



TO: Elizabeth Pauli, City Manager
FROM: Jackie Flowers, Director of Utilities, Tacoma Public Utilities
COPY: City Council and City Clerk
SUBJECT: Proposed Rate Ordinance – Amend and revise TMC Chapters 12.06; First Reading
November 13, 2018
DATE: October 2, 2018

SUMMARY:

Tacoma Power requests approval by the Public Utility Board and the City Council of a new pilot rate: Schedule FC Electric Vehicle Fast Charge that would become effective on January 1, 2019.

BACKGROUND:

Tacoma Power proposes a new temporary rate schedule to test appropriate rate(s) that would facilitate economic sales of energy to electric vehicle charging sites: Schedule FC Electric Vehicle Fast Charge.

Selling additional energy to owners of electric vehicle charging sites is an economically desirable opportunity for Tacoma Power. At any retail rate schedule, Tacoma Power would currently realize more revenue per unit of energy than disposing of that energy into the wholesale market. Additionally, if Tacoma Power is able to serve an anticipated increase in consumer demand for electric vehicle fast charging services, greater use of electric vehicles in the local community may have the collateral benefits of providing more affordable transportation for area residents and reducing local emissions of potentially harmful pollutants. Expanding the availability of electric vehicle charging infrastructure is recognized as one mechanism to improve the convenience of electric vehicle ownership and operation. Because of this, Tacoma Power anticipates the demand for DC fast charging infrastructure will grow over time. Schedule FC will improve Tacoma Power's understanding of fast charging infrastructure and help Tacoma Power prepare to meet the anticipated increase in customer demands for fast charging services.

ISSUE:

The electricity demands of DC fast charging infrastructure are relatively high. Traditional utility rates charge customers according to these high demands. A charging station's profitability, and therefore viability, is impacted by demand charges. Many DC fast charging sites charge their customers according to session and time. In their initial stages, site utilization is low and site revenues are low. In their initial stage, charging stations under-recover the operational costs of traditional utility rates. This prohibits fast charging networks from expanding. Over time, site utilization grows and site revenues grow.

Under the proposed Schedule FC Electric Vehicle Fast Charge, electric vehicle charging sites transition energy and delivery services from Small general service (Schedule B) rates to General service (Schedule G) rates over a period of 13 years. This allows electric vehicle charging sites to transition into charges that are based on peak monthly demand. Through Schedule FC, Tacoma Power might alleviate a barrier to DC fast charging network expansion.

ALTERNATIVES:

Tacoma Power currently maintains two commercial electric rate schedules applicable to electric vehicle charging sites: General service (Schedule G) and Small general service (Schedule B). Schedule G maintains a delivery charge that is calculated based on the customer's peak monthly demand. Because of a DC fast charging site's relatively high demands, Schedule G will likely remain uneconomic for charging site owners and operators until electric vehicles are more widely adopted. Schedule B has no demand-based charge but is limited to 50 kW of demand service, which is approximately the requirement of a



single small DC fast charging unit. This limitation makes Schedule B inapplicable to electric vehicle charging sites with DC fast charging infrastructure.

RECOMMENDATION:

Tacoma Power requests approval by the Public Utility Board and the City Council of a new pilot rate: Schedule FC Electric Vehicle Fast Charge that would become effective on January 1, 2019.

FISCAL IMPACT:

Exact estimates of the cost to serve DC fast charging sites are unknown until further data on their usage patterns are available. By transitioning these customers from the cost-of-service-based Schedule B rate to the otherwise applicable cost-of-service-based published rate schedules set forth in Chapter 12.06 (currently the cost-of-service-based Schedule G), Tacoma Power intends to recover the cost to serve customers under this rate schedule. In addition, no more than 25 installations may concurrently participate in Schedule FC Electric Vehicle Fast Charge. While this cap may be adjusted in future years, it allows Tacoma Power to carefully monitor and minimize the fiscal impact of the pilot rate.



EXPENDITURES:

FUND NUMBER & FUND NAME *	COST OBJECT (CC/WBS/ORDER)	COST ELEMENT	TOTAL AMOUNT
TOTAL			

* General Fund: Include Department

REVENUES:

FUNDING SOURCE	COST OBJECT (CC/WBS/ORDER)	COST ELEMENT	TOTAL AMOUNT
TOTAL			

POTENTIAL POSITION IMPACT:

POSITION TITLE	PERMANENT/ PROJECT TEMPORARY POSITION	FTE IMPACT	POSITION END DATE
TOTAL			

This section should only be completed if a subsequent request will be made to increase or decrease the current position count.

FISCAL IMPACT TO CURRENT BIENNIAL BUDGET: negligible

ARE THE EXPENDITURES AND REVENUES PLANNED AND BUDGETED? yes

IF EXPENSE IS NOT BUDGETED, PLEASE EXPLAIN HOW THEY ARE TO BE COVERED.