



Best Practices for Sustainable Commercial EV Rates and PURPA 111(d) Implementation



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Introduction

Electric vehicles (EVs) are an essential tool in reducing transportation sector greenhouse gas emissions, while also potentially lowering electricity costs for all customers. One key to unlocking these benefits is thoughtful rate design. Thoughtful design can foster greater EV adoption and encourage EV charging during hours when the grid's capacity is underutilized. Traditional commercial and industrial (C&I) electricity rates may present a barrier to EV adoption, because they erase the EV fuel cost savings relative to gasoline or diesel transportation. Traditional commercial rates were generally designed for large buildings, rather than for public fast charging of passenger vehicles or for depot charging of truck and bus fleets. Some utilities have begun to acknowledge this issue by designing new rates specifically for commercial EV charging.

The 2022 Infrastructure Investment and Jobs Act (IIJA) amended the Public Utility Regulatory Policies Act (PURPA) Section 111(d) to require regulators and nonregulated utilities to consider new rates to support transportation electrification. As a result, regulators and utilities across the country must consider rates that

promote affordable and equitable electric vehicle charging options for residential, commercial, and public electric vehicle charging infrastructure; improve the customer experience associated with electric vehicle charging; accelerate third-party investment in electric vehicle charging for light-, medium-, and heavy-duty vehicles; and appropriately recover the marginal costs of delivering electricity to electric vehicles and electric vehicle charging infrastructure.¹

The amendments to PURPA 111(d) were motivated, in part, by problems in some states where existing EV charging rates fail to reflect the unique nature and costs of service for EV charging, harming the value proposition for electrification. Electric buses, trucks, and public fast charging stations have distinct usage patterns that differ from traditional commercial loads like large buildings. EVs charge for only a few hours a day (or even shorter periods at public fast charging locations). In many locations, they can also shift their charging demand to a time when most people are sleeping and there is spare capacity on the electric grid. Until now, however, EVs have generally been forced onto rate plans designed for large buildings and industrial operations that use electricity more constantly. New commercial EV rates that more accurately reflect the flexible nature of EV charging relative to traditional commercial and industrial loads and provide meaningful reductions in monthly charging costs for drivers and fleet operators could

¹ Infrastructure Investment and Jobs Act of 2021, Public Law 117-58, Section 40431, <https://www.congress.gov/117/bills/hr3684/BILLS-117hr3684enr.pdf>.

significantly improve the economics of EV adoption, while also improving grid utilization and helping to achieve states' climate, equity, and air quality goals.

This paper explores elements of commercial EV rate design and provides several examples of recently adopted commercial EV rates that could serve as helpful models for designing long-term, sustainable solutions for improving the economics of commercial EV charging, without subsidizing EV charging or shifting costs to other customers. To that end, this paper explores the benefits of these models to help state commissions consider the changes they may make pursuant to the PURPA 111(d) amendments in order to ensure benefits accrue to both participating and non-participating customers.

Key Considerations for Designing Rates for Commercial EV Customers

A core purpose of rate design is to promote efficient use of the system. Rates promote efficient use by sending price signals that are cost-reflective, simple, and actionable. Such pricing ensures that customers are charged accurately for the costs that they impose, while keeping rates simple and driving the desired behavioral response.

Rates for EV customers should also consider the impacts on transportation electrification to ensure that the economics of EV charging are not artificially undermined. In practice, this means that rates should take into account the sophistication of the users and their ability to respond, as well as the extent to which price signals accurately convey system costs.

Overly complicated or volatile rates may provide confusing incentives or price signals that are not actionable. Simple time-of-use (TOU) rates may be more effective than hourly pricing for many customers, since such rates are predictable and easy to understand. Accordingly, TOU rates should be considered in lieu of demand charges, particularly for costs that are driven by coincident demand.

TOU rates may also better reflect system costs than coincident demand charges. This is because the Peak Energy Charge applies to the full duration of time a customer is using shared infrastructure during peak periods, rather than focusing only on a customer's single hour of maximum demand. Unlike demand charges, time-varying energy rates are easy to pass through to drivers, and they provide a meaningful price signal that encourages off-peak charging. Notably, demand charges should generally be avoided for customers with low load factors, because they represent a disproportionate share of these customers' bills and can present an obstacle to transportation electrification.

