
MEMORANDUM

TO: IL TRM STAKEHOLDERS AND INTERESTED PARTIES

FROM: KALEE WHITEHOUSE, PROJECT MANAGER and SAM DENT, TECHNICAL LEAD - VEIC

SUBJECT: IL TRM VERSION 10.0 – CHANGE IMPACT SUMMARY

DATE: 07/06/2021

Cc: CELIA JOHNSON, SAG

VEIC has now submitted the first draft of the version 10.0 Illinois Technical Reference Manual (TRM) to the Technical Advisory Committee (TAC).

This memo is provided as an aid for the utilities and other TAC participants to help disseminate information on the proposed updates to additional stakeholder groups who may be less involved in the TAC discussions or aware of their potential outcomes. The goal is to promote a wider high-level understanding of the proposed changes that are likely to have the highest impact on a measure's savings and/or cost effectiveness, or require changes to how measures are implemented, in order that program implementation plans can progress with the awareness of where changes to offerings may occur.

Please note that all changes listed are still in draft and subject to continued change through the remainder of the update process, and additional high impact changes may still arise. However, this early view of the proposed changes will allow any input from the additional stakeholder groups to be provided before final decisions are made, allowing the TAC appropriate time to review, discuss, and reach consensus on the appropriate path forward.

As always, we welcome any feedback to the value of this memo and how its content could be improved to further help get the TRM related information where it needs to be. Please send any comments or questions on the content to iltrmadministrator@veic.org.

Market	End Use	Measure Name	Summary of Impactful Changes	Potential Impact
Commercial	Food Service	ENERGY STAR Dishwasher	New ENERGY STAR specification	Increase in savings
Commercial	Food Service	High Efficiency Pre-Rinse Spray Valve	Addition of ISR for use with efficiency kits	New implementation
Commercial	Hot Water	Water Heater	Addition of heat pump water heater	New equipment type
Commercial	Hot Water	Low Flow Faucet Aerators	Addition of ISR for use with efficiency kits	New implementation option
Commercial	Hot Water	Low Flow Showerheads	Addition of ISR for use with efficiency kits	New implementation option
Commercial	HVAC	High Efficiency Boiler	Update to residential sized baseline standard	Reduction in savings
Commercial	HVAC	Package Terminal Air Conditioner (PTAC) and Package Terminal Heat Pump (PTHP)	Assumption for existing unit efficiency increased.	Reduction in savings if using deemed assumptions for early replacement
Commercial	HVAC	Small Commercial Thermostats	Increase in HVAC system capacity cap. Adjustment to savings when replacing programmable thermostats.	Potential reduction for applications replacing programmable. New eligibility of larger capacity units.
Commercial	Lighting	LED Bulbs and Fixtures	Adjustments to wattage assumptions.	Minor impacts to savings
Commercial	Lighting	Lighting Controls	Adjustments to assumptions particularly for Luminaire Level Lighting Controls and Network Lighting Controls.	Minor impacts to savings
Commercial	Refrigeration	Beverage and Snack Machine Controls	Significant changes to measure methodology.	Likely reduction in savings
Commercial	Refrigeration	Electronically Commutated Motors (ECM) for Walk-in and Reach-in Coolers / Freezers	New basis for savings assumptions.	Increase in savings
Commercial	Refrigeration	Evaporator Fan Control for Electrically Commutated Motors	New basis for savings assumptions.	Reduction in savings
Commercial	Refrigeration	Strip Curtain for Walk-In Coolers	Methodology update	Savings impact dependent on application.

Market	End Use	Measure Name	Summary of Impactful Changes	Potential Impact
Residential	Appliances	ENERGY STAR Air Purifier/Cleaner	Methodology update	Significant increase in savings
Residential	Appliances	ENERGY STAR Dehumidifier	Updates to hours assumptions	Significant increase in savings
Residential	HVAC	Multiple HVAC measures involving fuel switching	** SAG and TAC committees continue to discuss policy and technical aspects of fuel switch measures. Potential changes are likely to the electric grid Heat Rate assumption and addition of gas distribution losses. The potential passing of new energy legislation is being watched and any impact to these measures will be considered. **	TBD
Residential	HVAC and Shell	Multiple HVAC early replacement and Shell measures	Consistent application of derating factors to existing unit HVAC.	Increase in savings from these measures if rated efficiency of existing unit is used
Residential	HVAC	Boiler Pipe Insulation	Methodology update	Significant increase in savings
Residential	HVAC	Gas High Efficiency Boiler	Update to federal standard baseline	Reduction in savings
Residential	HVAC	Gas High Efficiency Furnace	Removal of prediction that federal standard will increase in the future to 90%.	Increase in lifetime savings for early replacement.
Residential	HVAC	Gas High Efficiency Combination Boiler	Update to federal standard baseline	Reduction in savings
Residential	HVAC	Domestic Hot Water Pipe Insulation	Methodology update. Addition of virtual assessment program ISR	Significant increase in savings
Residential	Hot Water	Low Flow Faucet Aerators	Addition of virtual assessment program ISR	New implementation
Residential	Hot Water	Low Flow Showerheads	Addition of virtual assessment program ISR	New implementation
Residential	Lighting	LED Specialty Lamps	Adjustments to wattage assumptions. Addition of virtual assessment program ISR.	Minor impacts to savings
Residential	Lighting	LED Screw Based Omnidirectional Bulbs	Adjustments to wattage assumptions. Addition of virtual assessment program ISR.	Minor impacts to savings

Market	End Use	Measure Name	Summary of Impactful Changes	Potential Impact
Residential	Lighting	LED Fixtures	Adjustments to wattage assumptions.	Minor impacts to savings
Residential	Shell	Airsealing	** Expecting survey results for shell measures delivered via kits**	TBD
Residential	Miscellaneous	High Efficiency Pool Pumps	New methodology, updated baseline and efficient standards	Reduction in savings

In addition, the following new measures are being proposed for inclusion for the first time in v10:

Market	End Use	Measure
Commercial	Agricultural	Irrigation Pump VFD
Commercial	Agricultural	High Efficiency Grain Dryer
Commercial	Agricultural	Grain Dryer Tune-Up
Commercial	Agricultural	Greenhouse Boiler Tune-Up
Commercial	Agricultural	Greenhouse Thermal Curtains
Commercial	Agricultural	Infrared Film for Greenhouse
Commercial	Agricultural	ENERGY STAR Dairy Water Heater
Commercial	Food Service	On-Demand Package Sealers – Provisional Measure
Commercial	HVAC	HVAC Supply and Return Fans – Fan Energy Index
Commercial	HVAC	Process Heating Boiler
Commercial	HVAC	Commercial Gas Heat Pump
Commercial	Refrigeration	Floating Heat Pressure Control
Commercial	Miscellaneous	AODD Pump Controls
Commercial	Miscellaneous	Lithium Ion Forklift Batteries
Commercial	Miscellaneous	Building Operator Certification – Provisional Measure
Commercial	Miscellaneous	Warm-Mix Asphalt Chemical Additives
Commercial	Miscellaneous	High Efficiency Hand Dryers
Residential	HVAC	Residential Energy Recovery Ventilator (ERV)
Residential	Shell	Triple Pane and Thin Triple Windows