments on Staff Proposal at 13.

assessment of data, indicating there are clear needs for data collection and evaluation regarding EV infrastructure accessibility, uptime, and utilization.⁵⁷⁵

Parties' comments also include proposals to collect data related to equity. Greenlining recommends developing clear equity metrics and publishing deployment and resource data to identify where gaps exist and to ensure investments target priority populations.⁵⁷⁶ Greenlining and CSE note the lack of and need for centralized geospatial analysis of the locations of IOU TE investments and infrastructure.⁵⁷⁷ Greenlining recommends the program collect equity-related data on land use, zoning, and demographic trends, as well as climate data on sea level rise and flood and fire risk.⁵⁷⁸

We adopt the Staff Proposal's structure because it is a reasonable methodology to inventory all IOU TE data and ensure funds are properly spent. The Data Assessment will inventory data the IOUs report under all directed TE reporting in order to streamline existing reporting requirements, minimize unnecessary or duplicative reporting, and inform FC1 program reporting requirements. Because the Data Assessment will inform the FC1 reporting requirements discussed below, the process must conclude prior to the launch of FC1.

We direct the IOUs to submit to ED staff a complete inventory of all TE-related data fields the IOUs are currently reporting under the various Commission TE reporting requirements, including under individual programs,

⁵⁷⁵ CSE Opening Comments on Staff Proposal at 13.

⁵⁷⁶ Greenlining Opening Comments on Staff Proposal at 9.

⁵⁷⁷ *Id.*; CSE Reply Comments on Staff Proposal at 5.

⁵⁷⁸ Greenlining Opening Comments on Staff Proposal at 12.

SB 676, the Cost and Load Report, and LCFS. This reporting should itemize each individual data field reported and include a complete definition of each field, unit, frequency, and period.

By collecting and examining the data, the Data Assessment will facilitate an analysis of all information the IOUs report and help identify where there are gaps in data reporting. This will provide a basis to streamline TE data reporting and improve transparency. Additionally, the Data Assessment will identify data fields where the IOUs have differing definitions and propose universal definitions to allow for comparison across IOUs. These universal definitions will allow for comparison, when possible and applicable, between FC0 and FC1 programs.

The Program Handbook decision shall adopt, and update as needed, data field definitions – referred to as the TE Reporting Dictionary – and establish a process to align the definitions across IOUs. We adopt the timeline, process, and deliverables for implementation of the Data Assessment in Appendix B of this decision.

4.3.12. Reporting Requirements

The Staff Proposal requests comments on reporting requirements for FC1. CSE stresses the importance of robust data collection, evaluation, and reporting requirements.⁵⁷⁹ CSE emphasizes the importance of the data to quantify equity benefits, forecast future needs, inform program design changes, and track progress towards state goals. CSE recommends that the Commission coordinate with CARB and CEC to develop standardized metrics and data collection

⁵⁷⁹ CSE Opening Comments on Staff Proposal at 9.

methods. CSE also includes various categories of data that should be included in the reporting requirements.

We find reporting requirements will help monitor progress towards program goals, promote coordination with local, state, and federal programs, and provide transparency to the public. The decision adopting the Program Handbook will establish reporting requirements for FC1, including reporting format and frequency, as well as a process for revising reporting requirements. Reporting requirements will align with the CEC's data collection requirements and include energy forecasts and grid planning information where feasible and appropriate. The Program Handbook shall also establish standardized data transfer protocols, data request documents, and template data sharing agreements for the Program Administrator and the IOUs and for the Program Administrator and the EVSPs.

5. Conclusion

This decision adopts a funding cycle structure for TE and a third-party administered statewide TE infrastructure rebate program and directs the IOUs to jointly fund the program and associated activities. The decision addresses issues in the Draft TEF and the Staff Proposal. The adopted rebate program will accelerate BTM EV charging deployment to support California's ambitious climate goals, while limiting costs to ratepayers, promoting equity, minimizing administrative burden, and maximizing stakeholder participation.

6. Comments on Proposed Decision

The proposed decision of Commissioner Clifford Rechtschaffen 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. On November 3, 2022, the following parties

filed opening comments: Auto Innovators, ATE, Cal Advocates, CASMU, CEDMC, ChargePoint, Clean Energy Fuels, CLECA/EPUC,⁵⁸⁰ City of Long Beach, CSE, EDF, EDF Renewables, Electric Vehicle Association, Electrify America, EVgo, FreeWire Technologies, Inc. (FreeWire), GPI,⁵⁸¹ Greenlining, GRID, Joint CCAs,⁵⁸² Joint Commenters,⁵⁸³ NDC, NRDC, PG&E, SBUA, SCE, SDG&E, Siemens, Tesla, the Mobility House, TURN, VGIC, and Weave Grid. On November 8, 2022, the following parties filed reply comments: Auto Innovators, Cal Advocates, CASMU, ChargePoint, CSE, EDF, Electric Vehicle Association, Electrify America, FreeWire, GPI, Greenlining, Joint CCAs, Joint Commenters, NDC, NRDC, PG&E, SCE, SDG&E, Tesla, the Mobility House, TURN, and VGIC. We have considered parties' comments and made modifications to the decision as appropriate.

7. Assignment of Proceeding

Clifford Rechtschaffen is the assigned Commissioner, and Brian Korpics and Marcelo Poirier are the assigned ALJs in this proceeding.

Findings of Fact

1. The planning landscape has changed significantly since the issuance of the Draft TEF, and much of the planning work that the TEP proposal envisioned is underway.
2. The Commission currently engages in a number of processes to coordinate internal and interagency TE infrastructure planning efforts with IOU planning.

⁵⁸⁰ CLECA and EPUC filed joint opening comments.

⁵⁸¹ GPI filed its opening comments on November 2, 2022.

⁵⁸² Joint CCAs here refers to CalChoice, CPA, EBCE, MCE, PCE, RCEA, SDCP, SJCE, and SCP.

⁵⁸³ Joint Commenters here does not include the Center for Biological Diversity.

3. Most, if not all, TE market segments are not yet mature.
4. The Commission adopted TE Safety Checklists in D.18-01-024 and D.18-05-040.
5. The Commission adopted EVSE communication standards in D.22-08-024.
6. Pursuant to D.20-12-029, SCE filed, and the Commission approved, SCE Advice Letter 4521-E, concerning a cybersecurity workplan, but the Commission did not authorize the requested budget.
7. Portable fuel cards that offset the cost of charging for low-income customers who lack access to off-peak charging at home may promote equity.
8. The majority of the Commission's prior TE program decisions require the IOUs to recover costs in either a one-way Balancing Account or one-way subaccount within their TE Balancing Accounts.
9. The Commission's prior TE program decisions and the EV Infrastructure Rules direct the IOUs to recover costs via distribution rates.
10. An equal cents per kWh allocation factor will ensure that costs are distributed across all customer classes equitably.
11. Air Districts and Metropolitan Planning Organizations can share details on other funding opportunities and help influence program implementation details (e.g., rebate levels, outreach tactics, etc.).
12. IOU outreach on the FC1 program to Air Districts and Metropolitan Planning Organizations can help ensure that the program addresses regional TE plans, leverages additional outreach support from Air Districts and Metropolitan Planning Organizations, leverages funding sources and incentive stacking, and supports the equitable geographic distribution of charging infrastructure.

13. ME&O efforts post-energization can help to increase charger utilization rates.

14. Existing statewide efforts promote EV awareness, including the \$5 million program to promote ZEV awareness funded by the Governor's Office of Business and Economic Development.

15. Small businesses and small fleets would benefit from increased support through TE ME&O activities.

16. The Staff Proposal accounts for party feedback on the Draft TEF, updated direction from the Legislature, recent Commission decisions and resolutions, and market developments.

17. The Staff Proposal's funding cycle approach moves beyond the current piecemeal application and approval processes and better account for the evolving TE policy and market landscape.

18. The passage of AB 841 and the resulting EV Infrastructure Rules clarified the scope and magnitude of the IOUs' TE role to support and enable the TE market by acting as utility-side infrastructure and fuel providers.

19. There is a significant need for more EV charging infrastructure in the near-term to meet California's TE and emissions goals.

20. FC1 program funding will help the state meet its TE goals by reducing the installation costs for EV charging infrastructure.

21. Additional analysis – provided in part through the FC1 evaluation and market assessments – is needed before the Commission considers authorizing BTM TE funding beyond FC1.

22. The five-year funding cycle timeline provides clarity, certainty, and a reasonable timeframe for the periodic evaluation of the need for IOU BTM TE investments.

23. D.21-07-028 adequately addresses near-term IOU funding opportunities for the remainder of FC0.

24. A two-year grace period for FC0 to overlap with FC1 allows the IOUs to accept customer applications and agreements within FC0 programs through December 31, 2026, if the Commission has not directed otherwise, and provides sufficient flexibility to allow for the effective completion of FC0 programs and allocation of the associated funding.