Key Rate Design Considerations for Types of EV Charging

This section describes important rate design considerations for two common types of C&I EV customers, operators of public DC fast charging stations and fleet operators. These descriptions are not exhaustive but provide examples of the different characteristics of the EV customers that utilities seek to serve.

In designing rates for the broad range of customers typically taking service under commercial rates (including workplaces, multi-unit dwellings, public fast charging stations, transit operators, and medium- and heavy-duty fleet operators) utilities should consider the varying priorities, levels of sophistication, and load management capabilities among customer use-cases.

For example, building owners with Level 2 charging at long-dwell locations, workplaces, and multi-unit dwellings have needs different from public fast charging operators. Similarly, public fast charging operators serving public drivers with personally owned vehicles have distinctly different priorities from fleet operators, whose decision to electrify their fleet hinges on total cost of ownership. In the case of public charging operators, there is also an important distinction between the utility customer taking service on the rate (the charging operator) and the end-use drivers (who often see different price signals than those delivered to the utility customer). Utilities should work with the customers in their service territories to learn more about their specific operations and how rate structures can be designed to be both cost-reflective and actionable.

Public DC Fast Charging Stations

Public EV charging stations represent one important category of new C&I EV load. Fast charging stations operate similarly to gas stations, providing a quick recharge when drivers are on the road or have limited access to charging at home and work. DC fast chargers need to be able to provide large amounts of power rapidly, with the newest stations charging vehicles at up to 350 kW. As EVs capable of charging at these fast stations become more common, more of these high-powered stations will be needed.

Public DC fast charging station operators may have particular difficulty adapting their business model to dynamic rates that fluctuate on an hourly basis rather than the fixed schedule of TOU rates. Public DC fast charging stations are generally reluctant to charge their customers dynamic rates, since EV drivers prefer predictable and relatively stable electricity prices. If dynamic price signals are passed through to drivers, their ability to respond may be limited. It is difficult to warn customers on a longer trip that they are

approaching a higher price period, as they may live outside of the utility's service territory. Pausing their trip for a period of hours to charge at a lower price defeats the purpose of fast charging. For this reason, dynamic rates could be less effective for this group of utility customers.

Automatic load management, integrated storage, and on-site distributed generation may enable some DC fast charging stations to maintain fixed prices while being served on dynamic rates or rates with demand charges. However, applications are likely limited. Operators may also face customer resistance to throttling load to reduce demand charges, since drivers expect to be able to charge their vehicles as quickly as possible. Sensitivity to demand charges is likely to be even greater for fast charging stations with low load factors, such as those on more remote corridors. Investment in such stations, although essential to making transportation electrification viable, could be discouraged by a demand-based rate design that imposed disproportionate costs on these low load factor stations. Powering the charging station from an on-site battery or through distributed generation during peak periods storage may be particularly effective for avoiding critical peak pricing and demand charges by. However, battery storage is expensive and the locations in which these technologies can be installed are limited due to space constraints.

In light of these challenges, rate designs for EV fast charging stations should recover costs through more predictable rates where possible and impose demand charges and critical peak pricing only to the extent absolutely necessary. TOU energy rates may be a good alternative approach, since these rates are highly predictable and can be clearly communicated to drivers.

It is important to note that public fast charging stations are especially important for drivers who do not live in single-family residences with easy access to residential charging. Improved commercial rates that provide the opportunity to realize fuel cost savings for drivers at public fast charging stations are critical for expanding the benefits of transportation electrification to low-income drivers and helping expand EV adoption outside of single-family home owners. Utilities and regulators may also want to consider approaches to further unlock fuel cost savings for low-income drivers at public fast charging locations, given that the cost to refuel at these locations is typically more expensive than that for drivers with access to residential charging.²

² A number of states and utilities have recently explored policies aimed at lowering the cost of charging at public charging locations for low-income drivers. For example, Xcel proposed a pilot program in Colorado that would have used telematics to bill public charging customers on their home energy bill at their applicable residential rate. The Clean Vehicle Assistance

Fleet Vehicles

Commercial rate design is also crucial to the business case for electrifying medium and heavy-duty fleet vehicles, which can provide much-needed pollution relief to the low-income communities that often live near freeways, ports, railyards, and other facilities that generate significant levels of engine exhaust. Electrifying medium- and heavy-duty fleets like transit and school buses also provides an important opportunity to expand access to clean transportation to low-income residents who may not own personal vehicles.

