

# GMP's eCharger Pilot Update

DPS Rate Design Workshop

April 16, 2020

## CONCEPT DEVELOPMENT

- ▶ What problem are we trying to solve for customers?
  - ▶ Make home EV charging cheaper & simpler, while providing value to all customers
  - ▶ Manage peak-related costs which directly benefit all customers
- ▶ Who is the target customer?
  - ▶ Existing and prospective EV owners
- ▶ How can we leverage partnerships?
  - ▶ EVSE providers
  - ▶ Auto dealers



## CUSTOMER OFFERING

### Pilot Details

- \$29.99/month for unlimited off-peak charging
- Customer shares access with GMP to curtail during peak events, default opt-in
- \$0.60/kWh during peaks if customer opts out



## IMPLEMENTATION

An energy management event is happening soon

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Hi,

On August 21, Green Mountain Power will manage one or more of your enrolled devices between the times of 6:00 pm - 10:00 pm to help lower energy use during peak demand.

You are always in control. You can opt out of this event by manually adjusting your device during the event window or clicking the link below.

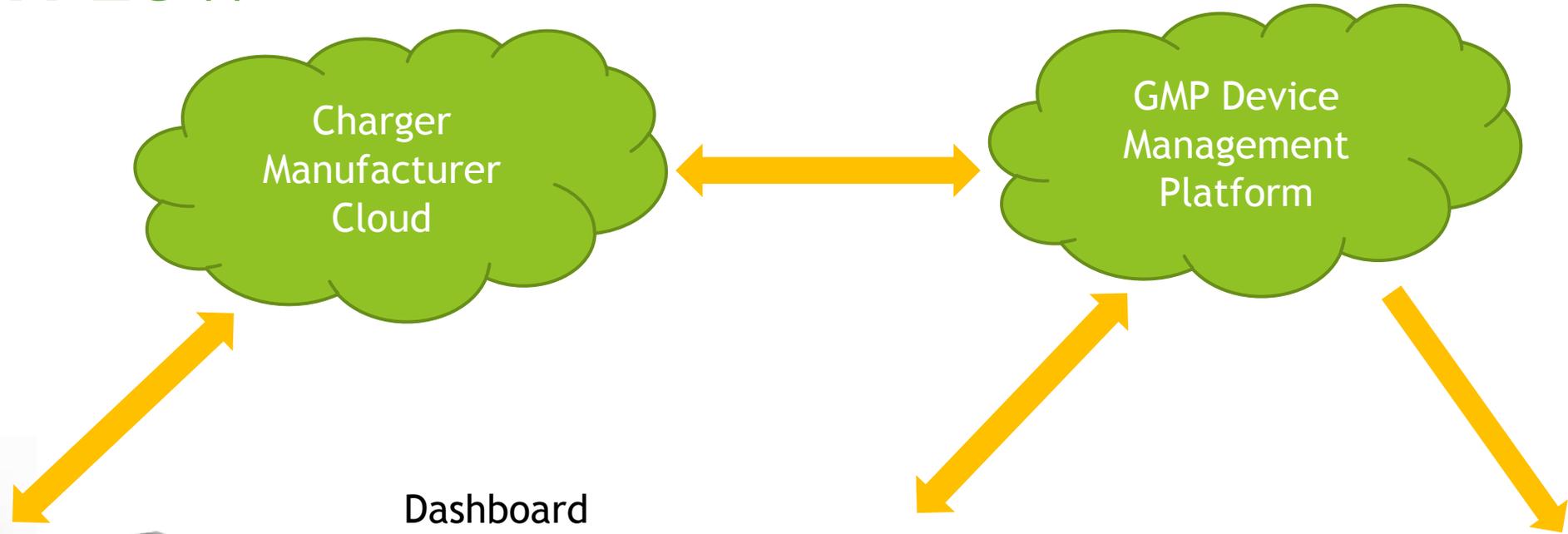
Thanks,

The team at Green Mountain Power

[Opt Out of Event](#)

- Free charger with purchase of EV, \$9.99/month rental otherwise
- 5-10 peak events per month based on forecasts (2-6 hours per event)
- Customers notified 8-24 hours in advance

## DATA FLOW



### Dashboard

The screenshot shows the 'Virtual Peaker' dashboard for Green Mountain Power. The 'Events' section is active, displaying a 'Schedule An Event' form. The form includes a 'Platoon' dropdown menu (set to '-- choose platoon --'), a 'Start Time' field (set to 'Select a datetime'), an 'Event Template' dropdown menu (set to '-- choose template --'), and a 'Notification' checkbox. A 'Schedule Event' button is at the bottom.

