

Next Steps on Transportation Electrification

Presentation at the Electrification Coalition
WIEV Bootcamp

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About RAP

The Regulatory Assistance Project (RAP)[®] is an independent, non-partisan, non-governmental organization dedicated to accelerating the transition to a clean, reliable, and efficient energy future.

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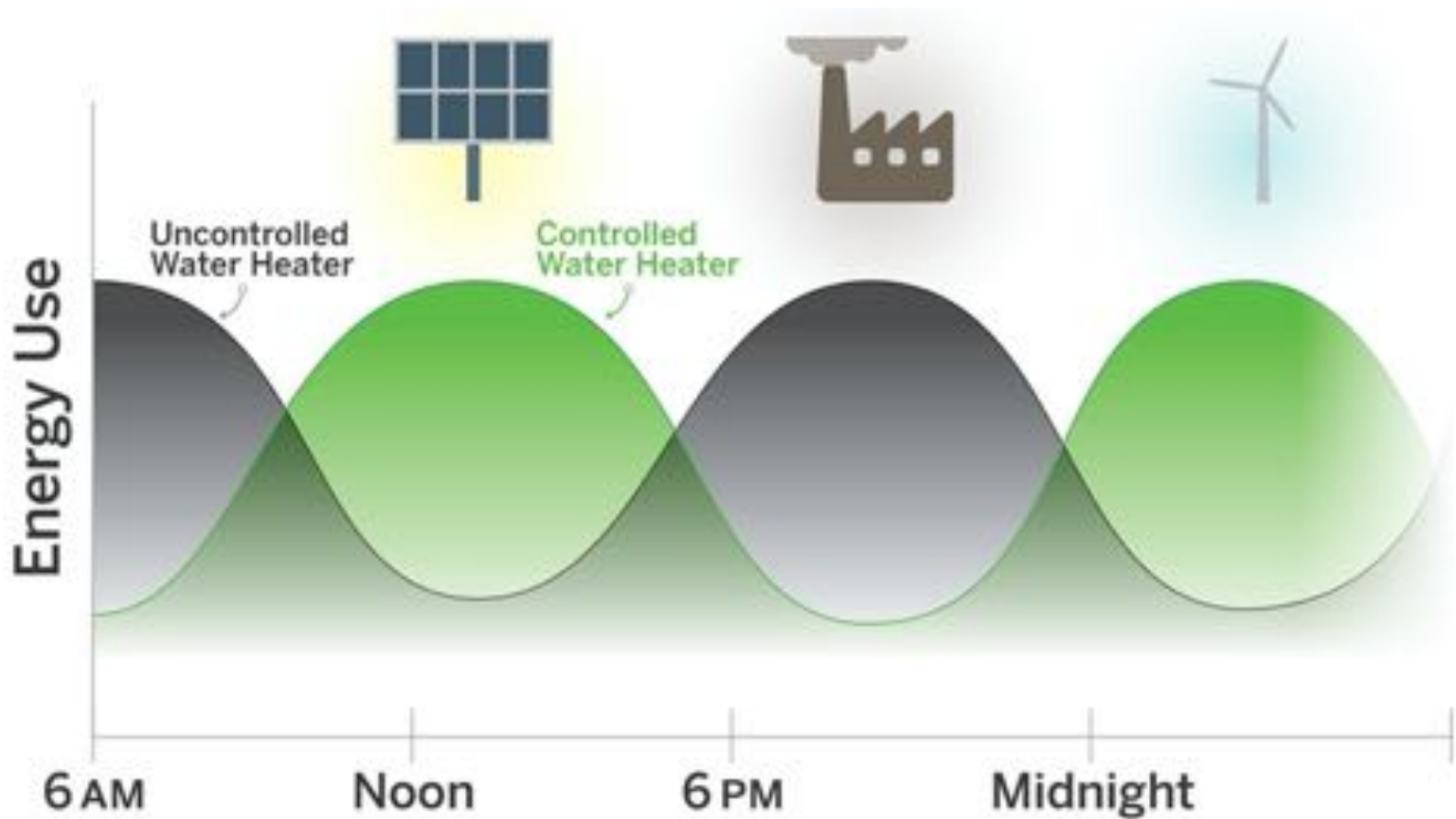
Taking First Steps



