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Energy Division Staff Proposal to Establish Transportation Electrification Funding Cycles and Statewide Behind-the-Meter Program

1.	Introduction: Evolution of the Transportation Electrification Framework Proposal.....	3
2.	Developments Since the Draft TEF.....	3
2.1.	Significant Changes to Treatment of Distribution Investments on the Utility-Side of the Meter 4	
3.	Proposed Changes to the Draft TEF	5
3.1.	Summary of Proposed 2025 through 2029 Support for Behind-the-Meter Charging Infrastructure.....	8
3.2.	Schedule.....	8
3.3.	Staff Proposed Changes to the Draft TEF.....	9
3.3.1.	Reduce Administrative Burden.....	9
3.3.2.	Role of the Utility.....	10
3.3.3.	Supporting BTM Charging Infrastructure.....	10
4.	Funding Cycle Staff Proposal.....	11
4.1.	Overview and Schedule.....	11
4.2.	Funding Cycle 0: Present Through 2024.....	12
4.2.1.	Existing FC0 Funding Sources and Pathways.....	12
4.3.	Funding Cycle 1: 2025 through 2029	13
4.4.	Funding Cycle 2 and beyond: 2030+	13
4.5.	Transportation Electrification Plans	13
4.6.	Questions – Funding Cycles	14
5.	TE Behind-the-Meter Program Proposal for Funding Cycle 1.....	14
5.1.	Overview	14
5.2.	FC1 Budget	15
5.2.1.	Questions – Budget.....	16
5.3.	Component 1: Rebate Program.....	16
5.3.1.	Rebate Levels	17
5.3.2.	Questions – Rebate Program	17
5.4.	Component 2: Technical Assistance.....	17
5.4.1.	Questions – Technical Assistance.....	18

5.5.	Component 3: Marketing, Education, and Outreach.....	18
5.5.1.	Questions – ME&O.....	18
5.6.	Underserved Communities	18
5.6.1.	Questions – Underserved Communities.....	20
5.7.	Priority Segments/Use Cases	20
5.7.1.	Medium-Duty and Heavy-Duty Segments	21
5.7.2.	Light-Duty and Focus on Multi-Unit Dwelling Residents	21
5.7.3.	Phasing out of Workplace Charging Support.....	22
5.7.4.	Questions – Priority Segments/Use Cases	22
5.8.	Program Administration.....	22
5.8.1.	Administration Framework.....	22
5.8.2.	Program Handbook and Other Implementation Details.....	23
5.8.3.	Ensuring Flexibility	23
5.8.4.	Questions – Program Administration and Other Implementation Details	24
6.	Data Collection and Evaluation	24
6.1.	Data Collection	24
6.2.	Evaluation Funding.....	25
6.3.	Questions – Data Collection and Evaluation	25

1. Introduction: Evolution of the Transportation Electrification Framework Proposal

This Energy Division (ED) staff proposal responds to stakeholder comments on the draft Transportation Electrification Framework (TEF) issued in February 2020 and developments in the market since that time to propose a modified approach to transportation electrification (TE) funding through the remainder of the decade and beyond. This proposal aims to accelerate electric vehicle (EV) behind-the-meter (BTM) charging deployment to support our ambitious State goals¹ and the California Energy Commission's (CEC) projected EV charger need,² while limiting cost to ratepayers, minimizing administrative burden, and maximizing third-party participation. The distribution system on the utility-side of the meter will additionally require substantial upgrades to handle the significant growth in EV load. However, as the investor-owned utility (IOU) role on the utility-side of the meter is now addressed via the EV Infrastructure Rules and utility and interagency planning efforts, this staff proposal focuses on the BTM component of EV charging.

Staff recommends that the California Public Utilities Commission (CPUC) adopt this proposal to modify certain outstanding aspects of the draft TEF.

This staff proposal is structured as follows:

- Section 1 presents an introduction.
- Section 2 outlines developments since the 2020 release of the draft TEF.
- Section 3 describes proposed changes to the draft TEF approach.
- Section 4 describes ED staff's funding cycles (FCs) proposal and poses questions.
- Section 5 describes the TE BTM Program proposal for funding cycle 1 and poses questions.
- Section 6 describes proposed data requirements and evaluations and poses questions.

2. Developments Since the Draft TEF

Since the issuance of the draft TEF, the CPUC has issued numerous decisions and resolutions establishing new TE programs, authorizing millions of additional dollars in TE funding, and furthering internal and interagency coordination on TE planning. These actions notably include two new light-duty (LD) programs—SCE's Charge Ready 2³ and SDG&E's Power Your Drive Extension,⁴ a decision authorizing funding for vehicle-grid integration (VGI) pilots and an emerging technology program,⁵ direction on spending investor-owned utility (IOU) Low Carbon Fuel Standard revenue,⁶ a resolution regarding technical communications protocols,⁷ a decision establishing pathways and funding for near-term

¹ This includes, Executive Order B-16-12, SB 350 (de Leon, Chapter 547, Statutes of 2017), Executive Order B-48-18, Executive Order N-79-20, SB 676, and AB 841.

² AB 2127 EV Charging Infrastructure Assessment can be accessed here: <https://www.energy.ca.gov/programs-and-topics/programs/electric-vehicle-charging-infrastructure-assessment-ab-2127>

³ D.20-08-045 (<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M346/K230/346230115.PDF>)

⁴ D.21-04-014 (<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M378/K429/378429298.PDF>)

⁵ D.20-12-029 (<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M355/K794/355794454.PDF>)

⁶ D.20-12-027 (<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M356/K223/356223853.PDF>)

⁷ Resolution E-5175 (<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M424/K359/424359510.PDF>)

priorities through both advice letters and applications,⁸ and one decision and two resolutions implementing Assembly Bill (AB) 841 (Ting, 2020).⁹

The CPUC has authorized more than \$1.8 billion in ratepayer dollars on TE to date. This amount does not include the significant utility-side investment we expect to result from the new EV Infrastructure Rules under AB 841 and other necessary utility-side upgrades, and the significant investment from Low Carbon Fuel Standard revenue.¹⁰ Of the \$1.8 billion that the CPUC has authorized, the IOUs have spent approximately \$316 million to date, or approximately 17.5 percent.¹¹ This means that there is a significant level of funding still available.

2.1. Significant Changes to Treatment of Distribution Investments on the Utility-Side of the Meter

To accelerate TE throughout the next decade, the distribution system on the utility-side of the meter will require substantial upgrades to handle growth in EV load and to support increasing deployment of high-capacity fast chargers. It will be especially critical for the system to expand at a pace and in locations that support the build out of California's medium- and heavy-duty (MDHD) fleets needed to meet the State's air quality regulations.¹² It is essential that investments are made strategically so that the grid is not overloaded and that we can take advantage of cost-effective upgrade opportunities. To that end, utility-side infrastructure to support charging is, starting in 2022, generally paid for via ratepayers under the EV Infrastructure Rules adopted pursuant to AB 841.¹³

In the past, the CPUC approved utility-side investments related to TE as part of specific, one-off IOU TE applications. Under the new approach, ratepayers will now cover most of the costs associated with utility-side EV infrastructure—for both customers participating in TE programs and customers installing EV charging outside of TE programs. Now, the CPUC will review and approve these investments as part of the IOU's general rate case along with other utility-side distribution system costs. As a result, IOUs will no longer request approval for utility-side costs associated with EV charging in applications or advice letters proposing new TE programs. For EV charging installed outside of TE programs, the EV Infrastructure Rules will allow customers to pay less of the costs associated with utility-side distribution

⁸ D.21-07-028 (<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M394/K347/394347617.PDF>)

⁹ Resolution E-5167 (<http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M413/K566/413566906.PDF>), Resolution E-5168 (<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M414/K618/414618951.PDF>), and D. 21-12-033 (<https://docs.cpuc.ca.gov/SearchRes.aspx?DocFormat=ALL&DocID=433082807>).

