



**VERMONT ENERGY**  
INVESTMENT CORPORATION

# **Illinois Statewide Technical Reference Manual**

Stakeholder Advisory Group Meeting  
February 28<sup>th</sup>, 2012

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# Agenda

- Process to Date
- Schedule Going Forward
- Breakdown of Progress
  - High Impact Measure Summary
  - Process Item Consensus
  - Equations in Question
  - Variable Input Values
- Most Commented Measures & Comment Categories



# Process to Date

Kickoff Meeting  
~ 11/28/11

Weekly Deliverable Meetings  
~ Dec...

HIM TRM Draft Delivered  
~ 1/27/12

Comment Incorporation  
~ Jan...



# Schedule Going Forward

All HIM comments received.

~3/2/12\*

Deliver Draft of Full TRM

~3/16/12\*

Present Full TRM to SAG

~3/20/12\*

Comments on Full TRM Due

~4/6/12\*

\* These dates are subject to change depending on when the last HIM comments are submitted.



# High Impact Measure Summary

## Commercial High Impact Measures

#	End Use	Technology / Measure
1	Food Service	Pre Rinse Spray Valves
2	Food Service	Commercial Steamers
3	HVAC	Variable Speed Drives for HVAC
4	HVAC	Steam Traps
5	HVAC	High Efficiency Furnace
6	HVAC	Boiler Tune Up
7	HVAC	High Efficiency Boilers
8	HVAC	Boiler Reset Controls
9	Lighting	HPT8
10	Lighting	T5
11	Lighting	Lighting Power Density Reduction
12	Lighting	LED
13	Lighting	ILED
14	Lighting	CFL
15	Lighting	Lighting Controls
16	Hot Water	Tankless Water Heaters

## Residential High Impact Measures

#	End Use	Technology / Measure
1	Appliances	Clothes Washer
2	Appliances	Refrigerators & Freezers
3	Hot Water	Faucet Aerator
4	Hot Water	Low Flow Showerhead
5	Hot Water	High Efficiency Water Heater
6	Hot Water	Heat Pump Water Heater
7	HVAC	Air Source Heat Pump
8	HVAC	Central Air Conditioning
9	HVAC	Furnace Blower Motor
10	HVAC	High Efficiency Boiler
11	HVAC	High Efficiency Furnace
12	HVAC	Programmable Thermostat
13	Lighting	Standard CFL
14	Lighting	Specialty CFL
15	Lighting	LED
16	Shell	Air Sealing
17	Shell	Wall and Ceiling Insulation
18	Shell	Basement Sidewall Insulation



# Process Item Consensus

- Interactive Effects
  - Incorporated in all individual, prescriptive measures.
- Organizational Structure of TRM
  - Market, End Use, Technology
- Program Design
  - Measure characterizations are program neutral, but provide specific inputs for different, existing programs.
- TRM Update Procedure
  - Geared to existing regulatory process



# Equations in Question

- Commercial
  - Boiler Tune Up
  - Steam Trap Repair
  - VSD for HVAC
  - Tankless Water Heaters
- Residential
  - Clothes Washer



# Variable Input Value Categories

- Algorithm Specific Inputs
- Baseline, Lifetime, Persistence, Operating Hours, Loadshape
- Cost Specification
- Weather Data





# Most Commented Measures

- Commercial
  1. Lighting (by far)
  2. Steam Trap
  3. Boiler Tune Up
  4. Prewash Spray Nozzles
  
- Residential
  1. Central AC
  2. Aerators & Showerheads
  3. CFL
  4. Furnaces & Boilers

# Most Commented Categories

- Variable Input Values (75%)
- Definitions / Descriptions / Eligibility Criteria (15%)
- Equation / Algorithm (10%)



# Open Questions

- Low Impact Measures
  - Review Table of General Questions
- Other Open Questions?

# Questions or Comments?

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