

Community Storage Initiative



Minneapolis, MN

May 4, 2016

What is GETS (GIWH)?

Dynamically coupling consumer usage
to real-time grid needs

Space Heating



Water Heating



GETS vs Water Heater vs **Battery**

- GETS 80 ga Hydro Plus vs:
 - 50 ga water heater = 2X
 - Retro fit existing 50 ga = 3.5X
- ***1/5th the cost of a 10 kWh Residential Battery***

DR vs Energy Storage w Grid-Services



Perception of Electric WH EE



56.7%
Source
Efficiency



27.8%
Source
Efficiency

GETS Field Trials



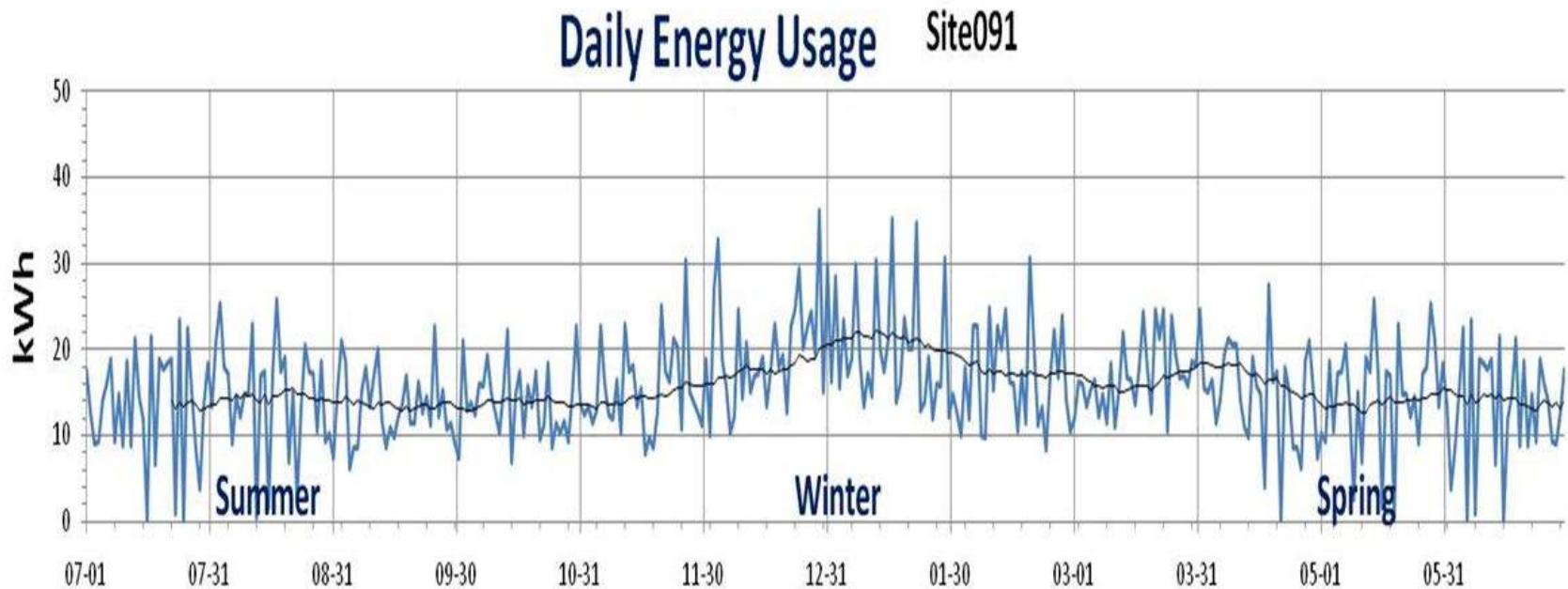
What was Learned

GETS Field Trials

- BPA
- Alaska
- MN/WI/PJM
- Power Shift Atlantic
- Hawaii



BPA



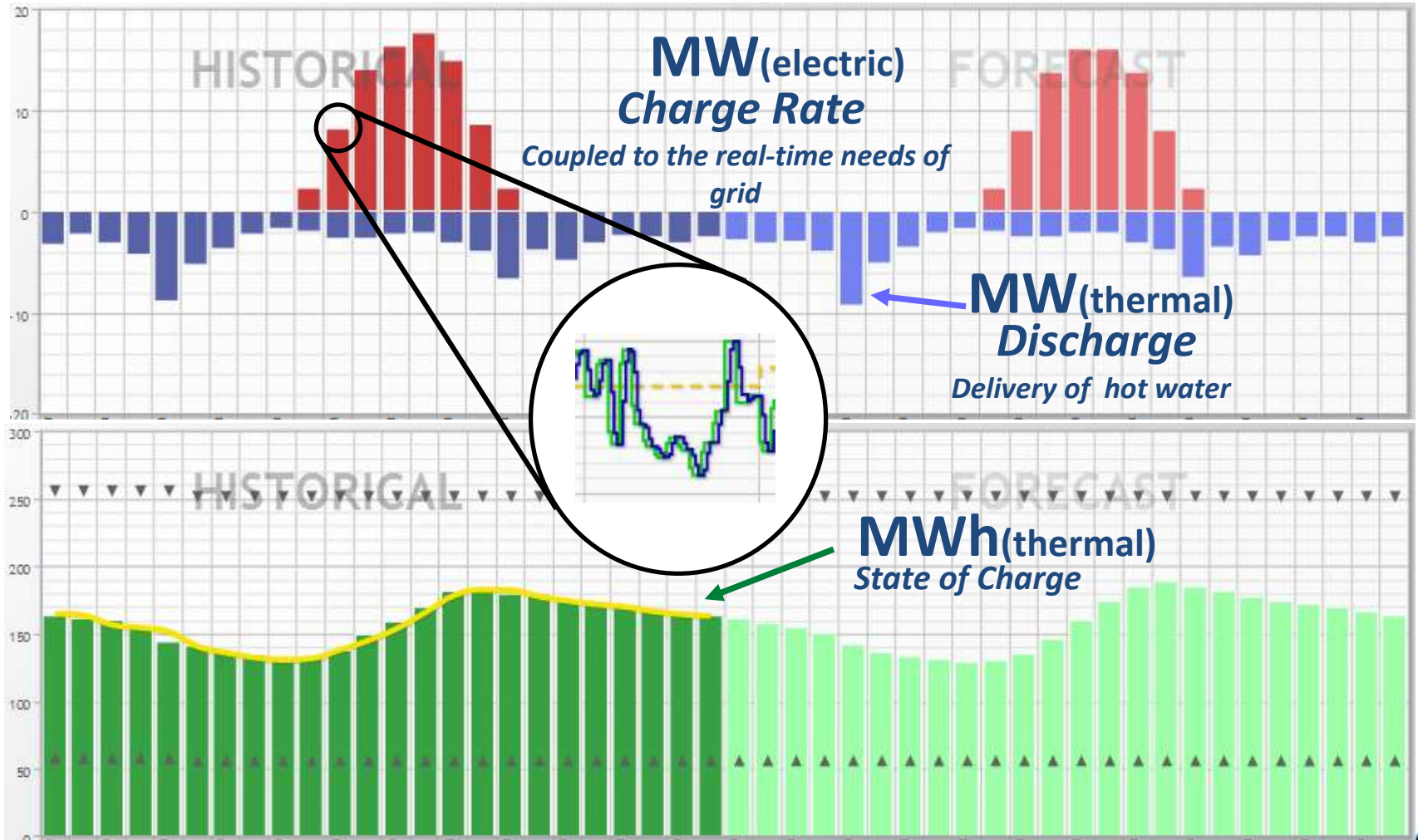
The need for energy portioning.