Fleet operations vary widely. This means that operators' ability to respond to price signals also varies widely. Some fleet customers may have a greater ability to shift load and respond to price signals than DC fast charging stations, because flexibility in their operations enables them to schedule charging for certain times. For example, some fleets may be able to charge overnight, or to charge while parked over the course of the day. Fleet managers may also elect to purchase vehicles with longer ranges to avoid having to charge during more expensive peak hours. This flexibility may make time-varying and dynamic rates highly effective for some fleets. Charging optimization software can also help fleet managers take advantage of these rates and reduce the effort required to oversee charging. Fleets with less flexibility may not be able to take advantage of such rates and find demand charges to be highly punitive, so an option to take service on a TOU tariff should remain available.

Case Studies

Various jurisdictions have already introduced new rates specifically for C&I EV customers. Some of these rates are temporary or include temporary provisions to encourage EV adoption over the next several years while there are still relatively few EVs on the road. Others try to make charges more reflective of the costs associated with EV charging by permanently modifying rate designs to increase the use of TOU energy rates and other time-varying features rather than demand charges. Such rate design modifications are an important mechanism for supporting the development of EV charging infrastructure and EV fleets. Specific examples of EV rates from different

Program in California (the state's low-income scrap and replace program) offers participants the opportunity to receive prepaid charge credits in lieu of residential charging infrastructure, for customers who may not be able to easily install charging at their home. States with discounted rates for low-income customers, such as the California Alternate Rates for Energy (CARE) program, could also look to explore ways to ensure that customers without access to residential charging can access these discounts at public charging locations. Other consumer protections to protect drivers from unreasonable or disproportionate price increases may also be needed. Importantly, however, the cost of service for public fast charging is critically different in most cases from the cost of residential charging, and utilities must evaluate these approaches with consideration for traditional ratemaking principles like cost causation.

jurisdictions and a discussion of the merits and shortcomings of these approaches follow.

Demand Charge Discounts

As described previously, demand charges will be particularly burdensome for EV customers, particularly during the early years when EV charging results in high electrical demand but relatively low energy use. For example, empirical analysis by Rocky Mountain Institute has shown that demand charges can drive over 90 percent of the costs of operating public fast charging stations during summer months in California, making it extremely challenging to recoup costs while EV penetration and station utilization are still low.³

To address this issue, numerous utilities are now providing temporary demand charge discounts for commercial EV customers, especially for DC fast charging stations.

For example, in New York, Con Edison's Business Incentive Rate offers rate discounts to public DC fast charging customers until 2025.⁴ In Oregon, Pacific Power implemented a rate adjustment for DC fast chargers that temporarily reduces demand charges while increasing on-peak energy charges. Within a decade, the demand charge will be phased back in.⁵ Although these temporary discounts may be appealing while EV adoption is still in its early stages, utilities should consider focusing on more sustainable long-term solutions that provide better price signals to EV charging customers.

Explicit discounts also raise questions of equity and access. For example, Tesla was originally excluded from the New York order adopting a "Consensus Proposal" that provided a temporary off-bill incentive to site hosts developing publicly accessible DCFC, because the Tesla network was not "technologically accessible" to non-Tesla drivers. The Commission ruled that Tesla could receive the "per-plug" rebate if Tesla stations were made accessible to all EV drivers, resulting in the automaker challenge the order.⁶ This dispute might have been avoided and a more sustainable, long-term solution achieved,

³ Garrett Fitzgerald and Chris Nelder, "EVgo Fleet and Tariff Analysis" (Rocky Mountain Institute, April 2017), https://www.rmi.org/wp-content/uploads/2017/04/eLab_EVgo_Fleet_and_Tariff_Analysis_2017.pdf.

