



Northeast Energy Efficiency Partnerships

What do HEMS mean for the Utility?

2016 Home Energy Management
Systems Workshop

Wednesday, September 21st, 2016

2:45am-3:45pm

Questions...

- Is HEMS a widget?
- Is HEMS an EM&V tool?
- Is HEMS a means to another end?
- Should we focus on smart end uses, or the “systems” that connect the dots?
 - Or both? In which case, how?
- Group activity:
 - Turn to your neighbor(s)
 - In groups of 2 or 3, take 5-10 minutes to discuss what you think is the greatest HEMS opportunity

HEMS Pilots

Brad Piper

LOCKHEED MARTIN





Home Energy Management System Pilot

LME is implementing a Home Energy Management System (HEMS) Pilot for NYSERDA, the objective of this pilot is to validate a test methodology for HEMS products and locate some initial savings.

We are monitoring, logging and analyzing: live plug load, lighting and HVAC data. This data will be combined with occupancy and geo-fencing data in order to locate opportunities for automatic actions that can be taken by the system to save energy and load.



Savings, More Than One Type?

Passive vs. Active savings

- Energy Savings has traditionally based on a “passive” methodology

For example: a lamp is sold, installed and the kWh associated with the lamp is accredited. The same falls true in the Appliance and Home Electronics categories

- Technology is evolving, and so must our approach and understanding of the potential savings. We (the industry) needs to get a better grasp of the potential of “Active” savings

For example: Lamps, fixtures or switches, appliances, electronics or HVAC left “on” while the room or dwelling is left unoccupied can be automatically turned “off” without a negative impact on the customer life.



Actions Taken Today....

- A change in mindset
- We need more factual data vs theory's and estimations
- In order to capture savings tomorrow, we need more small scale pilots today



Developing a Clear Path