### GMP Bill

**Bill Details**

Rate: E01 Residential

**New Charges/Adjustments**

|  |                 |
|--|-----------------|
| Customer Charge: 32 Days @ \$0.48              | \$15.36         |
| 635 Total KWH @ \$0.16446                      | \$104.43        |
| Energy Efficiency Charge 635 x \$0.01371       | \$8.71          |
| Power Adjustment                               | \$0.69          |
| Federal Tax Reform Credit                      | -\$7.23         |
| Electric Assistance Program Fee                | \$1.00          |
| <b>New Charges/Adjustments due by 10/27/19</b> | <b>\$122.96</b> |

## OUTREACH



### Green Mountain Power in new boost for electric vehicles

By **Xander Landen**

Apr 23 2018 | no reader footnotes

 Rutland Herald

#### GMP drives interest in driving electric | News

Steve Costello, vice president at Green Mountain Power, said incentives and rebates including a Level-2 charger, ...

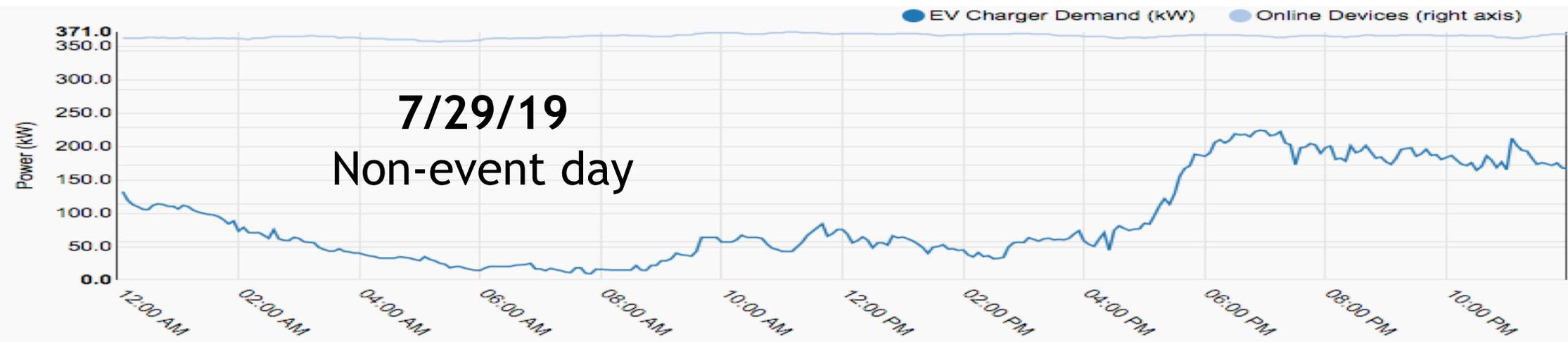
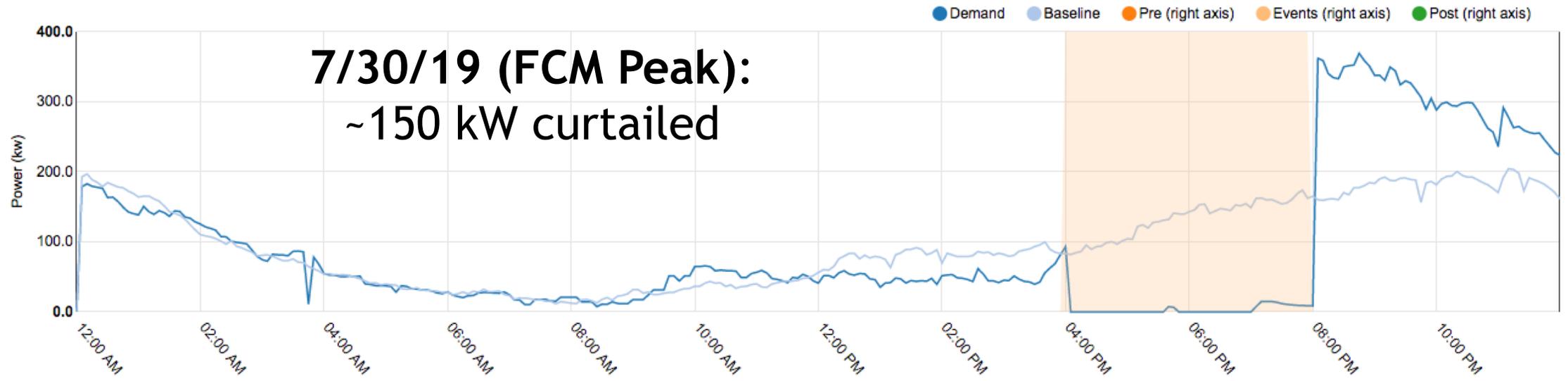