⁴ Consolidated Edison Company of New York, Inc., Tariff Book, Revision 5, Leaf 201, Rider J, issued February 7, 2019.

⁵ Max St. Brown, "Staff Report Re: Schedule 45 Public DC Fast Charger Delivery Service Optional Transitional Rate," Docket No. ADV 485/Advice No. 16 020, May 8, 2017.

⁶ New York Public Service Commission, *Order Establishing Framework for Direct Current Fast Charging Infrastructure Program*, February 7, 2019; Verified Article 78 Petition and Complaint, *Tesla, Inc., vs New York State Public Service Commission*, filed August 2, 2019.

if Con Edison and the other parties had a cost-based rate available to all EV customers, rather than developing a “discount” on an existing C&I rate that was only made available to certain customers.

Southern California Edison

Southern California Edison (SCE) established an EV rate that temporarily eliminates demand charges for EV charging through 2024 (termed a “demand charge holiday”) and instead recovers costs through a TOU energy charge and a small fixed charge.⁷ By recovering all costs through volumetric energy charges that vary depending on the cost of providing electricity, SCE’s rate strongly encourages charging at low-cost hours for the grid and avoids penalizing customers with “spikey” loads.

Demand charges will be phased back in beginning in 2024, with the expectation that at that time many DC fast charging stations will have higher load factors and be able to spread the charges over greater total electricity sales. However, there may still be charging stations that have low utilization at that point, both because EV adoption is still at an early stage and because stations will be needed in relatively remote places to allow for longer-distance trips. Indeed, certain stations may never have high load factors.⁸ For this reason, SCE has proposed to extend the demand charge holiday for another two years. The SCE example shows that demand charge holidays with uncertain glide paths to full-cost rates and subject to future requests for extension may raise concerns for regulators looking for long-term, sustainable solutions.

Pacific Gas & Electric

Pacific Gas and Electric Company (PG&E) took a ground-up approach in designing new C&I EV rates for various use cases. The utility partnered with the Electric Power Research Institute (EPRI) to conduct customer and stakeholder outreach to inform the resulting rate design. The company received approval for rates that combine a subscription charge with a time-varying energy charge.⁹ The subscription charge replaces fixed and demand charges with a per-kilowatt charge based on peak demand. Unlike conventional demand charges, the subscription charge requires a prospective commitment, in which the customer subscribes to a specific level of peak demand in

⁷ Decision 18-05-040 at 110, available at <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M215/K783/215783846.PDF>

⁸ SCE Schedule TOU-EV-7. July 26, 2019. Available at https://library.sce.com/content/dam/sce-doelib/public/regulatory/tariff/electric/schedules/general-service-&-industrial-rates/ELECTRIC_SCHEDULES_TOU-EV-7.pdf.

⁹ Decision Approving Application for Pacific Gas and Electric Company’s Commercial Electric Vehicle Rates, D19-10-055, in A.18-11-003. October 28, 2019.

advance. The final approved rate provides customers with a grace period of three billing cycles for monthly peak demand exceeding subscription levels.

Notably, the Commission directed that only marginal distribution costs should be recovered through the subscription charge, since the rate would apply to a new rate class without a full revenue allocation study and any revenue collected from the new class beyond the marginal cost to serve them would be an overcollection.¹⁰ This had the effect of substantially reducing the subscription charge below the level originally proposed by PG&E, by around 40 percent. Customers on the commercial EV rate will only pay marginal costs until new rates go into effect in 2025 at the conclusion of the next General Rate Case.¹¹ Notably, the Commission's decision provides no guidance for whether or how these costs should be reintroduced after 2025, creating uncertainty and potential for rate shock if these costs are not phased in gradually.

