# PG&E's Commercial Electricity Vehicle Rate

**Webinar**

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**Michael Pimentel**
California Transit Association

**Cal Silcox**
Pacific Gas & Electric

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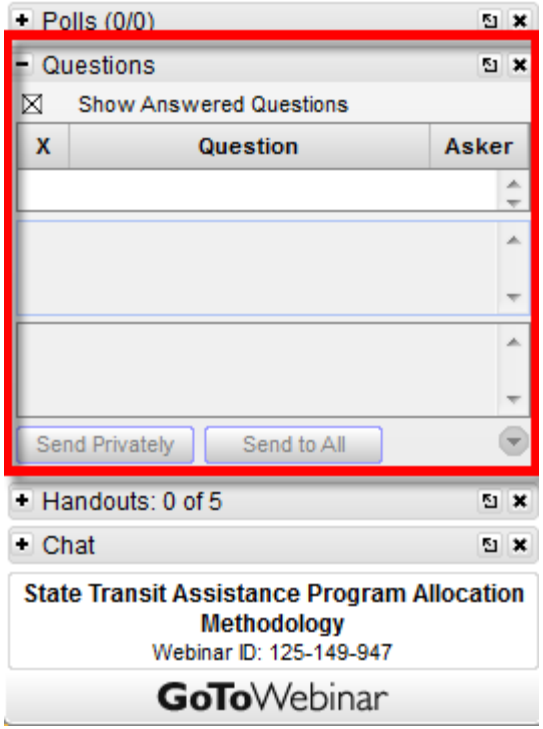
- We will collect all questions and get to as many as time permits during the Q&A portion of the program.



# PG&E Commercial EV Rate Proposal

Note: All rate values and proposals in this presentation are preliminary and should be considered directional. Rate proposals have not been approved by the CPUC.

Together, Building a Better California

# PG&E is committed to accelerating the transition to clean transportation

**40%**
of state GHG emissions come from transportation, the single largest sector

California is targeting
**5M**
zero-emission vehicles by 2030

PG&E's electricity is
**80%**
GHG free and 33% renewable

## Leveraging utility tools to enable EV adoption:

- Infrastructure and access to charging
- Rate design & rebates
- Grid modernization and R&D
- Education and outreach

# Summary of Commercial EV Rate Proposal

PG&E is proposing **new commercial EV rate plans** to support adoption of clean, electric vehicles

The proposed EV rates **eliminate demand charges**, instead using a monthly subscription pricing model to enable:

- More affordable charging
- Simpler pricing structures
- Improved certainty and budgeting

PG&E designed two rates specifically for **fleets, fast charging, workplaces and multifamily dwellings** and will create a new rate class* for Commercial EV (CEV) charging:

## CEV-Small

- Charging installations **up to 100 kW,** e.g. smaller workplaces and multifamily sites

## CEV-Large

- Charging installations **over 100 kW,** e.g. fleets, fast charging, and larger sites
- Options for secondary and primary voltage service

* To enable new rates, EV charging must be separately metered from existing buildings and facilities

# Proposed CEV rate structure

**1) Customers choose subscription level, based on charging needs**

Subscription Charge

**$184** / 50 kW connected charging

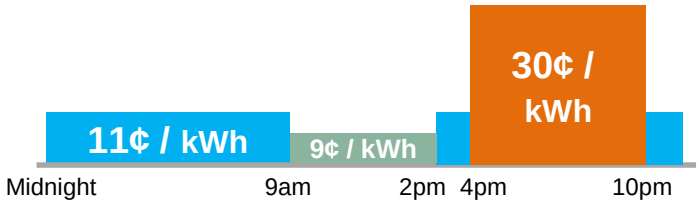
Customers that want to **manage charging loads** can opt for a lower subscription level

**2) Subscription remains consistent month-to-month**

If site charging power exceeds subscription, customer pays an **overage** for that month