#### In-Home Level 2 EV Charger

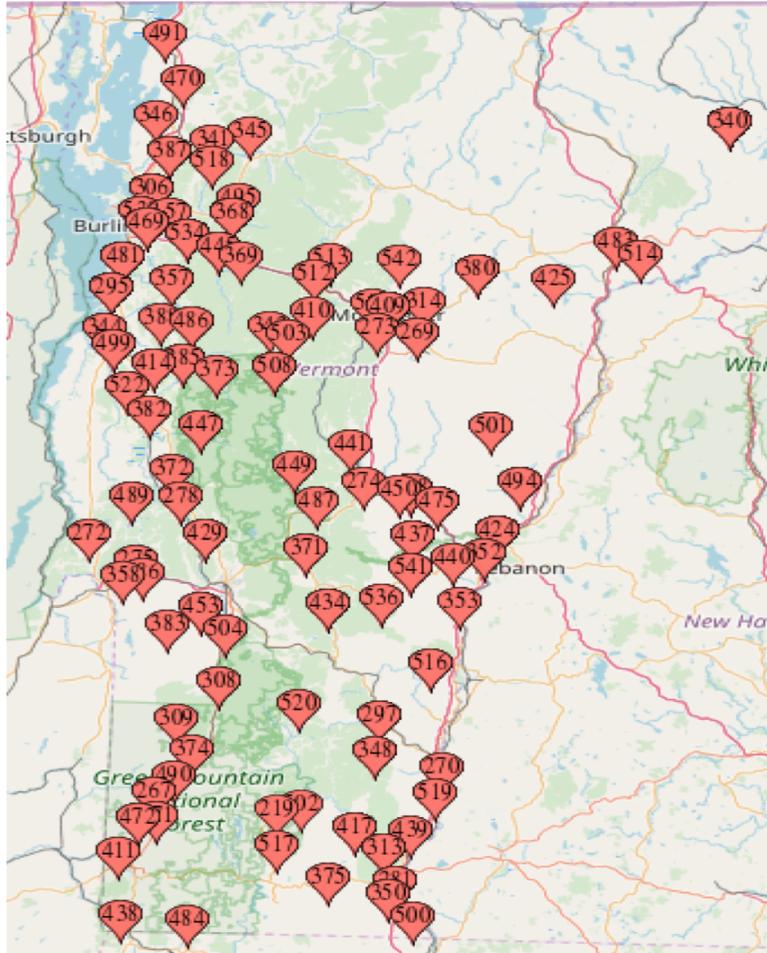
These programmable fast chargers will "refuel" your EV in 3-4 hours. Free when you buy a new electric vehicle.

[Learn More](#)

