

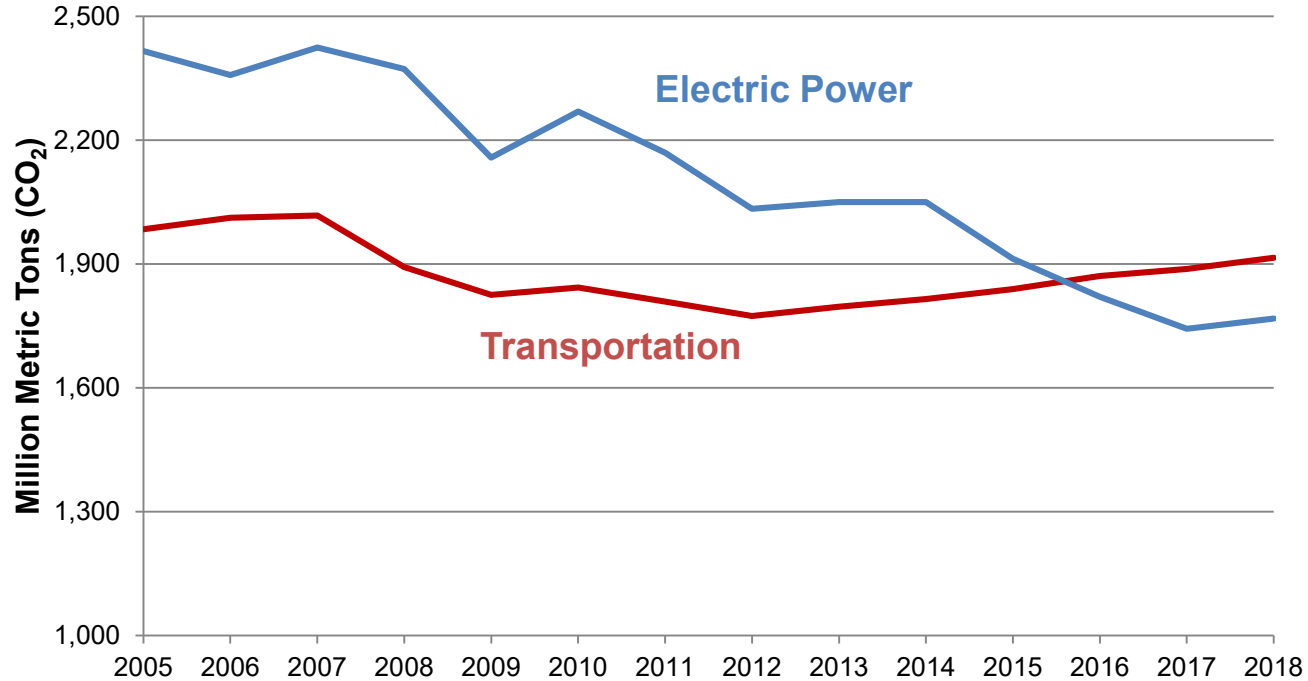


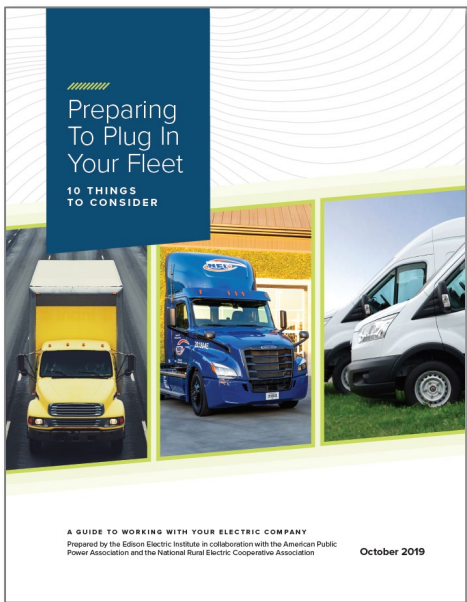
Edison Electric
INSTITUTE

Electric Companies Supporting EV Fleets

Federal Utility Partnership Working Group
Friday, November 8, 2019
Washington, DC

CO₂ Emissions by Sector





Preparing to Plug In Your Fleet: 10 Things to Consider

Charging Information
 Charging equipment. If you know the type of charging equipment that will be used at this location, on 4.

Vehicle and Operating Profile Information
 Operating profiles of vehicles planned to charge at this location. Please complete a row for each of the unique daily operating profiles for the vehicles that will charge at this location.

