



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

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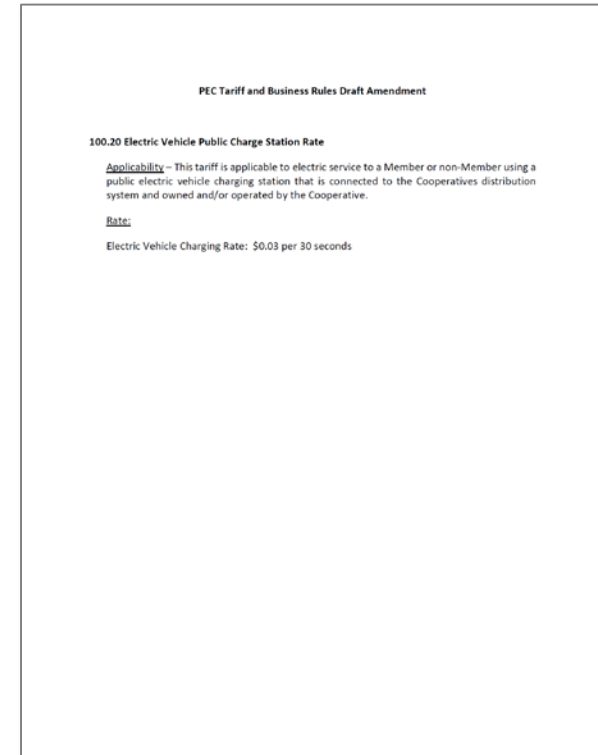
# PEC Owned EV Public Charge Station: Rate Recommendation

## 100.20 Electric Vehicle Public Charge Station Rate

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**Rate:**

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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

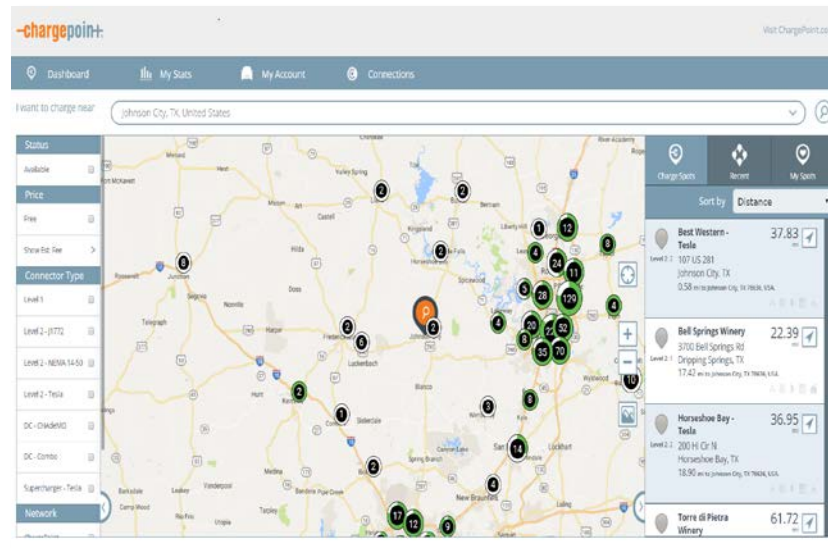
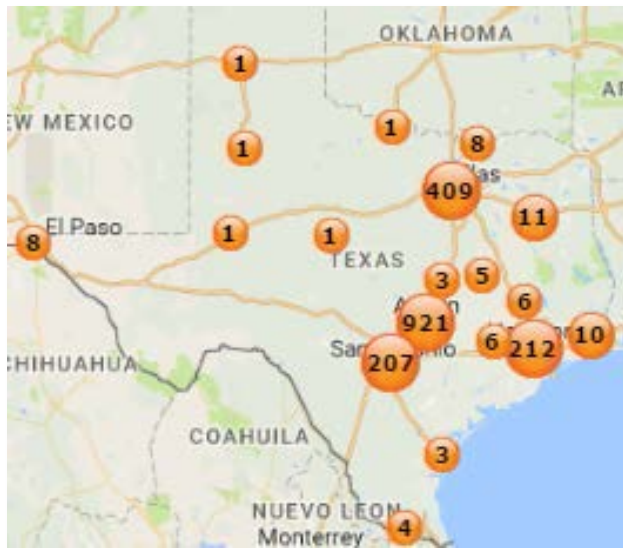
## South Station (Dual Port)