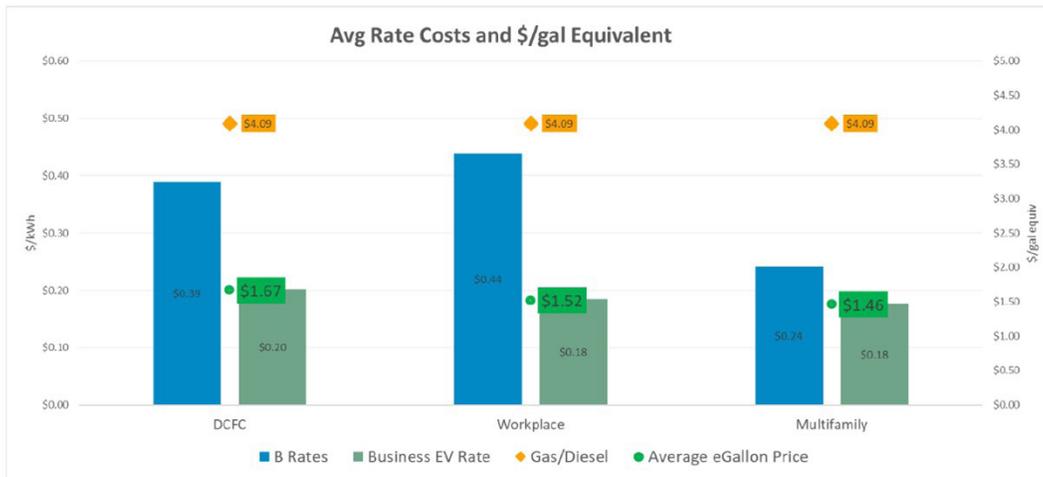
The final approved commercial EV rate creates strong incentives to shift electricity consumption to off-peak hours without penalizing low load factor customers. While the subscription format may present new challenges for customers, the reduction in subscription cost and the opportunity for low-cost off-peak charging provide good incentive for transportation electrification for commercial fleets. These rate design modifications will mean substantial savings for C&I EV customers, especially for those with low load factors, for whom a demand-charge weighted rate designs could produce onerous bills. Early implementation data from PG&E shows that customers on the new rate plan save 25 percent to 60 percent or more on their monthly bills, which translates into a cost per gallon equivalent *less than half* the price of gasoline or diesel fuel.¹²

¹⁰ To allocate embedded costs, a revenue allocation study must be performed in which costs are allocated based on class billing determinants (peak demand, energy sales, number of customers, etc.). Such a study has not yet been performed for the new commercial EV customers in PG&E's territory. See: Decision Approving Application for Pacific Gas and Electric Company's Commercial Electric Vehicle Rates, D19-10-055, in A.18-11-003. October 28, 2019.

¹¹ SDG&E has proposed to take a similar approach for its Electric Vehicle High-Power (EV-HP) Rate, initially collecting only marginal costs in its subscription charge and phasing embedded costs in over a period of 10 years. Although not yet approved, this signals a growing endorsement of marginal-cost based rate design for commercial EV rate reform.

¹² Exhibit PGE-1, Pacific Gas and Electric Company Commercial Electric Vehicle Rate Proposal Prepared Testimony, November 5, 2018, p. 1-27.

Figure 2. PG&E Customer Savings



To highlight a specific case study, PG&E reports that the San Joaquin Regional Transit District achieved cost savings of nearly \$15,000 across three stations in just the first month, reducing its overall fuel cost per mile from \$2.31 to \$0.68 with the new rate.¹³

Figure 3. PG&E Customer Savings: San Joaquin Regional Transit District¹⁴

Site	Billing Details	June Bill A10 rate	July Bill BEV rate	Savings
RTC	5 Depot Chargers; No time-of-use charges	\$3,181	\$1,001	\$2,181
DTC	2 Overhead Chargers; Demand Management Software in Place	\$8,334	\$1,707	\$6,627
UTS	2 Overhead Chargers; No Demand Management Software	\$9,437	\$3,423	\$6,014
Fleet cost per mile		\$2.31	\$0.68	\$1.63

