



Draft Resolution Public Electric Vehicle (EV) Charging Station Rate Tariff and Business Rules Amendment

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July 17, 2017

PEC Owned EV Public Charge Station: Rate Recommendation

100.20 Electric Vehicle Public Charge Station Rate

Applicability – This tariff is applicable to electric service to a Member or non-Member using a public electric vehicle charging station that is connected to the Cooperatives distribution system and owned and/or operated by the Cooperative.

Rate:

Electric Vehicle Charging Rate: \$0.03/30 seconds

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Aligns with market rates as observed in Dallas and Houston while also enabling cost recovery across a wide range of station utilization scenarios



EV Public Charge Stations: Johnson City Headquarters

PEC will provide Hill Country electric vehicle transportation charging capability with installation of first public access charge stations in greater Johnson City area



North Station (Dual Port)

- Front location; 1 block from 290
- Adjacent to flag poles & LB Smith conference room
- Short walk to shops, restaurants and attractions

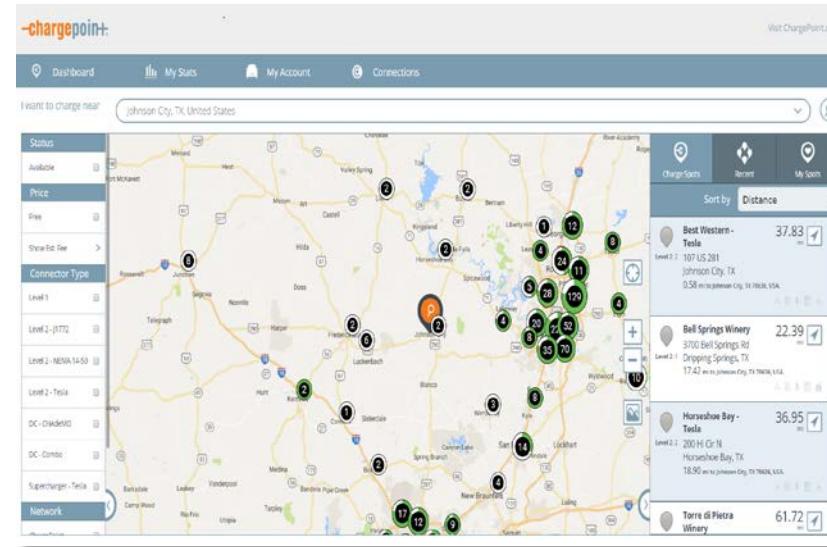
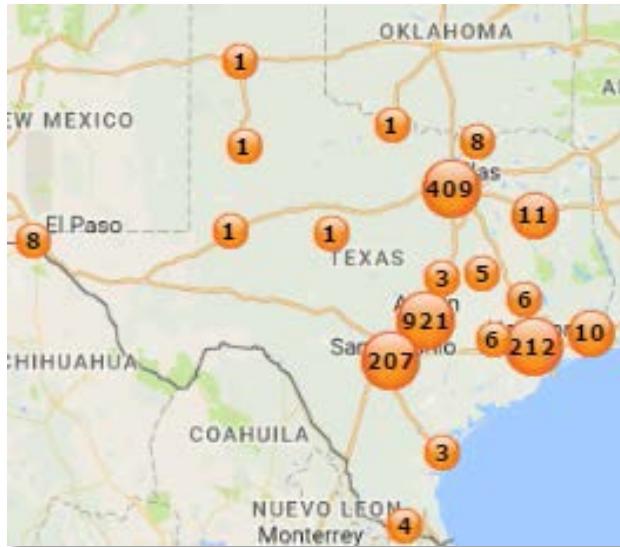
South Station (Dual Port)

- Rear location; adjacent to Communications & SCADA building
- Convenient spot for PEC and staff charging
- Short walk to LBJ visitors center

EVSE: CT4021 (Dual Port): Level 2, 208V, 32A, 18' Cable, (7.2kW), Bollard Mount

EV Public Charge Station Network: ChargePoint

Joining the world's largest and most accessible public charging network with over 1,100 locations in greater Austin-San Antonio area providing access to...