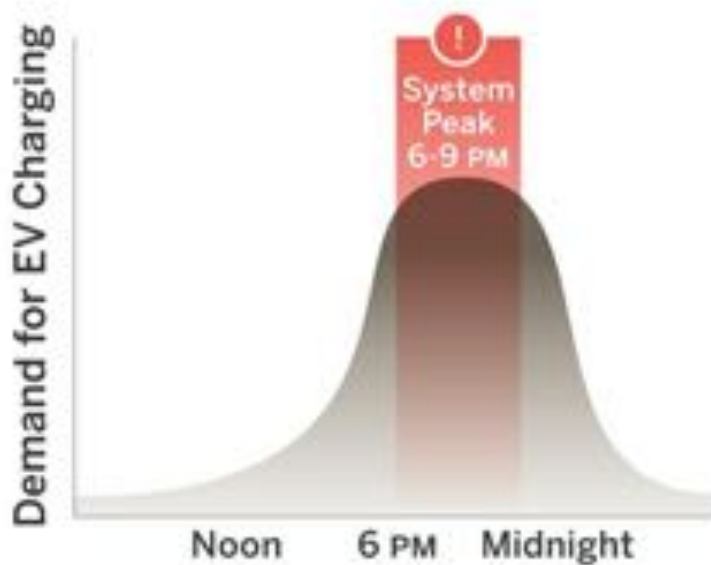
Initial WI pilot focus

- EV charging rates
- Load management
- Decrease costs of EVs and residential EV charging
- Pilot focus: Residential customers
 - Also
 - Equity and access
 - Low-income
 - Medium-heavy duty fleets and transit
 - Public charging

Recognize the Value of Flexible Load for Grid Operations

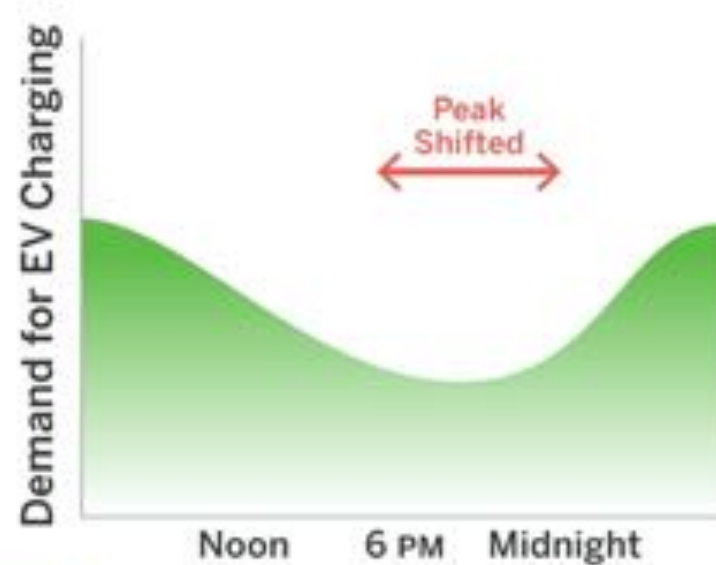


Design Rates to Encourage Beneficial Electrification



Typical Rate Design

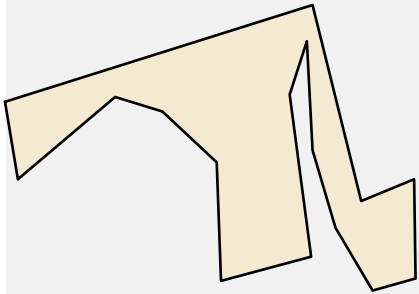
vs.