**3) Energy usage is billed based on time-of-day pricing**

Energy Charge




**Charging is cheapest mid-day**, when PG&E has higher levels of renewable energy generation

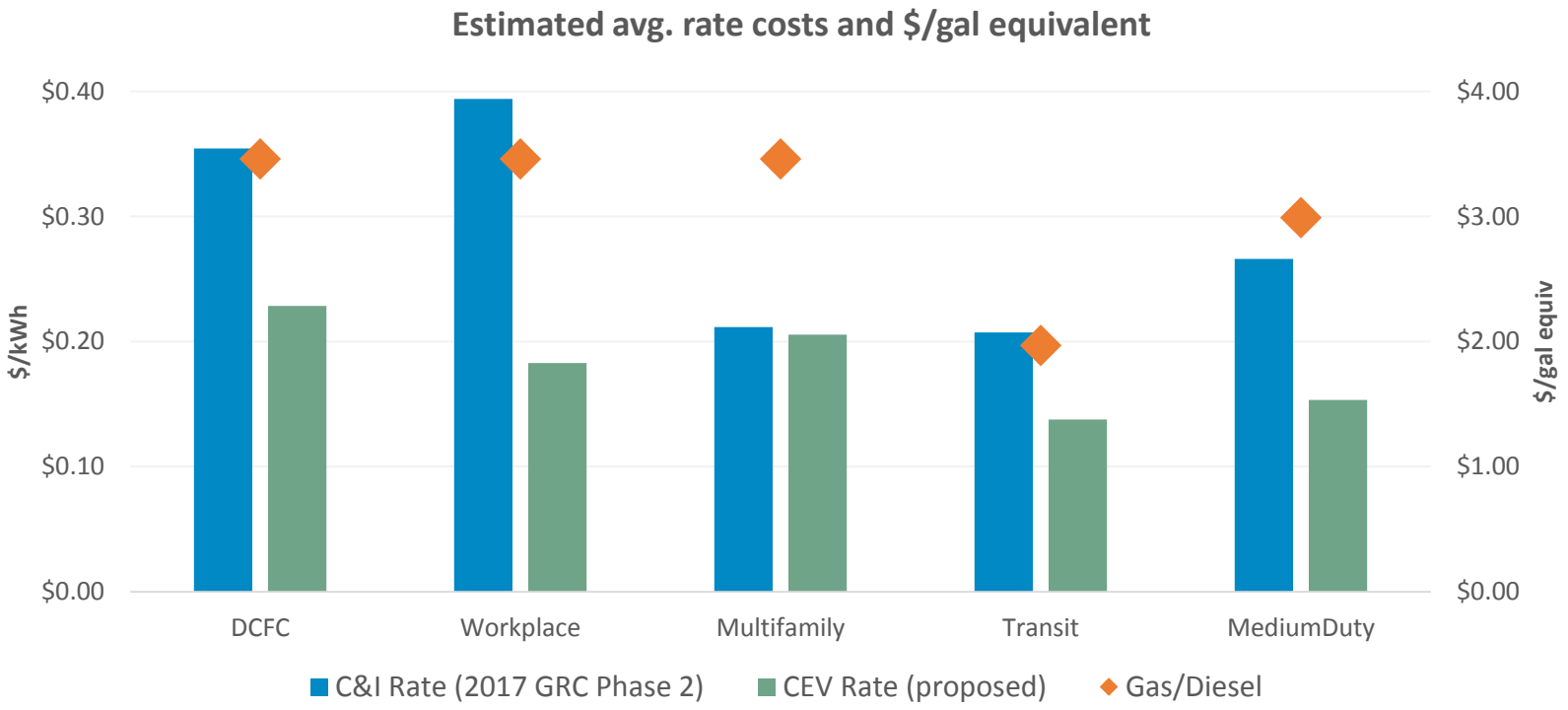
Customers should avoid charging during peak hours from 4-10 p.m., when possible

Note: Values above represent CEV-Large secondary rates. CEV-Small rate has a lower subscription charge ($25 per 10 kW connected charging)

# Estimated bill savings for sample site types

## For modeled customer sites, new EV rates can enable significant savings compared to existing commercial rate plans

Actual bill impacts will vary for each customer depending on charging usage patterns




Rate and billing estimates are preliminary and only reflect the sample site modeled. Actual costs will vary based on approved rate values, as well as individual site energy usage.