¹⁰ The IOU Low Carbon Fuel Standard funding, while confidential, is estimated to be in the tens of millions of dollars per year range (D.20-12-027 at page 7), and the while we cannot accurately predict the amount of ratepayer funding that will support the new EV Infrastructure Rules, we expect the Rules to cover an average of 15 to 20 percent of a site's total installation costs (utility and customer-side).

¹¹ The IOUs report informal monthly TE program expenditures to ED staff. This figure is based on the latest of these informal monthly reports.

¹² Transportation Electrification, California Air Resources Board (<https://ww2.arb.ca.gov/our-work/topics/transportation-electrification>)

¹³ AB 841 directed the utilities and CPUC to establish new Electric 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, or applicants, installing separately metered infrastructure to support charging stations, other than those in single-family residences.”

work. These Rules will remain in effect until at least the 2027 to 2029 timeframe, at which time the CPUC may revisit them based on data collected on costs and effectiveness of the new Rules.

Ratepayers are now responsible for the costs of service line extensions and distribution infrastructure for customers other than those in single-family residences. However, single-family residents receive similar treatment under existing exemptions from Rules 15 and 16 so that those customers do not bear the costs of upgrades the individual residential customer may trigger.

2.2. Federal and State Support of TE Infrastructure

In addition to the significant ratepayer investments, billions of dollars in federal and state funds have been approved to build out California's TE infrastructure since the release of the draft TEF. 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 more than six-fold.¹⁴

The Infrastructure Investment and Jobs Act of 2021 dedicates almost \$383 million in funding for TE infrastructure to California with an additional \$2.5 billion for clean vehicle infrastructure available in competitive grants nationwide.¹⁵ Governor Newsom's 2022-2023 State budget proposal, issued on January 10, 2022, proposes to add \$6.1 billion to support zero-emission vehicle acceleration for the next five years, with much of that funding going to support MDHD fleets and disadvantaged and low-income communities, and including approximately \$2.04 billion for infrastructure¹⁶

In September 2020, Governor Newsom issued Executive Order N-79-20 requiring that all new LD vehicle sales be zero-emission by 2035 and all new MDHD vehicle sales be zero-emission by 2045.¹⁷ Pursuant to the Executive Order and AB 2127 (Ting, 2018), the CEC issued its inaugural Electric Vehicle Charging Infrastructure Assessment in July 2021.¹⁸ The CEC's initial analysis 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.

3. Proposed Changes to the Draft TEF

As discussed above, the establishment of the EV Infrastructure Rules signals a major policy shift since the February 2020 issuance of the draft TEF, as the new approach incorporates utility-side TE investment into the IOUs' general rate case proceedings rather than individual program budgets. Given this shift, the remaining TEF issues and the proposal within this document pertain only to BTM TE costs.

Considering parties' comments, IOUs' implementation of CPUC-approved programs, additional TE funding allocations, and the state's EV charging needs, ED staff have updated the draft TEF proposal in

¹⁴ "[CEC Approves \\$1.4 Billion Plan for Zero-Emission Transportation Infrastructure and Manufacturing](https://www.energy.ca.gov/news/2021-11/cec-approves-14-billion-plan-zero-emission-transportation-infrastructure-and)", <https://www.energy.ca.gov/news/2021-11/cec-approves-14-billion-plan-zero-emission-transportation-infrastructure-and>.

¹⁵ See <https://afdc.energy.gov/laws/infrastructure-investment-jobs-act> for more information.

¹⁶ Governor's Budget Summary – 2022-23 at page 82 (<https://www.ebudget.ca.gov/FullBudgetSummary.pdf>)

¹⁷ <https://www.gov.ca.gov/wp-content/uploads/2020/09/9.23.20-EO-N-79-20-Climate.pdf>

¹⁸ <https://www.energy.ca.gov/programs-and-topics/programs/electric-vehicle-charging-infrastructure-assessment-ab-2127>

several areas. Table 1 below provides a summary of ED staff's key proposed changes to the draft TEF, as well as the policy significance of those changes.

Table 1 – ED Staff Proposal Components vis-à-vis Draft TEF

Component	Draft TEF Proposal	Updated ED Staff Proposal Approach	Policy Significance
Timelines	Ten-year plan for all TE-related infrastructure and charger needs, with intermittent applications.	Five-year funding cycles for IOU ratepayer investment, with a mid-cycle assessment of funding allocation.	Shorter cycles allow for more dynamic response to market needs. Addresses party concerns around the procedural complexity and difficulty of forecasting programs and planning needs for ten years.
Program Guidance	Transportation Electrification Plans (TEPs) and subsequently developed programs.	Do not adopt TEPs at this time, but continue to further planning objectives via internal and interagency channels. Instead, CPUC adopts program guidance for funding cycles zero (FC0) and 1 (FC1) based on this staff proposal.	Provides near-term guidance for program design and allows for continuation of critical interagency and internal planning efforts. The role of planning in program design to be reconsidered in funding cycle 2 (FC2).
Funding Cycles and Structure	Applications informed by TEPs.	Use funding cycles to establish clear budgets and program timelines and establish periods to reassess funding levels. Through the end of 2024, or funding cycle 0 (FC0): execution of approved funding opportunities. 2025 through the end of 2029 (FC1): Charger/make-ready ¹⁹ rebate program focused on MDHD; LD at multi-unit dwellings (MUDs) and public MUD-serving locations; marketing, education, and outreach (ME&O); and	The funding cycle proposal allows: a) Execution of already approved funding tracks and those that are currently pending. b) Continued funding of BTM charging infrastructure through 2029 based on a coordinated and consistent approach. c) The CPUC and stakeholders to reconsider the role and structure of

¹⁹ A make-ready is defined as a service connection and supply infrastructure to support EV charging, comprised of the electrical infrastructure from the distribution circuit to the stub of the EVSE. The BTM make-ready refers to equipment on the customer-side of the meter, which can include electrical panels, conduit, and wiring.

Component	Draft TEF Proposal	Updated ED Staff Proposal Approach	Policy Significance
		<p>technical assistance programs. Administrator to prioritize rebates for targeted underserved community customers.</p> <p>2030+ (FC2 and beyond): informed by more advanced system planning outputs and determination of need for ratepayer support of BTM charging infrastructure.</p>	<p>planning and market needs to guide future program design.</p>
Budget	TEPs assess IOU territory TE need and program applications request budget.	<p>Through the end of 2029: IOUs expend existing funding, and then transition to pre-defined funding level for BTM charging infrastructure (\$1 billion over five years).</p> <p>2030+: funding cycles based on updated planning assumptions and need determination.</p>	<p>Signals continued ratepayer TE support for BTM infrastructure in the near future.</p> <p>Sets boundaries and periodic checkpoints to review ratepayer investment needs.</p>
Scope	TEPs to address planning, forecasting, infrastructure needs, budget, and programs; based on Interconnection Capacity Analysis maps, CARB regulation data, AB 2127 data, etc.	<p>Do not adopt TEPs at this time but work through internal processes to ensure TE is considered through formal planning processes at sister agencies, CPUC, and IOUs.</p> <p>Focus on funding for chargers, make readies, ME&O, and technical assistance through 2029.</p> <p>TE-related infrastructure needs at the transmission, generation, and distribution system level are identified and funded in other venues (e.g., General Rate Case, Integrated Resource Planning, Distribution Planning Process).</p> <p>Reassess needs beyond 2030.</p>	<p>Simplified planning and investment assessment in the near-term given legislative mandates, ongoing planning, and existing infrastructure authorization (Distribution Planning Process, Integrated Resource Planning).</p>
Implementation Process	IOUs to submit TEPs, then once approved, submit program applications	FC0 - FC1: CPUC issues decision based on this proposal, including budget and program elements.	Provides a faster timeline for distribution of TE funds.