Vehicle Make and Model	Battery capacity (kWh)	Quantity	Est. Driving Start and End Times (e.g., 9 a.m. to 5 p.m.)	Est. Parking Start and End Times (e.g., 5 p.m. to 9 a.m.)	Est. Charge Duration (hrs.)	Est. Daily Mileage (mi.)
1						
2						
3						
4						
Total vehicles charging at this location						

Procurement plan. For each of the vehicles that will charge at this location, please specify the anticipated timing of delivery.

Vehicle Make and Model	Quantity	Order placed? (YES or NO)	Anticipated delivery date (mm/dd/yyyy)

Procurement plans within the next 5 years. If you are planning to procure additional vehicles to charge at this location over the next 5 years, please describe the type, quantity, and anticipated timing for delivery of these vehicles below.

Vehicle Make and Model	Quantity	Estimated timing for delivery (month or year)

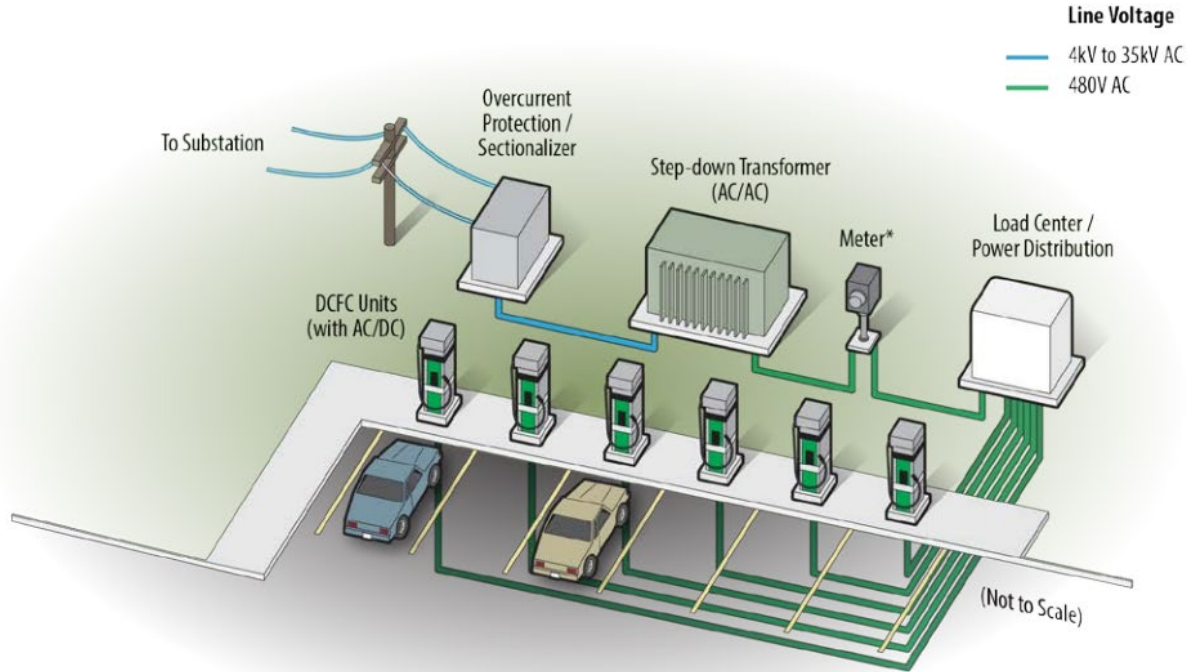
Sustainability goals. Does your organization have any longer-term sustainability or environmental goals that may lead to procuring more electric vehicles in the future? If so, please describe below.