...the largest community of EV drivers, best driver experience, most advanced technology and comprehensive charge station monitoring and support

EV Public Charge Station Unit Economics



Capital Asset

Equipment
\$6,500 - \$7,500/unit
(JC HQ: \$6,700/unit)

Installation
\$3,000 - \$4,000/unit
(JC HQ: \$3,200/unit)

Site Preparation
\$0 - \$10,000/unit
(JC HQ: \$7,300/unit)

Network Operations

Network Services
\$500/unit-year

Billing
10% revenue share

Maintenance & Repair
\$750/unit-year

Power Supply

Service Availability*
\$20/unit-month

Energy Cost Rate*
\$0.0852/kWh

** Per Existing Residential Tariff
Service Availability: \$20.00 per month
Delivery Charge: \$0.02712 per kWh
Transmission Charge: \$0.01158 per kWh
Flat Rate Power Cost: \$0.06050 per kWh
Power Cost Adjust.: -\$0.01400 per kWh*

EV Public Charge Station Rate Structures



By kWh



By Time



Flat Fee

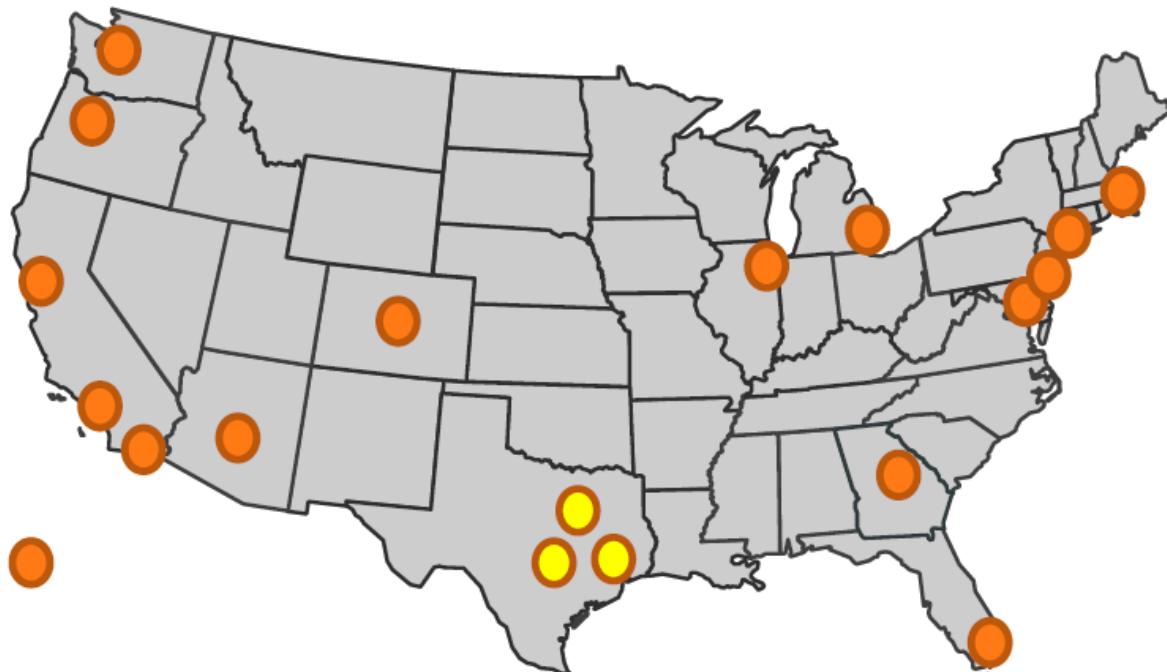


Gratis

Optimizes station use by encouraging drivers to promptly move their vehicle after charging; freeing spot for next driver