Component	Draft TEF Proposal	Updated ED Staff Proposal Approach	Policy Significance
		IOUs follow up with joint Tier 3 advice letter, including request for proposals (RFP) and Program Handbook, to establish statewide IOU rebate program. FC2+: to be determined prior to cycle commencing.	Minimizes administrative burden.
Administration	Each IOU administers various programs that are not consistent or comprehensive	FC1: consists of a statewide IOU program with components administered by third-party(ies). Future cycle administration to be assessed based on need and results from FC1 and to be determined prior to cycle commencing.	Ensures consistency in program design, reduced administrative burden, and ease of access to participants. Opportunity to reassess investment needs and structure prior to FC2.

3.1. Summary of Proposed 2025 through 2029 Support for Behind-the-Meter Charging Infrastructure

ED staff proposes that FC1 consist of a single statewide program to support BTM charging infrastructure to create a unified, IOU-wide approach. The highlights of this proposal include:

- FC1 would phase in as currently authorized TE funding is exhausted (January 2025).
- FC1 would consist of a \$1 billion, five-year budget primarily in the form of rebates for chargers, BTM make-readies, and administration, ME&O costs, and technical assistance.
- FC1 would include a mid-term assessment of funding allocation to ensure the investments sufficiently serve the market and contribute to state goals.
- Third-party implementer(s) would administer the rebate and ME&O components of this program, and the IOUs would administer the technical assistance programs.
- FC1 would prioritize rebates for underserved communities, and critical sectors and use cases, including MDHD sectors, MUD charging, and MUD-serving public charging.

3.2. Schedule

Table 2 below outlines a revised proposed schedule for the implementation of the outstanding TEF issues.

Table 2 – Proposed Timeline for TE Funding Cycle and BTM Program

Date	Milestone
February 2022	Ruling issuing ED staff proposal on TEF modifications
March-April 2022	Party comments and replies
Q2 2022	Decision establishing funding cycles and a BTM rebate program
Decision + 60 days	IOU workshop(s) to inform Program Handbook
Q4 2022	IOUs submit Tier 3 advice letter with Program Handbook and draft RFP
Q1 2023	IOUs issue RFP for third-party administrator(s)
Q2 2023	ED selects administrator(s)
2023-2024	Program set-up: additional stakeholder engagement and analysis to finalize rebate levels, etc.;
January 1, 2025	FC1 begins; rebate program launches
2025-2029	FC2 staff proposal, workshops, decision
December 31, 2029	FC1 ends
January 1, 2030	FC2 begins

3.3. Staff Proposed Changes to the Draft TEF

3.3.1. Reduce Administrative Burden

The draft TEF proposed that each IOU file 10-year forward TEPs that would address everything from system planning, forecasting and infrastructure needs, budget, and TE program plans. Party feedback, recent legislation, CPUC decisions and resolutions, and an evolving policy and market landscape supports the need for a more nimble and focused approach than the process the draft TEF initially envisioned.

The draft TEF intended to “[e]stablish a structured process to reduce the time and resources needed to resolve controversial issues that were previously addressed on a case-by-case basis.”²⁰ That is still the goal of this revised approach, which is similarly intended 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 the stakeholder and staff demands associated with numerous proceedings. Although the previous case-by-case design of TE programs was appropriate in the early stages of this nascent market, the CPUC and IOUs now have sufficient experience with TE to adopt a more focused approach.

ED staff proposes a simplified Funding Cycle structure that would establish and reevaluate the nature of and need for ratepayer support of BTM TE activities on a periodic basis. TE programs that support BTM infrastructure to date have served as a critical accelerant of TE in the state, but there is a need to move beyond the current piecemeal application and approval processes.

²⁰ Draft TEF at page 8

3.3.2. Role of the Utility

In Chapter 4 of the draft TEF, staff sought comments on the role of the IOUs in accelerating TE. Many parties provided thoughtful feedback and an array of opinions. PG&E asserted in their opening comments that:

“It 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,” and that the CPUC should “reframe the role of IOUs as market enablers and supporters rather than market stimulators to ensure appropriate attention is given to core utility capabilities without potential distractions,” given that IOUs “[support] the TE market and customers but cannot drive demand for it.”²¹

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 essential customer support in the process. With the passage of AB 841 and authorization of the new EV Infrastructure Rules²² governing recovery of utility-side costs related to EV charging, the substantial scope and magnitude of the IOU role is clearer.

If the IOUs execute their core roles properly, their efforts will accelerate TE by providing reliable infrastructure, rates, and technical expertise necessary to enable technology providers and customers to transform how transportation is powered. As the market evolves beyond the early adopter phase, where it currently is situated for both LD and MDHD sectors, the IOUs will need to devote an increasing amount of staff resources and ratepayer funding to plan and build utility-side infrastructure and integrate tens of millions of new EVs onto the electrical system to meet their customers’ electric needs and state goals.

3.3.3. Supporting BTM Charging Infrastructure

Given the immensity and importance of the core utility roles, the role of IOU ratepayers in subsidizing BTM infrastructure to support EV charging equipment requires careful and ongoing consideration.

While each of the IOUs currently has programs addressing the same TE sectors, each IOU’s individual approach differs in scale, program structure, program length and timing, administration, and infrastructure ownership. For example, all of the IOUs’ LD programs allow the IOU to own the BTM make-ready, but some also allow IOU ownership of the EVSE for certain customer segments, and some promote the option for customer make-ready ownership. Further, the scale and program length differ significantly between SDG&E’s Power Your Drive Extension and SCE’s Charge Ready 2, while PG&E’s proposed EV Charge 2 is still under consideration. The MDHD programs also differ in scale and in program requirements. These differences complicate the TE landscape, especially for customers and market participants who operate in multiple California IOU territories.

²¹ PG&E opening comments at page 8

²² Resolutions E-5167 and E-5168

ED staff proposes that, based on the State’s policy goals and the nascent state of the market, it is reasonable for ratepayer funds to continue to directly support the buildout of BTM charging infrastructure in the FC1 timeframe.

To promote consistent and transparent program offerings and customer experience, staff proposes that a third-party administrator disburse rebate funding for BTM infrastructure. This will also allow the IOUs to focus on their core TE responsibilities highlighted above and is a necessary evolution as TE accelerates further over the course of the decade.

Finally, ED staff proposes that the CPUC and stakeholders periodically reevaluate the need, scale, and focus of ratepayer funding for BTM charging infrastructure and other types of TE ratepayer funding based on market dynamics, technological innovations, and electric system planning. Staff proposes to seek stakeholder input and conduct analysis to explore the role of ratepayer funding in the long-term and determine how current internal and interagency planning efforts²³ as well as the TE market evolution and State policy can inform this process.