Electric Service Evaluation Template for Electric Fleets

Energy Managers are Key

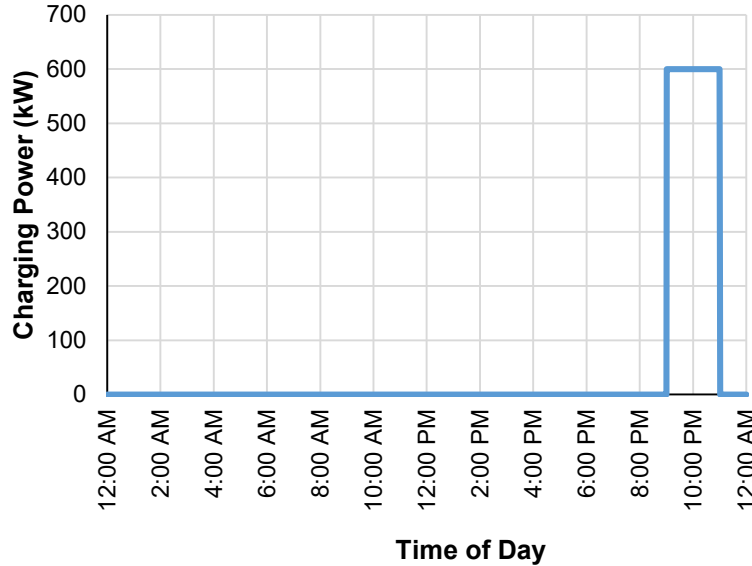
	Facilities Operations		Electric Fleet Operations
Fuel	Familiar with electric companies and electric rates	→	Electricity is purchased and delivered via electric companies
Procurement	Familiar with long lead times for new electrical service (e.g. new building construction)	→	EV delivery timeline will need to align with charging infrastructure installation
Operations	Familiar with optimizing facility energy usage to minimize electricity costs	→	Maximizing vehicle utilization will need to be balanced with energy management

Charging Infrastructure



*Meter may be located on the other side of the transformer

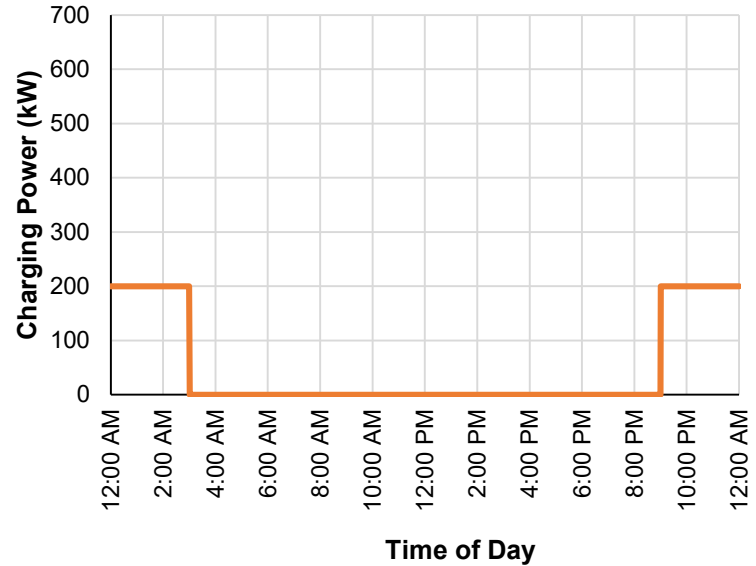
Load Profile for Scenario 1



4 EVs charge at 150 kW for 2 hours

1,200 kWh per day, 20 days/month

Load Profile for Scenario 2

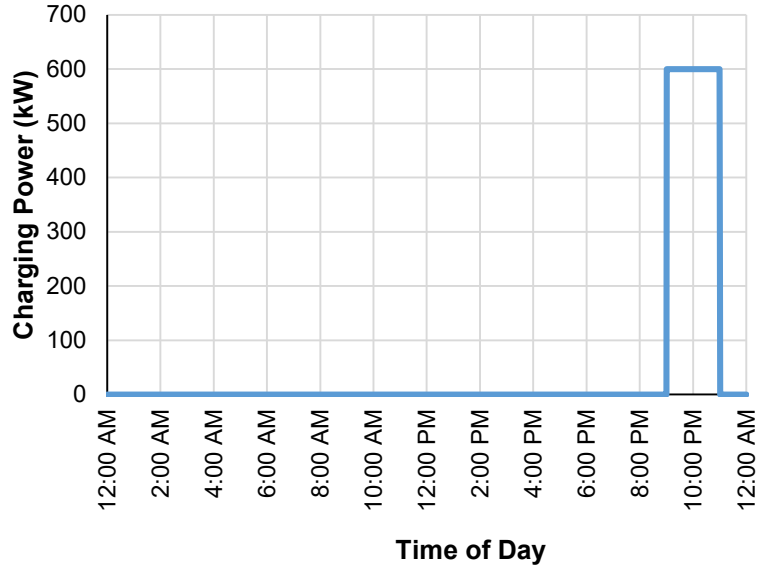


4 EVs charge at 50 kW for 6 hours

1,200 kWh per day, 20 days/month

*electric rate: \$25.00 per month (fixed charge)
+ \$0.07 per kWh (energy charge)
+ \$12.00 per kW (demand charge)*