EV Public Charge Station Market Dynamics & Comparative Rates

Top U.S. metropolitan areas for electric vehicle adoption and market growth



Austin
\$2.00/hour
Min \$2.00

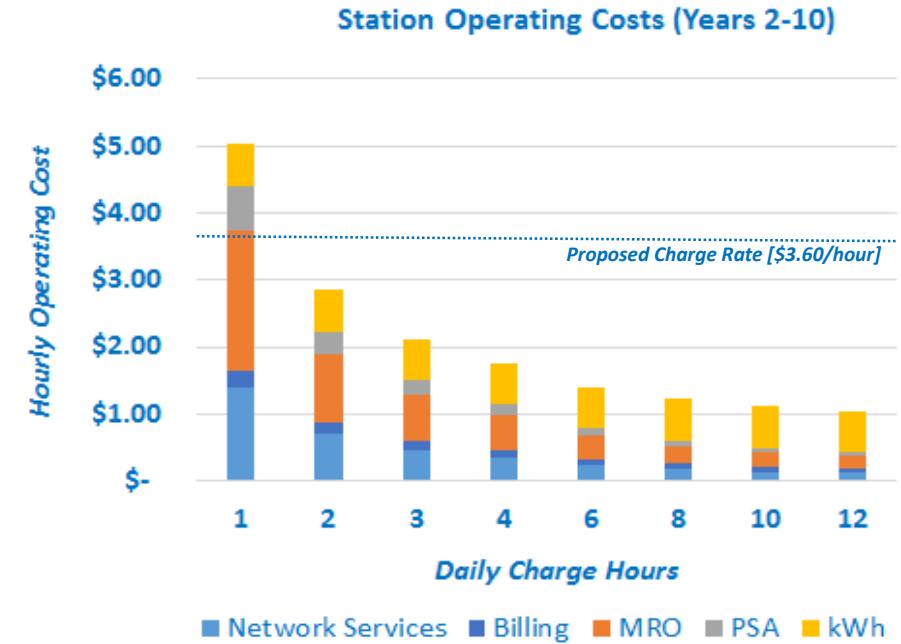
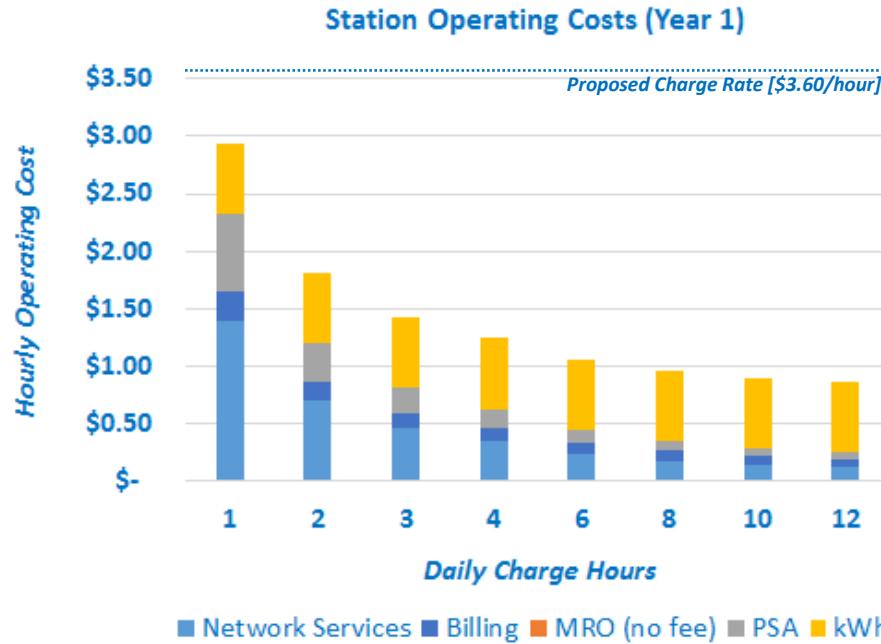
San Antonio
\$1.00/hour
Min \$2.00

Dallas
\$.03/30sec
[\$3.60/hour]

Houston
\$.03/30sec
[\$3.60/hour]