25. A single Mid-Cycle Assessment in 2027, the third year of FC1, is appropriate to ensure flexibility in program implementation, sufficient review of FC1, confirmation of whether investments are adequately serving the market and contributing to state goals.

26. The Mid-Cycle Assessment and the annual roundtables will provide sufficient flexibility for the FC1 program, while not overburdening stakeholders, the IOUs, and the Program Administrator.

27. An annual roundtable will provide program flexibility by creating a venue for stakeholder input and review of data/evaluation results to inform adjustments and updates to the Program Handbook, including modifications to rebate levels and changes to better reach underserved communities.

28. A single annual roundtable is more efficient than hosting separate data- and equity-focused roundtables.

29. It is premature to adopt guidance for FC2 due to the rapidly evolving TE market and policy landscape.

30. The FC1 program evaluation, market studies, and assessment of the continued role of IOUs in supporting BTM infrastructure will provide information needed to develop FC2 guidance.

31. The existing Commission application pathway per SB 350 provides the IOUs with an adequate process to propose supplemental and pilot programs during FC1.

32. Allowing the IOUs to only access up to 60 percent of FC1 funds within the first three-years of the FC1 program, with access to the remaining 40 percent of funding pending approval through the Mid-Cycle Assessment decision, provides flexibility to determine whether the full \$1 billion budget is reasonable over FC1's five-year period and whether modifications to or termination of the program is warranted.

33. Applying all funding caps towards the total accessible FC1 program funds will help accommodate fluctuations in annual spending, such as higher administrative start-up costs in early years and the acceleration of rebate payment as the program progresses.

34. A funding allocation based on each IOU's percentage of electric sales for 2024 is the most equitable way to determine each IOUs' FC1 budget allocation.

35. Limiting disbursed funds to each IOU's funding contribution to the FC1 program and not allowing ratepayers of one IOU to fund another IOU's customers' participation in the FC1 program will prevent unjust and unreasonable rate increases without commensurate benefits.

36. The imposition of an annual funding cap impedes overall program effectiveness because it leads to program uncertainty; in contrast, continual access to authorized program funding will lead to better IOU customer experience, consistent infrastructure investment and deployment, and efficient program administration.

37. The Mid-Cycle Assessment will determine if annual caps are necessary for the second half of the FC1 program.

38. A cap of eight percent cap for both the IOUs' and the Program Administrator's administrative costs is reasonable based on their required program administration responsibilities.

39. An eight percent cap on administrative costs is consistent with the Self-Generation Incentive Program and the Solar on Multifamily Affordable Housing program.

40. The Mid-Cycle Assessment will determine if any adjustments to the eight percent administrative funding cap are warranted.

41. An audit or review will determine whether spent administrative funds exceed the cap.

42. A broader audit scope or additional audits may be necessary.

43. Increased budgets for ME&O and TA will help ensure adequate outreach and engagement with and participation from hard-to-reach and underserved communities and adequate levels of TA.

44. The Mid-Cycle Assessment will determine if any adjustments to the administrative, ME&O, and TA budgets are necessary.

45. Adopting an evaluation budget structure consisting of two separate budgets for the IOUs and ED staff will ensure adequate technical support is available for ED staff up to and throughout FC1.

46. The ED-managed evaluation budget will support contracting with a technical consultant to analyze and assess TE program progress.

47. Reasonable options beyond IOU ownership exist to support low-income, DAC, and small business customers for whom the rebate model may be challenging.

48. While expense treatment of the BTM rebate costs may result in somewhat higher upfront costs, capitalizing these costs will be significantly more expensive for ratepayers over time.

49. Allocating State Budget General Funds for the FC1 program budget is outside of the Commission's authority.

50. Securitization increases ratepayer costs more over time compared with expense treatment.

51. The rebate program provides a well-suited and flexible solution to accelerating TE infrastructure development.

52. The technology and market conditions that inspired declining incentives for the solar market do not translate to deployment of EV charging infrastructure at this time.

53. The Mid-Cycle Assessment will analyze any new information concerning a declining block rebate structure and propose program modifications, if warranted.

54. The ability to stack rebates – provided that total rebates do not exceed project costs – allows for the installation of a broader and larger amount of TE infrastructure.

55. Determination of the appropriate FC1 rebate level will benefit from Commission guidance and additional stakeholder input and analysis.

56. Allowing rebate levels to change annually provides program flexibility to respond to changing market conditions.

57. It is appropriate for the IOUs to maintain administration of TA – for all IOU customers, including FC0, FC1, and non-program participants, as well as bundled and unbundled customers – because TA is part of their core

responsibilities, and they are best positioned to administer the current scope of the program.

58. IOU administration of TA does not raise anti-competitive issues because TA functions involve helping customers with rates and D.12-12-036 includes an exception to marketing limitations for communications that are part of a Commission-authorized program.

59. D.12-12-036 includes an exception to IOU marketing limitations with respect to CCAs for communications that are part of a specific program that is authorized or approved by the Commission.

60. A split CCA- and IOU-administered TA structure would cause confusion for customers when determining with whom they should work.

61. CCAs may be best suited to speak to their customers about their own rate structures.

62. TA would benefit from the involvement of EVSPs and providers of ALM and DR based on their technical expertise.

63. The following TA services help provide comprehensive support and advisory services during the planning, installation, and post-deployment stages of customer projects: (1) basic technical assistance; (2) planning load management and other VGI considerations; (3) help with choosing rates; (4) support with walking through the IOU energization and interconnection process; (5) support and advisory services during planning, installation, and post-deployment; (6) operations post-deployment, like route optimization, load management, and future fleet electrification; and (7) available ALM and DER options to lower deployment costs.

64. Strict standards of technology and product neutrality for the IOUs' TA services avoids interference with competitive markets and ensures customer choice.

65. Additional development of TA and its scope is necessary prior to program launch.

66. Targeted outreach to the following groups will help ensure ME&O activities are effective: (1) underserved communities; (2) rural communities; (3) small businesses; (4) tribal communities; and (5) workforce development, job training and placement, and certification organizations.

67. Additional work is necessary to finalize the ME&O component's scope.

68. The annual roundtable process and associated Tier 2 Advice Letter can review and propose modifications to the ME&O component of the program.

69. Involvement of CBOs and CCAs in the design and implementation of the FC1 program's ME&O component will improve the effectiveness of ME&O due to CBOs' and CCAs' extensive experience working closely with various communities and knowledge of successful outreach practices.

70. The Program Handbook development process, associated workshops, and annual roundtables will benefit from engagement with: (1) the Disadvantaged Community Advisory Group; (2) CBOs that are already integrated into DACs and other underserved communities; (3) non-English speaking community groups; (4) youth groups; and (5) workforce development, job training and placement, and certification organizations.

71. Subcontracting with CBOs, CCAs, and other groups with relevant experience for local ME&O efforts will help the TE program reach targeted communities due to these groups' expertise working with customers and local communities.

72. Certain sites in DACs do not serve low-income residents, primarily or at all.

73. Adopting higher rebates for MUDs with a majority of low-income residents accounts for income variances across the state, better focuses on customers facing heightened barriers to EV adoption in underserved communities and does not contribute to potential displacement of low-income residents.

74. Higher rebates for MUDs and MUD-serving public locations situated in DACs are not needed because the additional incentives would not effectively target customers most in need.

75. Higher LD rebates for MUDs with a majority low-income residents target low-income customers who are more in need of rebates.

76. If the Program Administrator cannot reasonably determine whether a majority of a MUD's residents have incomes at or below 80 percent of the AMI, the Program Handbook can propose an alternative method of identifying MUDs with low-income residents where higher LD rebates are appropriate.

77. Higher MDHD rebates for customers in DACs are warranted because DACs suffer from poor air quality and the MDHD sectors have a disproportionate effect on air quality.

78. Higher MDHD rebates for tribal communities are warranted in light of the unique barriers to TE faced by these tribal communities.

79. Vehicles domiciled and operating in DACs produce higher level of emissions in DACs than vehicles only domiciled in DACs and therefore affect air quality more negatively.

80. Fortune 1,000 corporations do not require additional TE incentives funded by ratepayers.

81. Due to more limited resources, small businesses and fleets currently require more targeted support for TE investments, and higher rebates for these customers will promote compliance with the CARB Advanced Clean Fleets regulation.

82. Public Utilities Code Section 323.5(a)(2) provides a definition of small business.

83. Increasing the underserved communities' allocation to at least 65 percent of FC1 funding better serves the state's EV adoption goals, supports communities confronting greater barriers to EV adoption, and promotes equity.

84. Requiring a minimum FC1 investment of 65 percent in underserved communities advances the goals of the Commission's Environmental and Social Justice Action Plan more effectively than a 50 percent allocation requirement because this higher amount of funding will result in a higher impact on improving local air quality, public health, and opportunities for access.