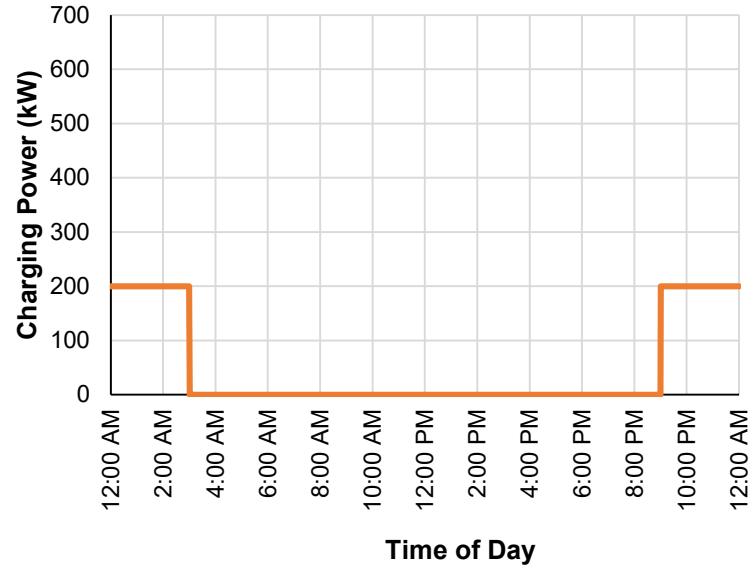
Load Profile for Scenario 1



\$8,905 electric bill

\$0.37 per kWh effective rate

Load Profile for Scenario 2



\$4,105 electric bill

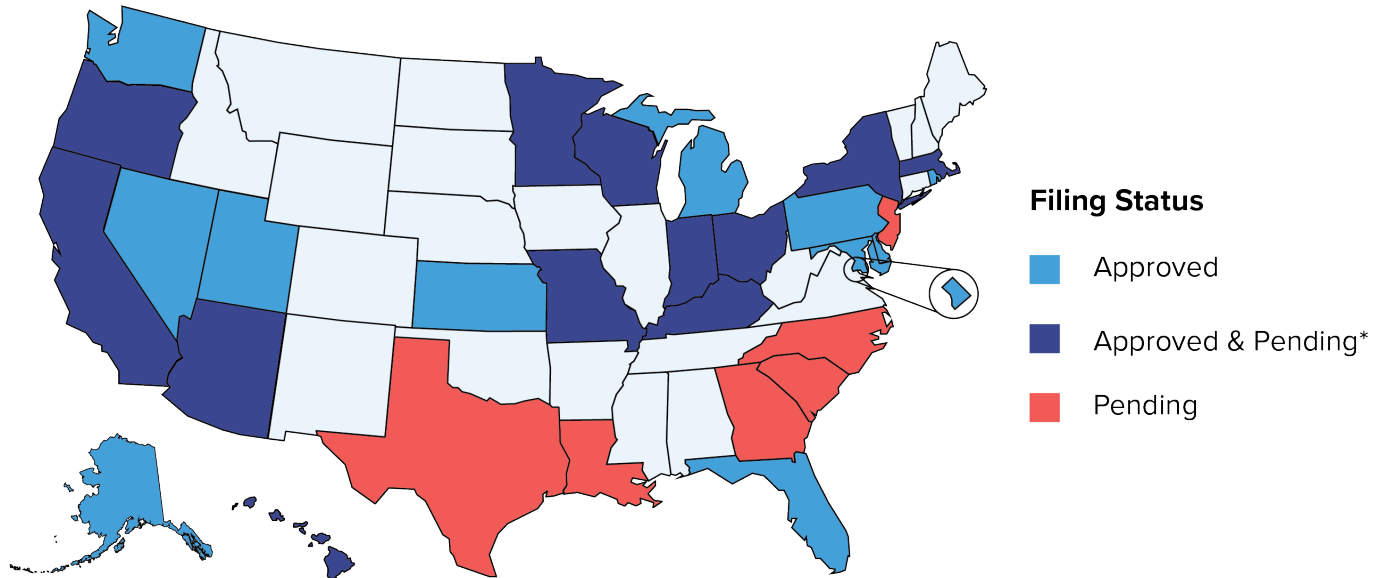
\$0.17 per kWh effective rate

Template

Operating profiles of vehicles planned to charge at this location. Please complete a row for each of the unique daily operating profiles for the vehicles that will charge at this location.

