

# M&V 2.0 Residential Opportunities

Ethan Goldman  
VEIC  
March 2016

# Good enough for Efficiency Work?

- More convincing to customers
- Feedback to contractors: performance counts
- Higher realization rates
- New measures
- Breaking out of the \$/MWh incentive box

# TRM 2.0: Mass Customization

- Heating/cooling loads
- Idle loads
- Occupancy schedules
- Load shapes
- Data from devices like smart thermostats
- Disaggregated loads (NILM)

# NILM – Measuring Appliances with AMI

- Targeting
- Pre-qualifying for measures/programs
- M&V with higher resolution
- Works best with <1-min ZigBee gateway data

# Beyond AMI

- Sub-metering
- Communicating thermostats
- Smart homes / HEMS

# Planning the Journey

- Engage internal stakeholders: identify needs
- Revisit program/regulatory goals – big picture
- Identify customer needs: beyond incentives!



Questions?  
Ethan Goldman  
egoldman@veic.org