4. Funding Cycle Staff Proposal

4.1. Overview and Schedule

The initial Funding Cycle, Funding Cycle 1 (FC1), would 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 EV supply equipment (“EVSE” or “chargers”), as well as ME&O, and technical assistance programs. In alignment with the spirit of the draft TEF, FC1’s approach to BTM support moves IOUs beyond the current patchwork of TE program designs and timelines to a unified, statewide, policy-driven approach to supporting BTM charging infrastructure. Funding Cycle 2 (FC2) would start in 2030 and would be based on an assessment of FC1, and analysis of the policy and market needs. Figure 1 depicts the proposed Funding Cycle structure.

Figure 1 - Funding Cycle Overview



²³ These efforts are underway in various proceedings (e.g., Integrated Resources Planning (R.20-05-003), High Distributed Energy Resources (DER) Future (R.21-06-017)), State working groups (e.g., Joint Agency Steering Committee interagency planning group with CPUC, California Air Resources Board, California Independent System Operator, California Energy Commission), and via direct coordination with IOUs.

Prior to the establishment of each Funding Cycle, the CPUC would issue a guidance decision to assess the overall needs and inform the design and budget of any ratepayer funded program.

4.2. Funding Cycle 0: Present Through 2024

ED staff proposes that the current array of programs, pending application and advice letters, and forthcoming near-term priority advice letters be grouped together as Funding Cycle 0 (FC0). FC0 is the culmination of programs and funding opportunities initiated following the passage of SB 350 and as such represents the CPUC's initial approach that Rulemaking 18-12-006 and the draft TEF sought to evolve beyond. This portfolio of programs currently, as of writing of this proposal, represents approximately \$1.48 billion of remaining ratepayer funding.

4.2.1. Existing FC0 Funding Sources and Pathways

The IOUs' collective \$1.48 billion in authorized unspent funding is nearly five times as much as the IOUs have spent since 2016.

Figure 2 below outlines the total authorized funding for FC0, as well as the projected time to implement these programs. The lighter color indicates a potential or proposed timeline/timeline extension.

Figure 1 - Funding Cycle 0 (FC0) Programs²⁴

Program	Funding (M)	2022	2023	2024	2025	2026-2029
PG&E's EV Fast Charge	\$23.3					
SCE's Charge Ready Transport	\$356.4					
PG&E's EV Fleet	\$245.8					
SDG&E's Power Your Drive for Fleets and V2G School Bus Pilot	\$113.4					
AB 1082/1083 Schools, Parks & Beaches	\$56.7					
SCE's Charge Ready 2	\$436					
SMJU SB 350 Programs	\$7.8					
SB 676 VGI Pilots	\$35					
SB 676 Emerging Technology	\$10					
SDG&E's Power Your Drive Extension	\$43.5					
TEF Near-Term Priorities	\$240					
AB 841 EV Infrastructure Rules	N/A					
PG&E's EV Charge 2 (proposed)	\$275.8					

Figure 2 includes numerous pathways for new funding in the near-term. For example, the Emerging Technology program earmarks \$10 million for VGI pilots, demonstrations, emerging technology, and studies.²⁵ Beyond what is included in Figure 2, other novel pilot or pilot-type concepts can additionally seek funding authorization through the Electric Program Investment Charge program (EPIC), Low Carbon Fuel Standard holdback investments, or through rates or demand response proceedings.

²⁴ This chart does not include the TEF Near-Term Priorities funding authorization of an additional \$240 million for Small and Multi-Jurisdictional Utilities (SMJUs).

²⁵ D.20-12-029 at page 35.

If additional needs or funding gaps arise in FC0 beyond all these options, the TEF Near-Term Priorities decision²⁶ allows the IOUs to submit applications through the traditional CPUC application pathway in addition to an expedited pathway for requesting a program extension. Thus, there are currently no explicit or implied limits to what the IOUs may request in terms of additional TE spending if the need should arise prior to FC1. The TEF Near-Term Priorities decision specifically left pathways open for extensions of existing program to ensure that there are no gaps in funding in the near-term.

While pathways for funding requests remain open, ED staff again stresses the need for the IOUs to expeditiously deploy currently authorized TE funding in advance of FC1. Any subsequent funding requests during the remainder of FC0 will be examined in the context of the IOUs' outstanding FC0 obligations and proximity to FC1.

4.3. Funding Cycle 1: 2025 through 2029

ED staff proposes that FC1 consist of a new \$1 billion statewide rebate program for BTM charging infrastructure and support, referred to here as the TE BTM Program. FC1 would last five years beginning on January 1, 2025 and ending December 31, 2029.

During FC1, ratepayer funding for BTM infrastructure would remain stable and the IOUs would be encouraged to refrain from submitting any additional ad hoc applications to focus on achieving FC1 objectives. However, ED staff proposes a mid-cycle assessment of funding allocation to ensure the rebates remain appropriately prioritized. Section 5 below outlines the proposed TE BTM Program in more detail.

4.4. Funding Cycle 2 and beyond: 2030+

Before the beginning of FC2, the CPUC would evaluate the results of previous cycles and assess future needs based on market conditions, inputs from various system planning processes, and results from the AB 2127 assessments, among other criteria.²⁷ This process would culminate with a CPUC guidance decision establishing the level and scale of any FC2 funding and program design.

4.5. Transportation Electrification Plans

ED staff does not recommend adoption of the TEPs proposed in the draft TEF at this time. ED staff is working both internally with electric system planning teams and externally with interagency partners and IOUs to better integrate TE into planning processes to ensure the grid is prepared for the expected growth in TE over the next decade, and to help ensure the IOUs are prepared to support customers transitioning to EVs. This work includes, but is not limited to, collaboration on the CEC's Integrated Energy Policy Report (IEPR) as well as better integration of TE into the CPUC's Integrated Resource Planning and Distribution Planning Processes. Multiple consultants are actively supporting this work, seeking to update and align internal and interagency planning efforts with IOU planning. Thus, much of

²⁶ D.21-07-028

²⁷ Public Utilities Code Section 740.12(c): "The commission shall review data concerning current and future electric transportation adoption and charging infrastructure utilization prior to authorizing an electrical corporation to collect new program costs related to transportation electrification in customer rates. If market barriers unrelated to the investment made by an electric corporation prevent electric transportation from adequately utilizing available charging infrastructure, the commission shall not permit additional investments in transportation electrification without a reasonable showing that the investments would not result in long-term stranded costs recoverable from ratepayers."

the planning work that the TEP proposal envisioned is underway. While ED staff does not recommend moving forward with the adoption of TEPs at this time, the CPUC could choose to adopt some, all, or none of the elements of the TEP proposal in the future.

4.6. Questions – Funding Cycles

- i. Does the Near-Term Priorities decision’s authority for extension of current IOU programs address potential gaps in funding within FC0? If not, why?
- ii. How should the transition between FC0 and FC1 be structured? If FC0 funding remains at the beginning of FC1, should:
 - a. FC0 programs and funding end based on the timelines within governing decision?
 - b. FC1 funding begin in a staggered manner either by IOU and/or sector?
 - c. There be a grace period to wind down FC0, allowing an overlap in program implementation and spending (e.g., one year), to allow for a smooth transition? If yes, what is a reasonable transition period: 1 year, 2 years, other?
- iii. Should the CPUC define a timeline for development of FC2 guidance at the same time as adoption of this proposal? If yes, how should we define this timeline?
- iv. Is a five-year funding cycle appropriate to stimulate the market and foster private investment, or is a shorter or longer length of time better suited to this approach? If so, why?
- v. Is mid-cycle an appropriate milestone for program reassessment? If not what other milestone(s) may be appropriate?