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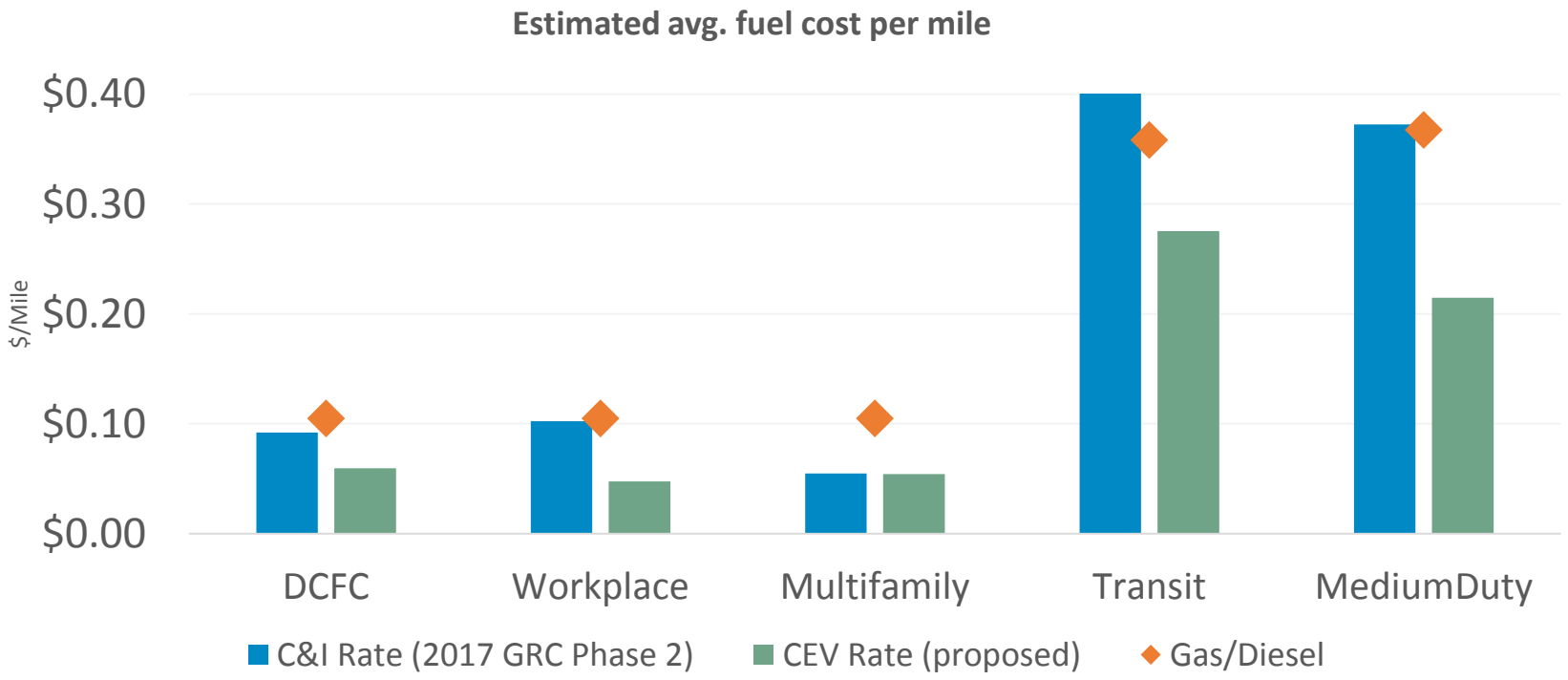


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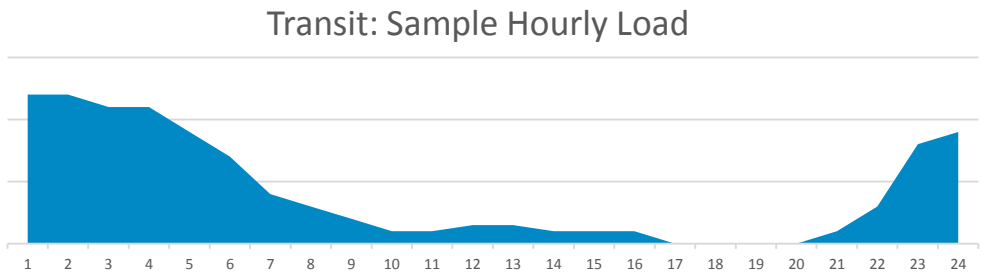
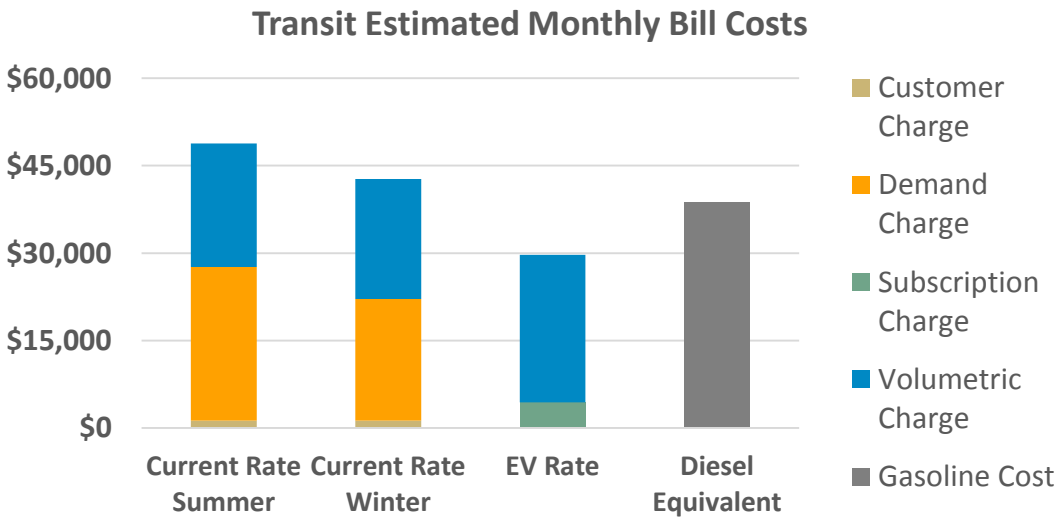
# Additional Materials