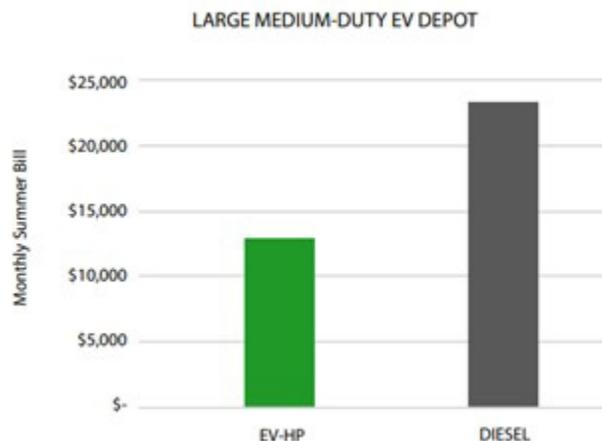
¹³ See PG&E, *Transit Agency Pioneers Electric Bus Program with Positive Results*, available at https://www.pge.com/pge_global/common/pdfs/solar-and-vehicles/your-options/clean-vehicles/charging-stations/ev-fleet-program/sjrt-d-case-study.pdf.

¹⁴ See PG&E, *Transit Agency Pioneers Electric Bus Program with Positive Results*, available at https://www.pge.com/pge_global/common/pdfs/solar-and-vehicles/your-options/clean-vehicles/charging-stations/ev-fleet-program/sjrt-d-case-study.pdf.

San Diego Gas & Electric

Borrowing from the innovative structure of PG&E's rate, SDG&E proposed its own new commercial and industrial rates, replacing demand charges with more predictable monthly subscriptions. SDG&E's "EV-HP" rate goes beyond PG&E's model to collect only marginal distribution *and commodity* costs, while phasing these costs back linearly over a predictable 10-year period. The Commission's final decision approving the rate directed SDG&E to make these modifications to align with the principles set out in a [joint-party Settlement Agreement](#) that had broad support from a diverse group of organizations including SDG&E, the California Public Advocates Office, the Coalition of California Utility Employees, Environmental Defense Fund, Union of Concerned Scientists, Sierra Club, NRDC, Enel X, Siemens, Greenlots, ChargePoint, Tesla, EVgo, EVBox, and Plug In America. Early implementation data from SDG&E's rate is not yet available, but the company estimates that customers taking service under the new rate could save roughly 20 to 50 percent on their monthly bills relative to the otherwise applicable rate.

Figure 4. SDG&E Illustrative Rate Savings¹⁵



To align with the Commission's historical treatment of Economic Development Rate loads and reduce the likelihood of the rate unintentionally imposing additional costs on other ratepayers, the Commission directed SDG&E to treat commercial EV load on the EV-HP rate as retained or incremental load, to measure EV-HP revenue relative to the

¹⁵ See *SDG&E EV-HP Fact Sheet*, available at <https://www.sdge.com/sites/default/files/documents/SDGE.PYDFF%20-%20EVHP%20Fact%20Sheet%202021.pdf>. This example compares the cost of charging an EV fleet using SDG&E's EV-HP rates to the cost of fueling a similar diesel fleet, assuming a fleet of 50 medium-duty vehicles driving 50 miles per day, charging during weekday summer, super off-peak hours.

marginal cost price floor of a contribution-to-margin analysis, and to continually review implementation data to evaluate whether future modifications are necessary to ensure that the rate results in a positive contribution-to-margin. Further, the Commission directed that if any future analyses reveal a negative contribution-to-margin (under-collection), SDG&E must submit a proposal within 90 days detailing future modifications to eliminate it. As described in the joint party settlement agreement:

This approach aligns with the Commission's treatment of Economic Development Rate load as retained or incremental load, helps avoid rate shock and customer confusion, and provides a more predictable estimate of the future cost of electricity as a fuel for customers. Improving the economics of commercial EV charging, while providing a predictable phase-in of [embedded costs], will encourage greater commercial EV adoption. Such adoption promotes the achievement of state climate, equity, and air quality goals. In addition, it promotes the integration of incremental load which, when the rate provides positive CTM, can potentially help put downward pressure on rates to the benefit of all electricity customers in the long term.¹⁶