5. TE Behind-the-Meter Program Proposal for Funding Cycle 1

5.1. Overview

ED staff proposes a TE BTM Program comprised of three main components: a rebate program, ME&O services, and Technical Assistance. ED staff proposes that a third-party administrator(s) carry out the administration of the rebate and ME&O components and that the IOUs be responsible for the Technical Assistance component. ED staff proposes a fixed budget of \$1 billion with funding contribution shared across the IOUs over a five-year period.

Table 3: FC1 TE BTM Program Proposal Overview

Element	Details
Timeline	January 1, 2025 – December 31, 2029
Budget	New authorization of \$1 billion in ratepayer funding, or \$200 million annually, to be spent over five years, with funding contribution split among IOUs, including SMJUs
Scope	Fund rebates for chargers and BTM make-readies, with funding set aside for program administration, evaluation, ME&O, and technical assistance
Administration	Rebate and ME&O: third-party administrator(s) Technical Assistance: administered by IOUs
Priority Segments	Prioritize spending and ME&O in underserved communities and provide higher rebates for targeted customers within underserved communities; prioritize certain sectors/use cases, including the MDHD sectors, MUD charging, and MUD-serving public charging

Participation	Enable bundled ²⁸ and unbundled customers ²⁹ to participate and receive rebates
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ED staff acknowledges that many details pertaining to program implementation are not contained in this proposal. ED staff proposes that, once the CPUC authorizes the TE BTM Program, the IOUs with support from CCAs and other stakeholders develop a Program Handbook that would inform an RFP for a third-party administrator(s), outline any outstanding implementation details, and guide the third-party administrator(s) in implementing the program. During Program Handbook development, stakeholders would weigh in on various implementation details via a workshop(s), and would again have an opportunity to provide input once the IOUs submit the draft Program Handbook via Tier 3 advice letter. Responsibility for determining certain implementation details may also be assigned to the program administrator(s) (e.g., final rebate levels). The sections below describe the proposal in more detail.

5.2. FC1 Budget

ED staff proposes a FC1 budget of \$1 billion over five years. As outlined earlier in this document, the CEC has just approved approximately \$1.4 billion for charging infrastructure for the next three years, and the federal infrastructure act will provide an additional \$383 million to the state. The proposed 2022-23 State budget, if approved, would add another \$2 billion for the next five years. Remaining authorized but unspent IOU ratepayer infrastructure funding amounts to approximately \$1.48 billion through the end of FC0. An additional \$1 billion in ratepayer funded BTM infrastructure incentives through 2030 for FC1 represents an appropriate balance between spending needed to support the achievement of California's charger deployment goals while minimizing excessive ratepayer impacts.

In addition, the proposed FC1 budget is based on historic IOU spending rates and aspirations for increased program deployment speed. Since 2016, the large IOUs have collectively spent between approximately \$5 million up to approximately \$78 million annually.³⁰ These expenditures have also historically included both utility-side and BTM costs. Thus, ED staff's proposed budget of \$200 million annually primarily for BTM infrastructure represents significantly more than doubling the IOUs' historical spending rate. ED staff expects this generous funding allocation will provide enough incentive to accelerate the pace at which the IOUs deploy EV charging to support California's ambitious TE goals.

In the event that there is very significant new state or federal spending on TE infrastructure beyond the investment identified above, ED staff would recommend that the CPUC revisit this proposed budget.

Large IOUs and SMJUs would participate in and fund the TE BTM Program. ED staff proposes that the CPUC not require SMJUs to participate in developing the Program Handbook and RFP issuance. The CPUC would authorize SMJUs' administrative funds accordingly.

ED staff proposes that the M&EO and Technical Assistance component budgets be collectively capped at six percent of the entire budget, and overall administrative expenditures do not exceed eight percent of

²⁸ Customers who receive both generation and transmission/distribution services from the IOU.

²⁹ Customers who receive generation services from a CCA and transmission/distribution services from the IOU.

³⁰ In 2016, the large IOUs collectively spent approx. \$5 million, in 2017 approx. \$30 million, in 2018 approx. \$78 million, in 2019 approx. \$75 million, in 2020 approx. \$77 million, and approx. \$50 million in 2021.

the budget.³¹ The budget for evaluation to cover ED and IOU led evaluation and other studies should be capped at two percent of the entire budget.

5.2.1. Questions – Budget

- i. Is a total budget of \$1 billion over five years for FC1 appropriate, or is another budget level more appropriate? Please provide support for your justification.
- ii. How should the CPUC determine the portion of the budget each IOU should contribute to fund the FC1?
 - a. Proportionally, based on population in each service territory?
 - b. Proportionally, based on electric sales?
 - c. Proportionally, based on current or projected levels of EV adoption?
 - d. Based on geographic distribution need (e.g., based on CEC’s SB 1000 findings)?³²
 - e. Fixed amounts?
 - f. Other?
 - g. Should the allocation method be reassessed mid-cycle? If so, how?
- iii. Should funding dispersed in each IOU territory be limited to each IOU’s funding contribution to the program? Why or why not?
- iv. Should the CPUC place an annual cap on program funding? For instance, instead of \$1 billion over five years, \$200 million annually over five years?
 - a. If you believe there should be an annual cap, how should unspent funds in each period be treated?
 - b. If you believe there should be an annual cap, what should happen if the annual funds are fully committed before the end of the annual funding period?
- v. Is the proposed eight percent cap for program administration, six percent for ME&O and TE advisory services, and two percent for evaluation appropriate? If not, please propose alternative caps and provide support for the proposal.
- vi. If the IOUs run out of funding in FC1, how should we ensure there are no gaps in program offerings?

5.3. Component 1: Rebate Program

ED staff proposes that the IOUs jointly develop the TE BTM Program and associated Program Handbook for a new statewide rebate for BTM charging infrastructure to be administered by a third-party.

In comments on the draft TEF, parties contemplated the merits of a long-term rebate model for customer infrastructure, with many parties in support. In particular, parties discussed The Utility Reform Network (TURN)’s proposal for a declining rebate program for BTM charging infrastructure.³³

³¹ The administrative spending for both the Solar on Multifamily Affordable Housing (SOMAH) program (D.17-12-022 at Appendix A) and the energy efficiency programs (D.09-09-047 at page 49) are capped at 10 percent of total program budgets. However, ED staff recommends a slightly lower percentage cap on administrative spending for the TE BTM Program as we anticipate this to be a relatively administratively simple program model.

³² CEC’s SB 1000 Staff Report can be accessed here: <https://www.energy.ca.gov/publications/2020/california-electric-vehicle-infrastructure-deployment-assessment-senate-bill>

³³ TURN Opening Comments at page 12, filed on March 6, 2020, and Reply Comments at page 19, filed April 27, 2020.

ED staff recommends adopting a rebate program as this structure prioritizes customer choice, allows for more technology and construction flexibility, and reduces the burden on ratepayers of capitalized IOU costs. An efficient rebate program could more quickly and cost-effectively incentivize charger deployment than more costly and complex IOU-administered programs in the medium-term.

