

Electric drive is beautiful.

SDGE

A  Sempra Energy utility®



Guiding Principles – For Discussion

- Support Governor's goals
- Grid integrated – optimize use of grid
- Provide benefits to all ratepayers
- Equitable deployment of services to all customers
 - Low income depends more on transit and are sensitive to pass through costs
- Maximize all funding resources, programs, grants
- Public private partnerships are essential



Guiding Principles – For Discussion



- Commercial needs are unique and varied
- Technology agnostic
- Consider each customer's unique operational needs
- Minimize impact to customers
 - Increased load factors mean less capacity build out required
 - Increased load factors means lower costs for operators

Commercial Customer Transportation Electrification Support

Commercial load and consumption estimates,

- San Diego Airport Ground Support Equipment
- Port of San Diego and Tenants

Coordination & Support of Electric Heavy Duty Trucks Grant Applications for Port of San Diego Tenants:

- CEC PON-13-605 March 2015 for five heavy duty electric trucks
- CARB Drayage grant September 2015 for three heavy duty electric trucks
- CEC GFO 15-604 in March 2016 for heavy duty electric trucks and forklifts

Taxi industry outreach

- Driving demonstrations and fuel cost modeling

Billing and charging analysis

Existing Commercial Rates

	\$ / kWh	\$ / kW	Links	Description
AL-TOU	\$0.7-\$0.11	\$22-\$41	Utility Distribution Electric Energy Commodity Costs	Time of use with demand charges

GRC Phase II Proposed Rate (Filed Dec 2015)

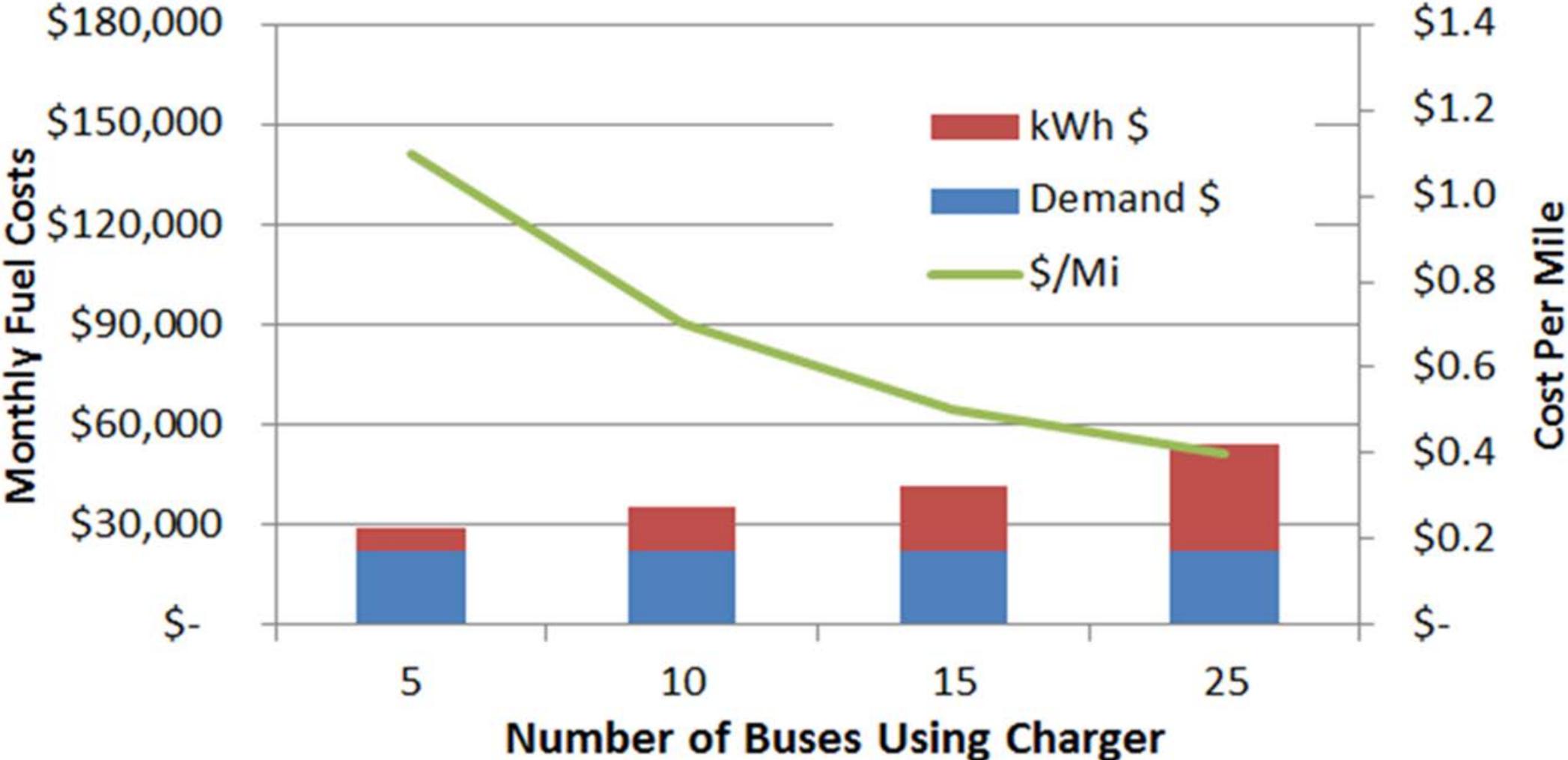
- A fully cost-based option that includes: (1) cost-based MSF; (2) distribution demand charges recovered through a NCD charge with exemption for demand in super-off peak period; (3) on-peak demand charge reflecting 90% of generation capacity
- This option could benefit C&I customers that have flexibility to shift energy use to SDG&E's super off-peak period
- Summer Super Off Peak (12am-6am); Winter Super Off Peak (12am - 2pm)

Modeling Operational Assumptions with AL-TOU Tariff

- Model incorporates aggregate load, consumption, miles driven
- 175 miles per bus, per day
- 2 kWh per mile for transit buses
- Non-Direct Access customer

Quantity of Buses	Miles Monthly	kWh Monthly
5	26,250	52,500
10	52,500	105,000
15	78,750	157,500
25	131,250	262,500

Demand Charges: Single 500 kW Fast Charging



Demand Charges: 120kW Slow Charging (25 buses)