85. Reserving a specific percentage of the minimum spending in underserved communities and considering the unique needs of tribal communities will ensure that these communities benefit from the program.

86. The FC1 program's equity goals will be advanced through ME&O initiatives focused on underserved communities, significant collaboration with CBOs, and engagement with tribal communities.

87. A major purpose of widespread TE, as set forth in Public Utilities Code Section 740.12(a)(1)(F), is the creation of high-quality jobs for Californians

88. Adoption of workforce training program goals, requirements, and implementation strategies will help ensure TE investments create high-quality jobs, facilitate access to these jobs for targeted populations, and address the need for a skilled, trained, and diverse workforce.

89. The Commission's Solar on Multifamily Affordable Housing program provides examples of workforce training requirements.

90. The LITE pilot program provides an opportunity to test new rebate design approaches that may fill gaps in the statewide rebate program in a creative way.

91. The Research and Evaluation Plan will provide an effective means of documenting the Commission's and the IOUs' research priorities.

92. The Commission has historically approved less funding for the MDHD sectors than for the LD sector.

93. Existing and forthcoming CARB regulations—including Advanced Clean Trucks, Advanced Clean Fleets, and Innovative Clean Transit—will accelerate adoption of MDHD EVs.

94. Electrifying the MDHD sectors will reduce air pollution disproportionately impacting DACs.

95. Updated data and analysis may justify modifying the MDHD/LD funding allocation during the Mid-Cycle Assessment.

96. The CEC's AB 2127 Charging Assessment identified the need to support charging at MUDs and MUD-serving public locations.

97. MUD residents face significant barriers to EV adoption in part due to a lack of access to charging infrastructure.

98. The market and regulatory landscape in 2025 and beyond may necessitate the prioritization of rebates for other LD-sector chargers.

99. The MDHD definition contained in D.20-09-025 includes all vehicle categories parties recommend in comments on the Staff Proposal but future circumstances may warrant modifying or updating the MDHD definition.

100. Certain MDHD use cases may require more assistance than others to electrify, for example small fleets often lack the resources needed to electrify as compared to larger fleets.

101. Future conditions may justify different FC1 use case prioritization for the MDHD sectors.

102. A MDHD EV purchase requirement would ensure FC1 rebates provide ratepayer benefits by increasing the purchase and use of EVs, and supporting shared MDHD charging infrastructure would ensure FC1 rebates provide ratepayer benefits by increasing the purchase and use of EVs by fleets that do not own or control their own fueling infrastructure.

103. Multiple MDHD EVs may use the same charger.

104. Implementing an MDHD EV purchase requirement in certain contexts, including for public/shared charging ports and small businesses, requires additional consideration and possibly an exemption.

105. A single third-party administrator for both LD and MDHD components of the rebate program enhances simplicity and accessibility for customers.

106. Allowing the Program Administrator to determine details of the program administration structure, including the Program Administrator's use of subcontractors, will provide for flexibility in implementation and technical expertise.

107. California mandates certain contracting requirements, including the Commission's "Conflict of Interest" policies.

108. A program name that is easily understandable and effectively communicates the program's purpose will promote the success of the program.

109. Rather than the current PACs, it is appropriate to utilize the annual roundtables to discuss any programmatic and market developments during FC1, as well as potential modifications to the program.

110. Allowing the Program Handbook development process to determine details of the program with stakeholder feedback will help create a well-designed and effective FC1 program.

111. The Commission has not yet established a clear VGI strategy or strategic focus areas to complement and inform FC1.

112. Establishing an annual VGI Forum and associated process will allow stakeholders to propose appropriate changes to the FC0 and FC1 programs.

113. If needed, the VGI Forum and associated process can propose appropriate changes to the FC0 and FC1 programs.

114. A flexible approach to VGI, rates, and DR is warranted because each customer has specific constraints and technology is rapidly advancing.

115. Defaulting customers onto applicable time-varying EV-specific rates promotes use of beneficial rates for EVs and is consistent with the requirements of the EV Infrastructure Rules.

116. Load management plans help ensure that EV charging load is flexible and responsive to price signals.

117. A study will help develop a broader understanding of the costs and benefits of ALM to support potential large-scale deployment of an incentive.

118. The ALM requirements in Ordering Paragraphs 5 and 6 of D.20-12-029 are overly broad and create unnecessary ambiguity given the new funding cycle structure and the potential impact on future EV rate design.

119. Modifying the ALM requirements in D.20-12-029 accounts for the ALM directives in this decision, reduces ambiguity, and emphasizes the importance of

ensuring that IOU-led education on ALM includes a thorough consideration of EV drivers' mobility needs.

120. Alignment of the Commission's qualification process for LD and MDHD EVSE with the CEC's process is warranted for administrative efficiency and to harmonize program requirements.

121. An approved product list, managed by the Program Administrator and accessible on the program website, will help ensure compliance with EVSE technical requirements.

122. Allowing review and modification of EVSE technical requirements through the annual roundtable process provides flexibility to the program.

123. Adoption of minimum EVSE requirements is necessary to ensure the effectiveness of the FC1 program.

124. Adopting program targets through the Program Handbook development process can improve program implementation and performance.

125. The Mid-Cycle Assessment can determine if any changes or adjustments to the targets are necessary.

126. A Commission decision is needed to adopt the Program Handbook due to the number of significant unresolved program details.

127. The following topics require additional discussion and feedback in workshops during the Program Handbook development process: (1) TA scope; (2) TA engagement with EVSPs and ALM/DR providers; (3) establishment of clear communication channels with CCAs for TA; (4) load management plans; (5) ME&O; (6) CBO engagement in ME&O; (7) rebate levels; (8) establishment of upfront rebate levels; (9) support for small fleets and small businesses; (10) effective support and outreach for underserved communities; (11) technical requirements; and (12) targets.

128. The Program Handbook development process will benefit from stakeholder discussions and feedback.

129. It is appropriate to adopt the minimum scope list contained in this decision for the Program Handbook.

130. Adopting a Data Assessment requirement will streamline existing reporting requirements, minimize unnecessary or duplicative reporting, and inform FC1 program reporting requirements.

131. Adoption of reporting requirements helps monitor progress towards program goals and provides transparency to the public.

Conclusions of Law

1. The Commission should not adopt the Draft TEF's TEP framework and the associated proposals.

2. The IOUs should continue to participate in and improve upon internal and interagency TE infrastructure planning efforts.

3. The Commission should adopt a \$1 billion budget for FC1, which appropriately balances the benefits of increased access to TE, the costs of continued ratepayer investment in TE, and other sources of state and federal TE funding.

4. The Commission should establish the following sunset date for the near-term TE priorities pathways authorized in D.21-07-028: no later than May 31, 2023, for the IOUs to file any near-term TE priority applications or Advice Letters, and no later than December 31, 2026, for the IOUs to stop accepting customer applications or agreements within any approved near-term TE priority programs, unless the governing program decision directs another end date.

5. The IOUs and Program Administrator should continue to utilize and report on safety procedures throughout FC1 based on the TE Safety Checklists.

6. The Commission should clarify that the EVSE communication standards in D.22-08-024 apply to the FC1 rebate program.

7. The Commission should authorize SCE to implement the cybersecurity workplan approved in Advice Letter 4521-E and establish a memorandum account to track and record associated costs, with reasonableness review for recovery of the recorded expenditures within a GRC.

8. The Commission should authorize SCE to file an Advice Letter to establish a memorandum account to track and record costs associated with the cybersecurity workplan implementation, with reasonableness review and recovery to occur within SCE's GRC, limited by expected costs as filed confidentially in Advice Letter 4521-E.

9. The Commission should direct the FC1 Mid-Cycle Assessment to consider designating a portion of program funds for fuel cards for low-income customers.

10. The Commission should require the IOUs to record all BTM TE program costs in either one-way subaccounts within the IOUs' individual TE Balancing Accounts or through separate one-way balancing accounts and recover the costs through distribution rates.

11. The Commission should require the IOUs to allocate FC1 program costs and all BTM TE program costs on an equal cents per kWh basis.

12. The Commission should require the IOUs to conduct outreach to the Air Districts and Metropolitan Planning Organizations in their service territories to inform them of and request their participation in the development of the Program Handbook.

13. The Commission should phase out the authorization provided in D.21-07-028 because that decision served to provide the IOUs with guidance for any proposals for TE investments prior to adoption of the TEF, which this decision addresses.

14. The Commission should prevent ratepayer FC1 ME&O funds from duplicating broad EV awareness campaigns.

15. The Commission should require FC1 ME&O efforts to target small businesses and fleets.

16. The Commission should adopt the Staff Proposal's funding cycle framework, rather than the Draft TEF's proposed TEPs.

17. Given the significant need for more charging infrastructure in the near-term, the Commission should establish a role for ratepayers in supporting TE and EV charging infrastructure in the near-term.