This proposal eliminates the IOU ownership option for BTM make-readies and EVSE, which has been a component of the TE programs to date, beginning in 2025.

5.3.1. Rebate Levels

ED staff proposes the simplicity of fixed rebate amounts that are revisited periodically and allow for increased rebates for targeted underserved community customers. The rebate amount could be fixed for the duration of FC1 or reevaluated mid-cycle, or rebates could vary according to certain parameters. Whatever the structure, ED staff proposes that rebate levels be set via a stakeholder process led by the third-party administrator.

5.3.2. Questions – Rebate Program

- i. What information is most salient in determining appropriate rebate levels?
- ii. Should rebates be fixed or variable during FC1?
 - a. For fixed rebate levels, how should we determine rebate levels for MDHD? Should these vary by use case, power level, size of fleet served, and/or some other metric?
 - b. For declining block or variable rebate levels, should rebates decline in blocks based on deployment instead of being fixed for the duration of FC1, and if so, what information is necessary to determine the declining rebate levels?
- iii. Should rebates amounts be fixed for the entirety of the FC1 (i.e., five years)? If not, how should the CPUC/third-party administrator/stakeholders revisit and reevaluate the rebate levels, and over what period of time?
- iv. Should participants be allowed to stack rebates offered by other agencies/programs? If yes, why and what conditions for rebate stacking should the CPUC impose?
- v. How should we determine the appropriate increase in rebate level for the targeted underserved community customers, as described in section 5.6?

5.4. Component 2: Technical Assistance

In addition to funding rebates for BTM infrastructure, ED staff recommends that each IOU lead Technical Assistance Programs.

These services should include, at a minimum, basic technical assistance, planning load management and other VGI considerations, help with choosing rates, and support with walking through the IOU energization and/or interconnection process. Stakeholder engagement, in particular from EV service providers and fleet customers, prior to the start of FC1 should help inform the full scope of this work.

Providing technical assistance to customers, especially fleets, that are electrifying is a core utility role. The IOUs already do this in some form, and SCE has been implementing its TE Advisory Services program for several years.³⁴ As more fleets electrify because of existing and new CARB regulations, this will

³⁴ Within Application 18-06-015, parties offered broad support for SCE's proposal to extend its TE Advisory Services program.

continue to be a critical component of the IOUs' work. The IOUs should work with the rebate program administrator to set up clear channels of communication by which the administrator could direct customers to the IOU's individual Technical Assistance programs. The IOUs should additionally make sure that these services are equally available and marketed to customers outside of the rebate program who seek assistance with electrifying.

5.4.1. Questions – Technical Assistance

- i. Should the IOUs directly manage the Technical Assistance programs, as proposed, or should the CPUC adopt some other administrative structure?
- ii. Is the scope of the technical assistance programs appropriate? If not, what should be included or removed and why?

5.5. Component 3: Marketing, Education, and Outreach

ME&O is critical to ensuring successful customer participation in the rebate program. As the draft TEF proposed, ME&O should focus on ensuring customer awareness of the program, increasing utilization of EVSE, providing education on fueling from the grid, the distribution system, and load management. In particular, ME&O should focus on reaching customers in underserved communities and ensuring equitable participation of and knowledge of the program and the benefits of TE.

A third-party should administer the ME&O component of the TE BTM Program and should leverage local and community-based organizations (CBOs) to better tailor outreach to local communities.

Community Choice Aggregators (CCAs) have proven to be critical partners on outreach to CCA customers, given their proximity to the community. Therefore, CCAs will be valuable contributors to ME&O strategy. At minimum, the administrator should work with the CCAs to develop marketing and outreach plans, incorporating feedback from the CCAs into the early development of the ME&O strategy. The administrator should also continue to engage the CCAs throughout implementation to ensure their feedback on ME&O is continually heard and addressed. Additionally, all marketing materials must be competitively neutral.

Parties already submitted significant comments on ME&O, and CBO and CCA coordination in response to the draft TEF.

5.5.1. Questions – ME&O

- i. What should requirements around consultation and/or coordination with CBOs be?
- ii. What should the role of CCAs be in development and implementation of ME&O strategies?

5.6. Underserved Communities

The draft TEF included significant focus on equity and addressing the barriers to TE that are particularly severe for underserved communities. In comments on this portion of the draft TEF, parties echoed the need to focus on underserved communities via early, ongoing, and meaningful community engagement, ME&O, and targeted funding. This staff proposal takes into consideration the significant comments

parties already submitted on the draft TEF, as well as goals one, two, five, and nine in the CPUC's Environmental and Social Justice Action Plan.³⁵

Since the release of the draft TEF, new state law requires that IOU TE programs direct a minimum of 35 percent of program funds towards underserved communities.³⁶ More recently, the CPUC established a 50 percent minimum for programs authorized via the TEF Near-Term Priorities Decision. ED staff proposes maintaining the 50 percent underserved communities investment minimum within the TE BTM Program.

Additionally, ED staff sees the need for higher rebates for certain underserved community customers within both the LD and MDHD segments. For LD, ED staff recommends higher rebates for MUDs with a majority of residents who are low-income,³⁷ MUDs located in disadvantaged communities (DAC), and MUD-serving public locations that are located in a DAC.³⁸ For MDHD, ED staff recommends customers in DACs should receive higher rebates, since DACs suffer from poor air quality and the MDHD sector has a disproportionate effect on air quality.³⁹

These program elements should work in tandem with ME&O initiatives that are both focused on reaching underserved communities and based on deep collaboration with CBOs to help the program administrator understand the unique needs and interests of local communities. The input from CBOs should be reflected in the early design of the ME&O initiatives.

Further, the draft TEF originally recommended incorporating principles from the CPUC's Tribal Consultation Policy⁴⁰ into the TE equity efforts. ED staff proposes that to further ensure equity in program development, the Program Handbook should include program guidelines for consulting with tribal communities in accordance with these principles.

ED staff additionally proposes that the IOUs and administrator host an annual roundtable to review the program's efficacy in addressing equity, with participation from stakeholders including CBOs, environmental justice groups, tribal community representatives, CPUC representatives, CCAs, the Disadvantaged Communities Advisory Group (DACAG),⁴¹ and other stakeholders. These roundtables should present data on the program's rebate deployment, usage data, and metrics from the ME&O and technical assistance programs. Following these roundtables and based on feedback, the administrator should propose any necessary modifications to the program to address equity concerns.

³⁵ The Environmental and Social Justice Action Plan can be accessed here: <https://www.cpuc.ca.gov/news-and-updates/newsroom/environmental-and-social-justice-action-plan>

³⁶ Underserved communities as defined in Section 1601, and as referenced in Section 740.12(b).

³⁷ As defined in Section 740.12(b).

³⁸ Staff recommends that the definition of "MUD-serving public locations" be determined through the Program Handbook process, and following the determination of similar criteria with the SCE Charge Ready 2 program—D.20-08-045—and the SDG&E Power Your Drive Extension program—D.21-04-014.

³⁹ Per Section 740.12(a), the CPUC is required to support TE in DACs.