# Sample transit bus site model

**Sample site has 24 buses that drive 150 miles/day and charge mostly overnight, generally avoiding peak hours**

| | |
|---|---|
| Buses | 24 |
| Chargers | 12 |
| kW/Charger | 100 |
| Miles/Day | 150 |
| kWh/mile | 2 |




Proposed new EV rate yields **~30% savings** compared to current rates.

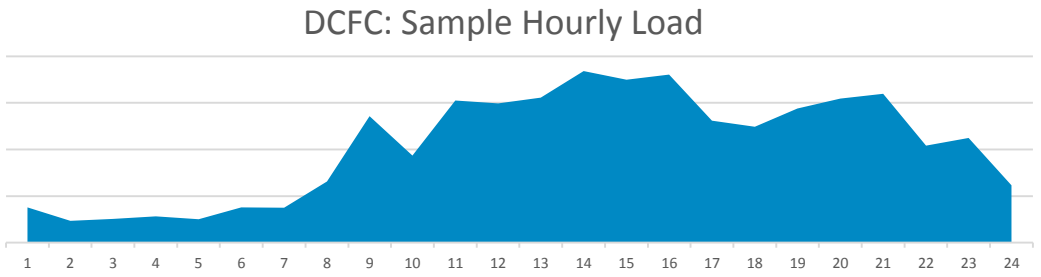
EV cost per mile is reduced to less than $0.30/mile, cheaper than diesel at $2.00/gallon.

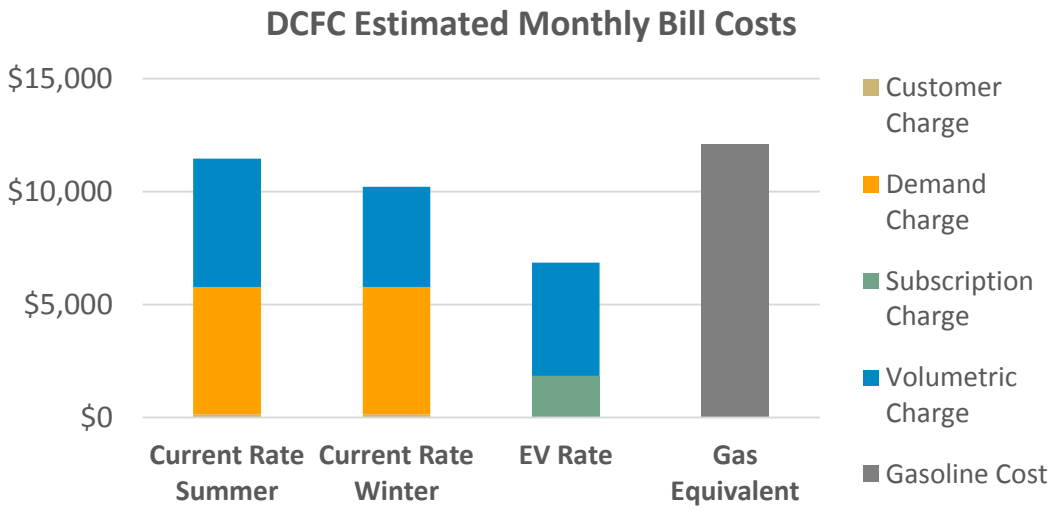
Rate and billing estimates are preliminary and only reflect the sample site modeled. Actual costs will vary based on approved rate values, as well as individual site energy usage.