18. The Commission should adopt the Staff Proposal's FC1 program, with modifications, to stimulate the TE market and foster private investment from 2025 through 2029.

19. The Commission should not extend the authorization provided in D.21-07-028 through FC1.

20. The Commission should initiate the Mid-Cycle Assessment in Quarter 1 of 2027 to assess and, if needed, modify the FC1 program.

21. The Commission should require the IOUs to annually review and, if needed, adjust the FC1 program through a Tier 2 Advice Letter process.

22. The Commission should require a single annual roundtable hosted by the IOUs and the Program Administrator to review program data and equity considerations.

23. The Commission should initiate the FC2 development process in early 2027 via ruling and subsequently issue FC2 program guidance, if needed, by the end of 2027, to allow FC2 to commence on January 1, 2030.

24. To promote technology and construction flexibility, while reducing the cost burden that capitalized IOU expenditures impose on ratepayers, the Commission should eliminate all IOU ownership of BTM TE infrastructure beginning with FC1.

25. Given the immensity and importance of the core IOU responsibilities, the role of IOU ratepayers in subsidizing BTM TE infrastructure requires careful and ongoing consideration; indefinite ratepayer support may not be warranted.

26. The Commission should decline to create additional application pathways for the IOUs to propose programs and pilots during FC1 beyond the process provided for in SB 350.

27. The Commission should approve a \$1 billion budget for the FC1 program.

28. The Commission should allow the IOUs to only access up to 60 percent of FC1 funds within the first three-years of FC1, with access to the remaining 40 percent of funding pending approval through a future Commission decision following the Mid-Cycle Assessment.

29. The Commission should calculate funding caps over the first three years of FC1 based on the IOUs' respective percentage the \$600 million in initial funding.

30. The Commission should allocate the FC1 budget based on each IOU's percentage of electric sales for 2024.

31. Each IOU should file a Tier 2 Advice Letter within 60 days of the issuance date of this decision to establish a one-way sub-account within their existing TE balancing account or separate one-way balancing account. Each sub-account

should be capped based on the approved FC1 budget and the percentage of electric sales for the IOU in 2024.

32. The Commission should limit disbursed funds to each IOU's funding contribution to the FC1 program.

33. The Commission should not adopt an annual cap on program funding.

34. The Commission should adopt an eight percent cap for program administrative costs.

35. The Commission should conduct an audit or review prior to the Mid-Cycle Assessment, to determine whether spent administrative funds exceed the cap.

36. The Commission should authorize ED staff, in consultation with the Commission's Utility Audit, Risk, and Compliance Division, to request additional audits or broaden the scope of the audit of administrative funds.

37. The Commission should adopt a budget for each ME&O and TA activities of up to six percent of the total program funding.

38. An IOU-managed evaluation budget of \$3 million for the first three years of FC1 and up to \$5 million for the full five years of FC1 is reasonable.

39. The Commission should approve an IOU-managed evaluation budget of \$3 million for the first 3 years of the FC1 program and up to \$5 million for the program's full five years.

40. An ED-managed evaluation budget of \$3 million annually from 2023 through 2029 for technical consulting and support funding is reasonable.

41. The Commission should approve an ED-managed evaluation budget of \$3 million annually from 2023 through 2029 for technical consulting and support funding, separate from the FC1 budget.

42. The Commission should eliminate all IOU ownership of BTM TE infrastructure beginning with FC1.

43. Private industry, not ratepayers, should cover any additional TE funding beyond the authorized FC1 program and the Commission's other approved TE spending.

44. The Commission should authorize the Program Handbook to propose up-front rebates and any other appropriate options – beyond IOU ownership – to support low-income, DAC, and small business customers for whom the FC1 rebate model may be challenging.

45. The Commission should authorize a stakeholder process led by the Program Administrator to set the FC1 rebate levels.

46. The Commission should not adopt a declining block rate structure at this time.

47. The Commission should allow rebate stacking, provided that the total received rebates do not exceed 100 percent of costs and any rebate amounts that exceed the limit are returned.

48. The Commission should authorize annual assessments of the appropriate rebate levels via the annual roundtable process.

49. The Commission should authorize the IOUs to administer TA.

50. The Commission should require the Program Handbook development process, and a corresponding workshop, to determine appropriate clear and defined channels of communication between the IOUs' TA efforts and the CCAs in their service territories.

51. The Commission should require the Program Handbook development process, and a corresponding workshop, to determine a clear method for IOU TA engagement with EVSPs and providers of ALM and DR.

52. The Commission should require the IOUs to host a workshop to develop and refine the final scope of TA for inclusion in the Program Handbook.

53. The Commission should require the Program Handbook development process to determine the scope and administration details of the program's ME&O component.

54. The Commission should require engagement with the following groups during the Program Handbook development process, associated workshops, annual roundtables, and the design and implementation of the FC1 program's ME&O component: (1) the Disadvantaged Community Advisory Group; (2) CBOs that are integrated into DACs and other underserved communities; (3) non-English speaking community groups; (4) youth groups; and (5) workforce development, job training and placement, and certification organizations

55. The Commission should allow the Program Administrator to subcontract with CCAs, CBOs, and other groups with experience working with local communities for local ME&O activities, including subcontracts to administer portions of the ME&O program on a local level.

56. The Commission should require the Program Handbook development process to determine: (1) any required percentage of budget allocated to local ME&O; (2) roles of subcontractors; (3) the geographic reach of subcontractors; and (4) how the subcontractors will ensure consistent implementation of the ME&O program.

57. The Commission should require engagement with CCAs during the Program Handbook development process, associated workshops, and annual roundtables.

58. The Commission should adopt higher LD rebates for MUDs with a majority low-income residents, defined as those customers with incomes at or below 80 percent of the AMI. If this requirement is not reasonably administrable,

the Program Handbook development process may explore and propose alternative criteria (e.g., California Alternative Rates for Energy/Family Electric Rate Assistance eligibility).

59. The Commission should not adopt higher LD rebates for MUDs and MUD-serving public locations in DACs.

60. The Commission should consider the unique needs of tribal communities to ensure charging infrastructure reaches these communities effectively, potentially including alternative use cases to provide rebates and higher rebate levels.

61. The Commission should require ME&O efforts to focus on reaching underserved communities and ensure collaboration with CBOs to respond to the unique needs and interests of local communities.

62. The Commission should authorize higher MDHD rebates for customers in DACs.

63. The Commission should require the Program Handbook development process to consider higher MDHD rebates for tribal communities.

64. The Commission should authorize higher MDHD rebates for customers whose vehicles are domiciled and operate for significant periods in DACs.

65. The record lacks evidence demonstrating why medium- and large-sized corporations located in DACs require additional MDHD subsidies.

66. The Commission should prohibit Fortune 1000 corporations – operating in DACs or elsewhere – from receiving FC1 rebates.

67. The Commission should require the FC1 rebate program to target small businesses and fleets, as defined in the Program Handbook, which should incorporate the definition provided in Public Utilities Code Section 323.5(a)(2).

68. The Commission should dedicate a minimum of 65 percent of FC1 rebate funds to underserved communities.

69. The Commission should dedicate a minimum of 65 percent of FC1 ME&O funds towards ME&O for underserved communities.

70. The Commission should require the Program Handbook to set aside a specific percentage of the required minimum spending in underserved communities for rebates in tribal communities.

71. To provide a venue to review and potentially modify the FC1 program, the Commission should require an annual roundtable, where the Program Administrator should present program metrics and data on rebate deployment, equity, usage, ME&O efforts, and TA activities.

72. The Commission should require the IOUs to jointly file a Tier 2 Advice Letter annually, containing a summary of the discussion at the roundtable and proposing any changes to the FC1 program (*e.g.*, rebate level, rebate design, ME&O strategies, customer targeting, or requirements to ensure participation of underserved communities); however, the Advice Letter should not propose modifications to the Program Administrator's contract or key terms of the program (*e.g.*, overall budget, allocation of FC1 rebates between the MDHD and LD sectors, prohibition on IOU ownership of BTM charging infrastructure, etc.).

73. The Commission should require the Program Handbook to: (1) propose ME&O initiatives specifically targeting underserved communities; (2) ensure collaboration with CBOs, and (3) incorporate principles from the Commission's Tribal Consultation Policy to advance efforts to engage with tribal communities.

74. The Commission should require the Program Handbook to: (1) develop contracting and procurement mechanisms that promote equity; (2) establish job

quality standards and job access requirements; (3) incorporate elements of the Commission's Environmental and Social Justice Action Plan related to high-quality workforce education and training; and (4) create targets related to workforce development.

75. A budget of up to \$25 million of the total FC1 budget for the LITE pilot program is reasonable due to the potential to test new rebate design approaches that may fill gaps in the statewide rebate program in a creative way.