The Commission concluded that because new commercial load taking service on the rate would be considered incremental load,

revenues collected under the EV-HP rate will benefit ratepayers as long as the EV-HP rate is set above a price floor of marginal costs and non-bypassable charges. Ratepayers benefit even if the revenues collected under the EV-HP rate are substantially lower than would have been collected under [SDG&E's pre-existing rates].¹⁷

Alabama Power

Similar to SDG&E's rate, Alabama Power offers an Economic Development Incentive (EDI) Rate Rider which customers enrolled on their Business EV Rate (BEV) can enroll in.¹⁸ With the EDI Rider, customers' base rate is discounted to 110% of their estimated marginal cost (based on their specific service characteristics, including location, load and load shape), with a maximum discount on their base rate which declines over a predictable multi-year period. This model could present an alternative to developing

¹⁶ A.19-07-006, *Joint Motion of Settling Parties for Commission Adoption of Settlement Agreement* at 5, available at <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M342/K864/342864901.PDF>.

¹⁷ A.19-07-006, *Decision Authorizing San Diego Gas & Electric Company Rate for Electric Vehicle High Power Charging* at 29, available at <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M356/K212/356212154.PDF>.

¹⁸ See Alabama Power, Rate Rider EDI (Economic Development Incentive), available at <https://www.alabamapower.com/content/dam/alabama-power/pdfs-docs/Rates/EDI.pdf>.

separate EV-specific commercial rates, with utilities instead opening up existing technology-agnostic economic development rate riders to commercial EV customers.

Marginal Cost Based Rates

By recognizing that commercial EVs are new load on the system and charging these customers only the additional costs they impose on the grid, marginal cost based rates like PG&E's, SDG&E's, and Alabama Power's can help improve the economics of commercial EV adoption, without subsidizing EV charging or shifting costs to other customers.

Commercial EV charging is generally a new type of load on the system. Accordingly, encouraging fuel switching from historically gasoline- or diesel-powered vehicles presents an opportunity to bring incremental load onto the grid and spread the fixed costs of the system over a greater volume of electricity sales, putting downward pressure on rates for all electricity customers. However, significant levels of fuel switching and the resulting downward pressure on rates will not materialize unless the rates available to commercial EV drivers are cost-competitive with gasoline or diesel.

Setting rates at marginal cost, as has historically been done for economic development and business attraction rates, incentivizes greater commercial EV adoption and recruitment of incremental load during the critical developing years of the commercial EV market, and would better reflect the true cost of serving new commercial EV load on the system during those years. Because utility revenue requirements are largely reflective of historical expenditures, rates are typically set to recover embedded costs. Because the historical investments in the grid (embedded costs) exist regardless of this new EV charging load and were not incurred because of it, setting rates at marginal cost better reflects the actual cost new commercial EV load imposes on the system during the initial years. Over the long-term, however, marginal costs become embedded costs, making it appropriate to gradually transition to recovering embedded costs from EV customers. As long as rates are set to recover at least marginal costs, existing customers will bear no additional costs from bringing this new load onto the system, while benefitting in the long-term from downward pressure on rates due to the addition of incremental commercial EV load onto the grid.¹⁹

¹⁹ Synapse Energy Economics, Electric Vehicles Are Driving Electric Rates Down, June 2020, available at https://www.synapse-energy.com/sites/default/files/EV_Impacts_June_2020_18-122.pdf.

Conclusion

In considering new rates to support transportation electrification as required by the amendments to PURPA 111(d), regulators and utilities should look to examples from recently approved commercial EV rates as helpful models for designing long-term, sustainable solutions for improving the economics of commercial EV charging. Key principles emerging from these early examples should inform the considerations undertaken by regulators and utilities, including the recognition that traditional demand charges present an unnecessary barrier to transportation electrification, setting rates to recover marginal costs can help attract beneficial load, and that rates should be designed to reflect the varying levels of sophistication and motivations among customers.

Designed well, new commercial EV rates can improve the economics of EV adoption during the critical developing years of the market to help facilitate public policy goals, provide significant fuel cost savings to drivers and fleet operators who charge in a manner that supports the electric grid, reflect the underlying costs of serving commercial EV load, and avoid subsidizing EV charging or shifting costs to other customers.



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 **Perspectives**

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