- 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

Most Preferred



By Time



Flat Fee



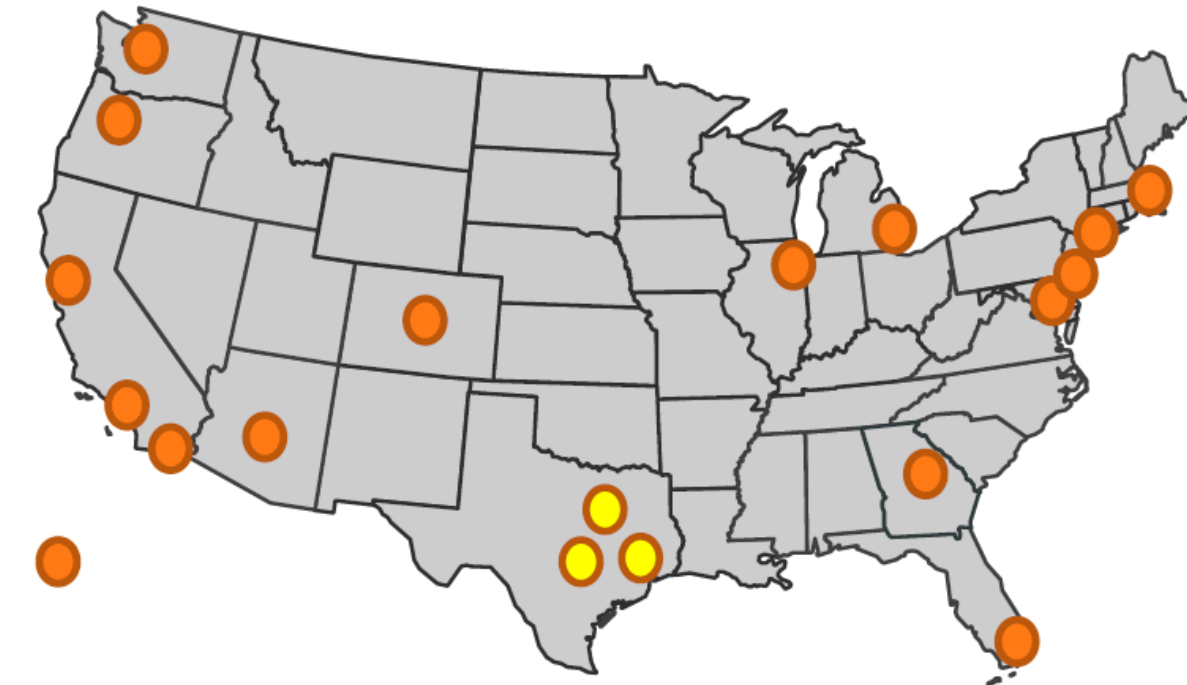
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*Optimizes station use by encouraging drivers to promptly move their vehicle after charging; freeing spot for next driver*