# Sample DC fast charging site model

**Sample site has 4 chargers at 125 kW each, used 2 hours throughout the day, including significant usage during peak hours.**

| | |
|---|---|
| Hours/Day Utilized | 2 |
| Total Chargers | 4 |
| kW/Charger | 125 |



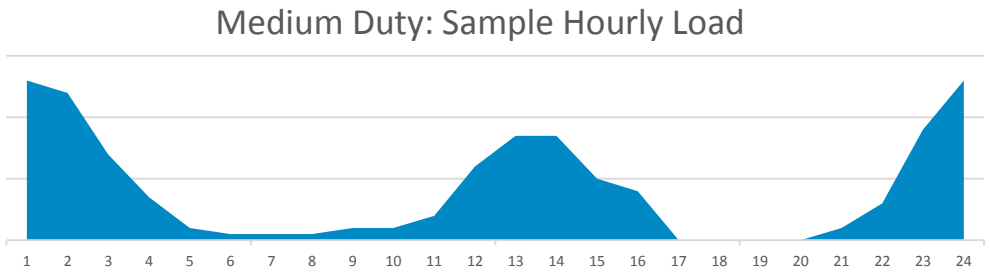

Proposed new EV rate yields **~30-40% savings** compared to current rates.

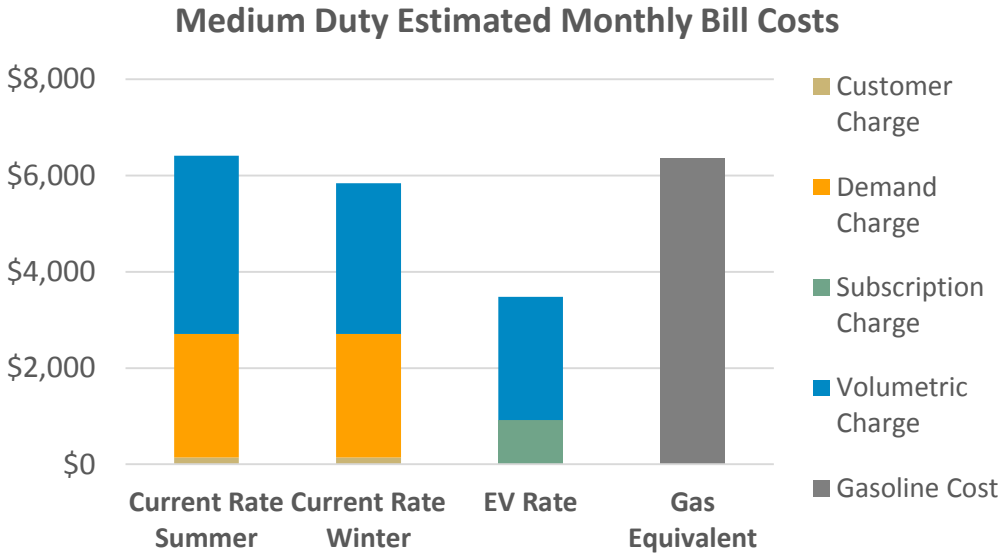
Rate and billing estimates are preliminary and only reflect the sample site modeled. Actual costs will vary based on approved rate values, as well as individual site energy usage.

# Sample medium duty truck site model

**Sample site has 12 delivery vehicles with 12chargers, traveling 45 miles per day and using high-power level 2 to charge mid-day and overnight**

| | |
|---|---|
| Vehicles | 12 |
| Chargers | 12 |
| kW/Charger | 19 |
| Miles/Day | 45 |
| kWh/mile | 1.4 |




Proposed CEV enables more than **40% savings** over current rate structure and gas/diesel equivalent.

Rate and billing estimates are preliminary and only reflect the sample site modeled. Actual costs will vary based on approved rate values, as well as individual site energy usage.