76. The Commission should require SDG&E to conduct an RFP and require the IOUs to execute contracts with selected entities administering LITE pilot projects according to the guidance and direction in this decision.

77. The Commission should authorize a budget of up to \$25 million of the total FC1 budget for the LITE pilot program.

78. The Commission should retain the flexibility to extend, modify, or terminate the initial tranche of LITE pilot projects as a part of the Mid-Cycle Assessment.

79. The Commission should require the IOUs to assist ED staff in developing and maintaining the Research and Evaluation Plan.

80. The Commission should allocate 70 percent of FC1 rebates to the MDHD sectors and 30 percent of FC1 rebates to the LD sector.

81. The Commission should allow the Mid-Cycle Assessment to revisit and potentially modify the allocation of FC1 rebates between the MDHD and LD sectors.

82. The Commission should limit LD sector rebates to chargers sited at MUDs and MUD-serving public locations.

83. The Commission should require the Mid-Cycle Assessment to revisit and potentially modify FC1's eligibility requirements for LD-sector rebates.

84. The Commission should adopt the MDHD definition contained in D.20-09-025 for FC1.

85. The Commission should allow the IOUs to propose, following consultation with the Program Administrator and stakeholders, modifications to the MDHD definition through the post-roundtable Tier 2 Advice Letter filings or during the Mid-Cycle Assessment.

86. The Commission should require that the Program Handbook development process include a presentation of data and findings from current MDHD programs to determine whether and how the FC1 program should account for the needs of MDHD fleets.

87. The Commission should require the Program Handbook to include a process to prioritize small fleets, as well as a definition for small fleets that considers those in the CEC's *EnergIZE*, CARB's Advanced Clean Fleets regulation, and other relevant MDHD regulations in California (*i.e.*, Drayage Trucks at Seaports and Railyards, Airport Shuttles, Transport Refrigeration Units, and Innovative Clean Transit).

88. The Commission should authorize the IOUs to propose, following consultation with the Program Administrator, modifications to prioritize or deprioritize MDHD use cases through the post-roundtable Tier 2 Advice Letter filings or during the Mid-Cycle Assessment.

89. The Commission should require a minimum of one EV purchase, lease, or retrofit per MDHD charging port rebate.

90. The Commission should require the Program Handbook to include details of the unique vehicle purchase requirement(s) for contexts such as MDHD public/shared-charging ports and small businesses, including a possible exemption.

91. The Commission should require the IOUs to contract with one Program Administrator for all components of FC1, other than the IOU-administered TA program.

92. The Commission should decline to impose restrictions on the program administration structure, including the Program Administrator's use of subcontractors.

93. The Commission should require the IOUs' contract with the selected Program Administrator, and any subcontracts with the Program Administrator, to comply with state contracting requirements, including the Commission's "Conflict of Interest" policies.

94. The Commission should require the Program Handbook to propose a name for the program.

95. The Commission should require the annual roundtables to address any programmatic and market developments, as well as potential modifications to the program, and allow the PAC meetings to end at the conclusion of the FC0 programs.

96. The Commission should require the IOUs to issue the RFP, contract with the selected Program Administrator, and manage the contract.

97. The Commission should authorize ED to select the Program Administrator.

98. The Commission should designate SCE as the lead IOU to execute the Program Administrator contract and to file a Tier 2 Advice Letter to request approval of the contract language prior to finalization.

99. The Commission should authorize a three-year contract period, with the potential but not the guarantee of a two-year extension, to be determined at the program's mid-cycle point.

100. The Commission should require that the Program Handbook development process determine details of the program for the Program Administrator to execute.

101. The IOUs' contract with the selected Program Administrator, and any Program Administrator subcontracts, must comply with state contracting requirements, including the Commission's "Conflict of Interest" policies.

102. The Commission should adopt a VGI strategy with strategic focus areas and require an annual VGI Forum.

103. The Commission should authorize the IOUs to propose changes to the FC0 and FC1 programs following the VGI Forums.

104. The Commission should require the IOUs to default all FC1 participants on to applicable time-varying EV-specific rates, with the ability to opt out for another time-varying rate, consistent with the EV Infrastructure Rules.

105. The Commission should direct the IOUs to work with each customer, and coordinate with relevant CCAs, to develop a load management plan including ALM options, if appropriate, with details of this process to be finalized through the Program Handbook development process.

106. The Commission should require a study to assess ALM opportunities and subsequently issue a report and recommendations on whether to pursue ALM rebates in the FC1 program.

107. The Commission should adopt the following definition of ALM for use throughout FC1: ALM refers to energy management systems that are deployed at a particular location to reduce aggregate EV charging load with the objective of reducing or eliminating the need for electrical capacity upgrades on the utility and/or customer side of the meter. Unless otherwise specified in other contexts (e.g., rates, rules, etc.), this definition of ALM should apply.

108. If the Commission approves ALM rebates, the Commission should require the IOUs to implement and administer the rebates. The FC1 infrastructure rebate budget shall provide funding for any approved ALM rebates.

109. Requiring the IOUs to administer potential ALM rebates is reasonable due to the scope of the IOUs' TA programs and their role in educating customers under the EV Infrastructure Rules.

110. The Commission should modify the ALM requirements in Ordering Paragraphs 5 and 6 of D.20-12-029 to account for the ALM directives in this decision, reduce ambiguity, and emphasize the importance of ensuring that IOU-led education on ALM includes a thorough consideration of EV drivers' mobility needs.

111. The Commission should align its qualification process for LD and MDHD EVSE with the CEC's process.

112. The Commission should require the Program Handbook development process to adopt EVSE technical requirements that, at minimum, comply with the EVSE requirements adopted in D.22-08-024 and this decision.

113. The Commission should require an approved product list for the Program Administrator to manage and post on the program website.

114. The Commission should authorize review and modification of EVSE technical requirements through the annual roundtable process.

115. The Commission should adopt minimum EVSE technical and data sharing requirements.

116. The Commission should require a series of workshops to discuss and receive input on the requirements of the Program Handbook.

117. The Commission should require the Program Handbook development process, and associated workshop(s), to establish FC1 program targets, including

at minimum the following categories: (1) equity; (2) LD ports; and (3) MDHD vehicles electrified.

118. The Commission should require the Program Administrator in collaboration with the IOUs to host workshops on unresolved FC1 program issues.

119. The Commission should require the IOUs, in consultation with the Program Administrator, to file a workshop report within 60 days of the final workshop reflecting stakeholder feedback and conversations from the workshops.

120. The Commission should manage one or more contractors to perform tasks in support of the research priorities ordered in this decision. The costs of such tasks shall not exceed \$3 million per year for seven years, or a total of \$21 million, with costs eligible to be rolled over annually. These costs are separate from the \$1 billion FC1 budget.

121. The Commission should require the Program Handbook to utilize the minimum scope list contained in this decision.

122. Once contracted, the Program Administrator should develop the Program Handbook in consultation with the IOUs, ED staff, and stakeholders.

123. The Commission should adopt, with any modifications, the Program Handbook in a subsequent decision following a ruling requesting comment on the draft Program Handbook and the workshop report.

124. The Commission should adopt the timeline, process, and deliverables for the Data Assessment described in Appendix B of this decision.

125. The IOUs should each file a Tier 2 Advice Letter to update the rate and bill impacts associated with the authorized investments for the FC1 program.

O R D E R

IT IS ORDERED that:

1. Southern California Edison Company (SCE) shall file a Tier 1 Advice Letter within 30 days of the issuance date of this decision to establish a memorandum account to track and record costs related to implementation of the cybersecurity workplan approved in SCE Advice Letter 4521-E. SCE shall implement the workplan according to the estimated budget specified confidentially in that Advice Letter. SCE shall seek reasonableness review for recovery of the recorded expenditures through a General Rate Case proceeding.

2. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, Liberty Utilities (CalPeco Electric) LLC, Bear Valley Electric Service Inc., and PacifiCorp d/b/a Pacific Power, collectively the investor-owned utilities (IOUs), shall not file any near-term priority applications or Advice Letters after May 31, 2023. By December 31, 2026, the IOUs shall stop accepting customer applications or agreements within all existing Commission-approved transportation electrification programs and any near-term priority programs the Commission approves pursuant to the direction in Decision 21-07-028, unless the governing program decision directs another end date.

3. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, Liberty Utilities (CalPeco Electric) LLC, Bear Valley Electric Service Inc., and PacifiCorp d/b/a Pacific Power, collectively the investor-owned utilities (IOUs), shall record all behind-the-meter transportation electrification (TE) program costs in either a one-way subaccount within each IOU's TE Balancing Account or through a separate one-way balancing account. The IOUs shall record such costs as expenses, rather than

capitalizing the costs. The IOUs shall recover such costs through distribution rates allocated on an equal cents per kilowatt hour basis applied equally to all customer classes.