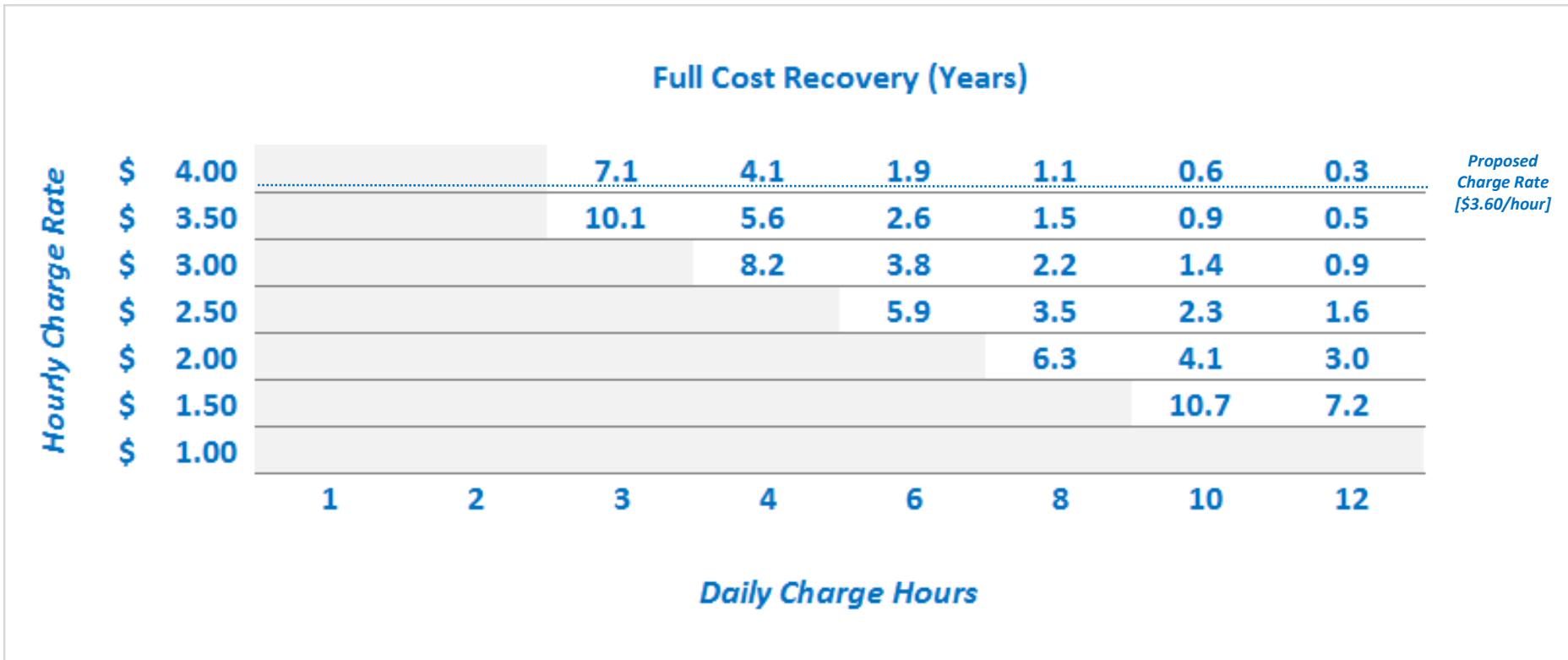
Rank	Metro	Q1'16	Q1'17	Growth
1	LA	89,334	124,224	39%
2	Bay Area	77,161	105,095	36%
3	NY/NJ/CT	17,669	24,667	40%
4	San Diego	14,765	20,447	38%
5	Atlanta	20,559	19,268	-6%
6	Seattle	13,191	18,025	37%
7	Chicago	7,857	10,827	38%
8	DC	7,325	10,550	44%
9	Detroit	7,052	10,526	49%
10	Portland	7,127	10,236	44%
11	Miami	6,218	9,072	46%
12	Phoenix	5,937	8,744	47%
13	Dallas	5,727	8,166	43%
14	Boston	5,174	7,334	42%
15	Denver	4,700	7,029	50%
16	Philadelphia	4,716	6,888	46%
17	Houston	3,510	4,752	35%
18	Austin	3,063	4,316	41%
19	Honolulu	3,313	4,291	30%
20	Baltimore	3,037	4,211	39%

EV Public Charge Station Operating Cost Recovery



Proposed charge rate of \$0.03/30 seconds [\$3.60/hour] falls within regional market ranges and recovers station operating costs across the widest range of daily usage scenarios

EV Public Charge Station Full Cost Recovery



Proposed charge rate of \$0.03/30 seconds [\$3.60/hour] enables full recovery of all station operating and capital costs within the useful life of the equipment (10 years) except for lowest usage scenarios

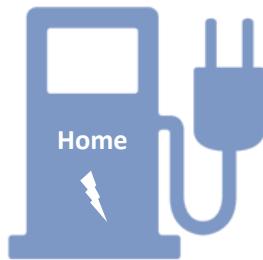
EV Public Charge Station Relative Cost Comparisons



2015 Chevy Volt (PEHV)

Fuel Economy: 35 MPG
Max Charge Rate: 3.6 kW
Distance/Charge Hour: 11-13 miles
EV Range: 53 miles
Typical Daily Usage: 35 miles

Comparative cost by energy source for typical daily usage



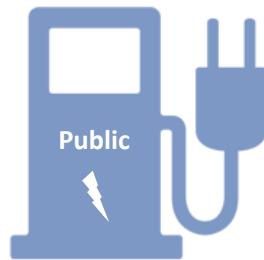
\$0.0836/kWh
3 hours
3.6 kW

\$0.90



\$2.03/gallon
1 gallon

\$2.03



\$3.60/hour
3 hours

\$10.80

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