Alaska



Broadcast Communication

MN/WI/PJM



Forecasting and Real Time Following

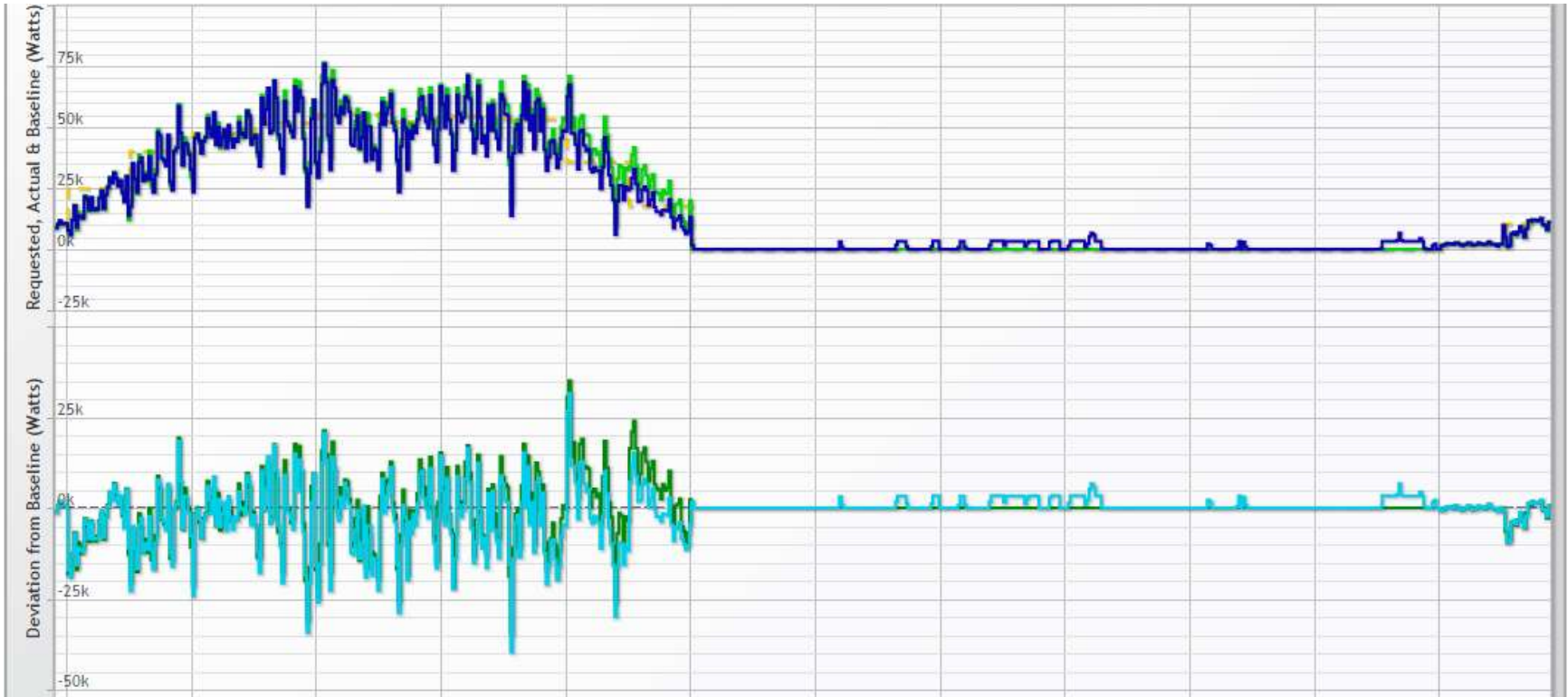
Power Shift Atlantic

5 MW

Scalability