# 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

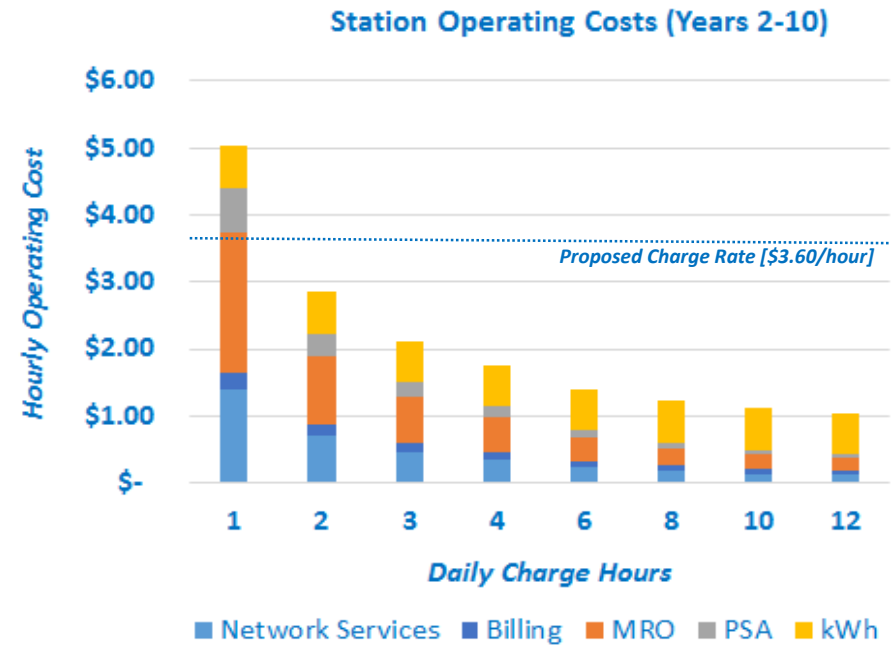
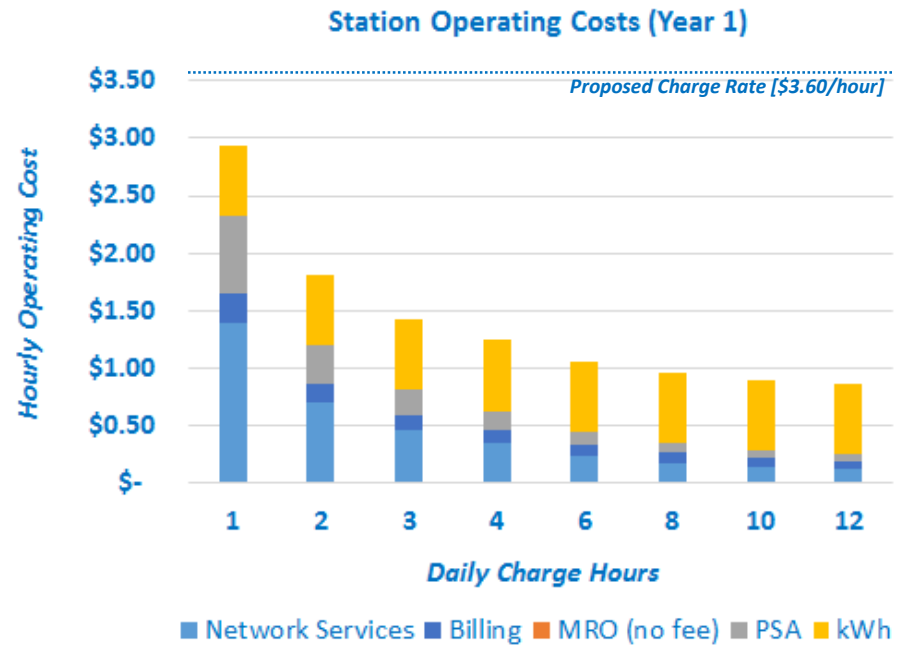
**San Antonio**  
\$1.00/hour  
Min \$2.00