4. Within 60 days of the issuance date of this decision, Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, Liberty Utilities (CalPeco Electric) LLC, Bear Valley Electric Service Inc., and PacifiCorp d/b/a Pacific Power, collectively the investor-owned utilities (IOUs), shall each file a Tier 2 Advice Letter to establish a one-way sub-account within their existing TE balancing account or separate one-way balancing account to track costs for the Funding Cycle 1 (FC1) program. This decision approves a \$1 billion budget for the FC1 program. The IOUs may access up to 60 percent of FC1 funds within the first three-years of the FC1 program, which shall begin on January 1, 2025. Each sub-account or balancing account shall be capped at \$600 million for the first three years and the percentage of electric sales for the IOU in 2024. Each IOU shall disburse appropriate funds to the Program Administrator. Total FC1 rebate funding in each IOU's service territory shall be capped based on each IOU's funding contribution, after deducting costs for program administration, technical support and evaluations, the Locally Invested Transportation Equity (LITE) pilot program, Technical Assistance (TA) programs, and marketing, education, and outreach (ME&O) programs. For the first three years, program administrative costs, including both IOU and Program Administrator administrative expenses, shall be capped at \$48 million, or eight percent of the utilized portion of the approved FC1 program budget of \$600 million, whichever is lower; TA program costs shall be capped at \$36 million, or six percent of the utilized portion of the approved FC1 program budget of \$600 million, whichever is lower; ME&O program costs shall be

capped at \$36 million, or six percent of the utilized portion of the approved FC1 program budget of \$600 million, whichever is lower; and costs for an IOU-managed program evaluation shall be capped at \$3 million. Costs for a technical support and evaluation budget, managed by the Commission's Energy Division (ED) staff, shall be capped at \$3 million annually from 2023 through 2029, or a total of \$21 million. Costs for the ED-managed technical support and evaluation budget are not included in the \$1 billion FC1 program budget. Costs for the LITE pilot program shall be capped at \$25 million. Program Administrator costs shall be subject to audit or review by the Commission's Utility Audit, Risk, and Compliance Division. ED staff is authorized to request additional audits or broaden the scope of the audit.

5. Southern California Edison Company (SCE), on behalf of itself, Pacific Gas and Electric Company, San Diego Gas & Electric Company, Liberty Utilities (CalPeco Electric) LLC, Bear Valley Electric Service Inc., and PacifiCorp d/b/a Pacific Power, collectively the investor-owned utilities (IOUs), shall issue a request for proposals to contract with a Program Administrator to design and administer the Funding Cycle 1 program. Following selection of the Program Administrator by the Commission's Energy Division staff, the IOUs shall draft the contract with the Program Administrator. By May 1, 2023, before executing the contract, SCE shall submit the contract for approval to the Commission via a Tier 2 Advice Letter. The contract shall comply with all guidance and direction in this decision.

6. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, Liberty Utilities (CalPeco Electric) LLC, Bear Valley Electric Service Inc., and PacifiCorp d/b/a Pacific Power, in consultation with the Program Administrator, shall serve on the service list of this or any

successor proceeding, a draft Program Handbook and a workshop report covering all of the workshops held as part of the Program Handbook development process. The Program Handbook and the process to develop it shall comply with all guidance and direction provided in this decision. The workshop report shall reflect stakeholder feedback provided at the workshops.

7. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, Liberty Utilities (CalPeco Electric) LLC, Bear Valley Electric Service Inc., and PacifiCorp d/b/a Pacific Power, collectively the investor-owned utilities (IOUs), shall comply with this decision's guidance and direction in performing all required activities, including Funding Cycle 1 program administration and support, technical support and evaluations, the Locally Invested Transportation Equity pilot program, Technical Assistance programs, the Data Assessment, and marketing, education, and outreach programs. The IOUs shall complete all activities described in this decision by the deadlines provided in Appendices A and B. Energy Division staff is authorized to revise the deadlines related to Program Administrator selection and contracting, as needed.

8. By December 31, 2023, San Diego Gas & Electric Company (SDG&E), on behalf of itself, Pacific Gas and Electric Company, Southern California Edison Company, Liberty Utilities (CalPeco Electric) LLC, Bear Valley Electric Service Inc., and PacifiCorp d/b/a Pacific Power, collectively the investor-owned utilities (IOUs), shall issue a request for proposals for the Locally Invested Transportation Equity (LITE) pilot program. SDG&E shall submit the shortlisted pilots to the Commission via Tier 3 Advice Letter. The IOUs shall implement the LITE pilot program according to the guidance and direction in this decision. The LITE pilot program shall begin no later than Q1 2025.

9. Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, Liberty Utilities (CalPeco Electric) LLC, Bear Valley Electric Service Inc., and PacifiCorp d/b/a Pacific Power, collectively the investor-owned utilities (IOUs), shall assist the Commission's Energy Division staff in developing and maintaining a Research and Evaluation Plan to document the Commission's and the IOUs' research priorities.

10. Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company, collectively referred to as the large investor-owned utilities (large IOUs), shall jointly host annual roundtables with the Program Administrator in July of each year of the Funding Cycle 1 program. The large IOUs and the Program Administrator shall seek input from the Commission's Energy Division staff on the roundtable agendas. During the roundtables, the large IOUs and Program Administrator shall gather stakeholder feedback on the program. By August 1 of each year of the Funding Cycle 1 program, the large IOUs shall, with input from the Program Administrator, jointly file a Tier 2 Advice Letter reporting on program evaluations and metrics, summarizing the roundtable discussion, and proposing any program modifications. Any approved program modifications shall take effect on January 1 of the following year, unless the Commission determines otherwise.

11. Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company, collectively the large investor-owned utilities (large IOUs), shall host annual vehicle-grid integration (VGI) Forums in conjunction with the Commission's Energy Division staff. Within 60 days of each VGI Forum, the large IOUs shall file a workshop report and serve it service lists for this proceeding, any successor proceeding, and any other relevant Commission proceedings. The large IOUs shall propose any changes to the

Funding Cycle 1 program based on the VGI Forum and the associated workshop report through the Tier 2 Advice Letter filed following the annual VGI Forum. The large IOUs may file separate Tier 2 Advice Letters, where appropriate, to propose any changes to other existing transportation electrification rebate programs.

12. Ordering Paragraphs 5 and 6 from Decision 20-12-029 are modified as follows:

5. Southern California Edison Company, San Diego Gas & Electric Company, and Pacific Gas and Electric Company shall, each, in any future transportation electrification (TE) programs to support TE infrastructure installation identify how it will educate customers on how Automated Load Management technology may support TE installation at equal or lesser costs than hardware-based electrical capacity while meeting host site and electric vehicle drivers' charging and mobility needs.
6. Southern California Edison Company, San Diego Gas & Electric Company, and Pacific Gas and Electric Company shall each evaluate customer acceptance once Automated Load Management is installed at a host site as part of a ratepayer-funded transportation electrification program.

13. Within 30 days of the date of issuance of this decision, Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, Liberty Utilities (CalPeco Electric) LLC, Bear Valley Electric Service Inc., and PacifiCorp d/b/a Pacific Power shall each file a Tier 2 Advice Letter to update the rate and bill impacts associated with the authorized investments for the Funding Cycle 1 program, including the full revenue requirement associated with the approved program.

14. Rulemaking 18-12-006 remains open.

This order is effective today.

Dated November 17, 2022 at San Francisco, California

ALICE REYNOLDS

President

CLIFFORD RECHTSCHAFFEN

GENEVIEVE SHIROMA

DARCIE L. HOUCK

Commissioners

Commissioner John Reynolds recused himself and did not participate in the discussion and vote of this item.