Time-of-Use Electric Rates

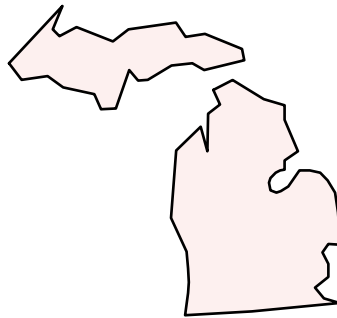
Residential Charging

Key issues: cross-subsidization, increasing EV adoption, energy efficiency, encouraging off-peak usage



Maryland (Jan 2019):

rebates for cost of smart L2 chargers; customers must enroll in TOU



Consumers Energy

(Jan 2019):
\$500 rebate for EV drivers with nighttime EV rate



SDG&E (May 2018):

rebate for EVSE approved, note PUC approved different ownership models among utilities

PSC identified pilot information

Docket 5-EI-156

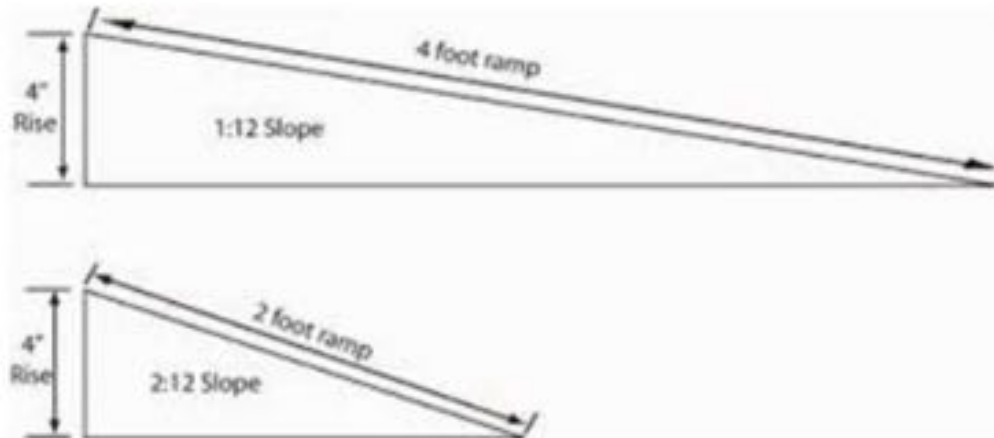
- Goals
- Benefits to participants, ratepayers, utility load management
- Performance metrics for assessment
- Schedule for reporting
- Outreach
- Rate design

Pilots don't have to be a bridge to nowhere



Image by [Don Johnoghue](#) from [Pixabay](#)

Why pilots before programs?



- Transitional arrangements
- Lessons learned before more permanent programs
- Key to scaling up to permanent programs

What are the goals of the pilot?

- What is the goal of supporting an EV build-out or EV pilot?
- Is the goal consistent with other state goals?
- Do utility programs align with existing state agency/city programs? Do they fill an existing need?
- How identified need be served most cost-effectively?

Performance metrics for assessment

- Assessment measures progress
- Initial data requirements can help form a baseline for future incentives
- Ex: MN Ottertail Docket E-017/M-20-181

Goal	Performance criteria	Metric
Increase efficient EV charger deployment	The utility will track EV charger deployment and usage	Track number of charging station hosts taking advantage of incentives; Require reporting of average number of chargers per site; types of chargers; average cost per site and port; rates offered; rates selected; charging behaviors by rate class; host application processing times; average time spent at charging point, average time parked, average kilowatt charges

Schedule of reporting

- How often?
 - Xcel CO – 6 months
 - MD - quarterly compliance filings
- Does the reporting schedule allow for changes in direction if needed?
- How is it reported? Who can see it?
 - Ex: HECO integrated interconnection queue
 - MN EV page

Outreach: Is the pilot clear and accessible to customers?

- What education and outreach activities are most helpful to provide customers?
- How will the pilot benefit and serve low-income and rural customers?
- Does the public (or specific community) understand
 - The benefits for them of transportation electrification?
 - How to access the program?

Stakeholder engagement

- Are stakeholders engaged?
- Are all communities that will be affected involved?
- Is the type of outreach used targeted to get results from the communities?
- Ex: MD PC 44 use of stakeholder groups

Resources

- [First Steps on Transportation Electrification](#)
- [Roadmap for Electrification Transportation](#)
- [Beneficial Electrification: Ensuring Electrification in the Public Interest](#)
- [Getting from Here to There: Regulatory Considerations for Transportation Electrification](#)
- [We all wish we were more flexible: Electrification Load as a Grid Flexibility Resource](#)