# Illinois Income Qualified Working Group (IQ-TRM)

**April 13, 2023** 



## Agenda IL IQ-TRM Working Group

April 13, 2023

9:00	Welcome, Introductions
9:10 – 10:00	Evaluation Framework Discussion
10:00 – 10:15	TRM Status
10:15 – 10:45	New Measures, Open Items
10:45 – 10:50	Wrap Up Next IQ-TRM Working Group: Thursday, May



**Contextual Principle:** Income-qualified customers may use different stores or secondary markets to purchase/obtain an efficiency measure.

## Parameters to Consider (how it could be reflected in TRM measure)

- Baseline assumptions
  - Store stocking differences
  - Second-hand units
  - Degradation over time
- Measure cost differences
- Expected lifetimes

#### **Key Questions for reviewers to consider**

- Do we have data to support updating these parameters?
- Is there a secondary market for this measure?
- What is the typical cost of second-hand products?



**Contextual Principle:** Home demographics may be different for income-qualified customers – number of people living per household, hours spent at home per day.

## Parameters to Consider (how it could be reflected in TRM measure)

- Deemed assumption of # people per household
- Loadshapes (example: night shift workers
   & disabled participants home 24/7)

#### **Key Questions for reviewers to consider**

- Weighting for unknown value available? (necessity would depend on program delivery method)
- Reliability of self-reported information?



**Contextual Principle:** Housing characteristics – e.g. size, type, shell conditions, heating, cooling, structural

## Parameters to Consider (how it could be reflected in TRM measure)

#### **Shell:**

- lower R-value likely
- Increased air leaks

#### **Structural:**

- Limitations to measure installed due to existing conditions
- Increase cost of installation

#### **Heating / Cooling:**

- Older equipment
- Lower efficiencies
- Utilizing window ACs and space heaters vs central
- See below for usage differences Add average size of homes/apts. are smaller.

#### **Key Questions for reviewers to consider**

- Studies or evaluations with data supporting different shell characteristics
- Does the limitations of the home impact the typical costs of installation?
- Are there significant differences in the heating and cooling equipment in IQ homes?
- Can we quantify the degradation of equipment performance?

**Contextual Principle:** Income-Qualified households may have different usage patterns of measures – e.g. run hours, maintenance, lifetimes, security concerns

#### **Parameters to Consider**

#### **Run hours:**

- Consumption pattern differences e.g. single window AC used in an IQ home v home with multiple units each used less frequently.
- Behavior differences e.g. reduced run hours to conserve money

#### Lower space heat set point temperatures

#### **Delayed or non-existent maintenance:**

Decreased efficiency of system

#### **Measure lifetimes:**

- Assumed longer as participants less likely to replace until existing unit completely fails
- Baseline lifetime may be significantly shorter if purchased via secondary market

#### **Security concerns:**

- Increased run hours of outdoor lighting
- Use of secondary space heating:
- Winter: Offset central heating costs to heat smaller area, decrease of run hrs and/or lower set temp with increase electrical consumption
- Fall/Spring: Delay turning on main heating source

#### **Key Questions**

- Data supporting assumptions of different hours of use?
- How to determine deemed set temp for space heating?
- How delayed is maintenance? Potentially home done, cutting down on labor costs, not necessarily professional level
- How long do people keep existing equipment before replacing
- Secondary heating source could be varied: size efficiency, frequency. How to determine & support those variables?

## **Draft list of 2023 Discussion Items**

ComEd upcycle program

Multi-Family / Mixed-Use

Leak repairs in coil, HVAC tune up measures – testing and fixing leaks (longer measure life)\*

**Refrigeration Energy Usage**  Portable heat pumps

Solar (Community solar, Virtual power plants) NEIs
(Bill Affordability,
Climate Resiliency,
Workforce)

**Market driven transformation**  EV infrastructure / microgrids