Appendix A
Timeline of Program Actions and Activities

Timing	Action/Activity
January 2023	<ul style="list-style-type: none"> Each IOU files Tier 2 Advice Letter to establish new one-way balancing account or subaccount within 60 days of the adoption of this decision.
Q1 – Q2 2023	<ul style="list-style-type: none"> SCE, in collaboration with other IOUs and ED staff, design and issue RFP for the Program Administrator; By May 1, 2023, SCE files Tier 2 Advice Letter with proposed Program Administrator contract; ED staff, in consultation with the CEC, approves the selection of Program Administrator; and Deadline for submittal of near-term priority Advice Letter proposals pursuant to D.21-07-028 on May 31, 2023.
Q3 – Q4 2023	<ul style="list-style-type: none"> Program Administrator holds workshops; IOUs submit data assessment to ED staff, which the Commission would subsequently issue via ruling for party response; and Annual VGI Forum and associated workshop report and Advice Letter.
Q1 2024	<ul style="list-style-type: none"> IOUs and Program Administrator submit workshop report and proposed/ draft Program Handbook by January 15, 2024; Ruling with workshop report and draft Program Handbook; and Ruling with ALM study results and recommendations.
Q2 2024	<ul style="list-style-type: none"> Ruling with findings of the Data Assessment, along with recommendations for modifications to the current data reporting requirements, recommendations on the establishment of the TE Data Reporting Dictionary, and recommendations for additional data reporting requirements for FC1; IOUs issue RFP for LITE equity pilot; and CCAs, CBOs and other entities submit pilot proposals.
Q3 2024	<ul style="list-style-type: none"> Decision adopting the Program Handbook;

	<ul style="list-style-type: none"> • First annual roundtable and associated Advice Letter, if needed; and • Program Handbook decision adopts modifications to TE reporting requirements – for FC0 and FC1 – and process to update reporting requirements as needed.
Q4 2024	<ul style="list-style-type: none"> • Program Administrator finalizes pre-FC1 launch planning; and • Annual VGI Forum and associated workshop report and Advice Letter.
December 31, 2024	<ul style="list-style-type: none"> • FC0 ends; and • Grace period to wind down FC0 programs begins.
January 1, 2025	<ul style="list-style-type: none"> • FC1 begins, with rebate program, ME&O and TA programs launching.
Q1 2025	<ul style="list-style-type: none"> • CCAs, CBOs and other entities begin implementation of selected LITE equity pilots.
Q3 2025	<ul style="list-style-type: none"> • Annual roundtable and associated Advice Letter.
Q4 2025	<ul style="list-style-type: none"> • Annual VGI Forum and associated workshop report and Advice Letter.
Q3 2026	<ul style="list-style-type: none"> • Annual roundtable and associated Advice Letter.
Q4 2026	<ul style="list-style-type: none"> • Annual VGI Forum and associated workshop report and Advice Letter.
December 31, 2026	<ul style="list-style-type: none"> • FC0 grace period ends; and • FC0 program implementation concludes.
Q1 – Q2 2027	<ul style="list-style-type: none"> • Mid-Cycle Assessment decision; and • CCAs, CBOs and other entities to conclude implementation of selected LITE equity pilots.
Q3 2027	<ul style="list-style-type: none"> • FC2 guidance decision; and • Annual roundtable and associated Advice Letter.
Q4 2027	<ul style="list-style-type: none"> • Annual VGI Forum and associated workshop report and Advice Letter.
January 1, 2028	<ul style="list-style-type: none"> • Any changes to FC1 pursuant to the Mid-Cycle Assessment go into effect.
Q3 2028	<ul style="list-style-type: none"> • Annual roundtable and associated Advice Letter.
Q4 2028	<ul style="list-style-type: none"> • Annual VGI Forum and associated workshop report and Advice Letter.

Q3 2029	<ul style="list-style-type: none">• Annual roundtable and associated Advice Letter.
Q4 2029	<ul style="list-style-type: none">• Annual VGI Forum and associated workshop report and Advice Letter.
December 31, 2029	<ul style="list-style-type: none">• End of FC1.
January 1, 2030	<ul style="list-style-type: none">• Tentative beginning of FC2.

(END OF APPENDIX A)

Appendix B

Timeline, Process, and Deliverables for Data Assessment

Quarter 3, 2023

1. Deliverable: IOUs submit the Data Assessment by July 30, 2023.
2. Scope: IOUs should work together to identify all reporting requirements. This means identifying each required reporting period related to TE, each data field reported through that period, and the frequency and timing of each of these reports. The IOUs should then identify where there is any overlap or any missing reporting requirements, where any requirement is unnecessary along with a justification, and joint suggestions on how to streamline the timing, frequency, and process for these reporting requirements. IOUs should consult with ED staff during the data assessment process.
3. Process: After the IOUs jointly submit the Data Assessment, the Commission would ensure it is put on the record for this proceeding or a subsequent one. This will also allow parties to comment.

Quarter 1, 2024

1. Deliverable: Internal ED review of IOUs' Data Assessment.
2. Scope: ED and the contractor will review the Data Assessment the IOUs submit, evaluate the proposals from the IOUs on how best to streamline. Further, as this would be issued via ruling, ED will review suggestions submitted in comments to that ruling.
3. Process: ED and the supporting contractors should aim to complete the internal review of the Data Assessment by Q1 2024.

Quarter 2, 2024

1. Deliverable: Commission ruling with recommendations on reporting requirements based on the review of the Data Assessment.
2. Scope: based on the evaluation from ED and the contractor, a proposal for recommended modifications to TE reporting requirements would be issued. This would include modifications to existing reporting requirements and recommendations on reporting requirements for FC1.
3. Process: Commission should issue findings of the Data Assessment, recommendations for modifications to the current data reporting

requirements, the TE Reporting Dictionary and recommendations for additional data reporting requirements for FC1 via Ruling.

Quarter 3, 2024

1. Deliverable: adoption of modifications to TE reporting requirements via decision.
2. Scope: the decision would adopt modifications to existing reporting requirements (FC0 programs), as necessary and based on the record, and would adopt new reporting requirements for FC1. It would also establish a process to update the requirements as needed.
3. Process: Commission should adopt recommendations, as modified by party comments to the Ruling, along with the Program Handbook decision. Via that decision, we expect that a process would be established to enable ED staff to make periodic updates, as necessary, to the data requirements. That decision may allow ED staff to initiate updates via resolution, if necessary.

(END OF APPENDIX B)

Appendix C

Glossary

AB 841	Assembly Bill 841 (Ting, 2020)
AB 2127	Assembly Bill 2127 (Ting, 2018)
ACCII	Advanced Clean Cars II, a CARB regulation that would require all new passenger vehicles sold in California to be zero emission by 2035.
ACF	Advanced Clean Fleets, a proposed CARB regulation that would govern the transition of MDHD fleets towards zero emission.
ACT	Advanced Clean Trucks, a CARB regulation that provides a ZEV sales requirement for manufacturers.
ALJ	Administrative Law Judge
ALM	Automated Load Management, which this decision defines as energy management systems that are deployed at a particular location to reduce aggregate EV charging load with the objective of reducing or eliminating the need for electric system capacity upgrades on the utility-side of the meter.
AMI	Area Median Income
Balancing Account	Deferred debit accounts carried on the utility's books that are approved by the Commission and established by the IOUs to serve various ratemaking purposes. The primary purpose of a Balancing Account is to ensure that an IOU recovers its Commission-authorized revenue requirement from ratepayers for a given program or function.
BTM	Behind-the-Meter infrastructure and the associated costs on the customer-side of a utility-grade meter.
CALGreen	The California Green Building Standards Code, which includes a range of green building requirements, is developed in collaboration with various state agencies including the CEC and the Building Standards Commission and is updated every three years.
CARB	California Air Resources Board
CBO	Community-Based Organization

CCA	Community Choice Aggregators are organizations run by cities, counties, and other qualifying governmental entities who purchase and/or generate electricity for the residents and businesses in their region. The IOU continues to deliver the electricity through its transmission and distribution system and provide meter reading, billing, and maintenance services for CCA customers.
CEC	California Energy Commission
Charger, or Charging Port	Plug for EVSE to charge vehicles. Each port corresponds to its own parking space, but a single EVSE can serve multiple ports.
CPUC or Commission	California Public Utilities Commission
DAC	Disadvantaged Community, defined as census tracts in the top 25 percentile in CalEnviroScreen 4.0 on a statewide basis.
Data Assessment	IOU-led assessment of all TE-related data currently reported, aimed at streamlining future program reporting.
DCFC	Direct Current Fast Charger, which is a charging station with a minimum capacity of 50kW.
Distribution System Upgrade Plans	Ongoing efforts in various venues and proceedings (<i>e.g.</i> , R.20-05-003, R.21-06-017), and working groups such as the Joint Agency Steering Committee, which is comprised of the Commission, CARB, CAISO, and CEC, with direct IOU coordination.
DR	Demand Response is a way to encourage customers to help manage electricity demand by reducing, increasing, or shifting their electricity consumption in response to economic or reliability signals.
Drayage Trucks	Heavy-duty, Class 8, trucks that transport containers and bulk freight between a port and intermodal rail facilities, distribution centers, and other near-port locations.
Electrical Distribution Infrastructure	As defined by Public Utilities Code Section 740.19(b), includes poles, vaults, service drops, transformers, mounting pads, trenching, conduit, wire, cable, meters,