## PEAK MANAGEMENT RESULTS

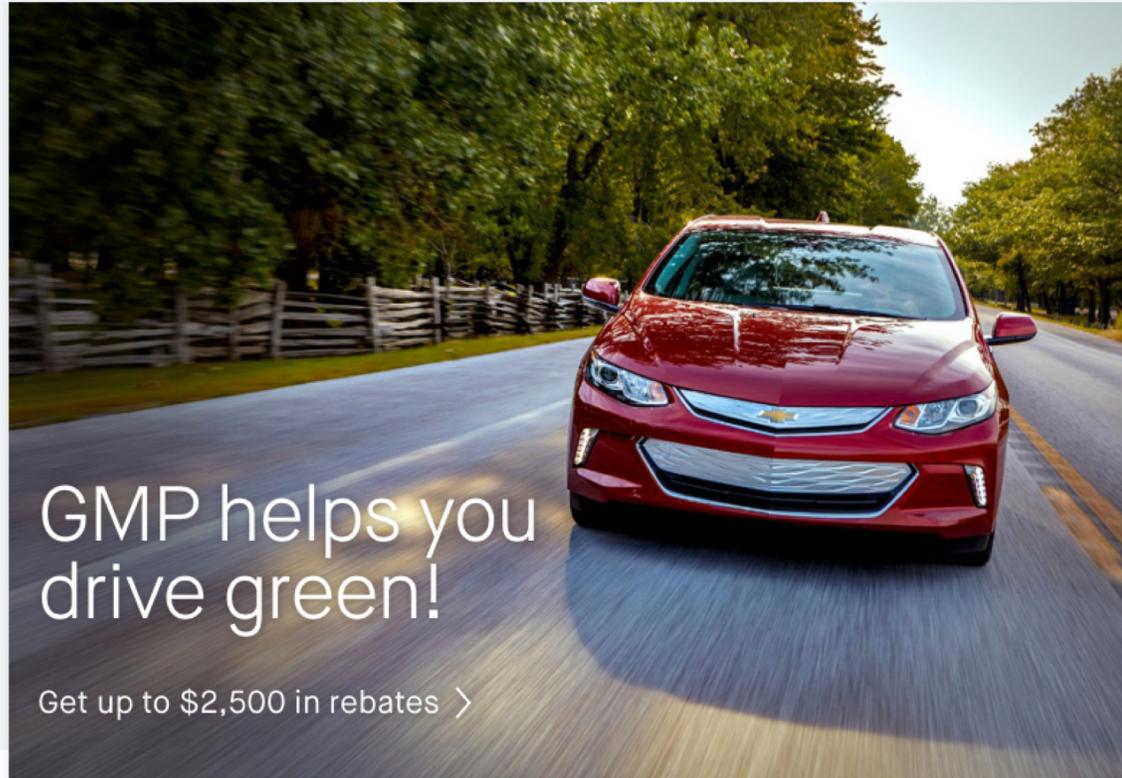


## PILOT OUTCOMES



- Participants consumed *more* than assumed under an unlimited rate
- Low opt-out rate (< 5%)
- Enrollment
  - Free charger: 273
  - \$9.99/month charger: 9
  - Unlimited rate: 151
- Net benefit of \$27k

## MOVING FORWARD



### Rebate Type (check all that apply)

- \$1,500 New All Electric (AEV)
- \$1,000 New Plug-in Hybrid (PHEV)
- \$750 Used AEV or PHEV

### Want to join our free EV charger program?

We give you a Level 2 charger (\$600 value) when you agree to install it and st demand on the grid during peak power use times. You must have WiFi to contr Learn more at [greenmountainpower.com/product/home-level-2-ev-charger/](https://greenmountainpower.com/product/home-level-2-ev-charger/)

- Yes! I'd like the charger. I agree. Enroll me now!

*In 2019, **77%** of customers who claimed purchase rebate also installed charger (426 of 626)*

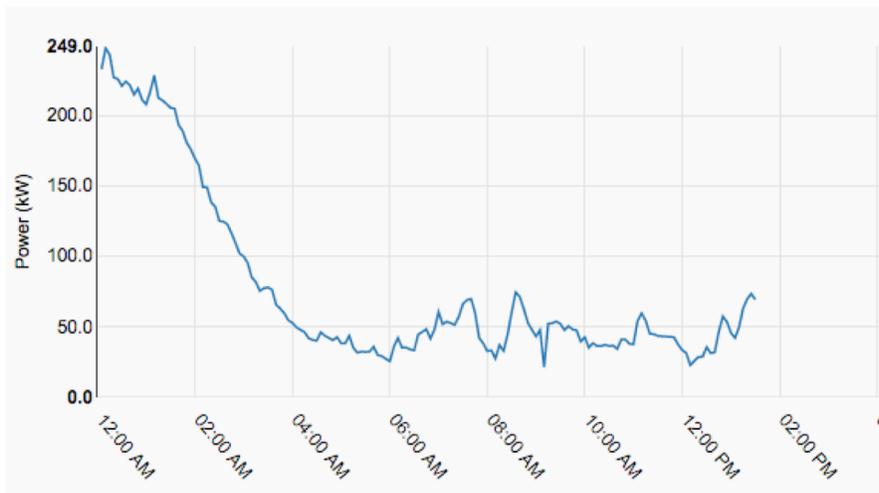
## CONVERTING TO TARIFF

### TOU Option

- Daily on/off peak schedule applied to EV charging
- Customer sets own schedule, does not receive peak event notifications

### Managed Option

- Discounted rate during all hours outside of called peak events, default opt-in
- \$0.69/kWh during events
- No intervention required by customer to achieve savings



*Used coincident peak data from pilot to calculate EV rate discounts*

# CONCLUSIONS

- EV charging management reduces peak-related costs, benefiting all customers
- Low opt-out rate demonstrated that a small amount of interruptions targeted at system peaks is an effective management strategy
- Data from pilot directly informed tariff design
- Free Level 2 charger was critical for pilot rate adoption and allowed customers to realize savings quickly



Thank you and stay safe!

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