Roadmap 11:
Using EVs to Lower Electricity Costs

David Kolata, Executive Director
Citizens Utility Board
Transportation Electrification

- Increasingly likely
- Opportunity to lower bills and rates
- But need for proactive policies
- Start with customer-focused principles
Key Principles

Optimize charging patterns to:

- Improve load shape
- Prevent peak demand increase
- Integrate variable energy resources
- Maximize grid value
“Using a combination of time-based rates, smart charging and rate design, load management practices, demand response, and other innovative applications, EV loads should be managed in the interest of all electricity consumers.”

TheEvAccord.com
Price Signals and Smart Rate Design Essential

- Adopt dynamic/time-variant rates
- Hourly pricing!
- TOU
- Wholesale and local grid signals
- EVs are a perfect DER
The Case for Hourly Pricing: May 2018

- Average HP: 2.7¢/kWh
- No. of negative price hours: 45
- No. of hours less than 1¢/kWh: 74
- 244 mi. ComEd typical rates: $7.32
- 244 mi. optimized HP: $2.95

More automation please!