	Vehicle Make and Model	Battery capacity (kWh)	Quantity	Est. Driving Start and End Time(s) (e.g., 9 a.m. to 5 p.m.)	Est. Parking Start and End Time(s) (e.g., 5 p.m. to 9 a.m.)	Est. Charge Duration (hrs.)	Est. Daily Mileage (mi.)
1							
2							
3							
4							
Total vehicles charging at this location							

Regulatory Filings Related to ET

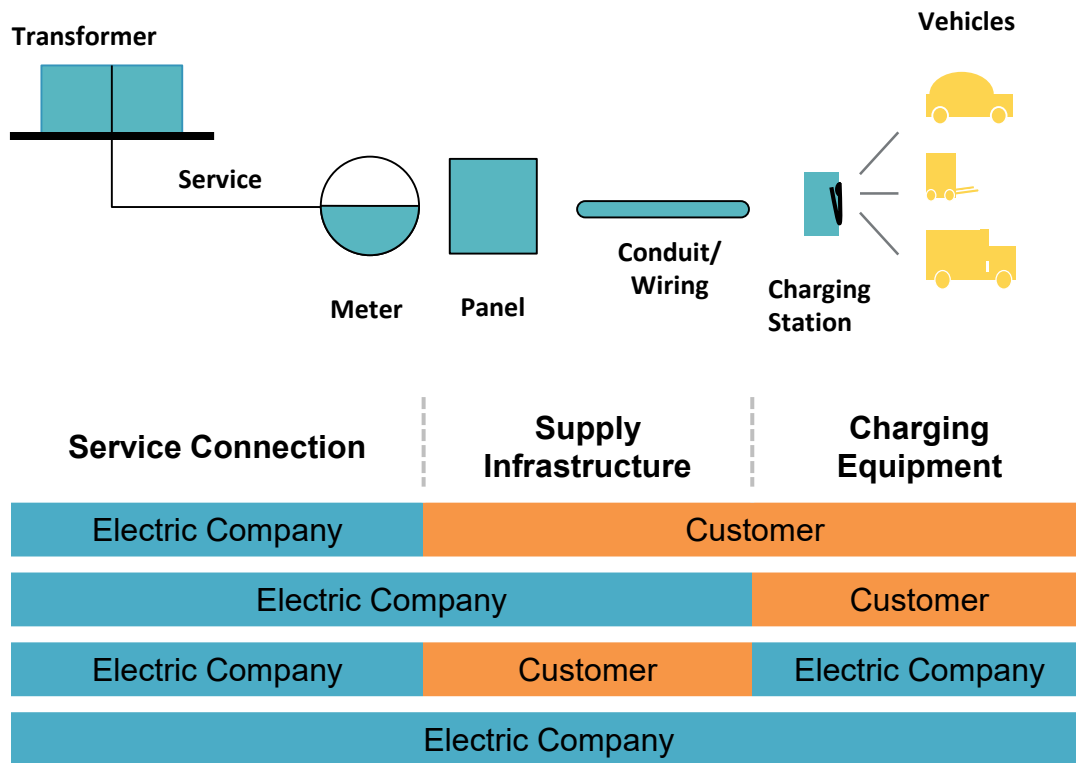


*This filing status indicates states with previously approved filings and filings still under consideration.


Customer Programs: Typical Features

- **Beyond business-as-usual:** regulatory approval
- **Customer-driven:** application process
- **Education and outreach:** generate interest in program, help customers through process
- **Managed charging:** e.g., participate in a TOU rate or DR program, share load data
- **Varying structure:** rebates, electric company-owned make-ready infrastructure, and/or electric company-owned charging station

Infrastructure Program Structures



Fleet-Specific Program Examples

Example	Other Approved Programs	Other Proposed Programs
<ul style="list-style-type: none">▪ PG&E (CA): EV Fleet Program, 700+ sites and at least 6,500 MD/HD vehicles  <p>The logo for 'EV fleet' features a stylized orange 'e' with a plug symbol inside, followed by a blue 'V', and the word 'fleet' in grey lowercase letters.</p>	<ul style="list-style-type: none">▪ Southern California Edison: MD/HD Charging Infrastructure Program, make-ready + EVSE rebates for some customer types▪ SDG&E (CA): make-ready + EVSE rebates	<ul style="list-style-type: none">▪ DTE Energy (MI): rebates for up to 100% of make-ready infrastructure costs▪ Duke Energy (NC): 900 EVSE rebates up to \$2,500 each▪ Xcel Energy (MN): make-ready + option for Xcel to own EVSE

SOURCE: PG&E