# Proposed CEV Rate Values

| Proposed CEV Rates | | | | Notes |
|---|---|---|---|---|
| Rate: | **EV-Small** | **EV-Large S** | **EV-Large P** | -S is for secondary voltage<br>-P is for primary voltage |
| Subscription Rate | $25 | $184 | $173 | -EV-Small rate is per 10 kW, up to 100kW.<br>-EV-Large is per 50 kW, for sites above 100kW. |
| Energy Rates ($/kWh) | | | | |
| Peak | $0.30 | $0.30 | $0.30 | 4-10 pm, all days |
| Off Peak | $0.12 | $0.11 | $0.11 | Midnight-9am, 2-4pm, 10pm-midnight, all days |
| SOP | $0.09 | $0.09 | $0.09 | 9am-2pm, all days |

Note: Values represent PG&E's proposed CEV rates, which have not been approved by the CPUC.

# Regulatory context for EV rate filing

## Regulatory and policy alignment:

- Electric charging costs can be a barrier for adoption of EVs and growth of charging infrastructure – especially for fleets and fast charging
- Rate designs that simplify and lower cost barriers for EV charging can support state policy initiatives to accelerate adoption of clean vehicles and reduce climate and air pollutants
- The CEV rate proposal aligns with CPUC Rate Design Principles and the S.B. 350 Guidance Ruling
- Few utilities outside of California have designed rates for commercial EV charging – particularly for fast charging or EV fleets

## Designing a new commercial EV rate class:

- To create rates for commercial EV charging, PG&E proposes to create a new rate class specific to these customers. This allows PG&E to design rates around EV load shapes and better fit rates to cost of service for EV charging
- Existing commercial & industrial rates are generally designed around building and industrial facility load shapes, which don't align well with EV charging
- Creating a new commercial EV rate class allows PG&E to transparently track and understand costs to serve these new customer types and aligns with PG&E's Modern Rate Architecture framework

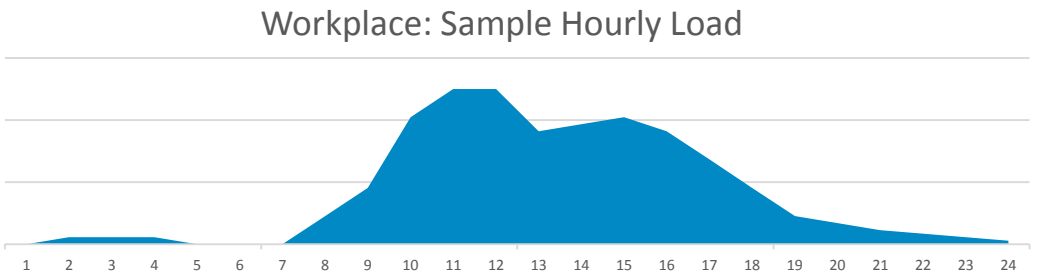
## The proposed EV rates will benefit all customers:

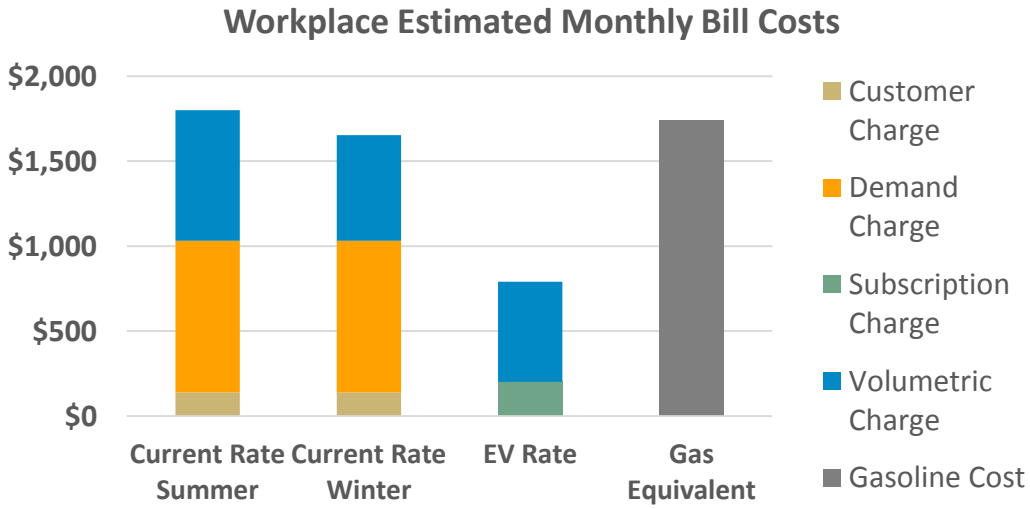
- PG&E does not anticipate that the creation of CEV rates will create any cost-shift among customers
- Revenues from CEV rates are additional to previously approved forecasts, and any costs collected above marginal costs put downward pressure on all PG&E customers' rates
- PG&E plans to track costs and revenues from this new customer class through the 2023 GRC, and if needed, propose any changes in that rate case, factoring the market, customer and policy conditions at that time

