



Electric Vehicle DC Fast Charging Rate

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Goal

Develop DC (direct current) fast charging rate that covers costs in alignment with Board Rate Setting Guidelines



Current Board Rate Setting Guidelines

(Res. 08-13395, confirmed 2011)

- Fair, equitable and non-discriminatory
- Provide stable and predictable revenue
- Cost based
- Continuity in philosophy
- Assist low-income customers
- Promotes conservation and efficient usage
- Simplicity in understanding and administration
- Major shifts adjusted over time

Rate Applicability

- Includes 480V publicly available DC fast charging stations
- Excludes Level 1 or 2 charging stations
- Excludes fast chargers that are few (less than two) AND not separately metered
- Excludes co-metered commercial chargers used for fleet purposes

DC Fast Charge Rate Options

Option#1-Status Quo Rate Schedule 2

Customer Charge – \$27

Energy (¢/kWh) – 2.5¢

Demand (\$/kW) – \$2.55

Hypothetical Monthly Bill –
\$2,700

Hypothetical Hourly Rate
~7.5¢/kWh

Option#2-Market Rate Market Energy, COSA (Cost of Service Analysis) Demand (3 Month CP¹)

Customer Charge – \$40

Energy (¢/kWh) – 5.64¢

Demand (\$/kW) – \$5.20

Hypothetical Monthly Bill –
\$5,600

Hypothetical Hourly Rate
~15.8¢/kWh

Option#3-Cost of Service COSA Energy, COSA Demand (3 Month CP¹)

Customer Charge – \$40

Energy (¢/kWh) – 3.10¢

Demand (\$/kW) – \$5.20

Hypothetical Monthly Bill –
\$4,700

Hypothetical Hourly Rate
~13.2¢/kWh

¹ CP-Coincidental Peak-The demand during the time period when system wide demand is at its highest.

Evaluation Compared to Guidelines

	Opt 1 Status Quo Schedule 2	Opt 2 Market Rate	Opt 3 Cost of Service Rate
Fair, Equitable and Non-Discriminatory			
Provide Stable and Predictable Revenue		Market rate creates variable revenue	
Cost Based	Existing Rates Do Not Cover Cost	Additional data would better inform cost-based demand specific to this class	Additional data would better inform cost-based demand specific to this class
Continuity in Philosophy		Consistent with crypto rate only	
Assist Low-Income Customers	N/A	N/A	N/A
Promote Conservation and Efficient Use	Current rate is less incentive for charging optimization	Energy and demand charge is a greater incentive to optimize charging software	Energy and demand charge is a greater incentive to optimize charging software
Simplicity in Understanding and Administration			
Major Shifts Adjusted Over Time			Could mitigate with phased implementation plan

Recommendation

- Option 3 with a phased in approach
 - Immediately set the energy charge at cost of production
 - Keep demand charge at current Schedule 2 level until Low Carbon Fuel Standard is implemented in 2023
 - Estimate of average rate is close to California LCFS credit value of 13.2¢/kWh
 - Pending value of LCFS credits, rate for customers would be effectively reduced

Why Option 3

- Recovers cost to serve customer class
- Matches level of effort to implement with impact of class on revenue-easy to administer and understand
- Provides stable and predictable revenue

Why A Phased in Approach

- Supports adjusting major shifts in rate over time
- Charging station owners prefer a phased approach to provide time to increase utilization
- Consistent with other utilities
- Timing of phase-in is designed to lower impacts of rate increase on customers

How It Compares

- Utilities implementing FC rates generally phase in demand charge.

Utility	Year 1 Demand Charge (kW)	Final Demand Charge (kW)	Final Hypothetical Hourly Rate ³ per kWh
Chelan PUD	\$2.55	\$5.20	13.2¢
Snohomish PUD ¹	\$.60	\$5.99	20.05¢
Tacoma Power ²	\$0.00	\$8.51	21.5¢

¹Schedule 20EV

²[2018-aug-8-study-session-materials.pdf \(mytptu.org\)](#)

³Based on data associated with Leavenworth Tesla charging station

Decision Evaluation Criteria

- Impact to customers
 - Will be a benefit to customer owners. New rate will be fair to DC fast charger infrastructure owners and limit subsidization from wholesale revenue
- Resource stewardship implications
 - Support transition to low-carbon transportation fuels with fair, sustainable and predictable DC fast charging rate
- Legal implications
 - Rate developed in a fair, equitable, and non-discriminatory manner
- HR Impacts
 - Administratively easy once programmed into C2M
- Stakeholder
 - Focus on support of Transportation Electrification
 - Low effective rates with the LCFS
 - DC fast chargers will have real impacts on our system, we want to ensure limited impacts to customer owners
 - Aligns with our Values of stewardship and trustworthiness

Proposed Public Outreach/Next Steps

Task Description	Date
• Present rate options and recommendation to the Board	11/15/2021
• Link on EV web page to presentation and for customers to provide comments	11/15/2021
• Post public notice for Board Rate Hearing	11/15/2021
• Send formal letter to directly impacted customers	11/16/2021
• Provide informal notice of potential rate impacts to known interested parties	11/20/2021
• Rate hearing on EV DC FC rate	12/6/2021
• Send formal notice of rate change to customer	12/7/2021
• Rate change becomes effective	6/2022