

Attachment A: Summary of Multifamily Electric Vehicle Rate Management Options

Scale of the Issue

The primary issue of concern, as it relates to the recently adopted electric vehicle (EV) reach code for new multifamily developments, is maintaining reasonable EV charging costs in new multifamily developments which will be required to have EV charging outlets (at minimum) in every residential parking stall as of July 1, 2024.

The full cost to a resident for charging their EV can be highly variable and dependent on the specific type of EV charging configuration employed at a multifamily development. Factors which may impact EV charging costs include: the specific EV rate applied, time-of-use, energy costs, charging speed, and any special charges (e.g., EV charger location, demand, per session, or idling fees/charges). Below is a summary of information obtained to date to understand the scale of the issue in two different scenarios wherein a multifamily complex has EV charging capabilities at each residential parking stall but no direct wiring:

1. **Property Owner/Manager Determines Rates Applied for EV Charging:** A property owner/manager may purchase and install third-party EV charging equipment, pay for online services to monitor usage and collect charges, and set the charging rates and parameters themselves. Based on an initial EV rate and networking fee cost analysis prepared by TRC, the annual cost difference between a direct-wired/lowest electric vehicle (EV) rate (est. \$711/yr.) and PG&E's commercial EV rate (est. \$841/yr.) or PG&E's standard commercial rate (est. \$1381/yr.) is \$130-\$670, although the latter rate with the largest cost difference is not likely to be how a site would be configured. Based on those estimated costs which assume operational cost recovery, EV charging utility costs could be 18-94% more expensive per year without direct wiring. This analysis is based on utility rate and time-of-use assumptions, which may change over time particularly as the City is interested in encouraging daytime charging.
2. **Third-Party Determines Rates Applied for EV Charging:** A third-party EV charging equipment company may install, manage, and set EV charging rates at a multifamily complex via an agreement with a property owner/manager. The City does not currently have data or analysis around the typical cost implications of this scenario.

In either scenario, or combination thereof, the rates charged to residents are unregulated and may be set in a manner to attract tenant with lower EV charging rates, to achieve cost recovery (which may include equipment, networking services, etc.), or to even obtain some level of financial return. Property owners/managers may also set other fees (e.g., monthly parking space costs, rents) which seek to recover EV charging or other costs. More City research is required to better understand the most common third-party charging scenarios in place in multifamily complexes in San Jose and their associated EV charging rates. It's important to note that an EV may still have a lower operational cost per year for a multifamily resident than a gas car, even with potentially higher EV charging costs, given their overall lower annual maintenance costs.

Options for Maintaining Retail Electricity Rates for EV Charging in Multifamily Complexes

Below are the City’s findings to-date and next steps on options available to maintain the lowest retail electricity rates for EV charging in multifamily complexes:

Category	Option	Description	Current Assessment	City Next Steps
Technology Options	240 Volt “Quick-disconnect” technology (such as Polaris™ connectors)	Hubs that allow electric wires to be re-routed to different electric panels	<ul style="list-style-type: none"> Limited known examples of installation in a multifamily building for this purpose City roughly estimates the installation cost for additional equipment at \$25-100/space, where feasible City roughly estimates the labor/permit cost at ~\$300-400 each time a space needs to be assigned to a new unit, unclear if additional complexities or cost with re-routing 	Continue research, with consultant support pending available staff capacity and funding, on: <ul style="list-style-type: none"> where this technology has been applied in multifamily buildings (e.g., number of units, how long), full cost to operate/ re-route, applicability to multifamily buildings of varying sizes, additional requirements in code language to accommodate (e.g., space and electrical infrastructure requirements), and, any other restrictions.
	PG&E virtual net metering	A networked sub meter is placed in EV charging spaces and can be billed	<ul style="list-style-type: none"> Both master and submetered account holders may need to agree to terms to proceed Unclear how/which rate could be applied (i.e., if different 	Conduct follow-up meeting/ communications with PG&E staff to better understand capabilities, restrictions, etc.

		directly to a tenant without the need for wiring	from master account) <ul style="list-style-type: none"> • Question as to whether this could apply to low-income residents who qualify for CARE/FERA rates 	
Rate Management/ Policy Options	City rate management mechanism (e.g., franchise, policy, ordinance)	City may adopt a legal mechanism for restricting rates above retail or the cost of service	No known examples of a similar policy from other cities	<ul style="list-style-type: none"> • Develop a scope of work and obtain a cost quote for the collection of third-party charging costs <p>Pending the third-party charging costs findings, the City can determine next steps and funding, e.g., conducting an initial vetting of legal restrictions on City policy options.</p>