⁴⁰ <https://www.cpuc.ca.gov/about-cpuc/divisions/news-and-public-information-office/business-and-community-outreach/tribal-office/tribal-consultation-policy>

⁴¹ <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/infrastructure/disadvantaged-communities/disadvantaged-communities-advisory-group>

5.6.1. Questions – Underserved Communities

- i. For LD, do the customer types proposed to receive higher rebates seem appropriate? If not, how should the proposal be modified to better address equity?
- ii. For MDHD, is the proposal to provide higher rebate amounts to customers in DACs appropriate? Why or why not? Should the CPUC include additional equity considerations for the MDHD sectors beyond higher DAC rebates?
- iii. Public Utilities Code Section 740.12(b) requires that IOUs direct at least 35 percent of TE program investments toward underserved communities, however the CPUC in recent decisions has directed 50 percent. Do you agree with the proposal to include a 50 percent underserved community investment minimum, why or why not?
- iv. What else should the CPUC consider in order to address equity issues within this proposal?
- v. Would an annual roundtable reviewing the program's efficacy in addressing equity and proposing any necessary programmatic changes be beneficial?
- vi. Is this approach consistent with the CPUC's Environmental and Social Justice Action Plan?
- vii. How can the FC1 rebate program ensure workforce development in underserved communities? How can we ensure that this investment includes consideration for residents in these communities to have access to high-road jobs?

5.7. Priority Segments/Use Cases

Since 2016, and through the rest of FC0, the IOUs' TE programs have targeted numerous sectors that the CPUC determined as requiring additional support. Recently, the Near-Term Priorities decision outlined programs that serve customers without access to the opportunity of home charging, single-family home panel upgrades, MDHD, resiliency, and new construction as key priority areas. While ratepayer support in the near-term is critical in these areas, ED staff has identified other funding sources or requirements—particularly State budget investments—which may mean that not all the key priority areas will require ratepayer funding in the medium-term.

The priority segments ED proposes for the FC1 rebate program starting in 2025 include a more focused approach than that of FC0. With the continued Low Carbon Fuel Standard holdback funding, some of which is directed towards panel upgrades and resiliency, resiliency funding pathways through other CPUC proceedings, and the forthcoming adoption of new CALGreen requirements, ED staff recommends phasing out ratepayer funding for TE new construction, resiliency, and panel upgrades starting in 2025. These critical areas can be addressed elsewhere—Low Carbon Fuel Standard funding, the CPUC microgrids proceeding, EPIC, and CALGreen building requirements.

For FC1, ED staff proposes focusing on MDHD sectors and LD charging at MUDs and MUD-serving public charging by allocating 70 percent of rebate funding for MDHD charging and 30 percent for LD charging at MUDs and MUD-serving public locations. ED staff additionally proposes ending incentives for workplace charging BTM.

5.7.1. Medium-Duty and Heavy-Duty Segments

Staff finds that providing more funding to the MDHD sectors is reasonable given the ambitious existing and forthcoming CARB regulations that are expected to rapidly accelerate adoption of MDHD EVs.⁴²

The CPUC has not provided as much funding to MDHD as LD to date, and fleet electrification often has higher associated installation costs and complexity as compared to LD. The MDHD focus reflects substantial party support for MDHD funding⁴³ as well as MDHD electrification's critical role in reducing air pollution, which disproportionately impacts residents of DACs.

5.7.2. Light-Duty and Focus on Multi-Unit Dwelling Residents

While proposing to direct more funds towards MDHD, staff still sees a critical need within the LD sector in the near- and medium-term. Most significantly, there are still barriers to EV adoption due to lack of access to EV charging for MUD residents. Therefore, focusing rebate funding on increasing charging access for MUD residents is important, as this would benefit a segment of the population that is reluctant to adopt EVs due to inconvenient charging. Additionally, the IOUs can build on their substantial experience deploying charging to serve these drivers.

Support for both MUD and public charging is a key component of the CEC's projected charging needs as outlined in its initial AB 2127 assessment.⁴⁴ ED staff proposes that rebates be available for charging located at MUDs as well as public charging in areas of high MUD density, or "MUD-serving" public locations. While we do not include a definition of "MUD-serving" within this staff proposal, we propose that a definition is adopted through the Program Handbook process. This definition should align, to the extent practical, with the definitions for sites serving MUDs within SDG&E Power Your Drive Extension⁴⁵ and SCE's Charge Ready 2.⁴⁶

⁴² Including, CARB's Advanced Clean Trucks (<https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks>), Advanced Clean Fleets (<https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets>), and Innovative Clean Transit (<https://ww2.arb.ca.gov/our-work/programs/innovative-clean-transit>).

⁴³ Within R.18-12-006, and in response to the draft TEF, many parties expressed the immense need for MDHD funding given the ambitious CARB regulations in the MDHD sectors.

⁴⁴ The CEC AB 2127 Assessment projects that over 700,000 chargers are needed to support five million ZEVs and nearly 1.2 million public and shared private chargers are needed to support almost eight million ZEVs in 2030. Of the projected light-duty chargers to support the five million ZEV goal, 278,000 are public Level 2, 224,000 are MUD Level 2, approx. 30,000 are DCFC, and 188,000 are workplace Level 2. AB 2127 Assessment at page 3 (<https://www.energy.ca.gov/programs-and-topics/programs/electric-vehicle-charging-infrastructure-assessment-ab-2127>).

⁴⁵ D.21-04-014 Ordering Paragraph 5 at page 97 discuss the requirement for SDG&E to file a Tier 2 Advice Letter to request approval of criteria for "sites serving multi-unit dwellings," which must consider "(1) how the proposed criteria will address the barriers impacting MUD site participation; (2) the distance from a MUD; (3) the available activities to occupy a driver during the charging event; (4) the anticipated charge dwell-time; and (5) the relative safety of parking the vehicle at the location for a prolonged charge event."

⁴⁶ D.20-08-045 Ordering Paragraph 15 at page 147 directs SCE to file a Tier 3 Advice Letter detailing site prioritization criteria for the direct current fast chargers (DCFC) it deploys through the program. The criteria must reflect the lessons learned from the Urban DCFC clusters pilot, and at minimum must include a plan for siting 25 percent of ports to serve residents of multiunit dwellings, among other requirements.

5.7.3. Phasing out of Workplace Charging Support

In the FC1 rebate program, workplace charging would not be eligible for rebates. Although this segment is important to address as part of the state's TE efforts, the IOUs have made much more headway with installations at workplaces as compared to MUDs, and the CEC's 2127 Assessment projects less need throughout the state by 2030 in this segment as compared to MUD and public charging.⁴⁷ Further, there is some continued uncertainty around in-person work patterns and thus workplace charging projections as a result of the COVID-19 pandemic and the resulting rise in remote work. In its Power Your Drive Extension decision, the CPUC opined on this issue in its determination of SDG&E's proposed breakdown of MUD and workplace sites, in which the CPUC directed SDG&E to focus more heavily on deployment at MUDs.⁴⁸

The IOUs will continue to robustly support workplace charging during FC0.⁴⁹ Further, other non-IOU led programs will likely continue to provide subsidies to workplace charging even while IOU support for this segment phases out. And notably, ratepayers will still provide a significant subsidy to workplace charging on the utility-side of the meter via the EV Infrastructure Rules.