**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%

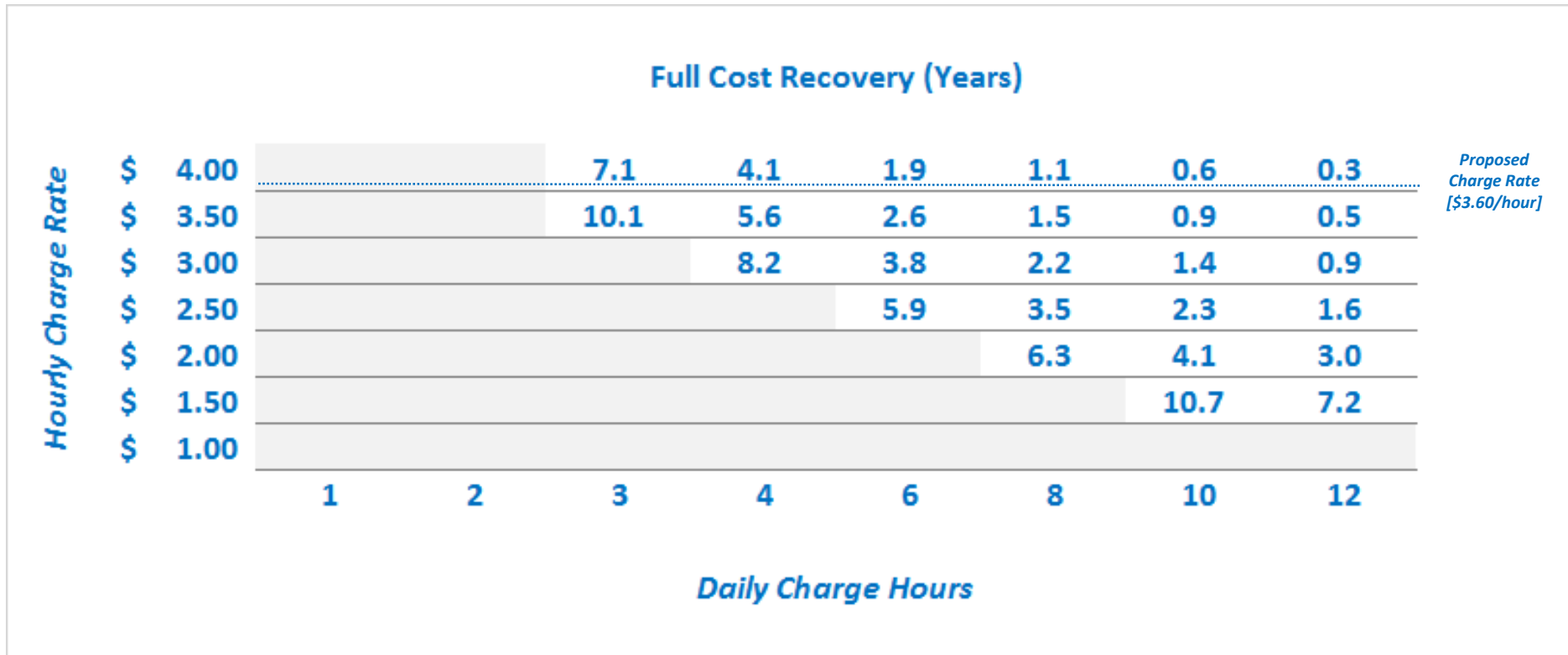
# EV Public Charge Station Operating Cost Recovery



***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***

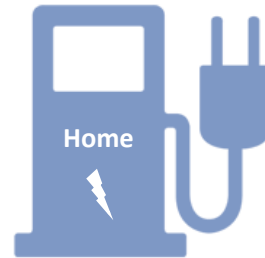
# EV Public Charge Station Relative Cost Comparisons



## 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*



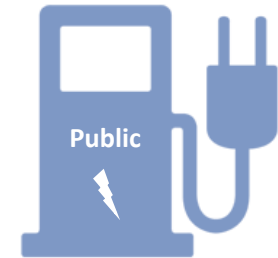
*\$0.0836/kWh  
3 hours  
3.6 kW*

*\$0.90*



*\$2.03/gallon  
1 gallon*

*\$2.03*



*\$3.60/hour  
3 hours*

*\$10.80*

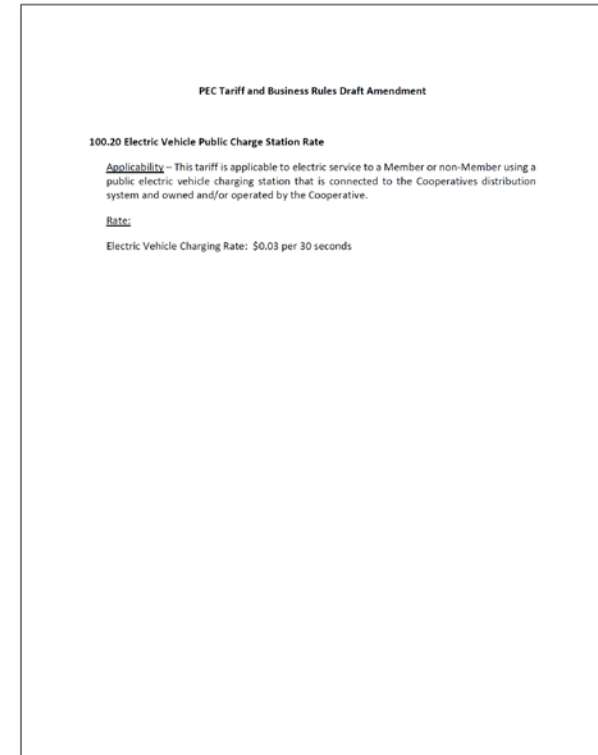
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