# Sample workplace site model

**Sample site has 12 chargers, and 24 vehicles recharging 20 miles each workday with level 2 chargers**

| | |
|---|---|
| Cars | 24 |
| Attach Rate | 0.5 |
| Chargers | 12 |
| kW/Charger | 6.6 |
| Miles/Day | 20 |
| kWh/mile | 0.3 |




Proposed EV rate bill is nearly half of current rates.

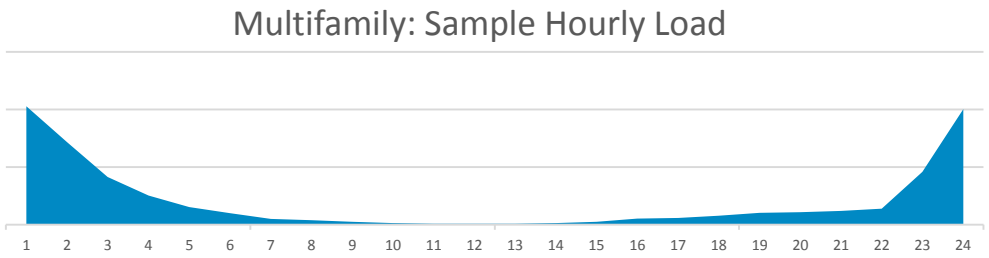
EV rate costs equate to less than $2.00/gallon gasoline equivalent.

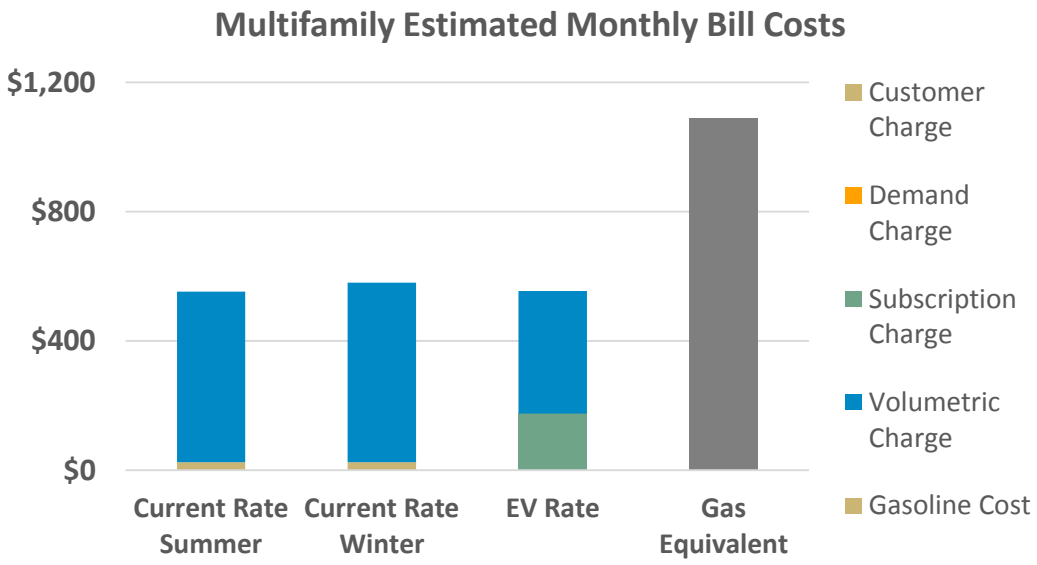
Rate and billing estimates are preliminary and only reflect the sample site modeled. Actual costs will vary based on approved rate values, as well as individual site energy usage.

# Sample multifamily site model

**Sample site has 10 chargers, and 10 vehicles recharging 30 miles each workday with level 2 chargers**

| | |
|---|---|
| Cars | 10 |
| Attach Rate | 1 |
| Chargers | 10 |
| kW/Charger | 6.6 |
| Miles/Day | 30 |
| kWh/mile | 0.3 |




Due to lower charger utilization, EV rate leads to minimal (3%) savings over current A-6 rate – however, CEV rates still enable significant savings compared to gas.

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