5.7.4. Questions – Priority Segments/Use Cases

- i. Do you agree with the allocation of funds between MDHD and LD? Why or why not? If not, what is a more appropriate allocation and why?
- ii. Do you agree with focusing all rebates for the LD sector on MUDs and MUD-serving public charging?
- iii. How should the TE BTM Program define "MDHD" (i.e., which vehicles and use cases should be included within the definition)?
- iv. Should the MDHD program prioritize or deprioritize particular use cases (e.g., quotas for number or rebates supporting transit, forklifts, etc.)?
 - a. If so, should these align with what the CPUC directed the IOUs to do with their existing MDHD programs?
 - b. If so, should these remain fixed over a Funding Cycle? If not fixed, how should stakeholders and the CPUC reevaluate them? What and who (e.g., IOUs or administrator) would trigger a reevaluation?
- v. For MDHD, should the program include a requirement for a certain number of purchased EVs, as the CPUC has for their existing programs?

5.8. Program Administration

5.8.1. Administration Framework

ED staff proposes a statewide third-party implemented program for the rebate and ME&O components of the TE BTM Program envisioned for FC1. This structure is aimed at minimizing administrative cost and complexity, reducing the number of administrators customers must consider, creating consistency across the state, and maximizing customer and technology provider participation. The scope of the

⁴⁷ AB 2127 Assessment at page 3 (<https://www.energy.ca.gov/programs-and-topics/programs/electric-vehicle-charging-infrastructure-assessment-ab-2127>).

⁴⁸ "We also note the ongoing uncertainty around employees returning to workplaces during the ongoing COVID-19 pandemic and the possible longer-term changes to workplace charging." (D.21-04-014 at page 37)

⁴⁹ Pending PG&E's Application for EV Charge 2 (A.21-10-010).

administrator(s) contract should be as simple and straightforward as possible, primarily charged with handling rebates and customer interactions, to reduce complexity and streamline the speed and efficacy of implementation activities.

ED staff recommends that only one entity be the administrator of each program component; in other words, there should be only one administrator for the rebate and one for the ME&O components. There is no limitation on which entity could compete for the administration of these two components and no requirements that both components be administered by the same entity. The administrator or administrators may additionally need to subcontract for other activities if necessary. ED staff recommends that the IOUs maintain administration of the technical assistance portion of the TE BTM Program.

Individual CCAs or a collective of CCAs would be eligible to bid on the administrator role, so long as they oversee the program for all IOU and CCA customers. Regardless of whether a CCA or group of CCAs bids on this role, CCAs must still be actively consulted given their close proximity to their customers. This could include a formal or informal advisory role to the administrator to ensure their feedback on program design and implementation is continually considered.

Above all, the program administration must ensure simplicity in customer access and experience, and rebate processing. ED staff wants to ensure that the experience of a customer in SDG&E's territory is the same as the experience of a customer in PG&E's territory. Further, all customers should be able to find information on the program easily without multiple calls to multiple entities. Any entity that bids in to serve as administrator must propose an implementation process that would achieve this goal.

5.8.2. Program Handbook and Other Implementation Details

ED staff recommends that additional program implementation details be determined and finalized through a Program Handbook. The IOUs should host a joint workshop or workshops to seek input on implementation details, including outstanding participation requirements, technical requirements, site prioritization, rebate levels, data collection, etc. The IOUs would incorporate this feedback into a Program Handbook that they would submit to the CPUC through a Tier 3 advice letter. This would then provide opportunity for stakeholders to provide further input on implementation details. ED staff proposes that the administrator would use this Program Handbook as strict guidelines for implementing the program. Any necessary changes to any aspect of the handbook during implementation should be requested via a Tier 2 advice letter to be filed by August of each year. Changes should become effective in the following year.

5.8.3. Ensuring Flexibility

To address incorporation of innovative technologies into FC1, the program will need some level of flexibility. ED staff recommends that the administrator and IOUs leverage the existing Program Advisory Council meetings to host an annual roundtable to discuss market and technological advances with stakeholders. If the administrator and IOUs agree that a program modification is necessary to keep up with the pace of innovation, the IOUs should add the request to the Program Handbook's annual Tier 2 advice letter update.

5.8.4. Questions – Program Administration and Other Implementation Details

- i. Is the proposal to have one administrator for the rebate component for both MDHD and LD end uses appropriate? Would there be any advantages to having separate administrators focused on LD and MDHD? Please provide evidence to support your recommendation.
- ii. Are there other administrative approaches that would better ensure program administration simplicity in customer access, experience, rebate processing, and cost?
- iii. Is the approach to leveraging the Program Advisory Council to discuss market and technological advances and propose any necessary changes annually an effective way to address innovation throughout FC1? If additional measures are needed to ensure flexibility to address innovation, please explain which measures and why they are necessary.
- iv. Should the CPUC align the process for qualifying LD EVSE with the CEC's process to reduce administrative burden and align program requirements? How should EVSE for the MDHD program be qualified?
- v. How should the CPUC encourage flexible charging and customer response to price signals via the use of VGI strategies for rebate-funded chargers?
- vi. Should the program include any requirements for customers to participate in demand response (DR) or implement other load management tactics? If not, should the program include other load management requirements of participating customers (e.g., requirements to educate customers about load management, including about automated load management options)?
- vii. Should the program implement any other participation requirements, and if so, why?
- viii. How should we ensure that the program has sufficient flexibility to account for new technology and/or business models that may develop over the next several years?
- ix. Beyond the EV Infrastructure Training Program (EVITP), are other workforce development measures necessary? Are any additional workforce requirements needed to ensure safety?
- x. Please describe any additional recommendations for the TE BTM Program not already covered.

6. Data Collection and Evaluation

6.1. Data Collection

ED staff recommends that the CPUC not adopt the draft TEF scorecard proposal at this time. Setting targets, as the draft TEF originally proposed, requires additional planning and analysis to ensure the targets are appropriate. However, some additional action related to data reporting and metrics may help to improve the usefulness of TE data. Staff recommends that the CPUC direct the IOUs to submit to ED staff a complete audit of all TE-related data the IOUs are currently reporting (e.g., individual program reporting, SB 676 data requirements, Cost and Load Report requirements, Low Carbon Fuel Standard reporting, etc.). This audit could help assess all of the information the IOUs are reporting, help identify where there are gaps in data reporting, and provide the CPUC with a basis for additional guidance to streamline TE data reporting and improve transparency. Through a decision, the CPUC could include any necessary modifications to the current reporting requirements.

The IOUs could additionally host an annual "TE Data Summit" where they present on programs, trends, and how stakeholders can engage with the data. The goal of this summit would be to increase transparency and usefulness of the data the IOUs gather and report.

6.2. Evaluation Funding

ED staff recommends that the CPUC not adopt the evaluation structure proposed in the draft TEF. Instead, staff recommends that the CPUC authorize two percent of total FC1 funding to cover research needs such as evaluation, market studies, planning, and other necessary studies starting in FC1. These funds should allocate 60 percent for ED staff management and 40 percent for IOUs management. ED staff and IOUs will coordinate to develop Research Plans on annual or biennial basis to identify evaluation and other research needs.

In addition to evaluation funding for FC1, staff finds that there is an immediate need for additional contractor funds within FC0. Although the IOUs already have program specific evaluation funds, ED staff recommends the CPUC authorize \$3 million for evaluation annually until the end of FC0. This will provide contractor support for ED staff for additional evaluation priorities, such as the development of charging load shapes and market assessments, data management, and planning needs.

6.3. Questions – Data Collection and Evaluation

- i. Do you agree with ED staff's recommendation on data collection and evaluation funding for FC0 and FC1? Why or why not?
- ii. Should the proposed TE Data Summit be a standalone event or should it be combined with the proposed IOU/administrator roundtable discussed in section 5.6?