



Empowering you to make
smart energy choices

EM&V of Tomorrow-3/31/16

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Where We Are Now-UI

- AMI metering is in place for over 10 years
- Data not all stored historically
- Bill to date feature for residential customers
- 45 minutes of interval data presented
- Weather sensitive targeting
- C&I large scale analytics
 - Can be one of many engagement tools
- Operational Savings (retrocommissioning)
 - May or may not use interval meter data

Where We Are headed-UI

- Utility of the future is on our doorstep
 - Renewable penetrations rising, two way power flow
- Customer expectations in a connected world increasing
 - The information age is upon us. Real time information is the norm.
 - Customers expect a high level of information flow
- Smart meters do not make a smart grid. More monitoring and control will become the norm.
 - Will distribution automation extend into the home? EM&V implications?

Possible Program Implications

- Connected homes, smart devices and customer engagement strategies are the future of programs
 - Evaluation needs will change
- Program evaluation parameters may not be effected (i.e. free-ridership or spillover)
- No end use measurement from revenue meters
 - All the utility wants to do is send an accurate bill
 - New utility models may require more monitoring and control
- Baseline determination largely unaffected
 - Existing equipment vs code vs common practice
 - Still important for DR projects in capacity markets

Summary

- Opportunities for savings are still vast
 - Data as a targeting tool not yet important
- EM&V will need to adapt to evolving program strategies and data availability
- Lowering cost of evaluations must be the goal
 - Just doing more analysis because you can is not an option
- Change will not happen over night
 - Good thing