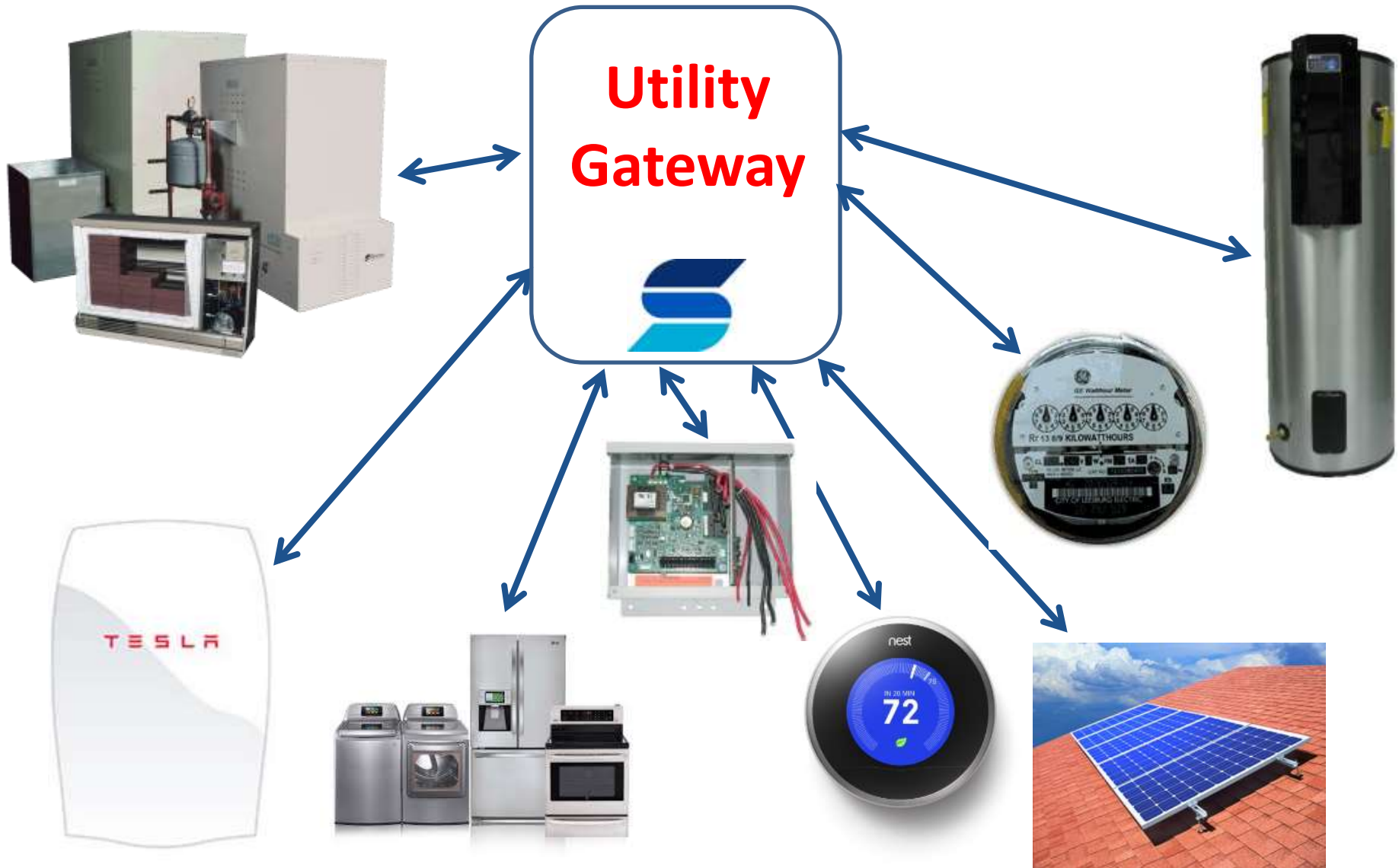


Hawaii

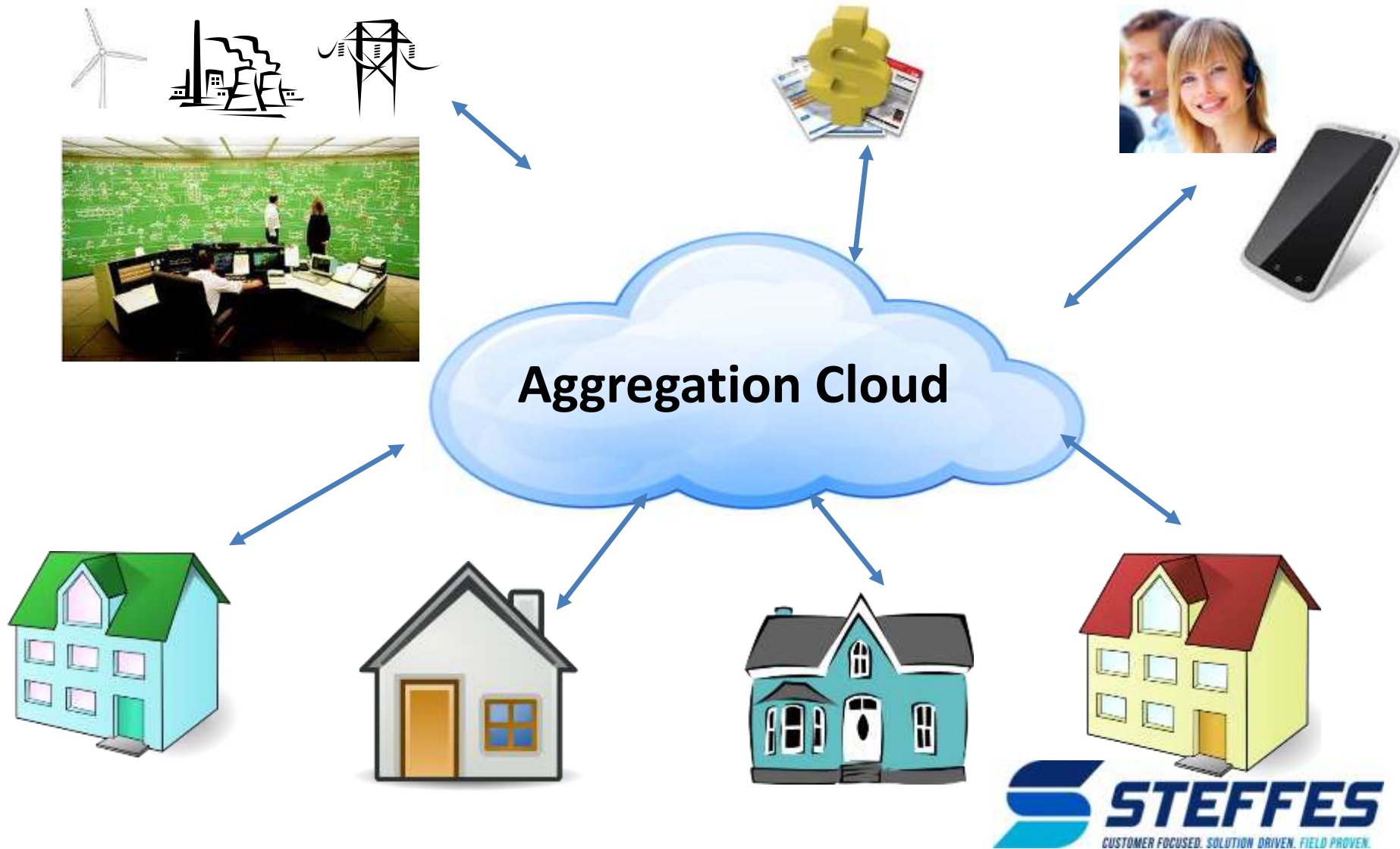


Putting it all together in a “real” deployment.

Residential Behind the Meter Assets



Residential Behind the Meter Assets



State of the Market



GETS – Solar Energy Storage



2011 – 2015 Install Cost Cut in Half

SunShot Goal



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