eCurv | AMS | Eversource Active Demand Management
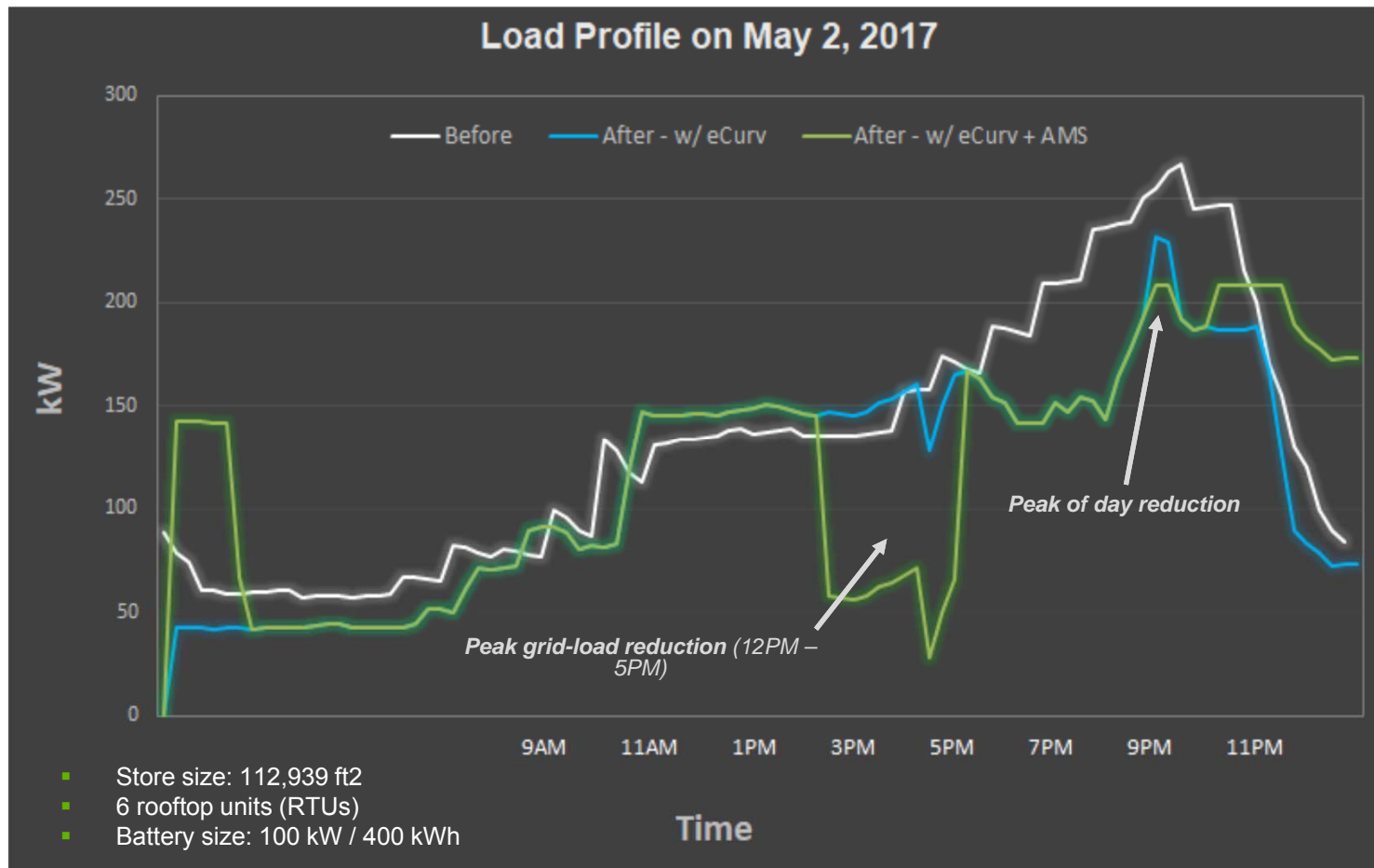
Program Description

Objective: Demonstrate the incremental value achieved by combining eCurv's software & controls system and AMS's battery system as an integrated service.

- eCurv's software and controls system was integrated with a big box retailer's building automation system (BAS) to make continuous micro-adjustments to avoid the simultaneous draw of power from equipment

- AMS separately simulated the performance of its Armada battery enabled system as a standalone demand management solution for the same stores.

- After the cooling season, it was possible to feed actual field data from the eCurv enabled stores into AMS' optimization algorithm to determine if incremental demand reductions from the combined offering were possible.