	other equipment as necessary, and associated engineering and civil construction work.
Electric Vehicle Charging Infrastructure Assessment	Pursuant to AB 2127 (Ting, 2018), the CEC is required to biennially assess the EV charging infrastructure needed to meet the state's goals of putting at least five million ZEVs on the road in California by 2030. The inaugural AB 2127 Electric Vehicle Charging Infrastructure Assessment was issued in July 2021.
EnergyIIZE	Energy Infrastructure Incentives for Zero Emission, a CEC funded program that provides incentives for commercial fleets to cover costs associated with the infrastructure needed to support transition to ZEVs.
Energy Division or ED	The California Public Utilities Commission's Energy Division
Environmental and Social Justice Action Plan	The Environmental and Social Justice Action Plan, or ESJ Action Plan, is a Commission-adopted plan serving as both a commitment to furthering environmental and social justice principles, as well as an operating framework with which to integrate environmental and social justice considerations throughout the Commission's work.
EV	Electric Vehicle
EV Cost and Load Report	The EV Cost and Load Report is an annual joint IOU report that examines data on EV customer charging behavior, charging infrastructure costs, and service and distribution system upgrade costs related to EV load.
EV Infrastructure Rules	Electric Rules 24, 29, 45, established pursuant to AB 841 to "design and deploy all electrical distribution infrastructure on the utility side of the customer's meter for all customers installing separately metered infrastructure to support charging stations, other than those in single-family residences."
EVITP	Electric Vehicle Infrastructure Training Program
EVREV	Proposal included in the draft TEF envisioned as a plan the IOUs would submit outlining the evolution of electric rates, including a collaborative, stakeholder-guided strategy for improving the customer experience in paying for EV fueling and potentially receiving

	compensation for discharge of their EV batteries at times of grid congestion.
EVSE	Electric vehicle supply equipment, or the equipment used to charge electric vehicles.
EVSE Communications Protocols	Charging and data standards that the Commission adopted in D.21-08-024 to establish minimum qualification requirements for EVSE installed via ratepayer funded or IOU administered programs.
EVSE Service Energization	The full process to install utility-side and customer-side infrastructure needed to energize an EVSE.
EVSP	Electric Vehicle Service Provider
Executive Order N-79-20	Executive Order issued by Governor Newsom in 2020 calling for the elimination of sales of new internal combustion passenger vehicles by 2035, and MDHD vehicles by 2045.
FC0	Funding Cycle Zero, which represents the current array of IOU TE programs, pending applications and ALs, and forthcoming near-term priority proposals. Per this decision, FC0 will conclude at the end of 2024, with a two-year grace period concluding at the end of 2026.
FC1	Funding Cycle One begins in 2025 and runs through the end of 2029, consisting of a statewide rebate program for BTM make-readies and EVSE, as well as ME&O and TA programs.
FC2	Funding Cycle Two, as described in this decision would start in 2030, after FC1 completes at the end of 2029, and would be based on an assessment of FC1 and analysis of the policy and market needs.
Federal Infrastructure Investment and Jobs Act of 2021	The federal bipartisan infrastructure law signed by President Biden in 2021, and enacted as Public Law 117-58, that includes provisions to increase investments in EVSE and EVs.
Federal Inflation Reduction Act	Federal law signed by President Biden in August 2022, providing incentives for residential and commercial EVSE and the purchase of EVs.
Fortune 1000 Corporations	Fortune 1000 corporations is a ranking of the top largest companies annually.
GHG	Greenhouse Gas

GRC	General Rate Case
Innovative Clean Transit or ITC	Innovative Clean Transit is a CARB regulation that requires all public transit agencies to gradually transition to a 100-percent zero-emission bus fleet and encourages them to provide innovative first- and last-mile connectivity and improved mobility for transit riders.
IOU	Investor-Owned Utility
IRP	Integrated Resource Planning is an umbrella planning proceeding to consider all of the Commission's electric procurement policies and programs and ensure California has a safe, reliable, and cost-effective electricity supply. The proceeding is also the Commission's primary venue for implementation of SB 350 requirements related to integrated resource planning.
kWh	Kilowatt-hour
L2	Level 2 charging, which typically operates at 208-240 V and provides between 3 kW-19 kW of AC power.
LCFS	Low Carbon Fuel Standard, a CARB regulation designed to decrease the carbon intensity of California's transportation fuel pool and provide an increasing range of low-carbon and renewable alternatives, which reduce petroleum dependency and achieve air quality benefits.
LD	Light-Duty
Make-Ready or Make-Ready Infrastructure	Service connection and supply infrastructure installed on the utility-side and customer-side of the meter needed to support the installation of EVSE.
MDHD	Medium- and heavy-duty vehicles
ME&O	Marketing, Education, and Outreach
Memorandum Account	A Memorandum Account is an accounting device that, after approval by the Commission or upon statutory notice, may be used by a utility to record various expenses it incurs. The utility may later seek authorization from the Commission to recover the recorded amounts by passing them on to consumers in

	rates. The establishment of a memo account does not guarantee that the utility will recover tracked costs, but a utility is precluded from recovering amounts not booked to a Memorandum Account.
Mid-Cycle Assessment	The Mid-Cycle Assessment will occur once in 2027, the third year of FC1, to ensure flexibility in program implementation, sufficient review of FC1, and confirmation of whether investments are adequately serving the market and contributing to state goals.
MUD	Multi-unit dwelling
MUD-serving	Public charging designed and sited to strategically serve residents of MUDs, in particular for residents of MUDs for whom on site services are not feasible.
PAC	Program Advisory Council
PEV	Plug-in electric vehicle, which includes battery electric vehicles and plug-in hybrid electric vehicles
PEV Submetering Protocol	The PEV submetering protocol enables PEV customers to simultaneously enroll in an EV-specific rate and a time-of-use rate by allowing a submeter to measure and bill EV charging separately from a customer's primary utility meter.
Program Handbook	The Program Handbook will include requirements and program details to guide the implementation of the FC1 program. It will contain three main sections: (1) Rebate Program Rulebook, (2) Implementation Plan, and (3) Technical Assistance Rulebook.
PRP	Priority Review Project, as adopted via D.18-01-024.
Pub. Util. Code	Public Utilities Code
Public Safety Power Shutoffs or PSPS	Events that occur when an IOU de-energizes power lines as a last-resort measure to mitigate the risk of potential catastrophic wildfire caused by the IOU's infrastructure.
RFP	Request for Proposals
Roundtable	Annual stakeholder meetings to discuss program progress and modifications for the FC1 program, adopted in this decision.
Rule 15	The Electric Rule governing distribution line extensions.
Rule 16	The Electric Rule governing service line extensions.

SB 676	Senate Bill 676 (Bradford, 2019)
Staff Proposal	The Energy Division staff proposal issued via ACR in R.18-12-006 in February 2022.
TA	Technical Assistance programs established via this decision that the IOUs will administer and that are aimed at providing technical assistance to customers transitioning their vehicle operations to electric and installing charging infrastructure on their premises.
TE	Transportation Electrification, as defined in Public Utilities Code section 237.5, means the use of electricity from external sources of electrical power, including the electrical grid, for all or part of vehicles, vessels, trains, boats, or other equipment that are mobile sources of air pollution and GHGs and the related programs and infrastructure investments to enable and encourage this use of electricity.
TEF or Draft TEF	Transportation Electrification Framework, which refers to the staff proposal issued in R.18-12-006 in February 2020.
TEP	Transportation Electrification Plan, which was a proposal within the Draft TEF that would have required the IOUs to submit to the Commission ten-year TE plans for investment and infrastructure build out.
Time Varying Rate	A rate structure in which pricing varies by time period, like traditional TOU rates or dynamic rates.
TOU	Time-of-use rate structures
Underserved Communities	As defined in Public Utilities Code section 1601, “underserved community” means a community that meets one of the following criteria: (1) is a “disadvantaged community” as defined by subdivision (g) of Section 75005 of the Public Resources Code; (2) is included within the definition of “low-income communities” as defined by paragraph (2) of subdivision (d) of Section 39713 of Health and Safety Code; (3) is within an area identified as among the most disadvantaged 25 percent in the state according to the California Environmental Protection Agency and based on the most recent California Communities

	Environmental Health Screening Tool, also known as CalEnviroScreen; (4) is a community in which at least 75 percent of public school students in the project area are eligible to receive free or reduced-price meals under the National School Lunch Program; or (5) is a community located on lands belonging to a federally recognized California Indian tribe.
Uptime	Uptime reliability, pursuant to AB 2061 (Ting 2022), indicates the percentage of time chargers/EVSE are operational and functioning.
Utility-side	Infrastructure, and the costs associated with it, on the utility-side of a customer's utility-grade meter.
VGI	Vehicle-Grid Integration, per D.20-12-029, means any method of altering the time, charging level, or location at which grid-connected LD EVs, MDHD EVs, off-road EVs, or off-road electrical equipment charges or discharges, in a manner that optimizes PEV or equipment interaction with the electrical grid and provides net benefits to ratepayers by doing any of the following: (A) increasing electrical grid asset utilization and operational flexibility; (B) avoiding otherwise necessary distribution infrastructure upgrades and supporting resiliency; (C) integrating renewable energy resources; (D) reducing the cost of electricity supply; or (E) offering reliability services consistent with the resource adequacy requirements established by Section 380 or the California Independent System Operator's tariff.
ZEV	Zero-Emission Vehicles, which include battery electric vehicles, plug-in hybrid electric vehicles, and fuel cell electric vehicles.

(END OF APPENDIX C)