- Next steps: Complete measurement and verification work, determine if this is a viable strategy at scale

Initial Results – Burlington Site
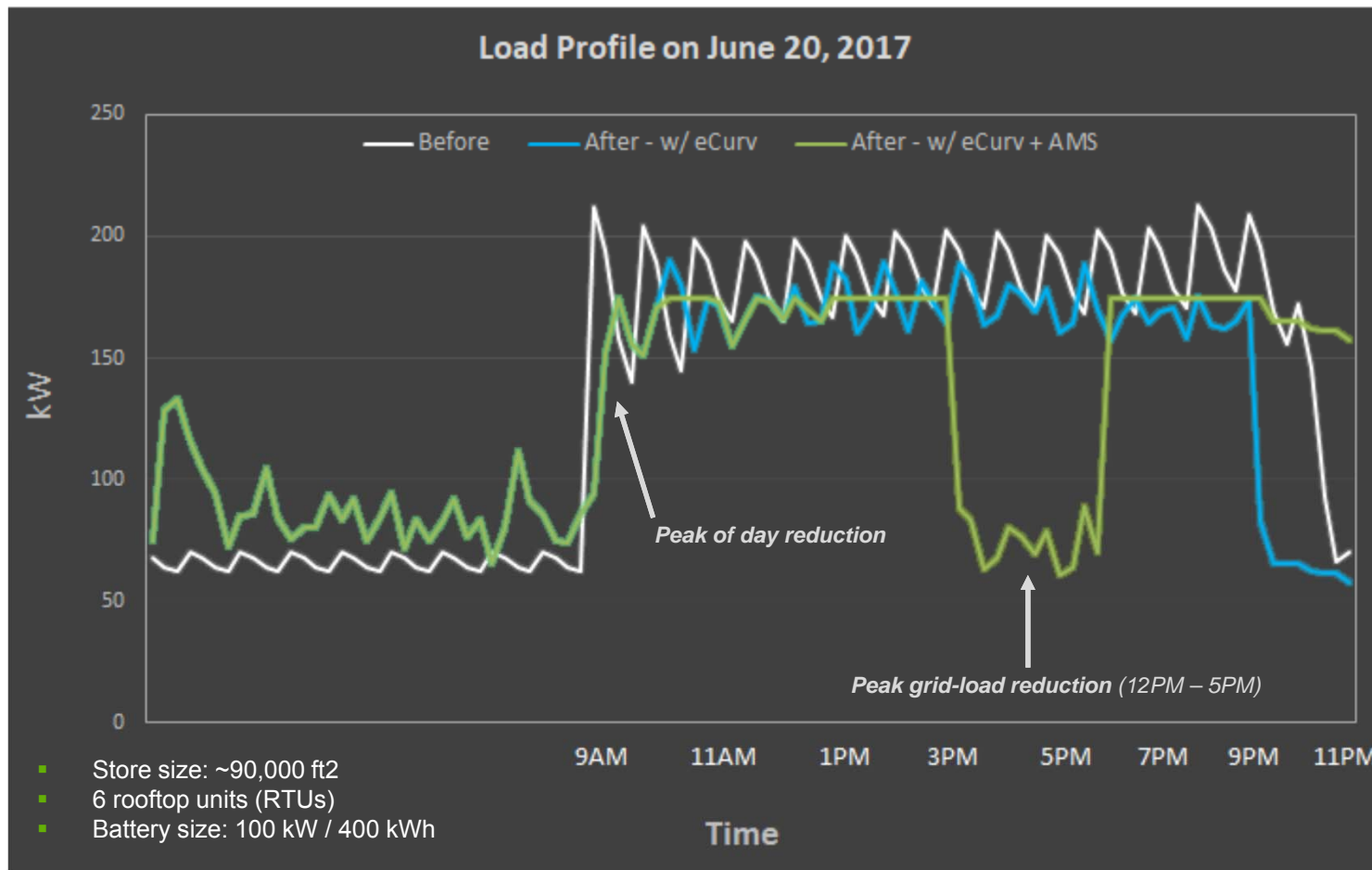
Preliminary Results

Load Profile on May 2, 2017

Legend: —— Before —— After - w/ eCurv —— After - w/ eCurv + AMS

Peak of day reduction

Peak grid-load reduction (12PM – 5PM)

- Store size: 112,939 ft2
- 6 rooftop units (RTUs)
- Battery size: 100 kW / 400 kWh

Next Steps:
- Attribution Analysis
- Determine changes in temperature and humidity
- Cost effectiveness

Initial Results – W. Springfield Site

Preliminary Results

Load Profile on June 20, 2017

Legend: Before | After - w/ eCurv | After - w/ eCurv + AMS

Peak of day reduction

Peak grid-load reduction (12PM – 5PM)

- Store size: ~90,000 ft2
- 6 rooftop units (RTUs)
- Battery size: 100 kW / 400 kWh

Next Steps:
- Attribution Analysis
- Determine changes in temperature and humidity
- Cost effectiveness